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Economic Profile of NCR

Final Report

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Contents

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LIST OF ACRONYMS AND ABBREVIATIONS

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

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EXECUTIVE SUMMARY

THE 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 changes in economic policy, privatization of Public Sector Undertaking (PSUs), downsizing of the government, and elimination of subsidies and tax incentives for industries. A number of existing and proposed developments, such as extension of the Delhi Metro throughout central NCR, expressways connecting Delhi NCR to other parts of the region, the Delhi-Mumbai Industrial Corridor and Dedicated Freight Corridor, development of Special Economic Zones (SEZs) etc. are expected to have significant impact on the economy of NCR. Trends indicate that the tertiary sector, particularly value-added services, is fast emerging as an important source of employment in the NCR. In order to respond to these physical and economic transformations, there is a need to analyze and assess the changing economic base of NCR as well as future directions of growth, along with fiscal policies, legislation, etc. and their impact on economic development in the region.

The Study of Economic Profile of NCR report 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, DATA SOURCES AND METHODOLOGY

This study aims to document all economic attributes of the NCR about the terms of reference issued. The undertaken study is a pioneer in varied aspects, as only a limited number of studies have been carried out on the NCR as an entity. Past studies, which were conduction, were primarily affiliated with following sectors; namely, infrastructure, physical features, natural resources, etc. However, so far studies related to economic aggregations or disaggregation by major economic sectors has not been carried out in detail so far. Much effort, thus, went into collating NCR profile from multiple primary and secondary sources, for the purpose of this study.

This study has evolved with a particular focus on the analysis of secondary data sources, which have been drawn upon heavily. Relevant documents, which were referred, are as follows; respective State Government's District Statistical Handbooks, Economic Census Reports for 1998 and 2005, Census Reports 2001 and 2011, and Annual Survey of Industries for different years, industry associations and other Government of India publications available in the public domain, brief industrial profiles published by MSME-DIs and published with DC-MSME website. The data on district GDP up to 2009-10 is quoted, primarily from the Planning Commission's website at the same time the most recent district GDP data has been collected from respective state governments.

Furthermore; a variety of tools available to measure the significance of activities from simple measures of specialization (location quotients) to input-output based techniques have been used. The micro-level applications are driven by particular regional interests or policy concerns. A very common, means of identifying regional importance, is the "Location Quotient" (LQ). For example; an LQ of 1.0 indicates that the regional economy has the same share of employment in industry as the nation as a whole. Location quotient exceeding 1.25 is usually taken as an initial evidence of a regional specialization in a given sector.

PROJECTIONS AND EXTRAPOLATION

The GDP projections for the year 2031 are based on the nine category actual compound annual growth of GDP from 2004-05 to 2009-10 (at constant 2004-05 prices) at the district level. Similarly, population projections are based on the past decadal growth of population and trend of participation rates. The participation rates are partially modified based on the likely variations which may be visible in the participation rates due to rapid structural modification within the respective districts and region's economies.

GDP AND INCOME ANALYSIS

Macro Trends

Key findings include:

- Delhi is the largest contributor to GDP in the NCR.
- The growth rate of GDP is the fastest in Haryana sub-region amongst all states.

- Uttar Pradesh sub-region's share in GDP has been declining consistently.
- On a yearly basis, Uttar Pradesh sub-region has touched the highest growth rate at 21.39% and lowest by Rajasthan sub region at 0.01%.
- 2006-07 is the year with highest growth rate at 13.64% followed by 2009-10 at 10.60%. 2008-09, 2007-08 and 2005-06 followed at 10.45%, 9.99% and 9.51% respectively in NCR economy.

To summarize, Haryana sub-region is growing at a much faster pace when compared to other sub-regions. There is a perceptible change in the structure of sub-regions with the considerable shift towards manufacturing activities. 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. The Per Capita Income of the NCR has uniformly been higher than the India's Per Capita Income during the period 2004-05 to 2009-10. 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 rapidly emerging as an important trade center. Furthermore, the tertiary sector contribution to GDP (67%) ranks the highest followed by secondary (25%) and primary (8%) sectors.

WORKFORCE IN NCR

The NCR is one of the fastest growing regions nationally in terms of population and employment. Major workforce characteristics of the NCR are below:

- There is a total of 1,57,34,929 workers in NCR (2011) of which 26% work in Haryana, 29% in Uttar Pradesh, 11% and 34% are in Rajasthan and Delhi region respectively. Of the total workers, Delhi sub-region contributes to the largest share, followed by Uttar Pradesh and Haryana sub-regions.
- Amongst the nine categories, different districts exhibit different patterns of the worker's participation, and this varies from one sector to the other.
- In terms of sectors, Bulandshahr has the highest portion of individuals engaged in agricultural, livestock and forestry activities of its total working population. Gurgaon

district has the largest part of its total working population in the service; Faridabad in manufacturing; and Alwar in cultivation sector respectively.

- Rajasthan sub-region has the highest Workers' Participation Rate (WPR), followed by Haryana, Uttar Pradesh, and Delhi.

INDUSTRIAL DEVELOPMENT IN NCR

The industrial activities in the NCR have undergone significant structural changes over a span of three decades or more. 'Scale Factor' one of the primary mutually inclusive components of the economic structure of the NCR, implies that the developments which the economic elements exhibits within the sector, could be easily characterized in terms of the development of the large and medium units, small-scale industries (SSIs), and in tiny unorganized units.

The organized industrial sector that consists of large and medium units and SSI in the NCR has developed both horizontally (number of units) and vertically (growth of different industries). Haryana sub-region has recorded a significant change in manufacturing units producing engineering goods consisting of metal products and parts, and machine tools and electric machinery; show the highest share of a percentage distribution. In Rajasthan Sub-region, textile products; metal products and parts, and transport equipments as well as non-metallic mineral products, chemicals, and basic metal products constitute the major sectors. Electric machinery, metal products and parts, chemical products and parts, textile products are the primary sector in UP sub-region.

Administrative mechanisms to a considerable extent did not allow for the expansion/ growth of large/ medium scale industries in NCR Delhi. In addition, the lack of regulation and powerful market forces in SSI and tiny sector has led to a rise to a laissez-faire situation. There by leading to the mushrooming of tiny and small industries every where and any where in the unorganized sector especially in Delhi. At the same time, in large parts of NCR except Delhi, the growth of large and medium industries and SSIs could be assigned partly to historical and causal and partly to regulatory factors.

The primary industrial sector locations in the NCR are Meerut, Ghaziabad, Gautambudh Nagar, Bulandshahr, Delhi, Gurgaon, Manesar, Bawal, Faridabad, Kundli, Murthal, and Panipat. There are more than 50 industrial clusters in NCR besides a number of micro enterprises concentrations in NCT Delhi. The approximate numbers of people employed in the above-mentioned industrial concentrations are about a million with a total turnover of Rs 100209.96 crores.

RURAL ECONOMY OF NCR

According to Census 2011, there are a total of 6,226,491 rural workers in NCR. Delhi has the lowest number of rural workers (130,227), while Uttar Pradesh sub-region has the maximum number of rural workers (2,513,152) followed by Haryana sub-region.

Rural infrastructure in India, and in the NCR, in terms of market yards, cold storage have fallen significantly short of demand. It is extensively funded by state governments and the central government, who in turn are constrained by budgetary severity. Some key facts related to market yards and cold storages are:

- There are 65 regulated markets and 74 sub yards and 261 cold storages in the NCR.
- The highest number of regulated markets and yards are in Haryana sub-region of NCR.
- The highest number of cold storages is located in Uttar Pradesh sub-region of NCR followed by Delhi.
- Meerut has the maximum number of cold storages amongst all districts of NCR.

The main features of NCR fruit and agriculture market are:

- 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 market is limited up to Haryana sub-region of NCR and NCT Delhi.

POLICY FRAMEWORK OF THE NCR

The study presents an outline of the fundamental premises of different industrial, investment and location development policies of the four sub-regions of the NCR. 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 AND RECOMMENDATIONS

NCR's economic profile has been undergoing a structural change especially after 2000. The share of industrial and agriculture sectors have declined significantly, whereas the proportion of the service sector has increased considerably. Different development policies of the respective sub-regions have played an imperial role in the shaping of existing structure of the NCR economy. Furthermore, introduction of new highways and expansion of old highways, expressways and the Delhi Metro, has substantially contributed to the change of economic profile of NCR.

Varied positive factors may subsist in future. However, the NCR does face challenges in terms of demography, economy, the environment, and technology. Demography is empirical when age and skill levels of workers, urbanization and changing the size of the household are taken into consideration. The Demographic instabilities will have a direct impact on the level and kind of manpower as well as structure of the market demand. Rapidly escalating rate of urbanization will further put pressure on vertically linked industries that are to be relocated near the mother units. Further pressure on the relocation of economic activities within the NCR will exist due to increased demand for housing, energy, food, water, and transports.

The behavior of the industrial sector in terms of large manufacturing units and sub-contractors in the next 25-30 years will be of an exceptional nature. The competition among industries having different sizes/strategies/nature will increase to minimize their business risk, by reducing inventory levels and orientation for skilled based activities. The risk will be redistributed from powerful to the less powerful and from more independent to the dependent industries. Therefore, the growth of Micro, Small and Medium Enterprises (MSMEs) which are significantly dependent on the large manufacturers are most likely to have a stronger impact on their economic volatility. The demand for production, efficiency and flexibility will also see a substantial increase specially industries with a high degree of subcontracting.

Gradually, the role of the government as the primary driver of economic activities in the NCR is likely to decline. The role of PPPs will increase to minimize the impact of business cycles and will decrease the turn-around time for different economic activities.

The current sub-regional allocation of induced investment will take an entirely different route. Sectors like Biotechnology, Nano technology, and Optical technology will have a definite bearing on the business environment of the NCR. The amplitude of Research and Development (R&D) institutions will considerably increase within the NCR. There will be a further increase in demand for technology and research towards product innovations. A strong research and development support will be mandatory in a very short span of time since product innovations cycles will be shorter and deeper.

The study made the following key recommendations:

- Currently, the GDP is not aggregated at district level; rather the same is obtained by segregating the state level GDP data. Capturing GDP data at district level as per CSO approach could prove more helpful. Also, the GDP computation for constituent districts of NCR and NCT of Delhi is not done in a uniform manner; so there is difficulty in comparability and compatibility. Hence, it is recommended that district level GDP data should be captured in a uniform manner.
- There is need to evolve proper policy structure for the manufacturing sector as most of existing state policies put emphasis on service sector, especially in post 2000.
- There is need to increase infrastructure beyond Gurgaon, Faridabad and Noida especially to speed up the construction of Manesar. Kundli-Manesar-Palwal expressway to decongest NCT and nearby towns of NCR.

- There is need to create infrastructure for highly skilled workforce especially to leverage Nano technology as part of integrated policy.
- The rate of growth of enterprise creation is comparatively slow, especially in districts like Bulandshahr, Jhajjar, Alwar, and Sonepat. There is need to create infrastructure to encourage entrepreneurship in these districts.
- To increase the competitiveness of MSMEs, it is necessary to have common facility centres for them.
- Cluster based approach should be adopted to optimize the resources.
- There are more than 100 important MSME clusters in the NCR. There is should proper cluster development strategy for these cluster 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.
- There is scope for upstream industries in most of NCR districts especially in food processing sector.
- Value added rural infrastructure is still missing in NCR. Most of the cold storages are not customized to the requirements. It is therefore suggested that the state should utilize the Ministry of Food Processing Schemes to create this infrastructure.

Region-wise main recommendations

NCT Delhi

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

Haryana Sub region

1. Need to strengthen rural infrastructure to promote agro base industries;
2. Weak infrastructure in industrial areas especially those developed by HUDA;

3. Poor quality power availability for industries;
4. Need to address pollution in industrial towns (Bahadurgarh, Faridabad, Panipat etc.);
5. Slow progress on infrastructure projects like KMP Expressway and some SEZs;
6. MSME support very limited and need for propagating cluster development programs in major industrial clusters;
7. Special manpower and industrial development policies for some districts to mainstream their development process including Jhajjar and Rewari.

Uttar Pradesh Region

1. Need to provide common infrastructure (power, roads, etc.) for industries especially in the existing industrial areas
2. Need to address congestion and pollution in industrial areas of Ghaziabad;
3. Devise a special package for industrial revival of Meerut;
4. Comprehensive policy for MSMEs
5. Need to improve rural infrastructure to opportunities of modernization of non-farm activities; and
6. Proper infrastructure for traditional craft clusters like Khurja, Ghaziabad etc.

These are likely to provide the best support for the sustainable economic growth of the NCR. A total of 70 potential projects has been identified which are likely to stimulate growth and provide employment in the different sub-regions of the NCR.

CHAPTER I

1. INTRODUCTION

1.1 Background of the Study

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. Today, 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 participation of agriculture to the national economy had reduced rapidly due to globalization. Internationalization of national economy has directly affected the National Capital Region (NCR) economy. Tertiary sector is increasingly becoming the pre-dominant sector in the NCR.

The 2011 Wealth Report has ranked New Delhi at 37th globally. In terms of economic activity, New Delhi (ranked 39 globally) is ranked above cities like Jakarta and Johannesburg. As per Wealth Reports, New Delhi is to move further up the ranks over the next 10 years. Cost of living ranking in 2011 by Mercer has put Delhi at 85. Where, Delhi is the most, expensive city in India 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 proposed extensions in central NCR, construction of expressways, investments in roads and other infrastructure such as Delhi-Mumbai Industrial Corridor and Dedicated Freight Corridor, creation of 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. To capture the changes in NCR for better planning process, there is a need to analyze and assess economic trends of NCR and future directions of growth, along with fiscal policies, legislation, etc. The objective of the assignment is to understand all aspects of economic bases, trends of change and future direction of growth, and to formulate an adequate planning response to these.

1.2 The Vision

Over the last decade, the contribution of the NCR towards India's GDP and its rapid evolution as commercial centers had now deemed the NCR as an empirical component of the nation's economy. To sustain this growth and to provide a sustainable economic superstructure for the future, it is necessary to design a vision, and essential mapping of the region is of primary importance. The broad concept of this exercise is to identify, list and profile a sustainable NCR with differential in economic activities. The study also emphasizes on suitable projects and grass-root level actions/recommendations.

1.3 Study's Objective, Need and Scope of Work[1]

OBJECTIVE

The objective of the assignment is to understand all aspects of the economy of the NCR such as follow; economic resource base, trends of change and future direction of growth. Furthermore; to formulate an adequate planning response to these varied aspects. This study has been carried out in line with the terms of reference (ToR). The profiling of NCR in itself is pioneer in diverse respects. The Regional Plan 2021 aims at harnessing the agglomeration economies generated by Delhi and the spread of the developmental impulse for harmonized and environmentally sustainable spatial-economic development of the NCR with active co-operation of the participating states. Creating a balance between the holding capacity of settlements and suitable economic base to support those very capabilities can attain this. Sustainable infrastructure development with improved efficiency of existing methods of resource mobilization and adopting innovative methods of resource mobilization and facilitating, attracting and guiding private investment in the desired direction will also be taken into account.

The study provides with 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

[1] As per the ToR of the Study

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.

NEED FOR THE STUDY

The Regional Plan-2001, authorized by the Board in November 1988, 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 proposed 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 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 encourage economic development of NCR.

Keeping the above in mind, it is proposed that a study of Economic Profile of NCR may be taken up by a Consultant.

SCOPE OF WORK

This study has been limited to the following scope:

- i Literature survey including economic censuses and other reports of CSO/ NSSO, reports published by concerned ministries/ departments etc. identification of sources of data, collection and compilation of data.
- ii Analysis of gross and net domestic product – district-wise, sub-region wise and sector-wise, per capita income.
- iii Workforce and occupations in NCR.
- iv Number and size of establishments in primary, secondary and tertiary sectors, and their distribution in NCR.
- v Diversification of large, medium and small scale industries and the determinants of growth.
- vi Identification of important industry clusters in NCR, strength, weakness, opportunities and threat (SWOT) analysis, identifying comparative advantages of resources in agglomerated urban regions; identifying factors contributing to the competitiveness of sectors, industries, or clusters; building up partnerships for development opportunities in key industries and players; prioritizing the infrastructure investment needed to improve the business environment; and strategizing development of targeted sectors, thus generating employment opportunities.
- vii Location of major existing economic centers and major types of industries.
- viii Trends and new developments taking place in NCR.
- ix Informal economic activity in NCR.
- x Trends of economic growth and diversification of economy of NCR.

xi Identification of future growth potential of various sectors and proposed locations.

xii Identification of interventions required in different industries, industrial clusters and city clusters through planning, legislation and project implementation.

xiii Estimation and projections of employment in different sectors in NCR.

xiv Policies of central and state governments including industrial policies, SEZ policies, office location policy, location of commercial activities, and policies for inducement of economic growth in Rest of NCR.

xv Rural economy including identification of issues and problems, assessment of farm and non-farm employment, agro-processing industry, mandis and marketing infrastructure, government programs.

xvi Location aspects including proposed locations of major heavy industry, medium and small scale industry, business process outsourcing (BPO) industry, information technology (IT) sector, commerce, wholesale trade, etc.

xvii Policies/strategy recommendations and plan of action for future growth and development. Impact of plan of action in terms of creation of employment and contribution towards GDP.

Conducting a workshop (about 100 participants) with the participating States and concerned stakeholders before finalizing the report.

1.4 Literature Survey

The available literature on NCR is presented under three sections:

1. Studies conducted by NCR Planning Board
2. Studies conducted by the respective state in its sub-regions of NCR
3. Academic / research studies and papers on NCR and other Sub- regions
4. Economic & development indicators used in the study

STUDIES CONDUCTED BY NCR PLANNING BOARD

Some of the relevant studies and paper carried out by the NCR Board are:

Regional Plans including 2001 and 2021

The first exercise on planned development for the NCR was carried out through the Town Planning Organization (TPO), who prepared an Interim General Plan (IGP) in 1956 for Greater Delhi. The Plan stressed that the necessity of planning Delhi in a regional context. The Plan put forward `serious consideration should be given to a planned decentralization to outer areas and even outside the Delhi region'. The first Master Plan for Delhi arrogated in 1962. The region was then given intricate physical profile in the early 1970s when its frontier was outlined in geographic terms encompassing a contiguous area of over 30,000 sq. Kms. Comprising firstly, of the inner core of the erstwhile Union Territory UT of Delhi. Secondly, within the Delhi Metropolitan Area or middle tier that encompasses the cities of Gurgaon and Faridabad in Haryana and Ghaziabad respectively as well as NOIDA in UP, on the outskirts of national capital territory (NCT) of Delhi. As well as the outer-ring of NCR, extending on the far side of Panipat in the north, Meerut in the east, Alwar in the south and Rohtak in the west.

In 1985, National Capital Region Planning Board (NCRPB) was recognized by an Act of the Parliament. NCRPB is a licit distinctive autonomous entity charged with the consolidated planning and development of a recently developed inter-state and spatially dispersed NCR. The primary implementing agencies operating in NCR include; the Central Government, the three participating State Governments of Rajasthan Haryana and Uttar Pradesh, as well as the Government of NCT of Delhi. The NCRPB brought into force a Development Plan for NCR in the month of January 1989. This plan, the Regional Plan-2001, is a layout of varied policy essentials and action programs, which were required to deflect population from Delhi to, recognized Regional Centres or `Priority Towns' in NCR by the year 2001. The NCR Plans (Interim Development Plan - 1986, Regional Plan-1989) and the related plans (Sub-regional Plans; Uttar Pradesh - 1992, Rajasthan-1994 and Functional Plans for Transport (1995), Power (1996), Telecommunication (1997), and Industry (1998) were exercises which were considered most advantageous to attain the given standard objective via a set of policy techniques, the route of organization for land uses and development of empirical geographical infrastructure. The latest in the plan series is the Regional Plan 2021 (details in 1.12 and 1.13).

Other important studies and documents NCR Planning Board

Study on Integrated Transportation Plan for NCR including Regional Rapid Transit System: A Study on "Integrated Transportation Plan for NCR" has been decorated by the NCR Planning Board with the verifiable to facilitate accessibility to varied regions of NCR and inculcate growth and sustained development within the Region by facilitating with economic and structured Multi-Model Transportation System well integrated with the land use pattern.

Study on Water Supply and its Management in NCR: The purpose of the Study is to initiate an Integrated Water Management Plan for NCR. Further, focusing on determining of possible water sources (surface, ground, and inter-basin transfer), demand-supply gap, leakages in the existing supply systems, etc. and evolve a mechanism towards improving the water supply scenario in the region through an integrated approach.

Study on Counter Magnet Area: The objective of the Study is to evaluate the Counter-Magnet Area Development Strategy encompassing selection of Counter-Magnet Areas as verified and adhered by the Board and to propound changes in the strategy/evolve parallel strategy of development of Counter-Magnet Areas.

A study on National Capital Region – Industrial Potential:

The study, carried out by Operation Research Group in the year 1997 provides with an account of the economic spectrum, resource pool, and industrial purview of the NCR. It collated essential data and outlined thrust region of industrial growth in the NCR. It was the second publication of NCR Planning Board books. The book culminated the integrated potential of NCR sub-regions, especially in the industrialization aspect. Over a period, rapid industrialization has given birth to varied infrastructural challenges. The integrated approach in the region of industrialization and informal sector augmentation requires different state governments to have harmonious industrial and location policies. The book also highlights the problems of industrial policy and taxation.

Academic / research studies and papers on NCR and other Sub- regions

A study on Prospects for Economic Growth and Workforce Development in the Mumbai Metropolitan Region was undertaken in 2007 by USAID Academic / Research studies and papers on NCR and other Sub- regions

A study on Prospects for Economic Growth and Workforce Development in the Mumbai Metropolitan Region was undertaken in 2007 by USAID to apprehend the workforce development and economic growth in the Mumbai Metropolitan Region (MMR). It provides with an array of measures to improve the regional investment climate, i.e., lessening the average value of carrying out business within the city by providing specialized support to the key growth industries. The study came out with the following suggestions:

- Facilitating essential physical and social infrastructure;
- Developing a property / efficient land market;
- Fortifying the system for Human Resource Development;
- Developing an adequate regulatory environment (and reducing corruption);
- Rationalizing the system of taxation; and
- Improving access to market financial resources.

An Investment Destination by IMRB International in 2009: The study gives an insight into strength of NCR region as an investment destination, major areas where investment is possible, suggested sector wise location of investment viz. Gurgaon and Noida; IT, ITES, BPO, KPO auto and auto components Sector, NCT for financial services, Faridabad for engineering items. The study also suggests changes to be carried out in the industrial policies of central and state governments to facilitate investment and expansion. One of the recent works by ADB in partnership with National Institute of Urban Affairs on City Cluster Economic Development (CCED) – Indian Case Study published in 2010. According to CCED approach, City and Industrial clusters have a symbiotic relationship. Industrial Cluster Development can lead to an inclusive economic growth in Delhi & NCR. City Cluster Economic Development (CCED) is an urban-led development approach that enhances the ability of cities to promote economic growth in an extended urban region.

The steps, to induce inclusive economic growth through CCD, are:

a. Identifying the comparative advantages of resources in agglomerated urban regions;
b. Identifying factors contributing to the competitiveness of sectors, industries, or clusters;
c. Building up partnerships for development opportunities in key industries and players;
d. Prioritizing the infrastructure investment needed to improve the business environment;
e. Strategizing development of targeted sectors, thus generating employment opportunities.

This study is very useful for understanding the pattern of industrial development in NCR, especially the industrial agglomerations (industrial clusters).

Evaluation study of Delhi Metropolitan Area (DMA) Towns in NCR by Town and Country Planning Organization (TCPO)

The given study aims to evaluate the role of DMA towns in achieving the overall objective of the NCR Plan. The study highlights that the NCR is presently observing a boom in real estate development. Furthermore; with attempts carried out by the State Governments concerned to develop Hi-Tech Cities, Special Economic Zones, Industrial Estates etc., are liable to have spread effect on the vast hinterland. The Study was carried out by the Metropolitan and Union Territories Planning Division of TCPO. The study further outlines that the failure or success of the NCR Plan cannot be evaluated merely in qualitative or quantitative terms, as the vast scale namely, development scenario such as economic liberalization, globalization rapidly changes and above all carrying out urban reforms undoubtedly act as a role model for state capitals. The study emphasizes that the role of DMA towns in reducing the burden of NCT and the operational challenges in administrating the provisions of NCR Plan and suggests policy recommendations.

An article by B. K. Sundar Ray on Planning for the NCR as a Strategy for Sustainable Development of Delhi gives a historical perspective on the evolution of NCR and how the problems relating to overpopulation exerted pressure on existing infrastructure and availability of jobs.

ECONOMIC & DEVELOPMENT INDICATORS USED IN THE STUDY

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. Further, what are turning points, new requirements and actions to be taken for improvement. In this study we have used key indicators like **GDP, PCI, WPR, industrial development** etc. sub region wise and district wise to understand and compare the present economic conditions of the regions and districts.

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 of 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 have clear idea of 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.

Workforce is the quantum of the working population of the country or the region that indulge 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. The study has 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.

Another indictor used in the study 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).

The potential of the rural economy, of the region is other important aspect, which is detailed in Chapter 5, this gives a brief idea 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. The understanding on this sector would help policy makers' strategies actions to help these units and establishments get organized.

1.5 Methodology and Sources of Information

The study envisages five-pronged strategy to complete the assignment. These are:

1. **Preliminary Preparation;**
2. **Collection of Secondary Data;**
3. **Collection of Primary Data from Local Stakeholders;**
4. **Feedback and Draft Report; and**
5. **Final Report**

The study relies exclusively on existing reports and databases to develop the economic profile and to some extent on industry related data provided by industry associations. For GDP and per capita figures in several sectors, the study uses literature published by the Planning Commission. Reports by other government agencies, including the Census, were also used. In addition, published material available from industry associations was also used. The study focuses mainly on analysis of secondary literature.

The report consists of eight chapters for each of the economic sectors under consideration. Each chapter begins with a summary of the significant findings regarding the economic relevance of the sector.

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.

Projection Of GDP And Employment For 2030-31

As a part of a TOR,; The GDP projections for 2030-31 are carried out primarily based on the nine category wise compound annual growth of GDP from 1999-00 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.

In current situation, we have used Geometric Growth Rate Method, where Compound Annual Growth Rate (CAGR) in percentage term has been calculated from the available data (year 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. We are making projections for interval like year 2011, 2021& 2031. So in our case the Compound Annual Growth Rate (CAGR)[2] based method is most appropriate and has been used in our 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, we have extrapolated the GDP of corresponding activities in 9 categories for a particular district and summed them up to reach the total GDP of the district. 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.[3]

[2] **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.

[3] *<http://data.worldbank.org/about/data-overview/methodologies>

PRINCIPAL SOURCES OF INFORMATION USED IN THE STUDY

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 where information at the State-level is primarily employed for the analysis).

Information on Delhi-Mumbai Industrial Corridor (DMIC) [4]

Delhi-Mumbai Industrial Corridor is a mega infrastructure project of US $90 billion with technical and financial aids from Japan covering over 1483 KMs from Delhi to Mumbai. This project incorporates about 24 Mega Industrial / investment zones of about 200-250 sq. km., high-speed freight line, three ports, and six airports; a six-lane intersection-free expressway is bridging the country's financial and political capitals and a 4000 MW power plant. Varied industrial clusters and estates industrial hubs, with top-of-the-line infrastructure, will be developed alongside this corridor to attract more foreign investment. Out of the 24

[4] Source: http://www.dmic.co.in

proposed investments and industrial region in DMIC, seven are recommended in the NCR. The important proposals for NCR under this project include:

1. Regional MRTS between Delhi-Manesar-Bawal with feeder service to enhance connectivity between Delhi and the upcoming manufacturing hubs;
2. Exhibition-cum-Convention Centre in NCR;
3. Multi-modal Logistic Hubs at IMT Manesar;
4. New passenger Rail Links; Palwal-Rewari via Bhiwadi, Farrukhnagar – Jhajjar;
5. National Manufacturing Zone;
6. Road link connecting Bhiwadi and Neemrana;
7. Development of Knowledge City;
8. Development of Boraqui Railway Station as Passenger and Commercial Cargo Hub;
9. Multi Modal Logistics Hub at Greater NOIDA near Dadri;
10. Power Project in Greater NOIDA; and
11. Development of an International Airport.

Additional relevant secondary sources used in the study are:

1. State Government Statistical Departments for State Domestic Product.
2. Different State Ministries and Departments.
3. Central Government Ministries, like Ministry of MSME, Ministry of Textiles, Ministry of Programme Implementation, Ministry of Home and Ministry of Commerce and Industry.
4. International organizations like – GTZ, UNIDO, and UNDP, etc.
5. Local Industry Associations.
6. Sub Regional Plans of the State Governments.

1.6 Data Limitation

The study is an attempt to capture major components of economic activities of the NCR and create an Economic Profile of the same. There were constraints related to availability of data, especially in terms of drawing comparisons among the different sub-regions on select development indicators. Furthermore, it has not been possible to assess the parameters across a time-series. Therefore, in some cases, study findings are limited to determining data at two points in time only. 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 only.

1.7 About National Capital Region (NCR)

The NCR economy is a crucial part of 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. The origin of the NCR can be traced back to the recommendation of the first Master Plan for Delhi (1962). The NCRPB was set up with the aim of reducing burden of rapidly increasing population in Delhi and responding effectively to the growing demand for greater space requirement owing to large-scale industrialization in the district.

The NCR consists of the entire NCT Delhi; one district of Rajasthan i.e. ALwar; nine districts of Haryana and five districts of Uttar Pradesh with a population of over 460 lakhs in 2011. The sub-regions of NCT-Delhi, Haryana, Rajasthan and Uttar Pradesh habitats 36.44%, 23.95%, 7.98% and 31.64% of NCR's population respectively. Table 1.1 presents key population information for the region.

Table 1.1: Sub-Region wise Distribution of Population in NCR[5]

	Population				Decadal Growth (%)			Share of population (%)			
Year	1981	1991	2001	2011	1981-1991	1991-2001	2001-11	1981	1991	2001	2011
NCT Delhi	6220406	9420644	13850507	16787941	51.45	47.02	21.21	31.28	34.43	37.33	36.44
Rajasthan	1755575	2296580	2992592	3674179	30.82	30.31	22.78	8.83	8.39	8.07	7.98
Haryana	4938541	6643604	8687050	11031515	34.53	30.76	26.99	24.84	24.28	23.42	23.95
Uttar Pradesh	6968646	9001704	11570117	14575668	29.17	28.53	25.98	35.05	32.9	31.19	31.64
NCR	19883168	27362532	37100266	46069303	37.62	35.59	24.18	100	100	100	100

In 2011, NCT Delhi had the maximum population at 16787941 and Rajasthan sub-region had the minimum at 3674179.

The maximum decadal growth in population in 2001-11 year was seen by Haryana sub-region at 26.99%, closely followed by Uttar Pradesh sub-region at 25.98% and Rajasthan

[5] Source: NCR Regional Plan, 2021 and Census 2001 & 2011, Govt. of India

sub-region at 22.78%. The minimum decadal growth in this period was seen by NCT Delhi region at 21.21%.

As in 2011, NCT Delhi region had the biggest share of total NCR population by contributing 36.44%. Uttar Pradesh sub-region was not far behind at 31.64%. Haryana sub-region contributed 23.95% and Rajasthan sub-region, a minimal 7.98%.

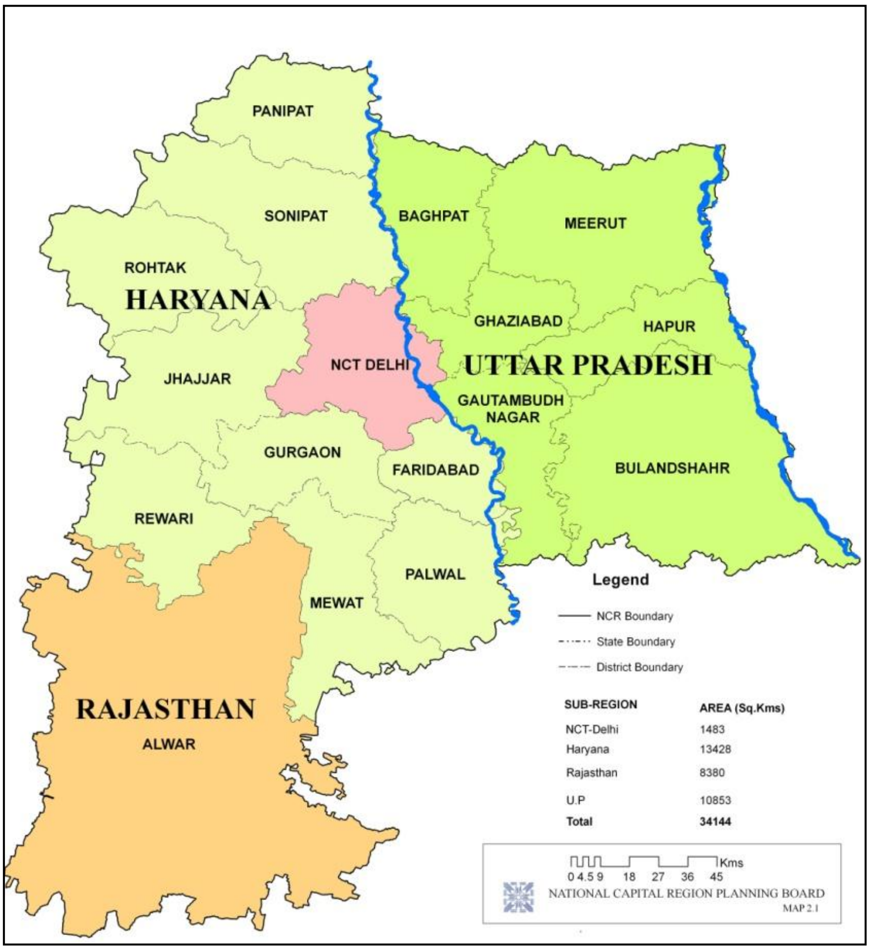


Figure 1.1: NCR Constituent Areas

Following are Sub-Regions wise constituent districts of NCR;

A. Sub Region - NCT Delhi

B. Sub Region - Haryana

1. Gurgaon- Haryana
2. Mewat
3. Faridabad
4. Palwal

5. Rohtak
6. Jhajjar
7. Sonipat
8. Rewari
9. Panipat

C. Sub Region – Uttar Pradesh

10. Baghpat
11. Bulandshahr
12. Gautambudh Nagar
13. Ghaziabad
14. Meerut
15. Hapur

D. Sub Region – Rajasthan

16. Alwar

Government of India vide Gazette Notification dated 1.10.2013 has included Bhiwani and Mahendragarh districts of the State of Haryana and Bharatpur district of the state of Rajasthan in NCR. Accordingly, now Haryana Sub regionhas 11 districts and Rajasthan Sub-region has two districts in NCR. Area of Haryana Sub-region is 20,105 sq. km. and that of Rajasthan Sub-region is 13,447 sq. km. Consequent to the notification, the area of NCR is now 45,888 sq. km.

1.8 NCT of Delhi

The NCT of Delhi is spread over an area of 1,483 sq km, out of which, 783 sq km is rural, and 700 sq km is urban. The NCT of Delhi accounts for 4.41% of the total area of NCR. Being the capital of India, Delhi has undergone rapid urbanization. According to the United Nations (2007), Delhi is the world’s sixth-largest urban agglomerate. Services sector and manufacturing are the predominant income and workforce contributors respectively in Delhi.

1.9 Haryana Sub-Region of NCR

The Haryana sub-region consists of nine districts namely; (i) Faridabad, (ii) Panipat, (iii) Sonipat, (iv) Gurgaon, (v) Rohtak, (vi) Jhajjar, (vii) Rewari, (viii) Mewat, and (ix) Palwal. Faridabad and Gurgaon are the most industrialized districts in the state followed by Panipat. This accounts for 30.33% area of the state and 39.95% area of NCR. According to census 2011 the total share of Haryana sub-Region is 23.98% of NCR.

1.10 Uttar Pradesh Sub-Region of NCR

The Uttar Pradesh sub-region comprises of 5 districts namely – (i) Baghpat, (ii) Meerut, (iii) Bulandshahr, (iv) Gautam Budh Nagar and (v) Ghaziabad. Gautam Budh Nagar and Ghaziabad are most industrialized districts followed by Meerut in the sub region. This accounts for 4.5% area of the state and 32.32% of the total area of NCR.

1.11 Rajasthan Sub-Region of NCR

The Rajasthan Sub-region of NCR consists of Alwar district. The area is 2.29 % of the total area of the state and 23.32% of the area of NCR.

1.12 Regional Plans for NCR

So far two such plans namely Regional Plan 2001 and Regional Plan 2021 have been prepared. The objectives and salient features of Regional Plan 2021 are as under:

OBJECTIVE OF NCR REGIONAL PLAN 2021

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 To provide efficient and economic rail and road based transportation networks (including mass transport systems) that are well integrated with land use patterns to support balanced regional development in such identified settlements.

iii To minimize the adverse environmental impact that may occur in the process of development of the NCR.

iv To develop selected urban settlements with urban infrastructural facilities such as transport, power, communication, drinking water, sewerage, drainage, etc. comparable with NCT of Delhi.

v To provide a rational land use pattern in order to protect and preserve good agricultural land and utilize unproductive land for urban uses.

vi To promote sustainable development in the region to improve the quality of life.

vii To improve 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.

1.13 Summary of NCR Profile

GROWTH DIFFERENTIALS

If we see the comparative data amongst all constituents of the NCR, there are stark differences in their growth patterns. Region such as Noida and Gurgaon have grown faster than the other regions 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. Recently studies conducted have suggested that NCR cities like Faridabad and Ghaziabad are among the 100 fastest growing cities in the world.

INDUSTRY

Industrial development in NCR is primarily represented by the 'Scale Factor' i.e. development can be characterized in terms of large and medium units, small-scale industries (SSIs) and development in tiny unorganized units.

The organized industrial sector consists of large and medium units and SSI in NCR that has augmented both in terms of growth of different industries as well as in terms of number of units. In Haryana sub-region, units manufacture machine tools, engineering goods consisting of metal products and parts electric machinery show highest percentage distribution. Electrical machinery, metal products and parts, chemical products, textile products constitute the major sectors in UP sub-region. Whereas, 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 hinterland area.

SETTLEMENT PATTERN

With the rapidly growing population and increasing number of settlements in the NCR, it has become difficult to match the demands of the growing population in order to support a sustainable development process. The unmet demand needs can be attained by a balanced and decentralized support system.

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 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. Table 1.2 presents the hierarchy of settlements proposed in Regional Plan 2021.

Rural Settlements

According to the Census 2011, there are 7,336 rural settlements of various sizes in the National Capital Region. Of these, 112 were in NCT of Delhi, 2320 in Haryana sub region, 2021 in Rajasthan and 2,883 in Uttar Pradesh sub-region. More than 172 lakhs populace resided in rural areas in NCR in 2011, accounting for about 37% of the total population in NCR.

Table 1.2: Six –tier Hierarchy of Settlements proposed in the Regional Plan 2021[6]

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

The Regional Plan 2021 has proposed the following Metro and Regional Cneters:

METRO CENTRE/ COMPLEX

There are three Metro Centre/ Complex in Haryana sub-region and four Metro Centre/ Complex in Uttar Pradesh sub-region, namely:

1) Faridabad-Ballabgarh;
2) Gurgaon-Manesar;
3) Ghaziabad including Loni;
4) NOIDA;
5) Sonipat-Kundli;
6) Greater NOIDA; and
7) Meerut;

Metro Centers can act as a powerful growth node to attract capital functions and activities. Further, help in population dispersal from the NCT Delhi towards neighboring regions. Due to their essential functional status and size, a high level of Social, physical and economic

[6] Source: National Capital Region, Regional Plan, 2021

infrastructure is required with the Capital. There is a need to necessitate the development of these towns/complexes in order to reach similar standards of infrastructure which can further facilitate the needs of the growing population. In order to meet the needs an efficient intra-urban mass transportation structure, as well as a secure transport and communication linkages of Delhi to 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.

REGIONAL CENTRE/COMPLEX

There are two Regional Centres / Complexs in the Haryana sub-region, two Regional Centres / Complexs in the Uttar Pradesh Sub-region, and one Regional Centres/Complexe in the Rajasthan sub-region, namely:

1) Bahdurgarh;
2) Panipat;
3) Rohtak;
4) Palwal;
5) Rewari-Dharuhera-Bawal;
6) Hapur-Pilkhua;
7) Bulandshahr-Khurja;
8) Baghpat-Barut;
9) Alwar;
10) Greater bhiwadi;
11) Shahjahanpur-Neemrana-Behror;

Regional Centers, which consist of well-established urban centers is often marked by highly specialized secondary and tertiary sector activities facilitating job opportunities, which typically cannot be performed by other lower-order centers. These centers are being developed for advanced industrial and other economic activities and propose to contain concentrations of administrative and higher order service functions. Thereby exerting a dynamic influence on attraction of investment and creation of conducive living and working environments.

Development of a well-knit regional settlement system is desired, where Delhi and other cities/ townships in the region would be allowed to grow to their carrying capacity and 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 region attractive to live in and work at and helps in checking migration towards urban centers.

1.14 Chapterisation of the Study

The study comprises eight chapters. In order, make this study reader-friendly, 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 of the study and covers the method and approach used in the study.

Chapter 2: GDP and Income Analysis present trends of GDP growth in the NCR, specifically at sub-region and district levels; this allows 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.

CHAPTER II

2. GDP AND INCOME ANALYSIS

2.1 Background

Gross Domestic Product 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 the NCR, it is imperative to aggregate the NCR GDP, a complex task. The complexity of this given task lies in the fact that (i) district level GDP data was first captured in 2011, (ii) district GDP estimates are qualified by the respective state governments and there may be difference in their approach to calculating GDP, and (iii) district GDP figures are available only till 2009-10. The dissection in this chapter, which focuses on status and changes in GDP trends in NCR and its constituent sub-regions, is thus limited to this period only. [7]

The NCR occupies an important place in terms of share of GDP of India. India's GDP at constant (2004-05) prices in 2009-10 was Rs. 45160.7 billion whereas the GDP of NCR for the same period was Rs. 3193.4 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.

The NCR is rapidly emerging as a world-class region and is among the fastest growing economic regions of India. In 2007-08 the NCR economy is driven primarily by the service sector, which accounted for 66% of its GDP. 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. Master Table 14 presents GDP of India and states at both constant (2004-05) prices and current prices.

[7] We have used only comparable data of district level GDP which is available till 2009-10 for all the districts of NCR. However, in case of some districts and sub regions data available till 2013-14.

Master Table 15 presents the per capita income of Indian states. As seen from Master Table 14, the 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, while Master Table 15 demonstrates that it is not far behind in terms of per capita income levels also.

2.2 Trends and Structure of NCR Economy

NCR GDP Trends

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

Table 2.1: District wise Gross Domestic Product (GDP) of NCR at Constant 2004-05 Prices from 2004-05 to 2009 -10[8]

	Regions	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
S. No.		GDP (In Rs Millions)	GDP (In Rs Millions)	GDP (In Rs Millions)	GDP (In Rs Millions)	GDP (In RS Millions)	GDP (In Rs Millions)
1.1	Meerut	71760.6	81598.94	85739	91741	93859	101255
1.2	Bagpat	29072.7	28550.69	30676	32878	34721	38426
1.3	Gaziabad + Hapur	89271.38	97684.35	116073	124786	131284	136476
1.4	Gautambudha Nagar	73533.04	75276.19	117302	126290	131114	141557
1.5	Bulandshahr	68799.56	66288.34	74341	78725	83337	88740
1	**Total of Uttar Pradesh Sub-region**	**332437.28**	**349398.51**	**424130**	**454420**	**474316**	**506453**
2.1	Delhi	1003245.2	1104060.7	1240796	1379609	1557911	1698390
2	**Total of Delhi Region**	**1003245**	**1104061**	**1240796**	**1379609**	**1557911**	**1698390**
3.1	Alwar	77420.3	77425.7	90451.3	93576.1	110109.8	121901
3	**Total of Rajasthan Sub- Region**	**77420.3**	**77425.7**	**90451.3**	**93576.1**	**110109.8**	**121901**
4.1	Faridabad	111351.3	121775.9	136363	151289	162484	190015
4.2	Gurgaon	166984.4	180864	202167	227494	242418	269906
4.3	Jhajjar	28356.3	30757.1	34253	36861	40157	44948
4.4	Panipat	65641	72170.5	79053	88334	100821	99298

[8] 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

4.5	Rewari	43623.8	47154.9	51646	56207	60465	65931
4.6	Rohtak	32447.2	34565.7	37593	40121	41931	47052
4.7	Sonipat	48414.2	52734.5	58440	62898	68729	77068
4.8	Mewat	NA	20637.4	21934	23363	27919	29968
4.9	Palwal						42546.5
4	**Total of Haryana Sub-region**	**496818.2**	**560660**	**621448**	**686566**	**744925**	**866730**
5	**Grand Total/ NCR**	**1909921**	**2091545**	**2376825**	**2614171**	**2887262**	**3193474.3**

Table 2.2 presents the sub-region GDP trends on a time-series; GDP of the NCR doubled from 2004-05 to 2009-10 (at constant 2004-05 prices), of which Delhi contributed to the highest level of growth followed by Haryana, Uttar Pradesh, and Rajasthan respectively.

Table 2.2: Sub-Region wise Gross Domestic Product (GDP) of NCR at Constant 2004-05 Prices from 2004-05 to 2009-10[9]

	Regions	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
S. No.		**GDP (In Rs Millions)**	**GDP (In Rs Millions)**	**GDP (In Rs Millions)**	**GDP (In Rs Millions)**	**GDP (In RS Millions)**	**GDP (In Rs Millions)**
1	**Uttar Pradesh Sub-region**	332437.28	349398.51	424130	454420	474316	506453
2	**Delhi Region**	1003245	1104061	1240796	1379609	1557911	1698390
3	**Rajasthan Sub- region**	77420.3	77425.7	90451.3	93576.1	110109.8	121901
4	**Haryana Sub-region**	496818.2	560660	621448	686566	744925	866730
5	**GDP NCR**	1909921	2091545	2376825	2614171	2887262	3193474

The GDP of NCT of 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 of Delhi has increased by 3/4 times. Additionally, GDP of Haryana sub-region increased at rate faster than compared to other sub-regions, particularly after 2004-2005 (see Figure 2.1).

[9] 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

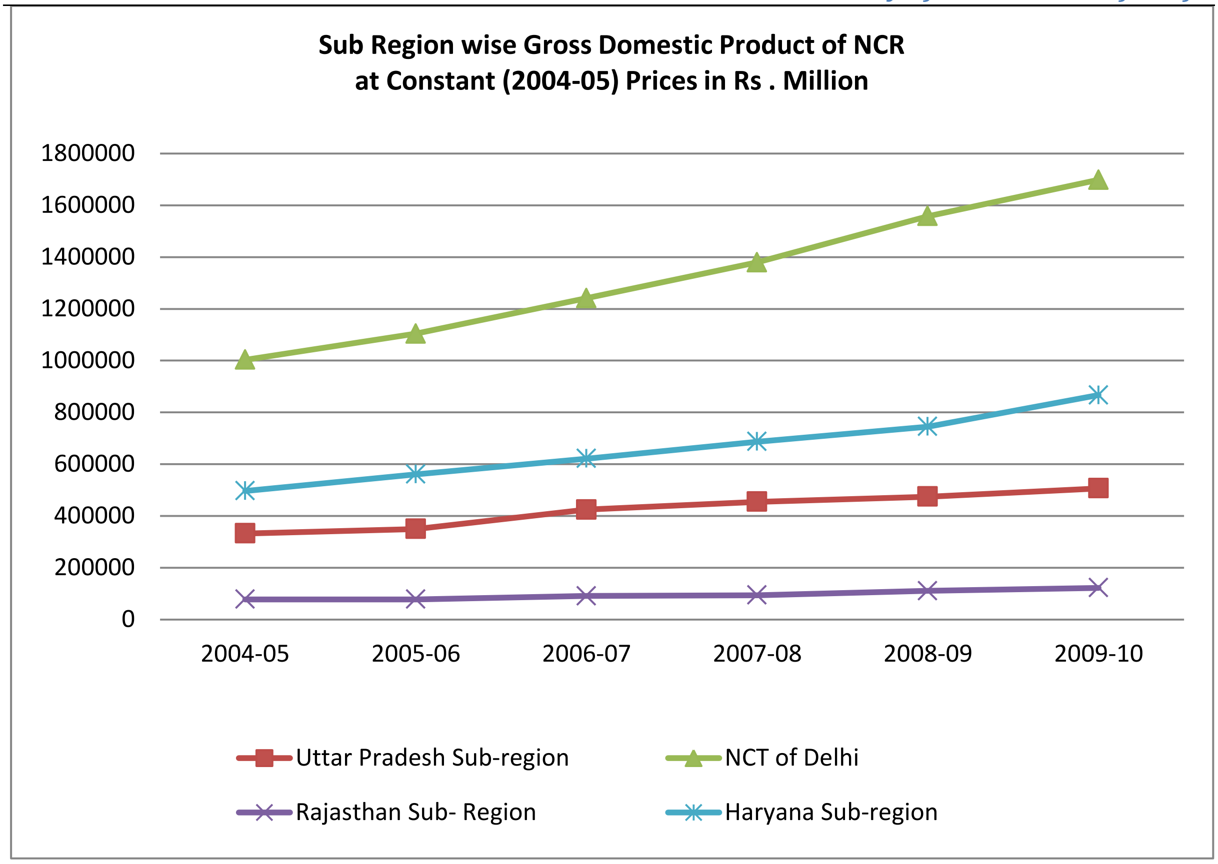


Figure 2.1: Sub-Region wise Gross Domestic Product of NCR at Constant 2004-05 Prices in Rs Million

Other key findings include:

- GDP of Rajasthan sub-region has increased at a very laggard pace.
- Uttar Pradesh and Haryana sub-regions reported GDP trends on almost similar lines till 2006-07 when Haryana sub-region started making better progress, probably due to heavy investments during this time in Gurgaon and Manesar.
- Till 2004-05, the growth ratio was comparatively smaller between the four regions but the difference gradually became broader from the year 2005-06 onwards.

Figure 2.2 presents the annual average growth rate (AAGR) of GDP of the four sub-regions, while Table 2.5 presents detailed figures for the same.

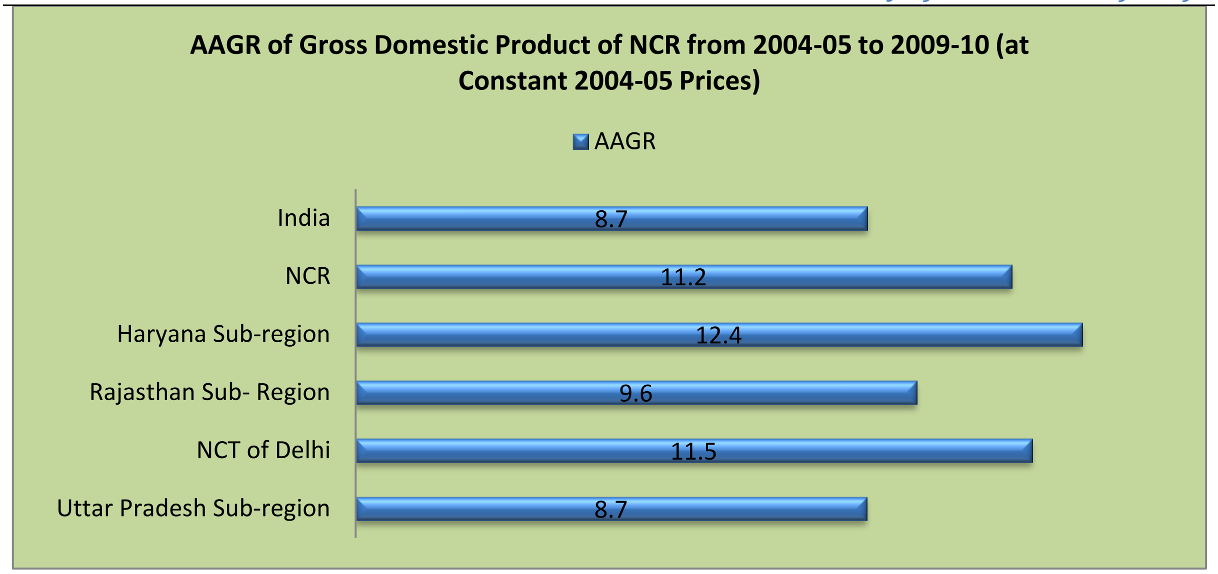


Figure 2.2: AAGR of Gross Domestic Product of NCR from 2004-05 to 2009-10 at Constant 2004-05 Prices

Table 2.3: Sub-Region wise AAGR of Gross Domestic Product of NCR from 2004-05 to 2009-10 (at Constant 2004-05 Prices)[10]

S. No.	Sub-Regions	YoY% 2005-06	YoY% 2006-07	YoY% 2007-08	YoY% 2008-09	YoY% 2009-10	AAGR
1	Uttar Pradesh Sub-region	5.10	21.39	7.14	4.38	6.78	8.7
2	NCT of Delhi	10.05	12.38	11.19	12.92	9.02	11.5
3	Rajasthan Sub-Region	0.01	16.82	3.45	17.67	10.71	9.6
4	Haryana Sub-region	12.85	10.84	10.48	8.50	16.4	12.4
5	**NCR**	**9.51**	**13.64**	**9.99**	**10.45**	**9.13**	**11.2**
6	**India**	**9.48**	**9.57**	**9.32**	**6.72**	**8.59**	**8.7**

Key findings include:

- Haryana Sub-region (12.4%) demonstrates the maximum AAGR of GDP followed by Delhi (11.5%), Rajasthan (9.6%) and Uttar Pradesh (8.7%) respectively.
- It can also be noted that the growth difference between Rajasthan and Uttar Pradesh sub-region was very miniscule at 9.6% and 8.7% respectively.
- AAGR of GDP in NCR was higher (11.2%) than India (8.7%).

Table 2.4 presents the comparative AAGR of GDP of states and respective sub-regions, while Figure 2.3 presents the time-series data on same for Uttar Pradesh.

[10] 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>

Table 2.4: Comparative Average Annual Growth Rate of states and respective Sub-Regions from 2004-05 to 2009-10 (at Constant 2004-05 Prices)[11]

S. No.	Sub-Regions	YoY% 2005-06	YoY% 2006-07	YoY% 2007-08	YoY% 2008-09	YoY% 2009-10	AAGR
1	NCT of Delhi	10.05	12.38	11.19	12.92	9.02	11.5
2	Uttar Pradesh Sub-region	5.10	21.39	7.14	4.38	6.78	8.7
3	Uttar Pradesh	6.51	8.07	7.32	6.99	6.58	6.81
4	Rajasthan Sub-Region	0.01	16.82	3.45	17.67	10.71	9.6
5	Rajasthan	6.68	11.67	5.14	9.09	6.70	7.63
6	Haryana Sub-region	12.85	10.84	10.48	8.50	16.4	12.4
7	Haryana	9.20	11.22	8.45	8.17	11.72	9.86
8	**GDP of NCR**	**9.51**	**13.64**	**9.99**	**10.45**	**10.60**	**11.2**
9	**GDP of India**	**9.48**	**9.57**	**9.32**	**6.72**	**8.59**	**8.736**

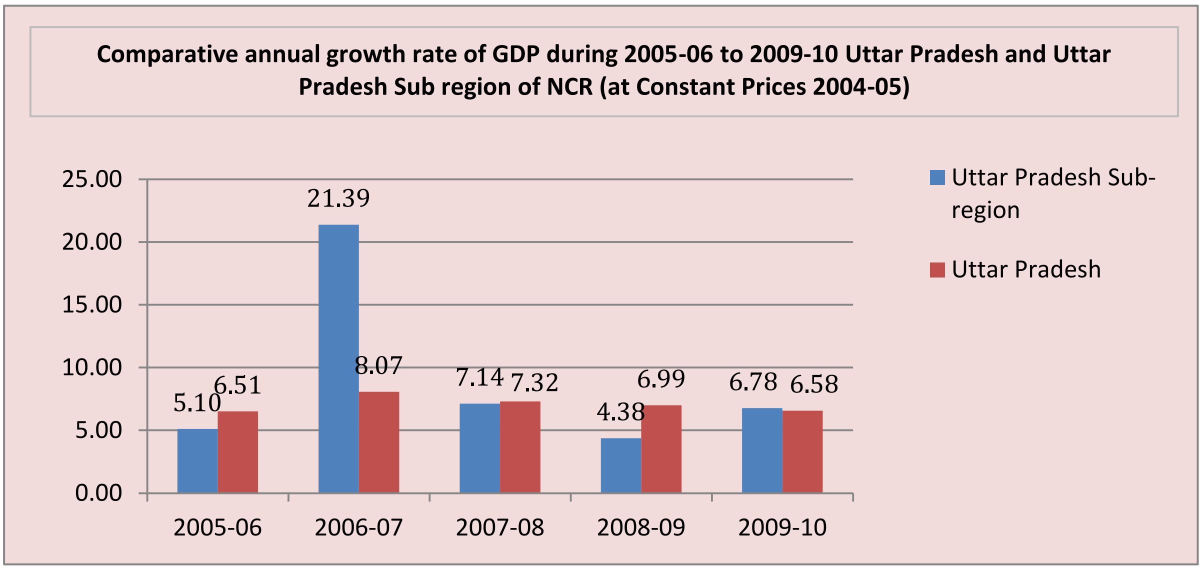


Figure 2.3: Comparative Annual Growth Rate of GDP during 2005-06 to 2009-10 Uttar Pradesh and Uttar Pradesh Sub-Region of NCR (at Constant 2004-05 Prices)

Uttar Pradesh sub-region recorded the highest growth in the year 2006-07 at 21.39% in among the sub regions of NCR.

- The comparative highest and the lowest AGR were both recorded by UP sub-region in the year 2006-07 and 2008-09 at 21.39% and 4.38% respectively.

[11] 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> ; Data Tables, Planning Commission

- Both UP and UP sub-region show a competitive growth, provided UP performed better than the UP sub region, except for the years 2006-07 and 2009-10.

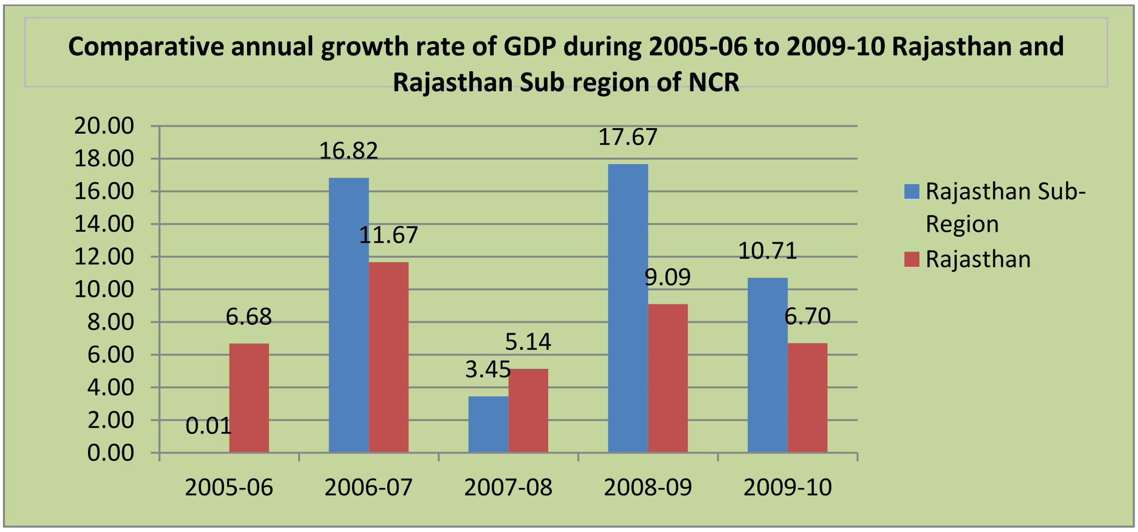


Figure 2.4: Comparative annual growth rate of GDP during 2005-06 to 2009-10 Rajasthan and Rajasthan Sub-Region of NCR

- By the end of year 2009-10, both UP and UP sub-region marked their annual growth rate of GDP at minutely differentiating points at 6.78% and 6.58 % respectively.

Key findings include:

- Rajasthan (state) underwent a series of ups and downs with AGR of 6.68% in 2004-05, 11.67% in 2006-07; 5.14% in 2007-08; 9.09%in 2008-09 and 6.70% in 2009-10. Similarly, Rajasthan sub-region was also experiencing ups and downs 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.
- Between 2005-06 to 2009-10, both the Rajasthan and Rajasthan sub region experienced simultaneous ups and downs, the Rajasthan sub region have performed better than the state except for the years 2005-06 and 2007-08.

Table 2.5 presents the comparative growth rate of GDP of the four sub-regions and the corresponding state while Figures 2.4 through 2.6 present the trends of Rajasthan, Haryana and the NCR vis-à-vis India GDP figures respectively.

Table 2.5: Comparative Annual Growth Rate of states and respective Sub-Regions from 2004-05 to 2009-10 (at Constant 2004-05 Prices)[12]

S. No.	Sub-Regions	YoY% 2005-06	YoY% 2006-07	YoY% 2007-08	YoY% 2008-09	YoY% 2009-10	AAGR
1	NCT of Delhi	10.05	12.38	11.19	12.92	9.02	11.5
2	Uttar Pradesh Sub-region	5.10	21.39	7.14	4.38	6.78	8.7
3	Uttar Pradesh	6.51	8.07	7.32	6.99	6.58	6.81
4	Rajasthan Sub-Region	0.01	16.82	3.45	17.67	10.71	9.6
5	Rajasthan	6.68	11.67	5.14	9.09	6.70	7.63
6	Haryana Sub-region	12.85	10.84	10.48	8.50	16.4	12.4
7	Haryana	9.20	11.22	8.45	8.17	11.72	9.86

Key findings are:

- AAGR of Haryana, Uttar Pradesh and Rajasthan sub-regions (12.4%; 8.7% and 9.6% respectively) was higher than that of their corresponding states (9.86%, 6.81% and 7.63 respectively).
- The AGR of GDP of Haryana sub-region and that of Haryana experienced simultaneous ups and downs.
- The Haryana sub-region demonstrates a higher sustainable growth rate of 12.85%, 10.48 and 8.50% compared to Haryana state with growth rate of 9.2%, 8.45%, 11.72 for the periods 2005-06, 2007-08 and 2008-09 respectively, except for the years 2006-07 and 2009-10.

[12] Source(s): Delhi, Economic Survey 2012-13; Department of Economic and Statistical Analysis, Haryana; Directorate of Economic and Statistics, Rajasthan, <updes.up.nic.in> ; Data Tables, Planning Commission

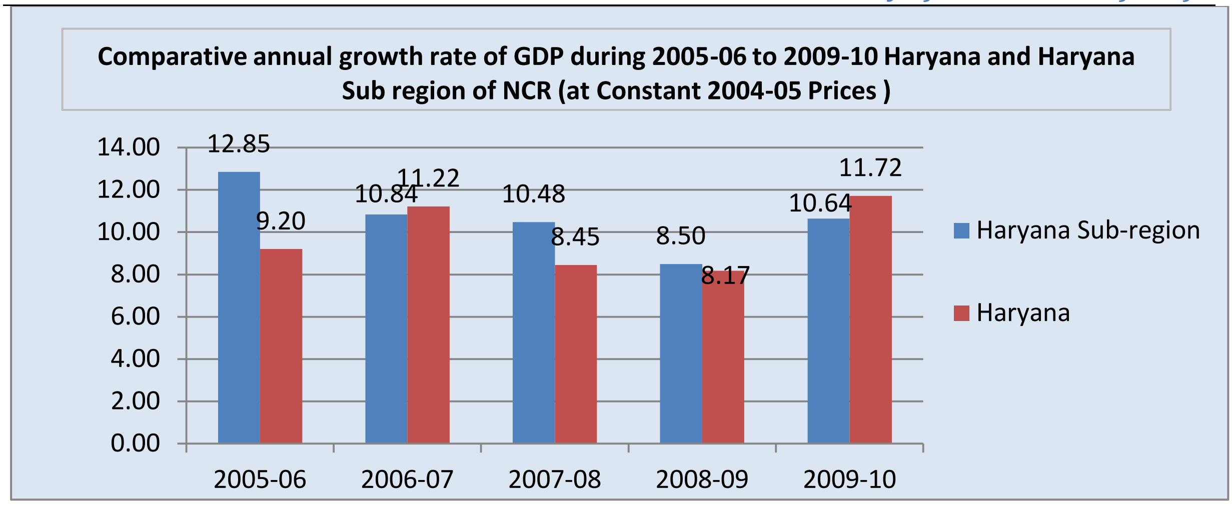
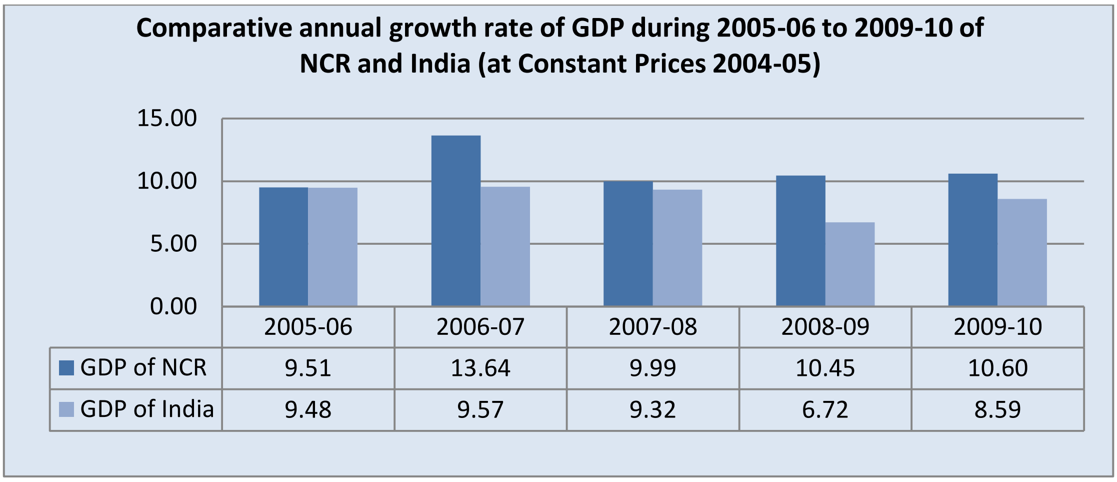


Figure 2.5: Comparative Annual Growth Rate of GDP during 2005-06 to 2009-10 Haryana and Haryana Sub-Region of NCR (at Constant 2004-05 Prices)



	2005-06	2006-07	2007-08	2008-09	2009-10
GDP of NCR	9.51	13.64	9.99	10.45	10.60
GDP of India	9.48	9.57	9.32	6.72	8.59

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

Key findings include:

- The highest growth rate in the above graph has been noted in the growth of GDP of NCR 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.

Figure 2.7 presents the annual growth rate of GDP of NCT on a time-series, while Figure 2.8 presents the same data for Rajasthan.

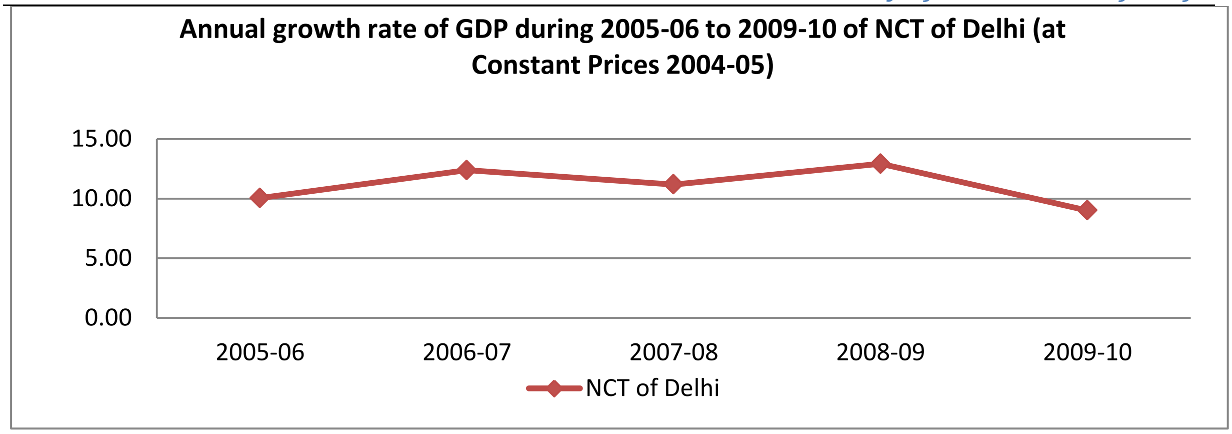


Figure 2.7: Annual Growth Rate of GDP during 2005-06 to 2009-10 of NCT of Delhi (at Constant 2004-05 Prices)

Key findings are:

- The annual growth rate of GDP of NCT 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 rate was slow.

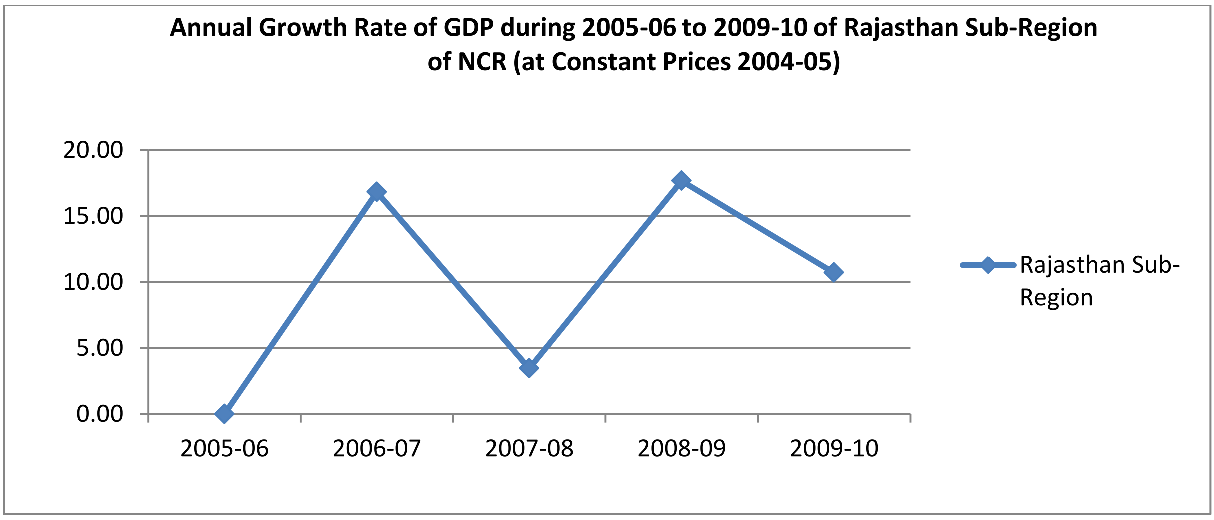


Figure 2.8: Annual Growth Rate of GDP during 2005-06 to 2009-10 of Rajasthan Sub-Region of NCR (at Constant Prices 2004-05)

Key findings include:

- The annual growth rate in the Rajasthan sub region experienced frequent ups and downs from 2005-06 to 2009-10.

- In 2005-06 the AGR was almost equal to 0, then picked up to 16.82% in the next year (2006-7), followed by a dip to 3.45% in 2007-08 and then increased to 17.67% then again followed by a dip in 2009-10 to 10.71%.
- During this time period, the Average Annual Growth Rate (AAGR) for the sub region was 9.6%

Table 2.6 presents the district-wide GDP of Uttar Pradesh sub-region while Figure 2.9 presents the same in figures.

Table 2.6: District wise GDP of Uttar Pradesh Sub-Region from 2004-2005 to 2009-10 (at Constant 2004-05 Prices) (In Rs Millions)[13]

Districts	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Meerut	71760.6	81598.94	85739.16	91741.39	93859.36	101254.56
Bagpat	29072.7	28550.69	30675.61	32878.24	34721.48	38426.16
Gaziabad+Hapur	89271.38	97684.35	116072.75	124785.67	131283.9	136475.9
Gautambudh nagar	73533.04	75276.19	117301.88	126289.94	131114	141557.06
Bulandshahr	68799.56	66288.34	74341.09	78724.65	83337.35	88739.5

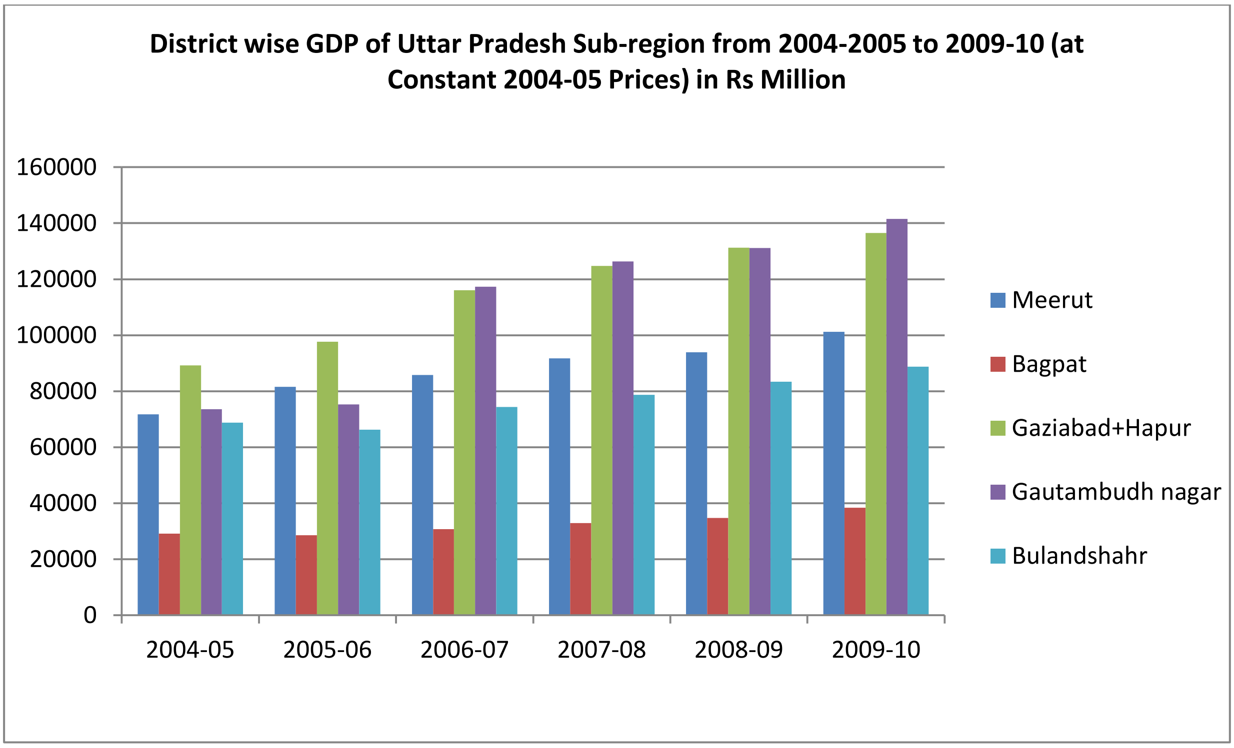


Figure 2.9: District wise GDP of Uttar Pradesh Sub-Region from 2004-2005 to 2009-10 (at Constant 2004-05 Prices) in Rs Million

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

Key findings include:

- In 2009-10, the highest GDP was recorded in Gautambudh Nagar (INR 141557.06 Million), which was almost four times that of Baghpat (INR 38426.16 Million).
- The GDP in Meerut, Ghaziabad + Hapur and Bulandshahr districts were competitive at INR 101254.56 Million, 136475.9 Million and 88739.5 Million respectively.
- Growth of GDP of Baghpat, Bulandshahr, GautamBudh Nagar, Ghaziabad and Meerut showed similar growth pattern throughout 2005-10.
- Gautambudh Nagar has displayed the highest growth of GDP in comparison to other districts. The maximum growth was experienced at INR 68024 Million in the year 2007-08.
- The lowest GDP has been that of Baghpat at INR 29072.2 Million in 2004-05. Evidently, it did not see a very high growth in the coming years and was at 38426.16 Million in the year 2009-10.

Figure 2.10 depicts district-wise GDP of Haryana sub-region including Faridabad, Gurgaon, Jhajjar, Mewat, Panipat, Rewari, Rohtak, Palwal and Sonipat.

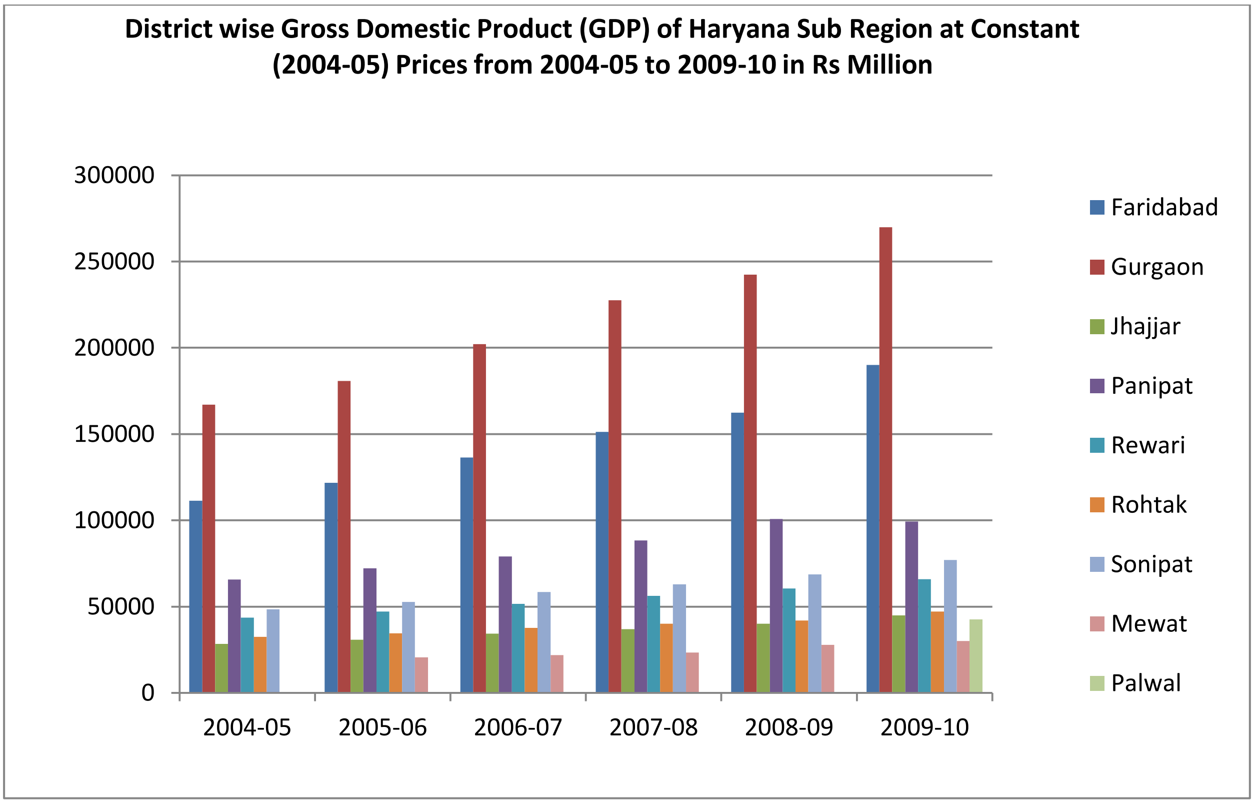


Figure 2.10: District wise Gross Domestic Product (GDP) of Haryana Sub-Region at Constant 2004-05 Prices from 2004-05 to 2009-10 in Rs Million

Key findings include:

- Gurgaon have accounted for the largest share in GDP of Haryana sub region at INR 269905.5 Million in 20O9-10; consistently from 2004-05 as seen in the above graph.
- Even though Mewat is being compared to other sub-regions, it was recognized as a separate district only in the year 2006. This district has witnessed the lowest share in the sub region's GDP at INR 29967.8 Million consistently since 2005-06.
- The newly recognized district of the Haryana sub region i.e. Palwal in 2009-10 have touched a GDP of INR 42546.5 Million in the year 2009-10.
- After Gurgaon, Faridabad has witnessed the largest share in the sub region's GDP at INR 190014.6 Million, followed by Panipat at INR 99297.5 Million; Sonipat at INR 77067.6 Million; Rewari at INR 65930.6 Million; Rohtak at 47052.3 Million during the year 2009-10.

Table 2.7 presents the district-wise, year on year (YoY) growth rate of GDP in Haryana sub-region.

Table 2.7: District wise Annual Growth (YoY) rate of GDP of Haryana Sub-Region from 2004-2005 to 2009-10 (at Constant 2004-05 Prices)[14]

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**

Key findings include:

- Faridabad records the highest growth in GDP amongst all districts in the year 2007-08 closely followed by Panipat district with GDP growth at 12.23%.
- Faridabad, Rewari and Sonipat did fairly well with GDP growth rates at 10.82%, 10.48% and 9.24% respectively.

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

- The least growth in GDP was seen by Jhajjar, Mewat and Rohtak districts, at 8.99%, 8.62% and 8.37% respectively.

Table 2.8 presents the per capita Income for NCT of Delhi, Table 2.11, Table 2.12 and Table 2.13 present the same for Uttar Pradesh, Haryana and Rajasthan sub regions respectively.

Table 2.8: Per Capita Income of NCT Delhi at Constant (2004-05) Prices[15]

NCT Delhi	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Per Capita income (in Rs.)	63,877	69,128	76,243	83,243	91,845	98,262

- Per capita Income of NCT of Delhi recorded more than 53% increase from INR 63,877 in 2004-05 to INR 98,262 in 2009-10.
- The trend of increase in per capita income is more visible during the 2005-06, 2006-07, 2007-08 and 2008-09 as can be seen from Figure 2.11.

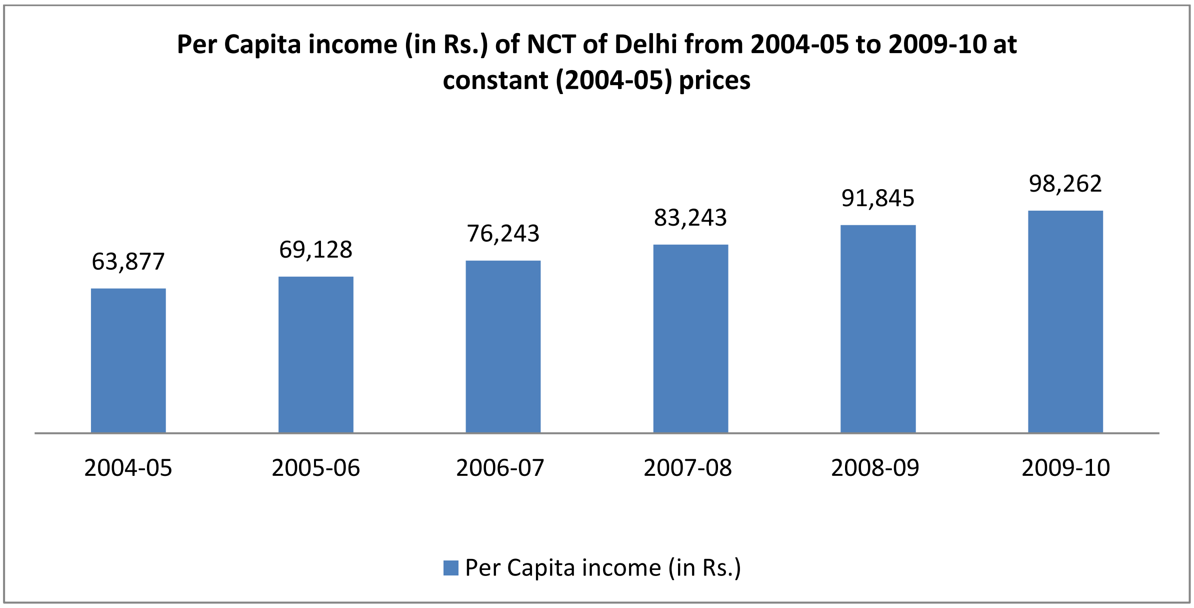


Figure 2.11: Per Capita income (in Rs.) of NCT of Delhi from 2004-05 to 2009-10 at Constant 2004-05 Prices

Table 2.9: District wise per capita Income at Constant 2004-05 Price for Uttar Pradesh Sub-Region from 2004-05 to 2009-10 in Rs[16]

Regions	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Meerut	19,946.28	22,148.51	22,925.14	23,923.94	24,043.62	25,536.35
Bagpat	21,779.58	21,090.75	22,471.80	23,776.14	24,937.65	27,348.20

[15] Source: Economic Survey of Delhi, 2012-13
[16] Source: updes.up.nic.in

Gaziabad+Hapur	20,775.18	21,863.16	25,032.36	25,637.83	26,109.19	26,426.39
Gautambudha Nagar	45,148.22	44,420.84	67,374.48	67,961.93	68,516.28	71,960.92
Bulandshahr	20,051.06	18,903.35	20,922.42	21,737.87	22,750.01	23,909.02

Key findings for Uttar Pradesh sub-region are:

- Per capita income of Gautambudh Nagar was significantly different from per capita income of other districts of Uttar Pradesh Sub region.
- Till 2009-10, Gautambudh Nagar recorded the highest per capita GDP in the sub region, with almost double of any other district of the sub-region till 2005-06 and almost three times of the other districts since then till 2009-10.
- Bulandshahr has lowest per capita income in the sub region of INR 23,909 in the year 2009-10.
- All other districts except Gautambudh Nagar with per capita Income of INR 71,960.92 have per capita Income of the range INR 23K – 28K (refer Figure 2.12).

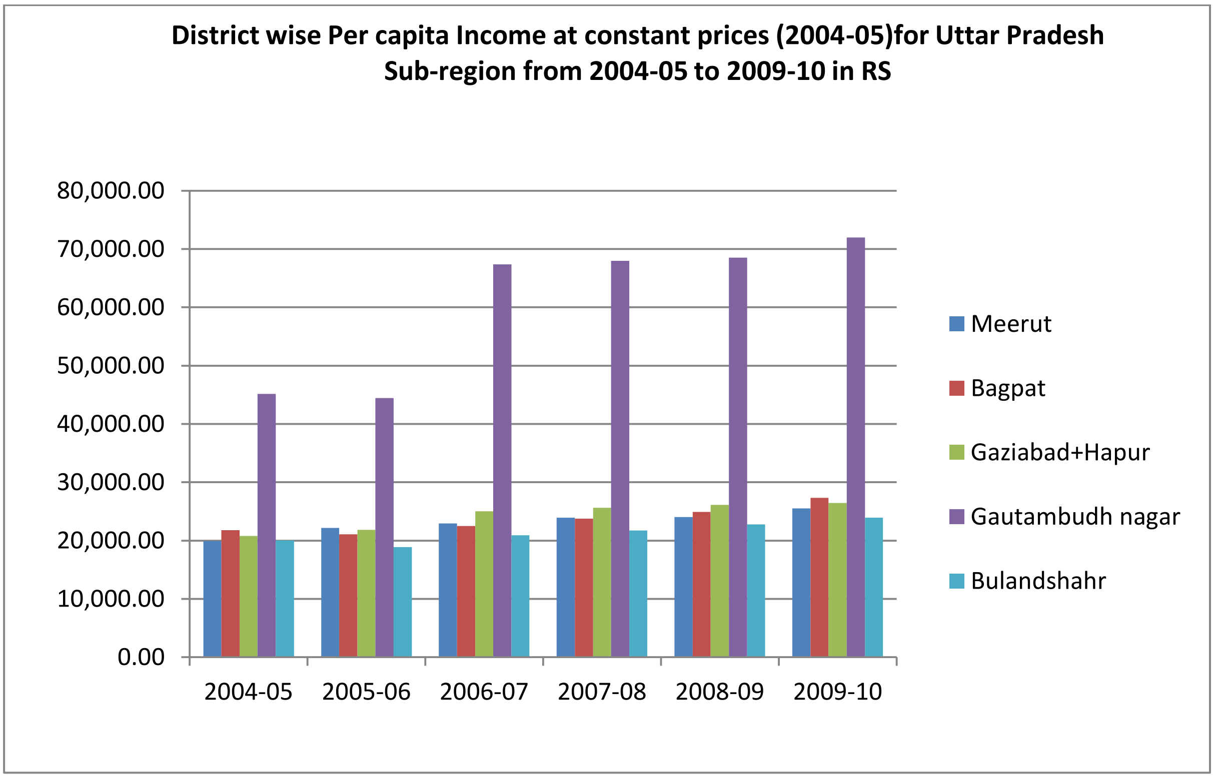


Figure 2.12: District wise Per Capita Income at Constant 2004-05 Prices for Uttar Pradesh Sub-Region from 2004-05 to 2009-10 in Rs

Table 2.10: District wise Per Capita Income at Constant 2004-05 Prices for Haryana Sub-Region for the period 2004-05 to 2009-10[17]

Regions	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Faridabad	41590	49408	54359	58882	61787	106896
Gurgaon	81478	165878	181730	199095	206817	229208
Jhajjar	26820	28525	31238	32824	35032	38665
Mewat	NA	17715	17764	18529	21706	27327
Panipat	57436	61273	66607	73095	81678	79047
Rewari	46259	50036	52634	55463	58120	63075
Rohtak	28959	29624	32219	33665	34429	38167
Sonipat	31723	33441	36879	38747	41496	46071
Palwal						41658

Key findings for Gurgaon sub-region is below:

- Gurgaon has highest per capita Income in Haryana sub-region of NCR with INR 229208 followed by Faridabad with INR 106896; Panipat with INR 79047, and Rewari with INR 63075 in 2009-10.
- Mewat has lowest per capita Income at INR 27327. Among the remaining four districts; Rohtak & Jhajjar have similar per capita income above INR 38K, while Sonipat and Palwal have a higher per capita than them of over INR 40K.
- After 2005, there has been a manifold increase in the GDP of Gurgaon district mainly due to the developments in Real Estate and IT/ITES sector.

[17] Source: Department of Economic and Statistical Analysis, Haryana

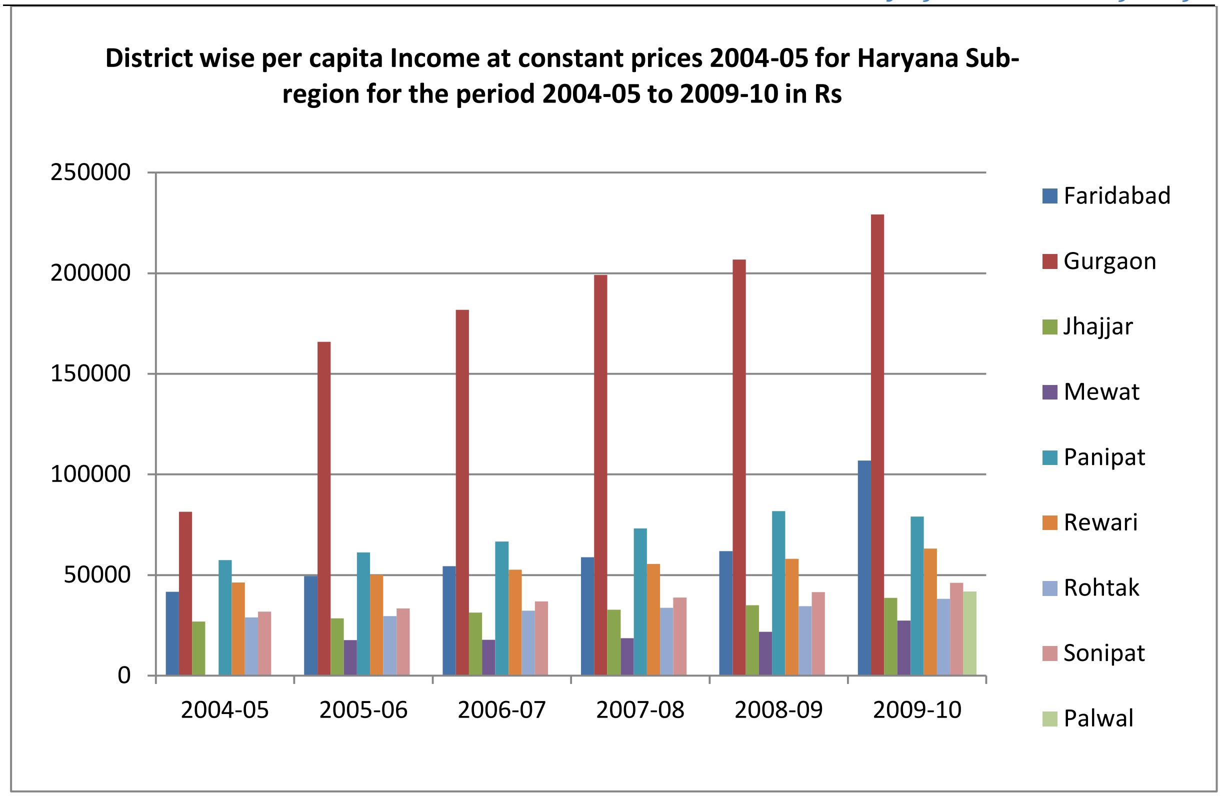


Figure 2.13: District wise Per Capita Income at Constant 2004-05 Prices for Haryana Sub-Region for the period 2004-05 to 2009-10 in Rs

Table 2.11: Per Capita Income at Constant 2004-05 Prices for Rajasthan Sub-Region from 2004-05 to 2009-10[18]

District	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Alwar (in Rs)	20,721	20,423	23,522	23,638	27,030	29,300

Key findings for Rajasthan sub-region are as follows:

- Rajasthan Sub-region, consisting of only Alwar district has recorded per capita income of INR 29,300 in the year 2009-10. The per capita income if the district has consistently been rising from INR 20,721 in 2004-05 to INR 29,300 in 2009-10, except during 2005-06 when it slight dipped (refer Figure 2.14).

[18] Directorate of Economics and Statistics, Rajasthan

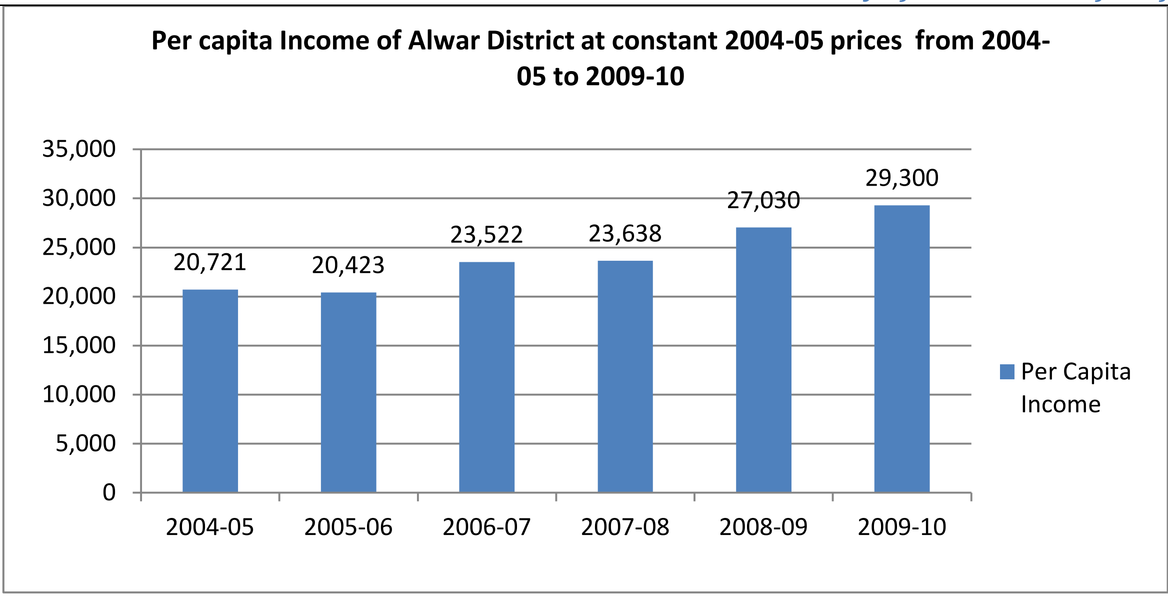


Figure 2.14: Per Capita Income of Alwar District from 2004-05 to 2009-10 at Constant prices of 2004-05

Table 2.12: District wise Per Capita Income of NCR at Constant 2004-05 Prices from 2004-05 to 2009-10[19]

District	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
NCT of Delhi	**63,877**	**69,128**	**76,243**	**83,243**	**91,845**	**98,262**
Meerut	19,946.28	22,148.51	22,925.14	23,923.94	24,043.62	25,536.35
Bagpat	21,779.58	21,090.75	22,471.80	23,776.14	24,937.65	27,348.20
Gaziabad+Hapur	20,775.18	21,863.16	25,032.36	25,637.83	26,109.19	26,426.39
Gautambudh nagar	45,148.22	44,420.84	67,374.48	67,961.93	68,516.28	71,960.92
Bulandshahr	20,051.06	18,903.35	20,922.42	21,737.87	22,750.01	23,909.02
Uttar Pradesh Sub region	**25,540.06**	**25,685.32**	**31,745.24**	**32,607.54**	**33,271.35**	**35,036.18**
Faridabad	41590	49408	54359	58882	61787	106896
Gurgaon	81478	165878	181730	199095	206817	229208
Jhajjar	26820	28525	31238	32824	35032	38665
Mewat	NA	17715	17764	18529	21706	27327
Panipat	57436	61273	66607	73095	81678	79047
Rewari	46259	50036	52634	55463	58120	63075
Rohtak	28959	29624	32219	33665	34429	38167
Sonipat	31723	33441	36879	38747	41496	46071
Palwal						41658
Haryana Sub region	**44895**	**54487**	**59179**	**63788**	**67633**	**74457**

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

Alwar	20,721	20,423	23,522	23,638	27,030	29,300
Rajasthan sub region	**20,721**	**20,423**	**23,522**	**23,638**	**27,030**	**29,300**
NCR	**38,758**	**42,431**	**47,672**	**50,819**	**54,945**	**59,264**

Key findings include:

- There is a wide variation in the per capita income of different regions of NCR.
- In 2009-10, NCT of Delhi recorded the highest per capita income of INR 98262, followed by Haryana sub-region at INR 74457, Uttar Pradesh at INR 35036 and Rajasthan at INR 29300.
- Per capita income of Delhi and Haryana sub-region is higher than that of NCR which has a per capita income of INR 59264.
- Rajasthan and Uttar Pradesh sub-regions have lower per capita income than the NCR. Their respective per capita income is also less than that of the Delhi and Haryana sub region (refer Figure 2.15).

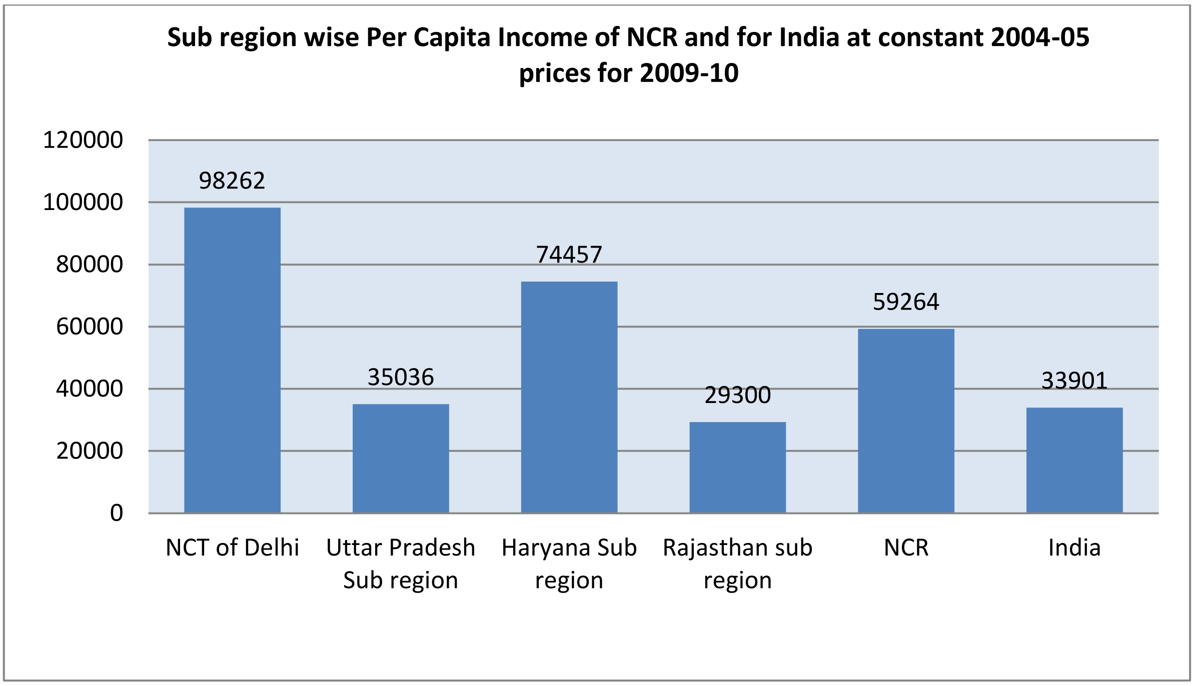


Figure 2.15: Sub-Region wise Per Capita Income of NCR and for India at Constant 2004-05 Prices for 2009-10[20]

[20] Department of Economics and Statistical Analysis, Haryana; Planning Commission, Govt. of India; <updes.up.nic.in>; Economic survey of Delhi; and Deptt. of Economics and Statistical Analysis, Rajasthan

Table 2.13: District wise Per Capita Income of NCR for the period 2004-05 to 2009-10 with the Compounded Annual Growth Rate (CAGR) over the period[21]

District	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	CAGR
NCT of 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
Gautam Budha 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	41590	49408	54359	58882	61787	106896	20.78
Gurgaon	81478	165878	181730	199095	206817	229208	22.98
Jhajjar	26820	28525	31238	32824	35032	38665	7.59
Mewat	NA	17715	17764	18529	21706	27327	11.45
Panipat	57436	61273	66607	73095	81678	79047	6.60
Rewari	46259	50036	52634	55463	58120	63075	6.40
Rohtak	28959	29624	32219	33665	34429	38167	5.68
Sonipat	31723	33441	36879	38747	41496	46071	7.75
Palwal						41658	NA
Haryana Sub region	**44895**	**54487**	**59179**	**63788**	**67633**	**74457**	**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**

Key findings are as follows:

- Haryana sub-region has the highest CAGR (10.65%), as compared with other sub-regions of NCR and is greater than the CAGR NCR (8.86%) too. 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 surpassed all others districts reporting a CAGR of 22.98%, followed by Faridabad with CAGR of 20.78% and Gautambudh Nagar with 9.77% CAGR (refer Table 2.16).

[21] Department of Economics and Statistical Analysis, Haryana; Planning Commission, Govt. of India; <updes.up.nic.in>; Economic survey of Delhi; and Deptt. of Economics and Statistical Analysis, Rajasthan

- In Uttar Pradesh Sub-region, CAGR of per capita income of all districts is maximum of 5.07% (Meerut) and lowest of 3.58% (Bulandshahr), except for Gautam Budha Nagar.

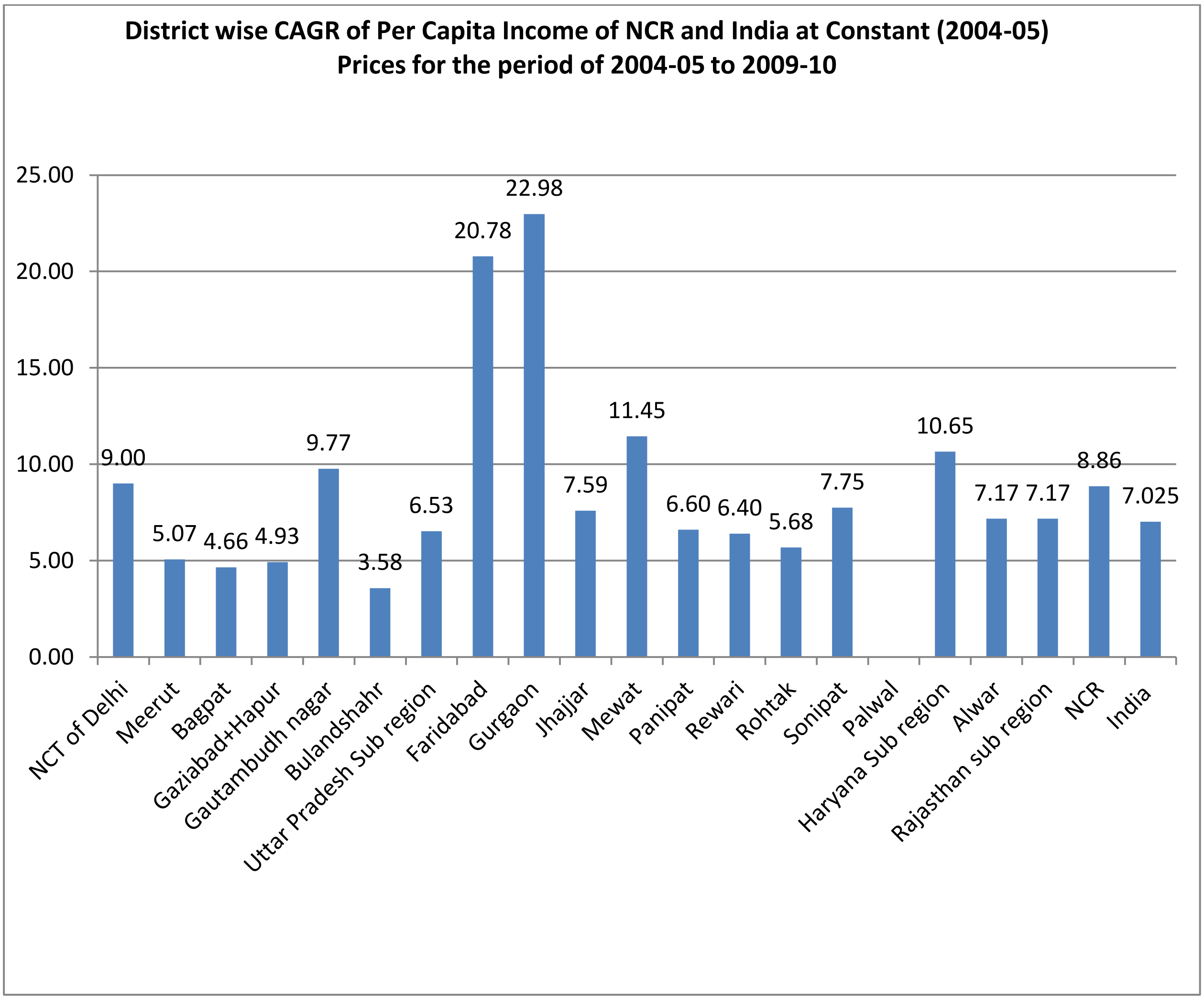


Figure 2.16: District wise CAGR of Per Capita Income of NCR and India at Constant (2004-05) Prices for the period of 2004-05 to 2009-10

Haryana and Delhi Sub-Regions cater to industrial sector with presence of MNC's and MSME's 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. Table 2.14 presents the sub region wise CAGR of per capita income during the period of 2004-05 to 2009-10, while Figure 2.16 present aggregated data of the district wise CAGR during this period.

Table 2.14: Comparative Per Capita Income of NCR and India at Constant 2004-05 Prices from 2004-05 to 2009-10 along with CAGR[22]

District	2004-05	2009-10	CAGR
NCT of Delhi	63,877	98,262	9
Uttar Pradesh Sub region	25,540.06	35,036.18	6.53
Haryana Sub region	44895	74457	10.65
Rajasthan sub region	20,721	29,300	7.17
NCR	38,758	59,264	8.86
India	24,143	33,901	7.025

Table 2.15 demonstrates that most NCR districts report a CAGR in the range of 1%-10%, with the only exception being Gurgaon.

Table 2.15: 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, Gautambudh nagar
10 and above	3	Faridabad, Gurgaon, Mewat
NA	1	Palwal

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

2.3 NCR Sectoral Trends

The analysis of sectoral growth GDP at constant prices divulges that the contribution of the primary sector consists of livestock, agriculture, fishing, forestry, mining & quarrying and also that the secondary sector includes manufacturing, electricity, gas, water-supply. Furthermore, the construction is decreasing (Refer Figure 2.17). In 2007-08, the tertiary sector accounted for about 2/3rd share NCR's GDP followed by secondary sector with 25% and remaining with Primary sector.

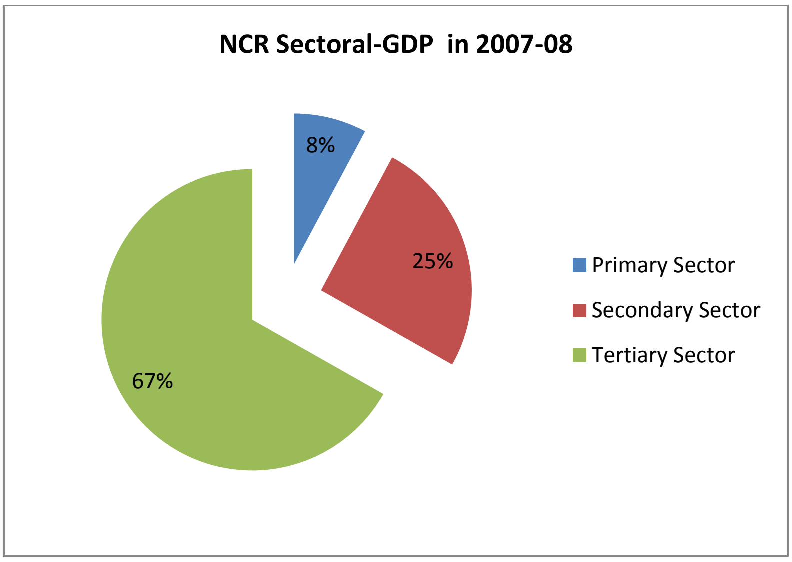


Figure 2.17: NCR Sectoral-GDP in 2007-08

The reasons for the shift in the sectoral composition of the NCR economy may be attributed to the instantaneous 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. Periodic monitoring of environmental degradation by varied government agencies on the directives of the Honorable Supreme Court and subsequent closing down of the polluting industrial units also contributed to the stagnation of output of the secondary sector.

Delhi Sub-Region

Table 2.16 presents the sector wise year-on-year growth rate of GDP of NCT of Delhi. Trends indicate that the strong tertiary sector (85% of total GDP of the NCT; refer Figure 2.18) is the backbone of the economy, comprising primarily of communications, transport, real estate, financial services, wholesale trade and other business related services, is an important indicator of growing urbanization of the NCT of Delhi.

Although the Primary sector, comprising of agriculture & allied activities and mining & quarrying have been experiencing a negative growth rate in the years 2005-06, 2007-08 and 2008-9, but have done quite very well in 2009-10 with a recorded growth rate of 26.8%. However, when it comes to the industrial sector, it has experienced more or less a stable growth rate between 5% - 6% during 2005-6 to 2009-10, except for 2006-07 with a growth rate of 7.1%.

Table 2.16: Sector wise YoY% growth rate of GDP of NCT of Delhi during the Period 2005 to 2010[23]

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**

The contribution of the primary sector to the GDP of NCT of Delhi has declined over the last decade and is touching hardly 1% share. From 2004-05 to 2009-10, the primary sector has witnessed a, AAGR of 3.2%, since it has negative YoY growth in the previous years. The secondary sector saw few imbalances but has grown at an AAGR of 5.4% and contributes to 14% share in the GDP of NCT of Delhi. The major contributing sector to the GDP of NCT is the Tertiary sector, accounts for 85% share in it. This sector has done comparatively well than the other two sectors and has recorded an AAGR of 13.1% for the same period (2004-05 to 2009-10[24]).

[23] Directorate of Economics & Statistics, Delhi; Estimates Of State Domestic Product, Delhi, 2012-13
[24] Directorate of Economics & Statistics, Delhi; Estimates Of State Domestic Product, Delhi, 2012-13

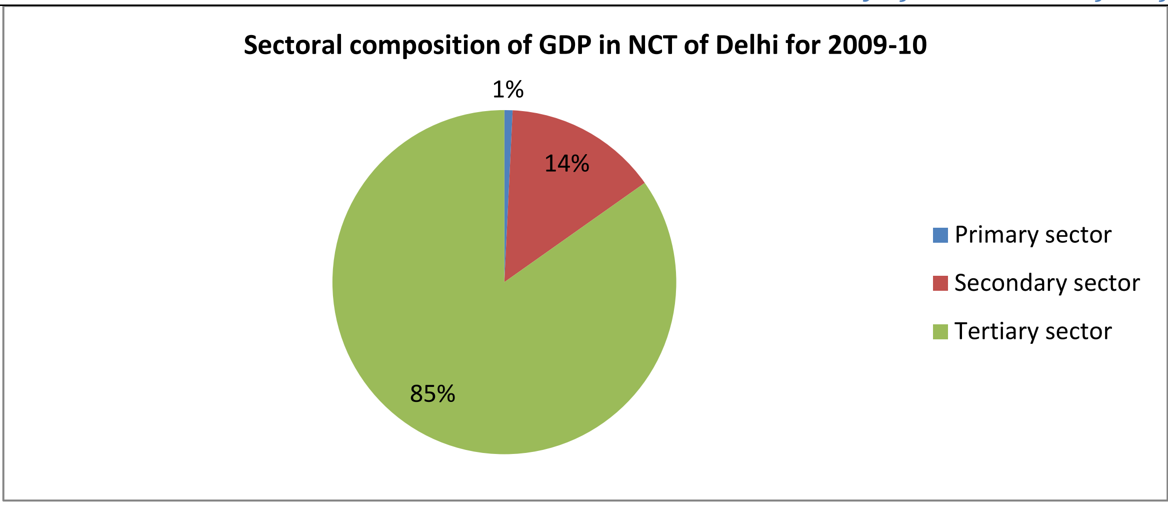


Figure 2.18: Sectoral composition of GDP in NCT of Delhi for 2009-10

Rajasthan Sub-region

Table 2.17 presents the sector wise year-on-year growth rate of GDP in the Rajasthan sub-region. The primary sector growth is observed in Alwar district of Rajasthan (7.8 % average for 8 years), while the secondary sector records a similar growth rate of 9.5% and the tertiary sector records a growth rate of 7.3%. Thus in Rajasthan Sub-region annual average growth rate is similar for each sector.

There has varied imbalances in the rate of growth of the primary sector. In the year 2001-02 its contribution to GDP increased by 8.73% and in the year 2002-03 it recorded a negative growth of 23.65%. In the year 2003-04 rate of growth of primary sector was very high (67.73%). In subsequent years 2004-05 and 2005-06, there was a decline to 11.36% and 5.99% respectively. The total contribution of primary sector in the GDP of the sub- region in the year 2005-06 was 26% (refer Figure 2.19), while secondary and tertiary sectors contributed 32% and 42% respectively.

Table 2.17: 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-	**-2.4**	**1.6**	**-1.6**	**23.4**	**-2.1**	**1.3**	**15.6**	**26.0**	**7.7**

Region										

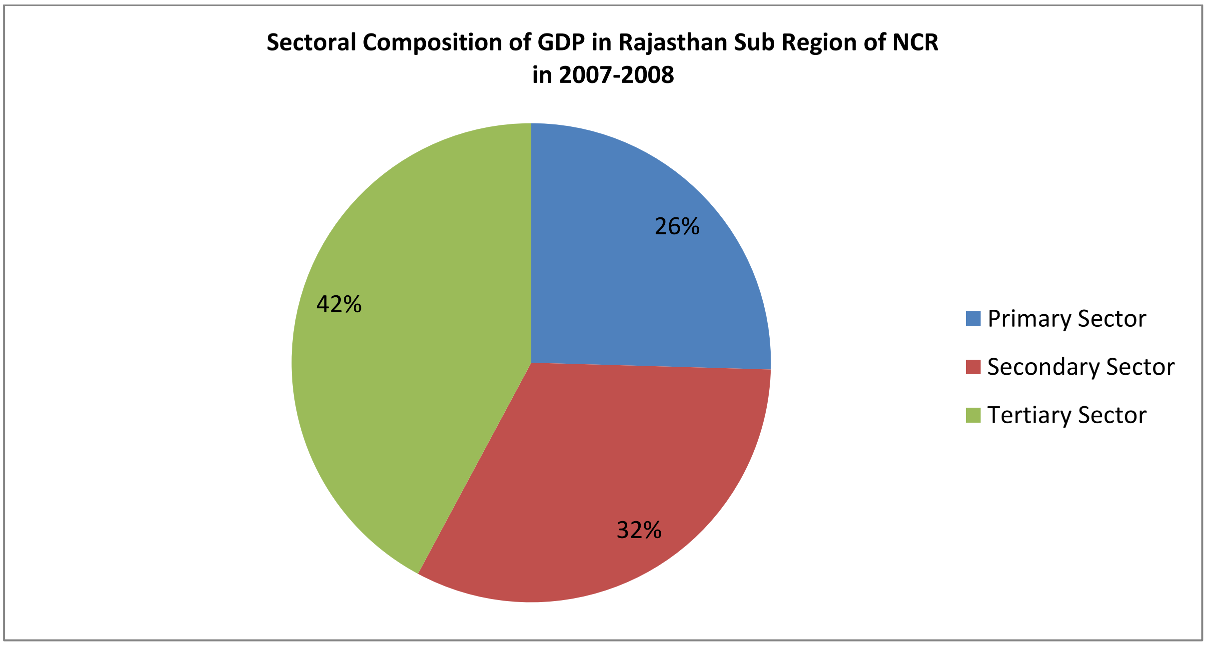


Figure 2.19: Sectoral composition of GDP in Rajasthan Sub-Region of NCR

Haryana Sub-region

Table 2.18 presents the sector wise year-on-year growth rate of GDP of Haryana sub-region. Trends demonstrate a rapidly growing tertiary sector with eight years annual average growth recorded at 10.3%. Secondary sector of Haryana sub-region has shown growth rate of 4.3% during the period 1999-2000 to 2007-2008. 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 small. Secondary sector has shown an impressive growth rate of 12.5%, primarily benefiting from rising real estate prices and infrastructural project coming up.

Secondary sector's contribution to GDP in the year 2005-06 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 2.20). Similarities in GDP growth pattern of NCT of Delhi and Haryana sub-region are also noted, especially in terms of growth of the secondary and the tertiary sectors over the last decade.

Table 2.18: Sector wise YoY growth rate of GDP of Haryana Sub-Region for the Period 2001 to 2008[25]

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

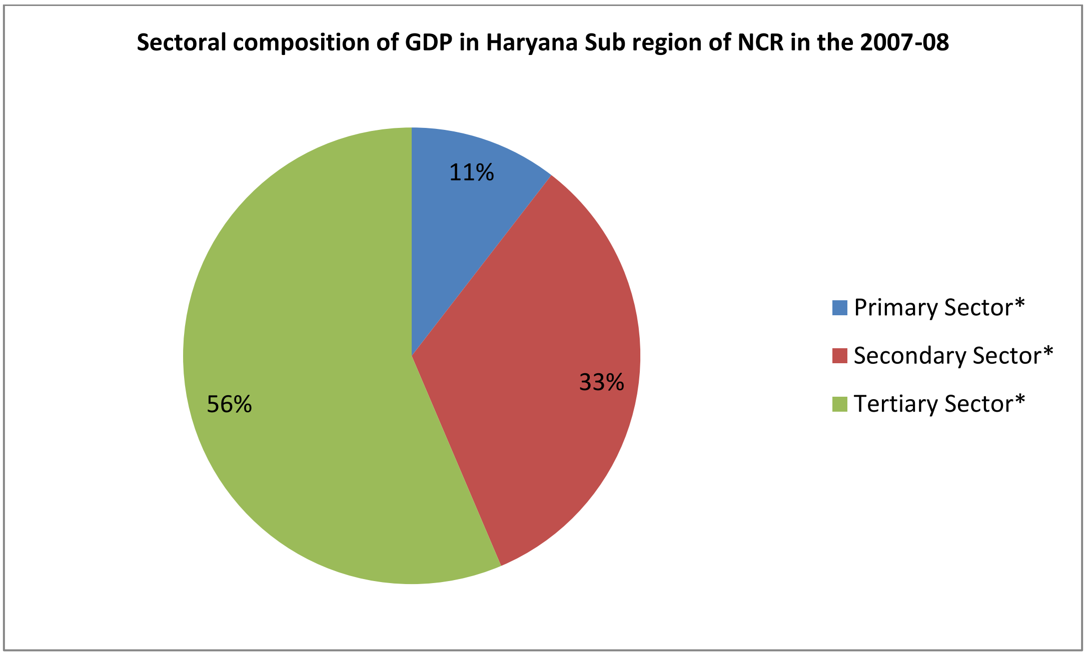


Figure 2.20: Sectoral composition of GDP in Haryana Sub-Region of NCR in the 2007-08

Uttar Pradesh Sub-Region

Table 2.19 presents the sector wise cum district wise composition of GDP of Uttar Pradesh sub-region. Primary, secondary and tertiary sector respectively are noted to demonstrate strong growth in the secondary sector and an almost comparative level of growth rates.

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

Table 2.19: GDP composition of UP Sub-Region at Constant (204-05) Prices for the year 2008-09 (In crores)[26]

Sectors/ Regions	Meerut	Bagpat	Ghaziabad +Hapur	Gautambudh nagar	Bulandshahr	UP Sub region
Primary Sector	2278.78	1272.83	1860.05	688	2620.66	8720.32
Secondary Sector	2707.88	587.92	5113.81	8186.95	2092.2	18688.75
Tertiary Sector	4399.28	1611.4	6154.53	4236.44	3620.88	20022.5
GDP	**9385.94**	**3472.15**	**13128.39**	**13111.4**	**8333.73**	**47431.16**

Primary, Secondary and Tertiary sectors contributed 18%, 40% and 42%, respectively towards the GDP of the sub-region. Secondary and tertiary sector are mainly developed in the districts of Gautambudh 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.

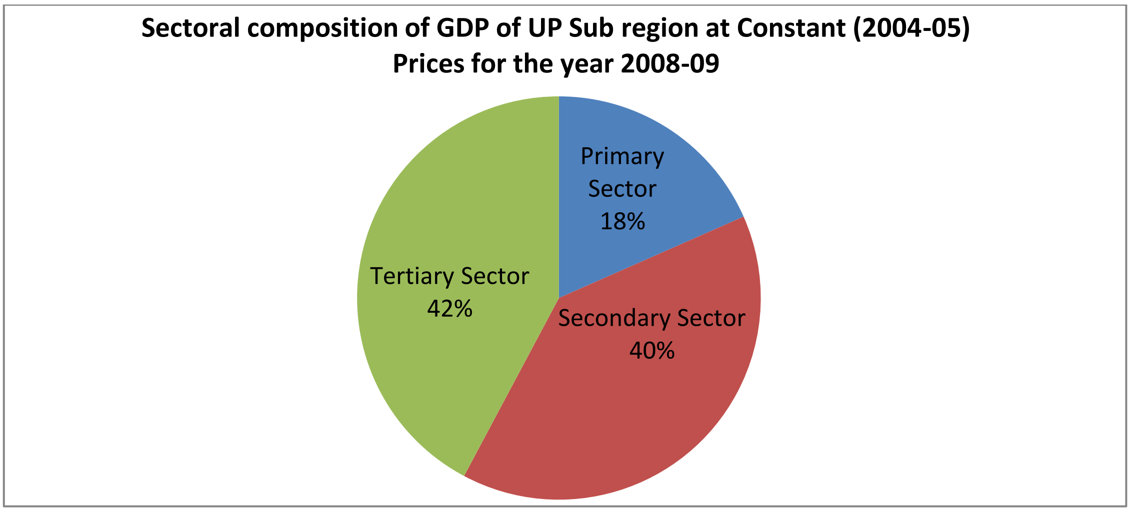


Figure 2.21: Sectoral composition of GDP of UP Sub-Region at Constant (2004-05) Prices for the year 2008-09

[26] Source: <updes.up.nic.in>

CHAPTER III

3. WORKFORCE IN NCR

3.1 Background

Employment level is an important indicator to understand the structure of an economy. The approaches adopted to tackle unemployment have been unstable from time to time. During the initial years of planning, primarily dependency was on the expectations of a rapid industrial development and the control over the population growth rate. However, these expectations did not transpire, and it was observed that 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 today is one of the fastest growing areas in terms of population and employment. Historically, NCT Delhi remained the main center for employment creation not only for Delhi's increasing workforce but also for the migrant population. Consequently, NCR's economy needs to create sufficient volume of 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. Table 3.1 presents the total number of workers in the NCR.

Table 3.1: Number of Total Workers in NCR as per Census 2001 and 2011[27]

Census Year	India	NCR	NCT of Delhi	Haryana Sub-Region	Rajasthan Sub-Region	Uttar Pradesh Sub-Region
2001	402234724	12972094	4346710	3414662	1458686	3752036
2011	481888868	15734929	5587049	3669197	1708542	4770141

3.2 Comparative Workers Participation Rate (1971-2011)

Table 3.2 presents the workforce participation rate of the NCR on a time-series. Trends demonstrate that the participation rate in NCT of 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, 2001-2011, participation rate for NCT of Delhi has increased and for Uttar Pradesh sub-region it has remained the same, while other sub regions of Haryana and Rajasthan have witnessed a downfall during this period.

Table 3.2: Workforce Participation Rate of NCR, 1971-2011[28]

Year	India	NCR	NCT Delhi	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

A breakup of total workers across the four sub-regions presented in Table 3.3 indicates that Delhi accounts for the largest share of the workforce in the NCR.

Table 3.3: Total workers in NCR Sub-Regions in 2011

Sub-region	Total workers	%
Haryana Sub-region	3669197	23.3
Uttar Pradesh Sub-region	4770141	30.3
Rajasthan Sub-region	1708542	10.9
Delhi Region	5587049	35.5

[27] Census of India, 2001 & 2011

[28] Census of India, 1971, 1981, 1991, 2001, 2011, Govt. of India

NCR (Total)	15734929	100

Although Rajasthan Sub–region work force only includes the Alwar district and it's the lowest share of total workers in NCR (Table 3.3). However, it accounts for the highest workforce participation rate (Table 3.2). Table 3.4 presents trends of distribution of the main workforce across the NCR.

Table 3.4: Distribution of Main Workforce in NCR (1971, 1991 and 2001)[29]

Year	1971		1991		2001	
Category of workers	Workers	Percentage	Workers	Percentage	Workers	Percentage
1	2	3	4	5	6	7
Cultivators	1270942	32.66	1790347	23.16	2733141*	25.53
Agricultural Labourers	401725	10.32	821188	10.62	-	-
Livestock, Forestry etc.	44485	1.14	58378	0.76	339775	3.17
Mining and Quarrying	6457	0.17	13884	0.18	38098	0.36
Sub-total Primary Sector	**1723609**	**44.3**	**2683797**	**34.71**	**377873**	**29.06**
a) Household Industries	166572	4.28	128661	1.66	773216	7.22
b) Other than household Industries	464125	11.93	1281140	16.57	460199	4.3
Electricity, Gas and Power	N.A.	N.A.	N.A.	N.A.	708680	6.62
Construction	107937	2.77	354049	4.58	1734125	16.2
Rural Industries	N.A.	N.A.	N.A.	N.A.	886977	8.29
Sub-total Secondary Sector	**738634**	**18.98**	**1763850**	**22.81**	**4563197**	**42.63**
Trade and Commerce	414000	10.64	1137207	14.71	794641	7.42
Transport, Storage and Communications	184839	4.75	411842	5.33	1248730	11.67
Other Services	829850	21.33	1734993	22.44	992787	9.28
Sub-total Tertiary Sector	**1428689**	**36.72**	**3284042**	**42.48**	**3036158**	**28.37**
Total Main Workers	**3890932**	**100**	**7731689**	**100**	**10703664**	**100**

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

Participation Ratio	**27.4**		**29**		**28.85**	

It is difficult to establish a clear trend across the nine categories of workers listed in the above table. Different districts showcase different Worker's Participation Rate (WPR) patterns that in turn vary from sector to sector. Figure 3.1 presents the same graphically. Though these have been discussed in detail later, some noticeable trends till 2001 are as follows:

- Bulandshahr has the largest portion of its total working population engaged in agricultural activities; livestock and forestry;
- Working population of Alwar majorly contributes towards cultivation;
- Under Mining and Quarrying, Ghaziabad's working population has a high participation rate and also ranks ahead of other districts in the Household activities sector; and
- Faridabad has the highest number of workers, 52,788 of whom are working in the manufacturing and processing industry.

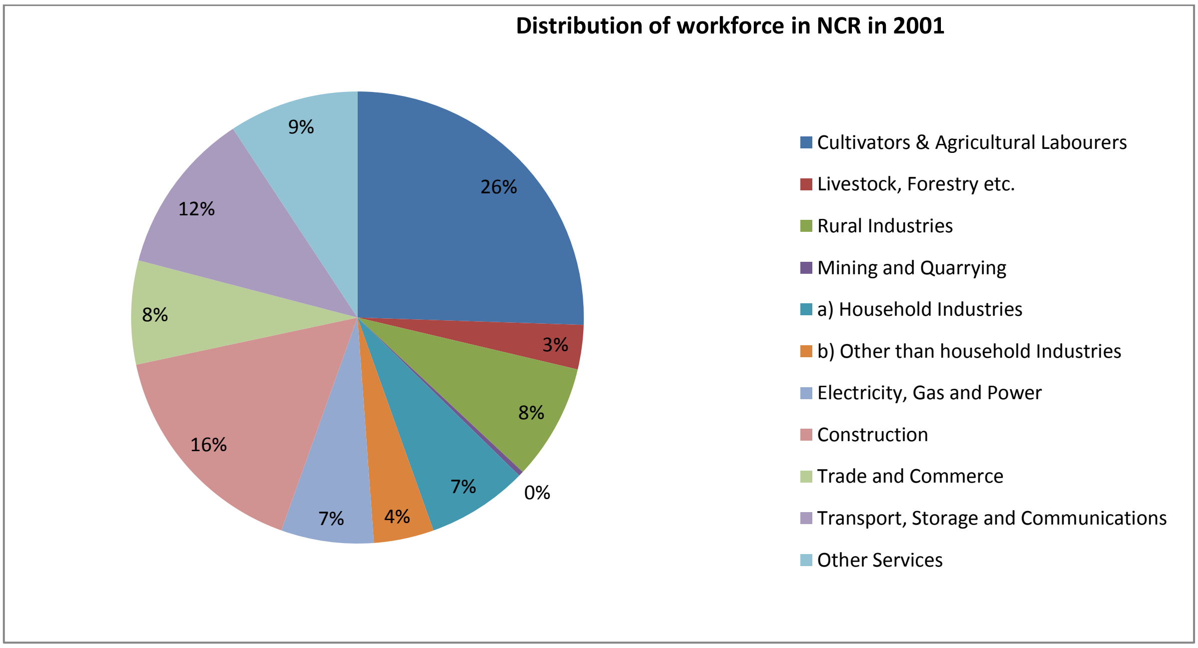


Figure 3.1: Distribution of workforce in NCR in 2001

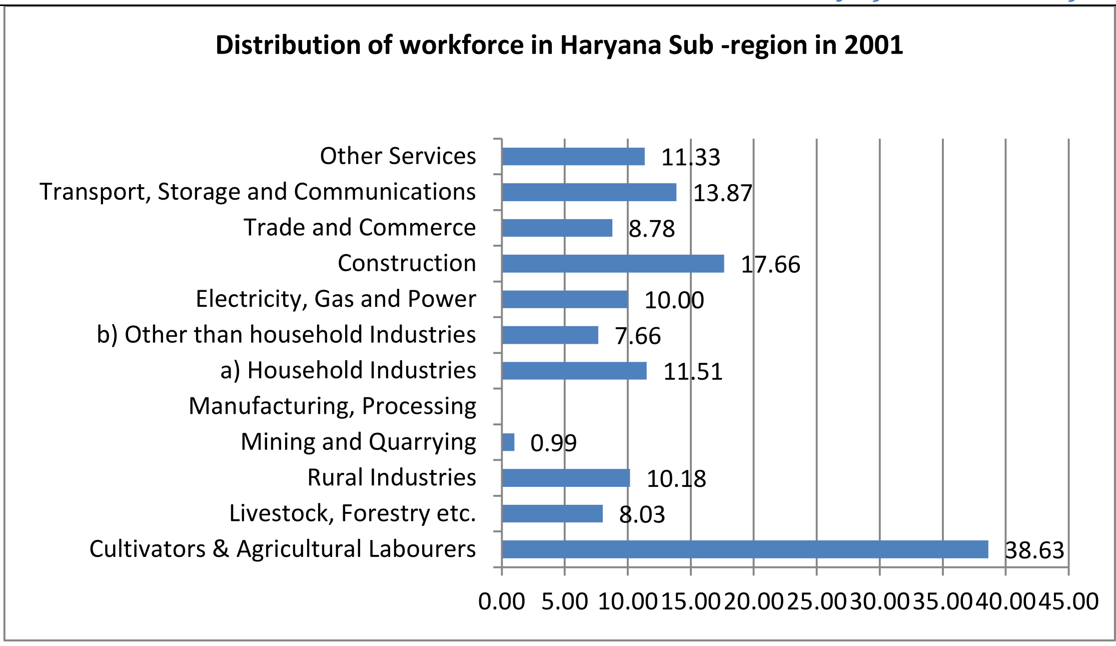


Figure 3.2: Distribution of workforce in Haryana Sub -Region in 2001

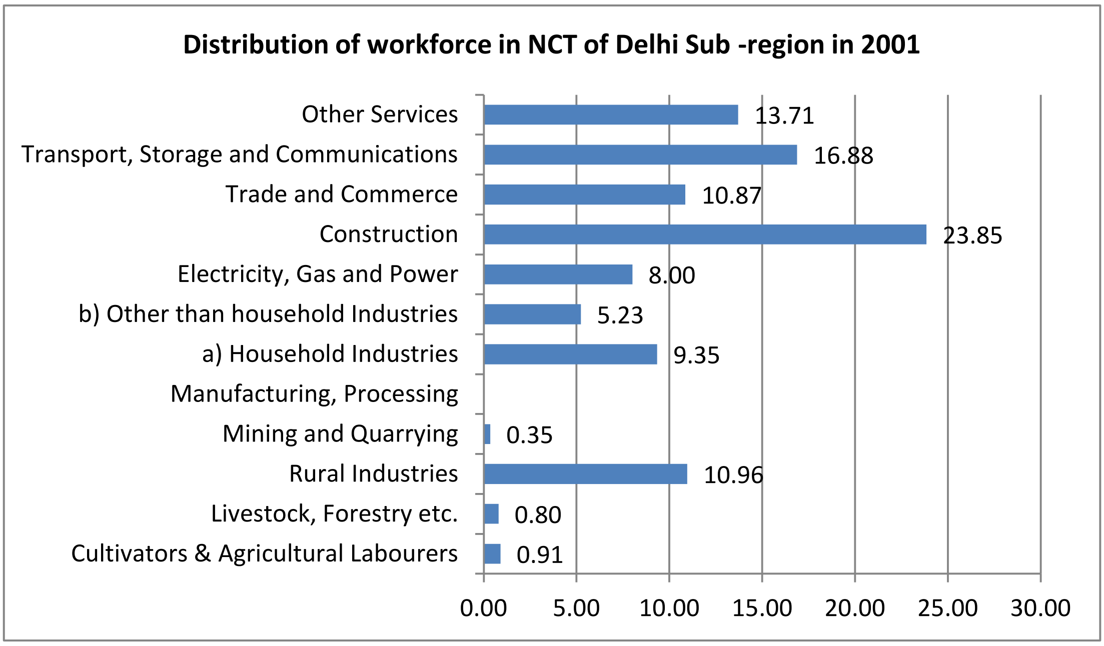


Figure 3.3: Distribution of workforce in Delhi Sub-Region in 2001

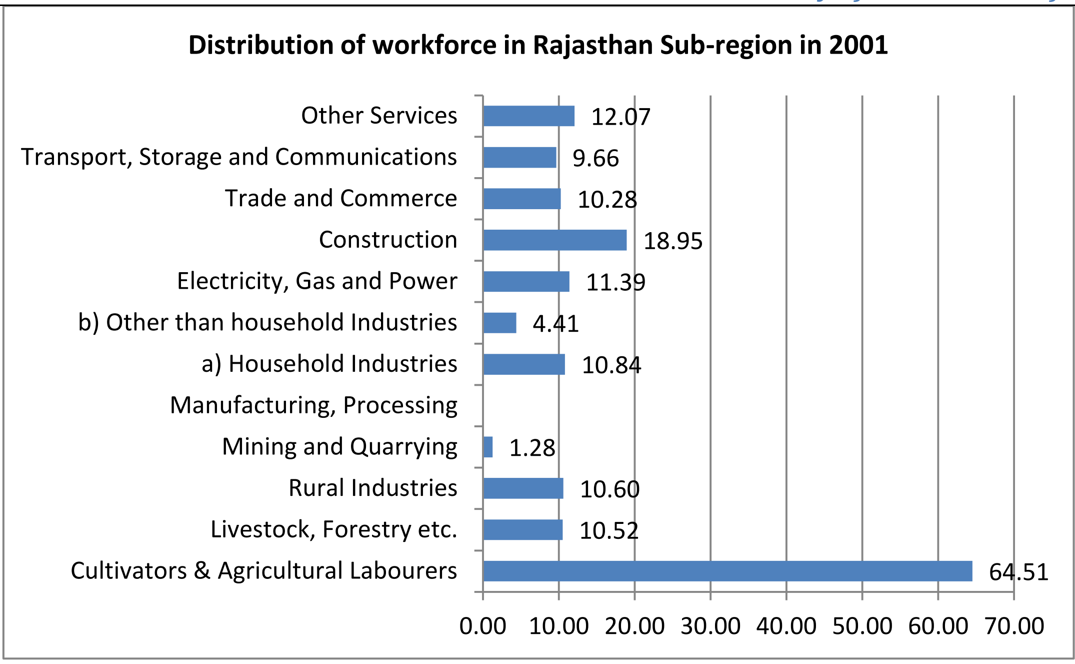


Figure 3.4: Distribution of workforce in Rajasthan Sub-Region in 2001

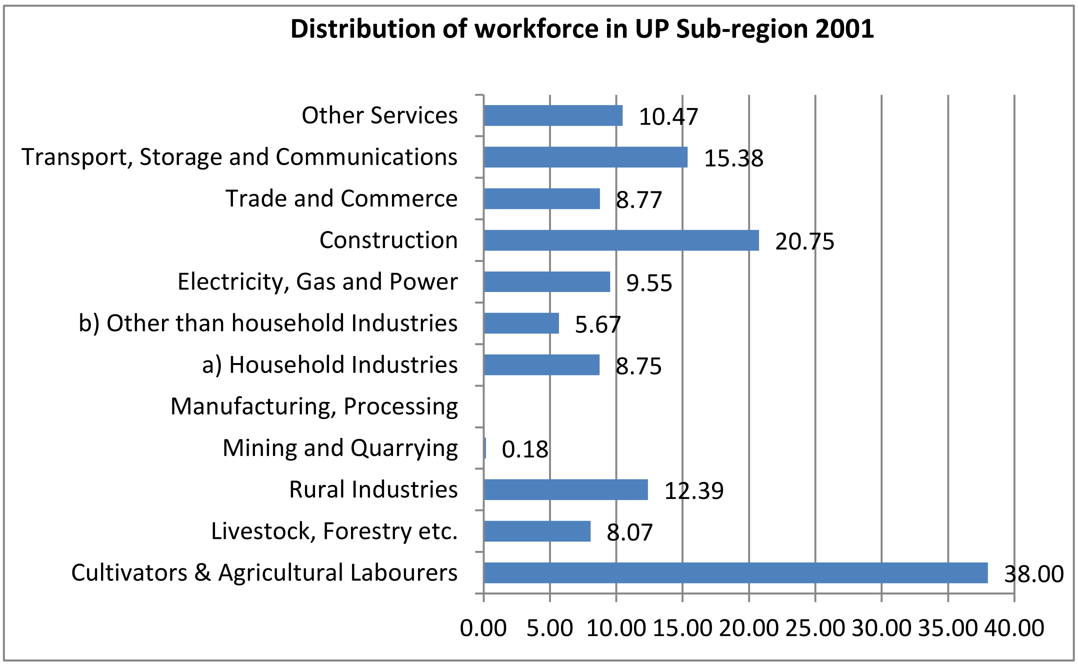


Figure 3.5: Distribution of workforce in Uttar Pradesh Sub-Region in 2001

The above charts indicate that cultivators and agricultural labor comprised of the largest portion (26%) of the workforce in the NCR (2001), followed by construction workers (16%). The data is interesting considering that the economy of the NCR is driven primarily by the tertiary (service) and the secondary sector as seen in the earlier chapter. Only NCT of Delhi demonstrates trends where workforce employed in the primary sector do not constitute the biggest share of the total workforce. Table 3.5 and Figure 3.2 bring out this aspect more clearly.

Table 3.5: Distribution of workforce in NCR and NCR Sub-Regions 2001[30]

Sub-region	Agricultural Laborers & Cultivator		Livestock, Forestry etc.		Rural Industries		Mining and Quarrying		Household Industries	
	Workers	%	Workers	%	Workers	%	Workers	%	Workers	%
Haryana	972007	35.56	123965	36.48	157144	17.72	15346	40.28	177695	22.98
Uttar Pradesh	1110693	40.64	146294	43.06	224482	25.31	3348	8.79	158564	20.51
Rajasthan	611306	22.37	35375	10.41	35632	4.02	4299	11.28	36437	4.71
NCT-Delhi	39135	1.43	34141	10.05	469719	52.96	15105	39.65	400520	51.80
Total NCR	**2733141**	**100.00**	**339775**	**100.00**	**886977**	**100.00**	**38098**	**100.00**	**773216**	**100.00**

Sub-region	Other than household Industries		Electricity, Gas and Power		Construction		Trade and Commerce		Transport, Storage and Communications	
	Workers	%	Workers	%	Workers	%	Workers	%	Workers	%
Haryana	118260	25.70	154406	21.79	272617	15.72	135515	17.05	214100	17.15
Uttar Pradesh	102794	22.34	172967	24.41	375954	21.68	158929	20.00	278696	22.32
Rajasthan	14843	3.23	38311	5.41	63738	3.68	34581	4.35	32487	2.60
NCT-Delhi	224302	48.74	342996	48.40	1021816	58.92	465616	58.59	723447	57.93
Total NCR	**460199**	**100.00**	**708680**	**100.00**	**1734125**	**100.00**	**794641**	**100.00**	**1248730**	**100.00**

Sub-region	Transport, Storage and Communications		Other Services		Total Main Workers	
	Workers	%	Workers	%	Workers	%
Haryana	214100	17.15	175002	17.63	2516057	23.51
Uttar Pradesh	278696	22.32	189783	19.12	2922504	27.30
Rajasthan	32487	2.60	40578	4.09	947587	8.85
NCT-Delhi	723447	57.93	587424	59.17	4317516	40.34
Total NCR	**1248730**	**100.00**	**992787**	**100.00**	**10703664**	**100.00**

Rural Urban Participation Rate in NCR

[30] Census 1971, 1981 1991 and 2001, Govt. of India

Table 3.6: WPR for the NCR disaggregated by Sub-Regions and Rural-Urban characteristics 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 Region	36.13	32.98	34.15

The WPR of the NCR is rural-dominated across the regions. The highest difference between rural and urban workforce participation rate is seen in Rajasthan sub-region, where the rural workforce participation rate is 15.56% point higher than that of the urban workforce participation rate. Rajasthan sub-region also has the highest overall workforce participation rate amongst all the sub-regions at 46.50%, with highest rural and urban workforce participation rate at 49.27% and 33.71% respectively among other sub regions of NCR. The least difference between the rural and urban workforce participation rate is evident in Haryana sub region at 0.50%, which also exhibits the lowest overall workforce participation rate amongst all the sub-regions at 33.26%.

The rural workforce participation rate is the highest in Rajasthan sub-region at 49.27% and the lowest in Delhi region at 31.08%, reflects a high primary sector composition of workforce in Rajasthan and a high tertiary sector composition of the workforce in Delhi. The urban workforce participation rate is the highest in Rajasthan sub-region at 33.71%, followed by Delhi region at 33.34%, and the lowest in Uttar Pradesh sub-region at 32.07%.

Participation Rate (In Numbers And Percentage) Of Workforce In NCR

Table 3.7 presents the WPR for the NCR disaggregated by region and as a percentage of the overall workforce population, as per census 2011.

In three sub-regions, the share of main workers significantly outnumbers the marginal workers, with NCT of Delhi reporting the highest differences at 29.95%. In the Haryana sub-region, the lowest WPR (26.62%) has been observed in Mewat district, which also has the maximum population, of 1089263 (census 2011). This is evident due to high rates of migration into this district because of increasing employment opportunities. The highest employment or workforce participation rate was observed in Rewari district at 37.15%.

Table 3.7: Participation rate (in numbers and percentage) of Workforce in NCR 2011[31]

Region	Districts	Total Workers	Main Workers	Marginal Workers	Non - Workers	% of Total Workers (WPR)	% of Main Workers	% of Marginal Workers	% of Non - Workers	Population
Delhi	North West	1,188,545	1135126	53419	2467994	32.50	31.04	1.46	67.50	3656539
	North	296,446	283583	12863	591532	33.38	31.94	1.45	66.62	887978
	North East	661,386	622443	38943	1580238	29.50	27.77	1.74	70.50	2241624
	East	579,692	555026	24666	1129654	33.91	32.47	1.44	66.09	1709346
	New Delhi	59,541	56471	3070	82463	41.93	39.77	2.16	58.07	142004
	Central	207,374	195978	11396	374946	35.61	33.65	1.96	64.39	582320
	West	874,320	839621	34699	1668923	34.38	33.01	1.36	65.62	2543243
	South West	795,352	749995	45357	1497606	34.69	32.71	1.98	65.31	2292958
	South	924,393	869086	55307	1807536	33.84	31.81	2.02	66.16	2731929
	Total of NCT of Delhi	5,587,049	5307329	279720	11200892	33.28	31.61	1.67	66.72	16787941
Haryana sub region	Faridabad	579,229	495316	83913	1230504	32.01	27.37	4.64	67.99	1809733
	Gurgaon	544,716	487441	57275	969716	35.97	32.19	3.78	64.03	1514432
	Rewari	337,727	250219	87508	562605	37.51	27.79	9.72	62.49	900332
	Rohtak	345,967	288949	57018	715237	32.60	27.23	5.37	67.40	1061204
	Sonipat	523,179	396763	126416	926822	36.08	27.36	8.72	63.92	1450001
	Panipat	412,318	339016	73302	793119	34.20	28.12	6.08	65.80	1205437
	Jhajjar	326,534	246457	80077	631871	34.07	25.72	8.36	65.93	958405
	Mewat	289,964	204178	85786	799299	26.62	18.74	7.88	73.38	1089263
	Palwal	309,563	216932	92631	733145	29.69	20.80	8.88	70.31	1042708
	Total of Haryana Sub region	3,669,197	2925271	743926	7362318	33.26	26.52	6.74	66.74	11031515
Rajasthan sub region	Alwar	1,708,542	1179461	529081	1965637	46.50	32.10	14.40	53.50	3674179
	Total of Rajasthan sub region	1,708,542	1179461	529081	1965637	46.50	32.10	14.40	53.50	3674179
Uttar Pradesh sub region	Baghpat	416,695	334519	82176	886353	31.98	25.67	6.31	68.02	1303048
	Bulandshahr	1,173,260	885216	288044	2325911	33.53	25.30	8.23	66.47	3499171
	Gautambudh nagar	569,109	458492	110617	1079006	34.53	27.82	6.71	65.47	1648115
	Ghaziabad + Hapur	1,520,538	1252911	267627	3161107	32.48	26.76	5.72	67.52	4681645
	Meerut	1,090,539	890810	199729	2353150	31.67	25.87	5.80	68.33	3443689
	Total of Uttar Pradesh Sub region	4,770,141	3821948	948193	9805527	32.73	26.22	6.51	67.27	14575668
Total of NCR		15,734,929	13234009	2500920	30334374	34.15	28.73	5.43	65.85	46069303

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

[31] Source: Primary Census Abstract, Census 2011, Govt. of India

The highest workforce participation rate in the Delhi region is in New Delhi district (41.93%), which has the lowest population of 142004 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 unable to attract working class migrants. The lowest workforce participation rate is in North-East district (29.50%), which has a population of 2241624 (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.

Region Wise Percentage of Workers among Nine Categories in NCR 2001

Disaggregating at a sub-regional level, in most categories, NCT of Delhi contributes to the largest portion of the workforce, barring agricultural laborers, cultivation and livestock, and forestry. NCT of 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 primarily contributes to agricultural laborers, and second most to livestock and forestry sectors, and the least to mining and quarrying category.

Disaggregating at sector level, a majority of the worker engaged in construction sector is located in Delhi (57%) with Rajasthan contributing a paltry sum to this sector (4%). Similar trends can be seen in the trade and commerce sector. A reverse trend is observed for workers engaged in cultivation and agricultural laborers. The NCT of Delhi contributes to only 2% and 3% respectively the largest proportion of these workers are concentrated in Haryana and Uttar Pradesh sub-regions respectively.

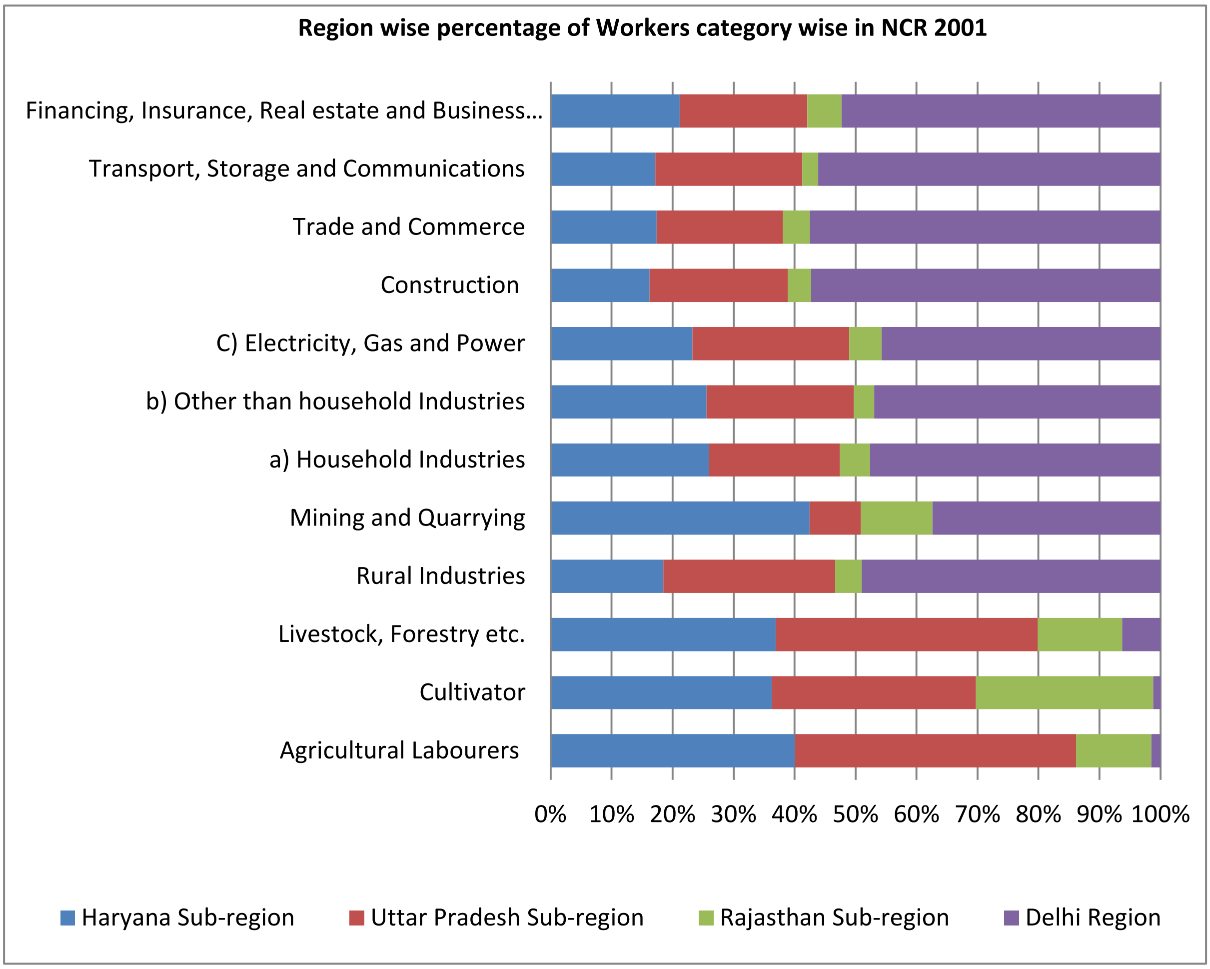


Figure 3.6: Distribution of workers across employment categories[32]

Table 3.8 and Figures 3.7 present the sub-region wise share of main and marginal workers in 2011, as per 2011 census.

Table 3.8: Sub-region wise worker wise share of workers in NCR in 2011[33]

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**

[32] Source; Census 2001, Govt. of India
[33] Source: Census 2011, Govt. of India

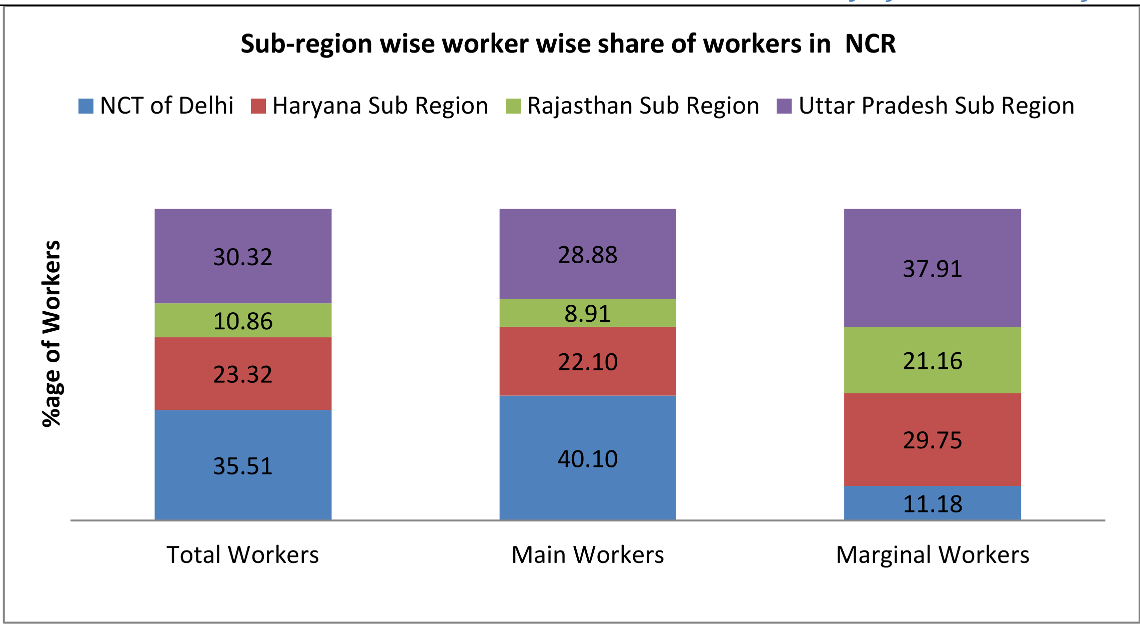


Figure 3.7: Sub-Region wise worker wise share of workers in NCR in 2011

As per 2011 census, the bulk of the main worker population of the NCR is located in NCT of Delhi (40.10%) followed by the Uttar Pradesh sub-region (28.88%), Haryana (22.10%) and Rajasthan (8.91%). NCT of Delhi also reports the lowest share of marginal workers (11.18%), the bulk being concentrated in Uttar Pradesh (37.91%), Haryana (29.75%), and Rajasthan (21.16%).

When it comes to sub- region wise share of main and marginal workers to Total Workforce in NCR, main workers constitutes over 84% share and rest by marginal workers to total workforce. The highest share of main workers to total workers is observed in the NCT of Delhi (94.99%), followed by Uttar Pradesh sub region (80.12%), Haryana 79.73% and then Rajasthan (69.03%). In all the sub regions of NCR the share of main workers to total workers outnumbers marginal workers.

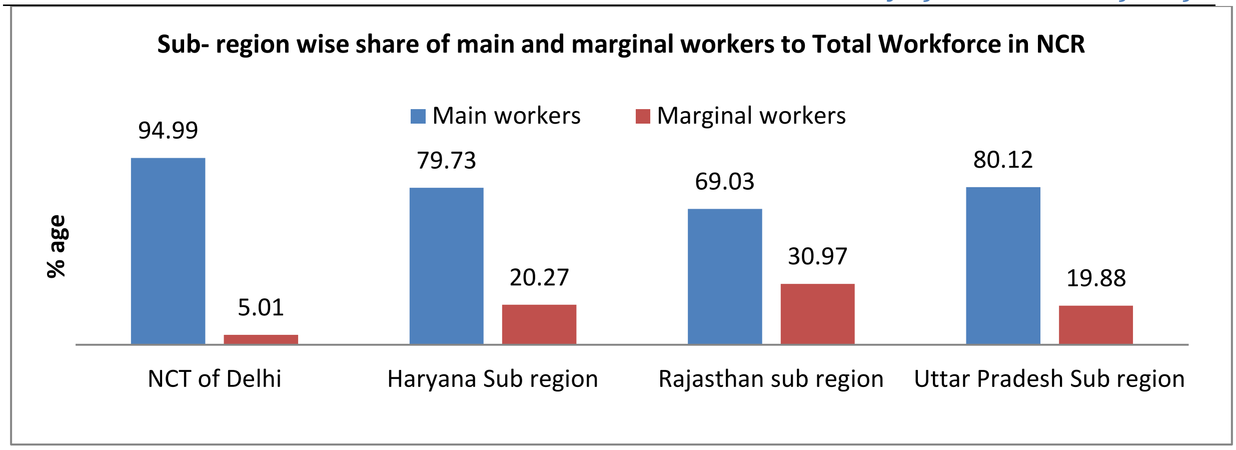


Figure 3.8: Sub-Region wise share of main and marginal workers to total workforce in NCR in 2011

SECTORWISE /SUB-REGIONWISE WORKERS

Table 3.9: Sector wise breakup of Workforce as per Census 2001[34]

State	Districts/Sector	Primary sector	Secondary Sector	Tertiary sector	Total Workers
Haryana	Faridabad	359491	268460	157005	785762
	Gurgaon	362923	155938	117704	629658
	Jhajjar	249254	80659	53054	388715
	Panipat	239535	96869	50735	382801
	Rewari	226185	61306	41957	333622
	Rohtak	216980	83484	66971	371073
	Sonipat	327691	111506	82099	523031
	Total of Haryana Sub-region	1978041	858222	569525	3414662
Uttar Pradesh	Baghpat	260116	64300	48519	380310
	Bulandshahar	839491	200760	133575	1173805
	Gautam Budh Nagar	162926	93206	105633	363814
	Ghaziabad	359459	336180	238801	938251
	Meerut	454366	258785	173278	895856
	Total of Uttar Pradesh Sub-region	2076358	953231	699806	3752036
Rajasthan	Alwar	1166427	176173	116731	1458686
	Total of Rajasthan Sub-region	1166427	176173	116731	1458686
Delhi	North West	123258	459805	339314	720,915
	North	28596	132507	96700	256,596

[34] Source: Census, 2001, Govt. of India

	North East	89315	259363	151041	500,425
	East	56524	225533	193954	475,310
	New Delhi	3035	15884	49638	67,594
	Central	36238	116178	76524	223,851
	West	79614	368398	278566	720,915
	South West	74455	224921	302247	602,546
	South	115643	309047	350701	778,558
	Total of Delhi Region	619001	2111636	1838685	4346710
NCR	**Total Workers in NCR**	**5839827**	**4099262**	**3224747**	**12972094**

The NCR has a total of 12972094 workers working in Primary, Secondary and Tertiary sectors. Of the total working population, almost half or 45.02% workers are employed in the primary sector, followed by secondary sector (31.60%) in Secondary Sector and the least 3224747 (24.86%) in Tertiary Sector. The biggest challenge faced by the workforce in Haryana, Uttar Pradesh and Rajasthan sub-regions is that the majority of workforce is engaged in the primary sector, whereas the biggest portion of the workforce in Delhi region is engaged in the secondary sector.

REGION WISE NINE CATEGORY-WISE SHARE OF WORKERS

Figure 3.9 presents the region-wise distribution of workers as a proportion of the total. Rajasthan sub-region contributes the least in most categories compared to other sub-regions, while Delhi has the highest contribution to nine out of twelve workforce categories. The three categories where other states have an edge over the NCT of Delhi are agricultural labor, cultivators, and livestock-forestry. The NCT of Delhi's highest stake is in community, social and personal services category, which indicates it's bent towards the tertiary sector compared to primary sector out of the three other sub-regions.

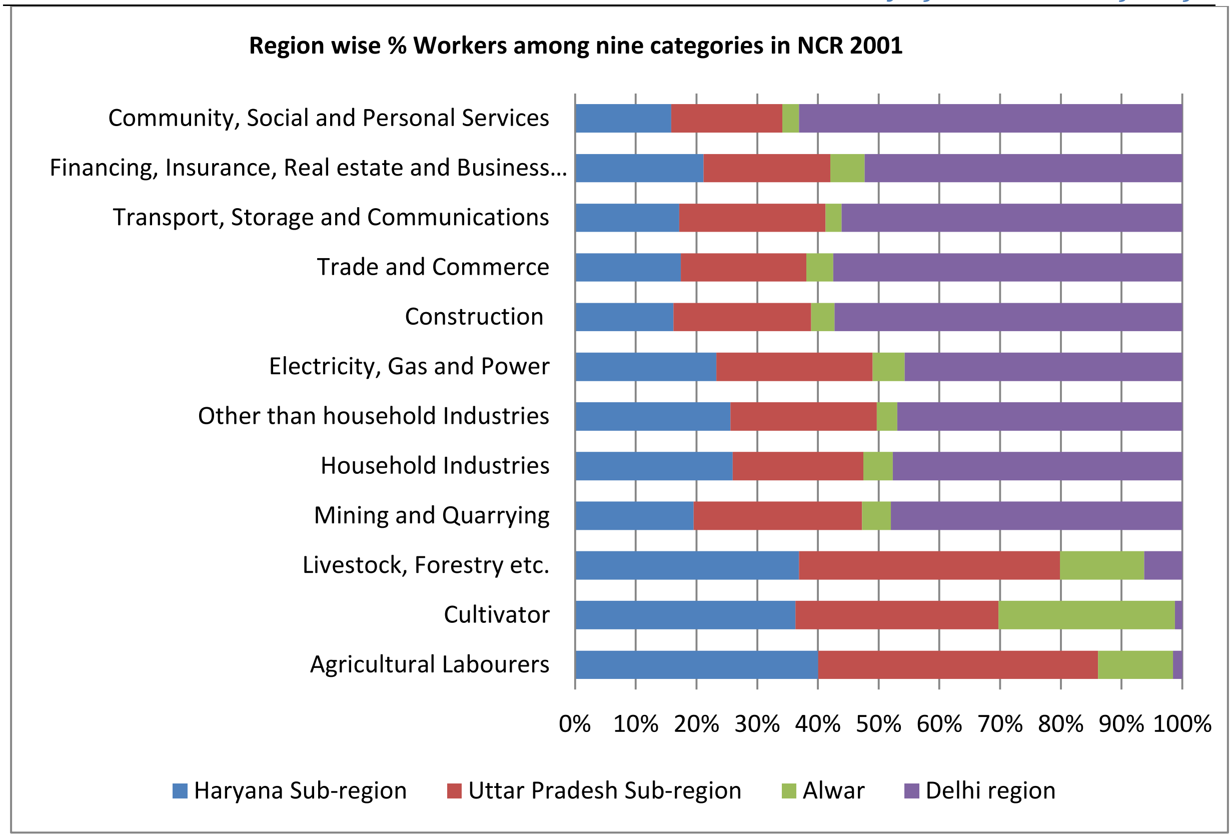


Figure 3.9: Region wise % Workers among nine categories in NCR, 2001[35]

3.3 Haryana Sub-Region

Table 3.10 presents the detailed information on distribution of main workers in the Haryana sub-region disaggregated by workforce category, while Table 3.11 presents the same data disaggregated by districts. Figure 3.7 presents the occupational profile of main workers in this sub-region.

Table 3.10: Distribution of Main Workforce in Haryana Sub-Region (1971, 1991 and 2001)[36]

Year/	1971		1991		2001	
Category of workers	Workers	Percentage	Workers	Percentage	Workers	Percentage
Cultivators	4,49,747	46.63	6,77,117	35.96	972007	38.63
Agricultural Laborers	1,32,687	13.76	2,86,950	15.24	-	-
Livestock, Forestry etc.	9447	0.98	13605	0.72	123965	4.93
Rural Industries	N.A.	N.A.	N.A.	N.A.	157144	6.25

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

Mining and Quarrying	2501	0.26	4462	0.24	15346	0.61
Manufacturing, Processing						
a) Household Industries	38723	4.01	26371	1.4	177695	7.06
b) Other than household Industries	85321	8.85	2,48,635	13.2	118260	4.70
Electricity, Gas and Power	N.A.	N.A.	N.A.	N.A.	154406	6.14
Construction	19355	2.01	52744	2.8	272617	10.84
Trade and Commerce	64931	6.73	1,64,767	8.75	135515	5.39
Transport, Storage and Communications	24512	2.54	71813	3.81	214100	8.51
Other Services	1,37,363	14.24	3,36,704	17.88	175002	6.96
Total Main Workers	9,64,587	100	18,83,168	100	2516057	100.00
Population	38,55,568		66,43,604		8687050	
Participation Ratio	**25.02**		**28.35**		**28.96**	

With an overall area of 37,72,000 hectares and cropping intensity of 179.69, Haryana is a cultivator's land providing job opportunities to the major part of the population. Majority of the rural population is engaged in cultivation. In the last 10 years, most districts of this sub-region are venturing into multiple sources of livelihood and are experimenting in order to bring in newer and technology intensive job opportunities to further provide a global platform of work opportunities to enrich the skill base and upgrade the livelihood options for the population.

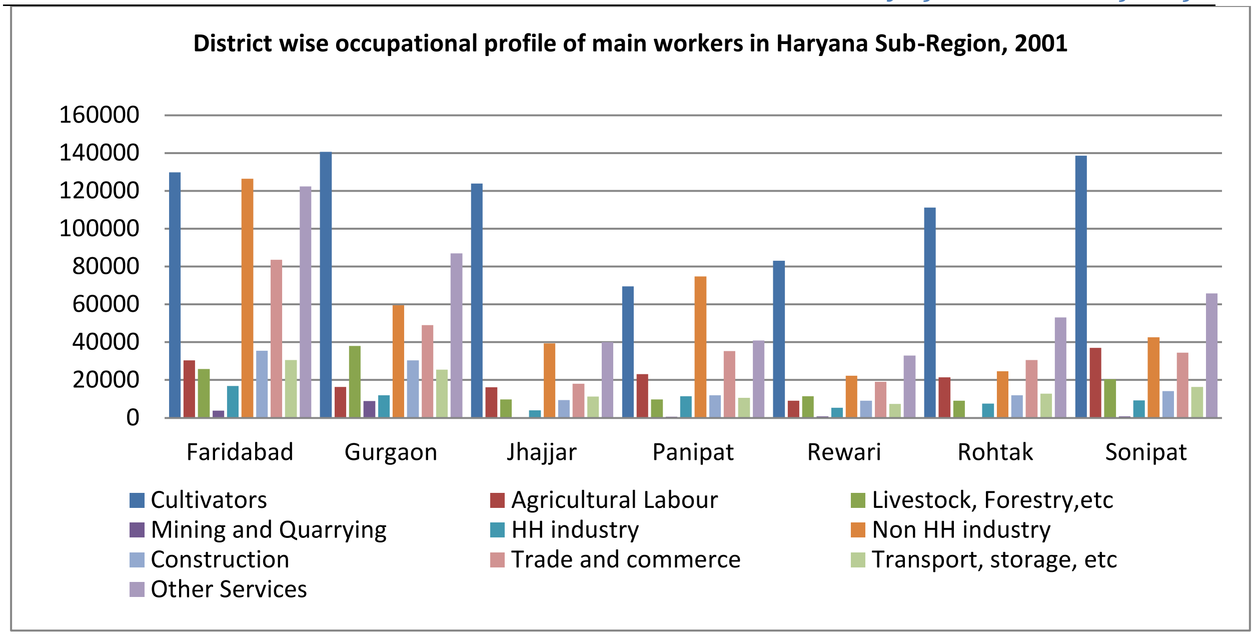


Figure 3.10: District wise occupational profile of main workers in Haryana Sub-Region, 2001

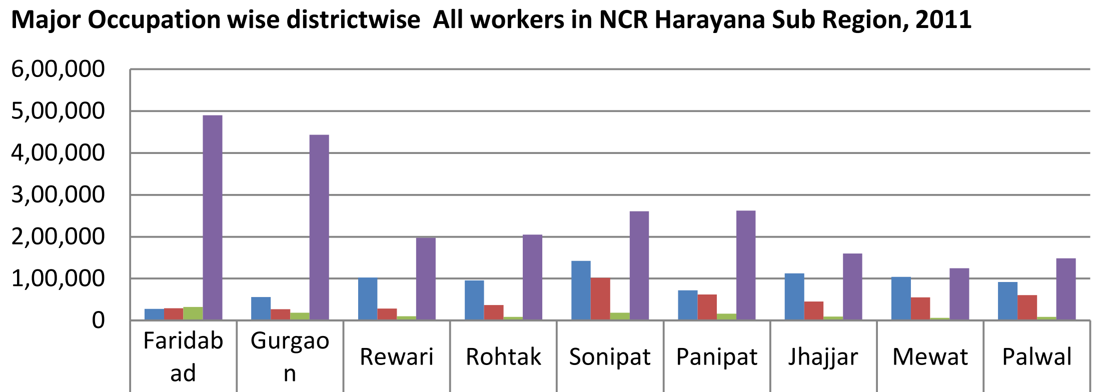
Table 3.11 outlines the district wise occupational profile of primary workers in Haryana Sub-Region. Agriculture is the major source of livelihood for six districts followed by household and other services, indicating the predominance of semi-skilled and unskilled workers. Cultivation, agriculture and non-household industries are the three major occupational profiles for these districts of Haryana, while trade and commerce and transport are the ones at the bottom.

Table 3.11: District wise occupational profile of main workers in Haryana 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	Community, Social and Personal
Faridabad	186403	82175	46513	39924	4476	65918	52788	57172	92582	38370	62321	27201	29113
Gurgaon	195768	57928	72640	25719	10868	31668	25199	44611	54460	32733	47504	19397	18070
Jhajjar	177377	44844	15765	11027	241	37547	7217	15602	20293	14025	22031	10505	6493
Panipat	89493	55042	21867	72535	598	22445	12926	21975	39523	13266	17259	9816	10394
Rewari	148218	44441	21187	11481	858	12622	11837	15437	21410	9703	17297	10018	4939
Rohtak	143314	45462	14530	13379	295	21377	6158	21724	34225	16835	25553	16602	7981
Sonipat	189673	87390	30471	19468	689	36666	12188	24694	37958	20508	33983	18987	8621

Occupational Profile of All Workers in Haryana Sub-Region, 2011

Figure 3.11 presents the district-wise number of workers disaggregated by major occupation in Haryana sub-region. A majority of workers in this sub-region are engaged in other activities which mainly consist of tertiary sector activities and other than industries. The participation of the workforce in cultivation and other agricultural activities comes next in nearly all the districts of the sub region. The household industry comes in the last, with Mewat reporting the least number of workers employed in this category and Faridabad reporting the maximum.



	Faridabad	Gurgaon	Rewari	Rohtak	Sonipat	Panipat	Jhajjar	Mewat	Palwal
Cultivators	27,705	56,046	1,02,698	95,732	1,42,344	72,120	1,12,389	1,04,237	91,506
Agriculture labor	29,288	27,097	28,215	36,568	1,01,733	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	4,89,950	4,43,345	1,97,032	2,05,146	2,60,918	2,62,016	1,60,046	1,24,426	1,48,806

Figure 3.11: District wise occupational profile of total workers in NCR Haryana Sub-Region 2011

Workforce Distribution in Haryana Sub-Region, 2011

Table 3.12 presents the district wise composition of rural/urban workers (including main marginal) and non-workers in the district. Haryana Sub region has a total of 3669197 workers of which 295177 are rural and 1574020 are urban workers. Faridabad has the maximum number of workers followed by Gurgaon, of which urban workers constitute a majority. Mewat have the least number of workers followed by Palwal with second least number of total workers, with rural workers constituting the majority. Haryana sub-region has a total 7362318 non working population and majority of them are in the rural area. Interestingly, Faridabad has the maximum number of non-workers and the least in Mewat.

Table 3.12: 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	84456	410860	495316	22302	61611	83913	264120	966384	1230504	106758	472471	579229
Gurgaon	124933	362508	487441	33529	23746	57275	313717	655999	969716	158462	386254	544716
Rewari	182761	67458	250219	81614	5894	87508	402527	160078	562605	264375	73352	337727
Rohtak	166788	122161	288949	45893	11125	57018	402359	312878	715237	212681	133286	345967
Sonipat	271676	125087	396763	104512	21904	126416	620449	306373	926822	376188	146991	523179
Panipat	167683	171333	339016	54248	19054	73302	428421	364698	793119	221931	190387	412318
Jhajjar	182688	63769	246457	71145	8932	80077	461233	170638	631871	253833	72701	326534
Mewat	179382	24796	204178	79339	6447	85786	706436	92863	799299	258721	31243	289964
Palwal	164067	52865	216932	78161	14470	92631	563936	169209	733145	242228	67335	309563
Haryana Sub region	**1524434**	**1400837**	**2925271**	**570743**	**173183**	**743926**	**4163198**	**3199120**	**7362318**	**2095177**	**1574020**	**3669197**

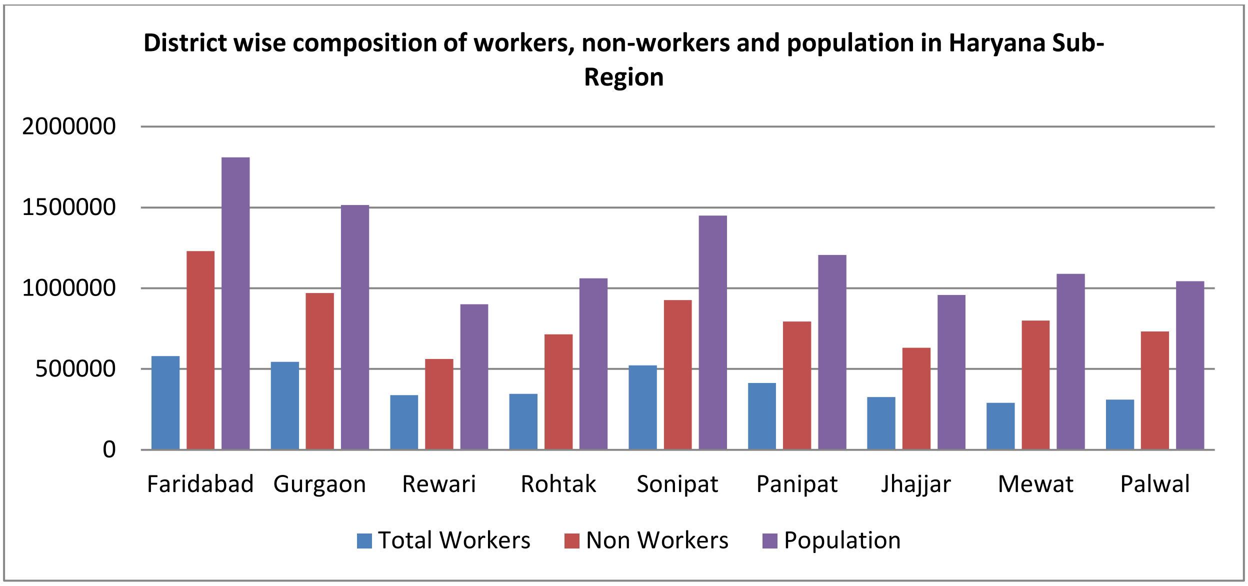


Figure 3.12: District wise composition of workers, non-workers and population in Haryana Sub-Region, 2011

Total Working Population Based on the Public and Private Sector in Haryana Sub-Region

Public sector and private sector jobs are the source of livelihood for the sole proprietorship, partnership business, Hindu Family and other such commercial activities. Service sector is considered to be risk-free sector. Figure 3.13 presents the district wise employment in Haryana sub-region disaggregated by employment in public and private sectors.

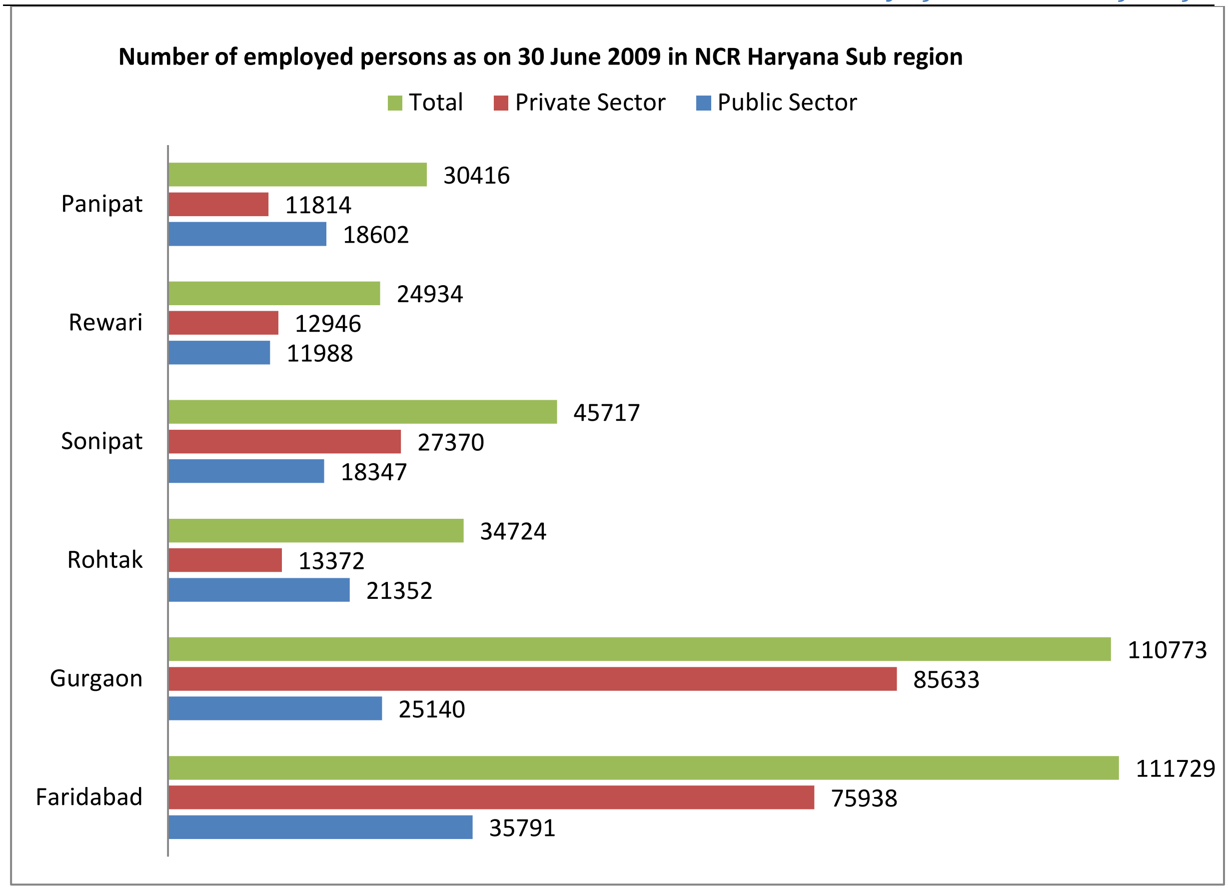


Figure 3.13: Number of employed persons as on 30 June 2009 in NCR Haryana Sub-Region

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 (68% and 77% respectively), followed by Sonepat (60%). The other three districts have a larger share of the workforce engaged in the public sector (refer Table 3.13).

Table 3.13: Percentage distribution of workforce in public and private sector[37]

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

[37] Source: Statistical Abstract of Haryana, 2008-09

3.4 Rajasthan Sub-Region

The analysis of Rajasthan sub-region is entirely drawn from the findings of Alwar district as this sub-region comprises of only this one district as part of the NCR. Table 3.14 presents the distribution of the primary workforce of the Rajasthan sub-region and is changing trends over the last three decades. In the last decadal information available (1991-2001), this sub-region has achieved the maximum increase in primary workers (47%) compared to the other districts of Rajasthan.

Table 3.14: Distribution of Main Workforce in Rajasthan Sub-Region (1971, 1991 and 2001)[38]

Year/	1971		1991		2001	
Category of workers	Workers	Percentage	Workers	Percentage	Workers	Percentage
Cultivators	1,35,956	63.08	2,22,065	54.58	611306	64.51
Agricultural Laborers	19511	9.05	35158	8.64	-	-
Livestock, Forestry etc.	2347	1.09	4087	1	35375	3.73
Rural Industries	N.A.	N.A.	N.A.	N.A.	35632	3.76
Mining and Quarrying	432	0.2	2004	0.49	4299	0.45
Manufacturing, Processing						
a) Household Industries	8921	4.14	6524	1.6	36437	3.85
b) Other than household Industries	5299	2.46	34083	8.38	14843	1.57
Electricity, Gas and Power	N.A.	N.A.	N.A.	N.A.	38311	4.04
Construction	2558	1.19	8611	2.12	63738	6.73
Trade and Commerce	10717	4.97	29796	7.32	34581	3.65
Transport, Storage and Communications	3156	1.46	11370	2.79	32487	3.43
Other Services	26624	12.35	53142	13.06	40578	4.28
Total Main Workers	2,15,521	100	4,06,840	100	947587	100.00
Participation Ratio	26.4		28.33		31.66	

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

Nine Category Wise Main Workers in Rajasthan Sub-Region, 2001

Figure 3.14 and Table 3.15 presents the distribution of main workers disaggregated by the nine workforce categories of the Rajasthan sub-region in 2001. The majority of workers are employed as agricultural laborers, followed by construction workers.

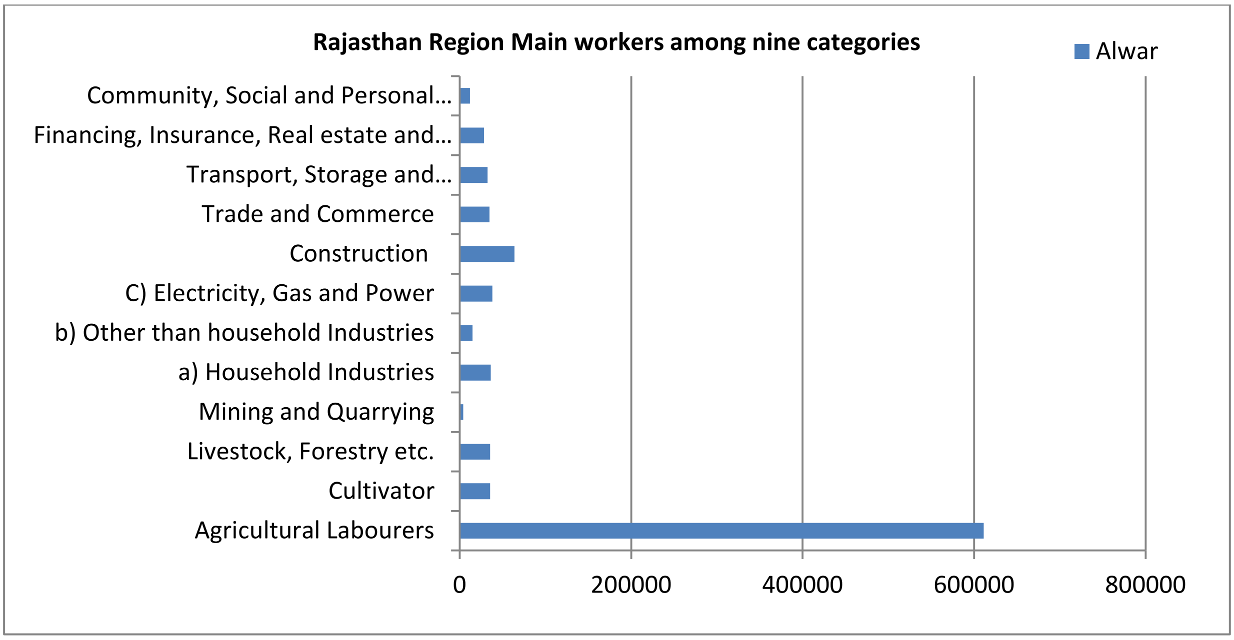


Figure 3.14: Rajasthan Region Main workers among Nine Categories, 2001

Table 3.15: Rajasthan Region Main workers among Nine Categories, 2001

District	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
Alwar	128442	905207	82083	45703	4992	43016	16809	45810	70538	37133	34937	29883	14778

Occupational Profile of total (Main + Marginal) Workers in Rajasthan Sub-Region, 2011

Figure 3.14 presents the occupational profile of all workers in Rajasthan sub-region as per census 2011. In 2011, there are over 11 lakh workers employed in the agriculture sector in the sub region, including cultivators (8,98,891) and agriculture laborers (2,16,772). With more focus on self-employment through Agro based activities, it seems justifiable to see the inclination of the workforce towards cultivation.

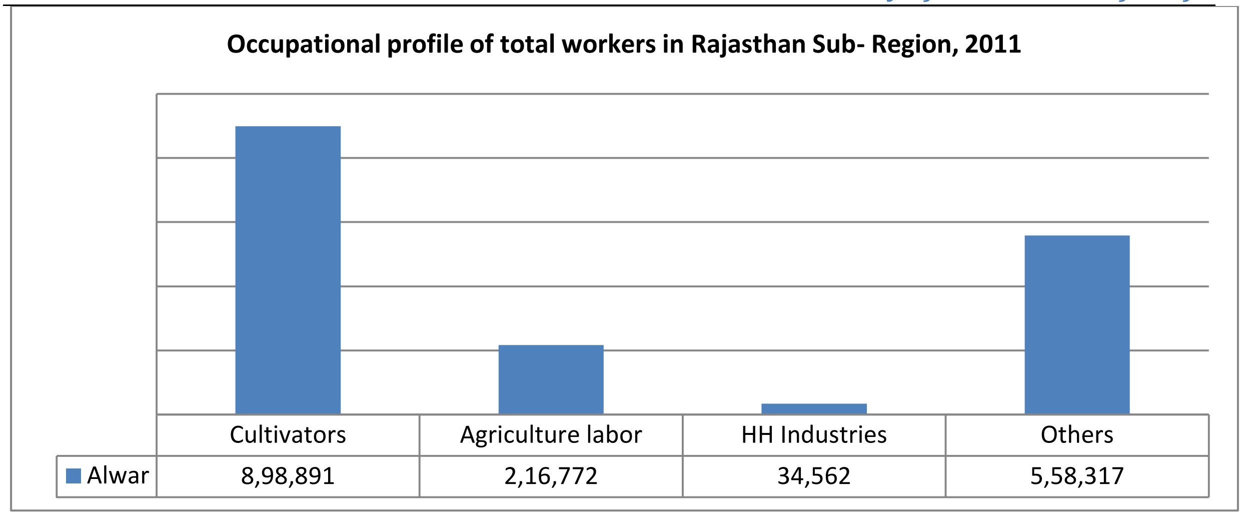


Figure 3.15: Occupational profile of total workers in Rajasthan Sub-Region, 2011

Out of the total 60 crops grown in India, 23 of which are grown Rajasthan alone, cultivation being the primary source of occupation is rather obvious. A broad range of products is exported. With major facilities for infrastructural development, the Rajasthan Sub-region promises the future of fast-tracked industrial developments.

Although household industry in Rajasthan sub-region is too minimal, a scope for growth is envisaged as 15 major industrial areas has been developed by Rajasthan State Industrial Development and Investment Corporation (RIICO) are fast coming up.

Workforce Distribution in Rajasthan Sub-Region, 2011

Table 3.16 presents the rural-urban distribution of the workforce in Rajasthan sub-region in 2011, as per 2011 census. The majority of the workforce in this sub-region resided in the rural side in 2011. A high portion of the rural population is engaged in agriculture as disguised workers as compared to the urban sector workers.

Table 3.16: District wise 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	982840	196621	1179461	505095	23986	529081	1531793	433844	1965637	1487935	220607	1708542

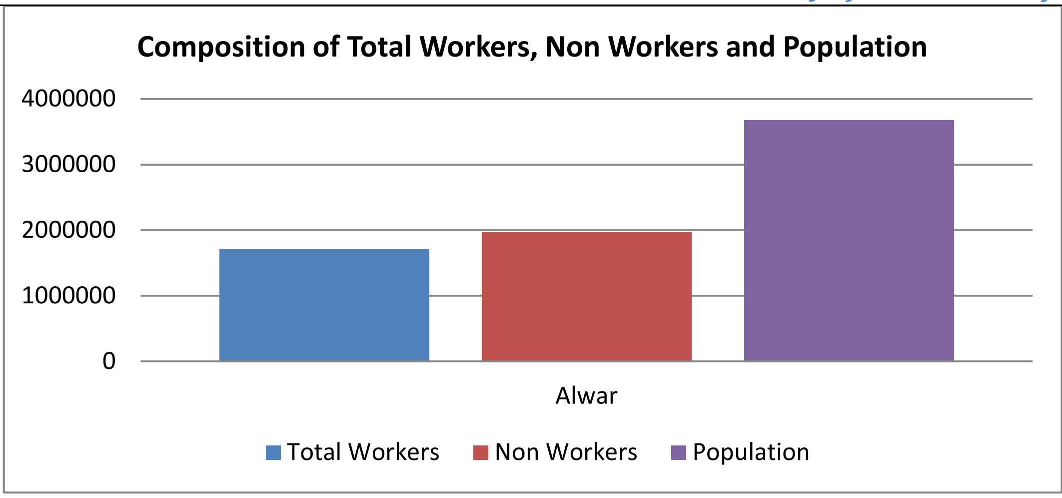


Figure 3.16: Rural/Urban Workers and Non-Workers 2011 in Alwar

In terms of marginal workers, rural marginal workforce constitutes over 94% of the total marginal workforce. In terms of non-workers, rural workforce 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.

3.5 NCT of Delhi

Workforce Distribution in NCT of Delhi, 2011

Table 3.17 presents the district-wise number of workers in NCT of Delhi disaggregated by rural-urban and typology of workers as main and marginal workers, as per 2011 census.

Table 3.17: District wise workers and non-workers in Delhi 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
North West	61679	1073447	1135126	5813	47606	53419	146458	2321536	2467994	67492	1121053	1188545
North	5052	278531	283583	226	12637	12863	12468	579064	591532	5278	291168	296446
North East	5773	616670	622443	215	38728	38943	15539	1564699	1580238	5988	655398	661386
East	1316	553710	555026	32	24634	24666	2182	1127472	1129654	1348	578344	579692
New Delhi		56471	56471		3070	3070	0	82463	82463	0	59541	59541
Central		195978	195978		11396	11396	0	374946	374946	0	207374	207374
West	1680	837941	839621	166	34533	34699	4574	1664349	1668923	1846	872474	874320
South West	39104	710891	749995	4945	40412	45357	99627	1397979	1497606	44049	751303	795352
South	3906	865180	869086	320	54987	55307	7967	1799569	1807536	4226	920167	924393
NCT of Delhi	**118510**	**5188819**	**5307329**	**11717**	**268003**	**279720**	**288815**	**10912077**	**11200892**	**130227**	**5456822**	**5587049**

In NCT of Delhi, the urban workforce dominates across all categories (main & marginal) of workers. In terms of main workers, urban workforce constitutes the substantive proportion of the total workforce. In terms of total workers, most workers seem to be concentrated in North West Delhi District and South Delhi District; the lowest being reported by New Delhi District followed by Central Delhi District. In terms of marginal workers, majority of them are urban.

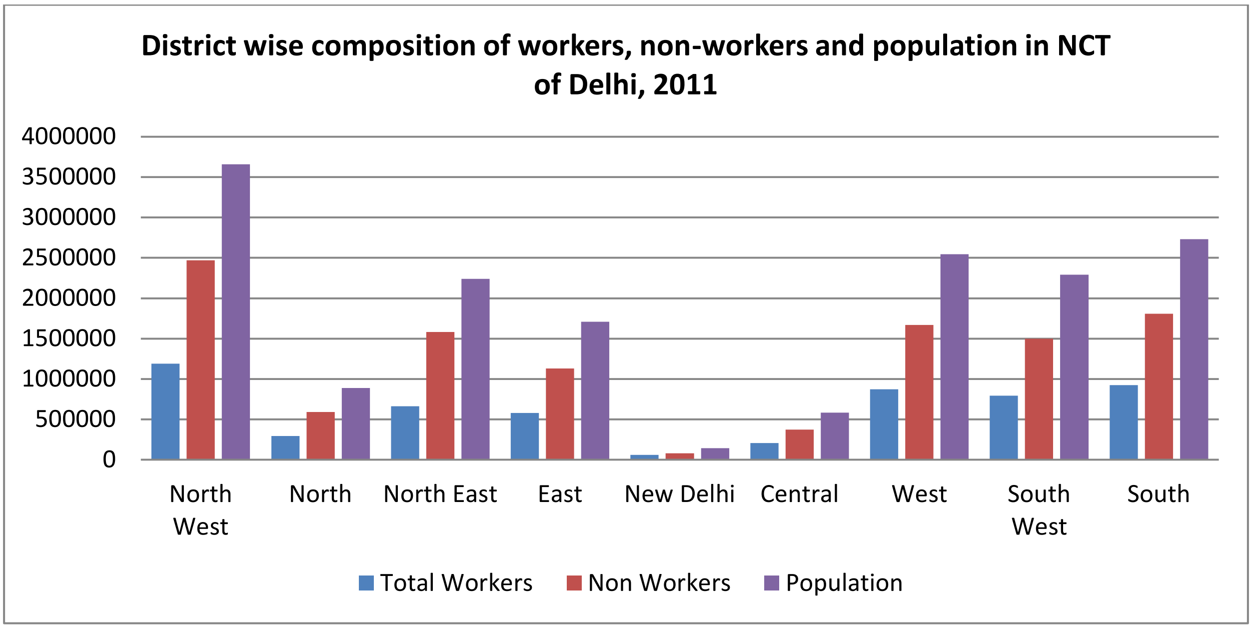
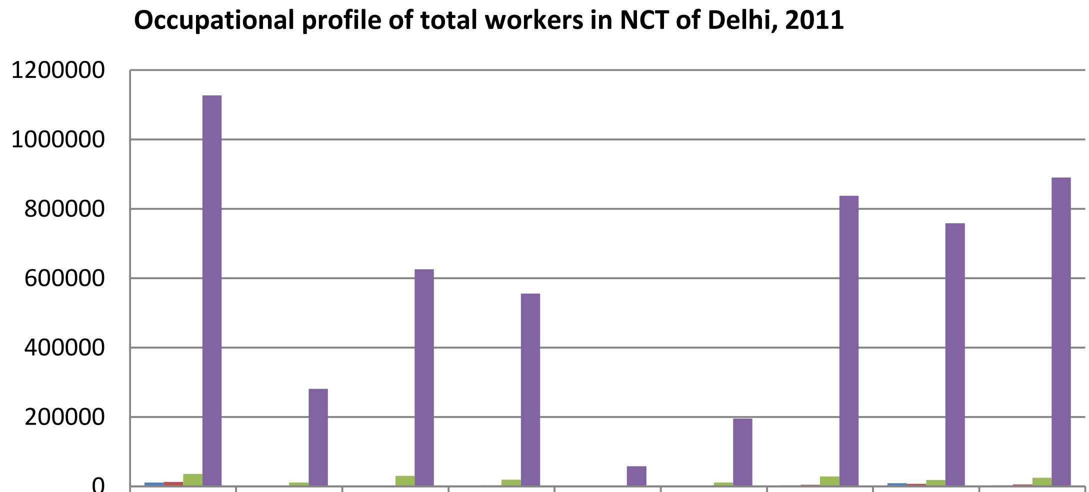


Figure 3.17: District wise composition of Total Workers, Non-Workers and Population in NCT of Delhi, 2011

The total workforce of marginal workers for 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 revealed that 43% of the workforce registered with employment exchanges in NCT of Delhi is from the neighboring states.

Occupational Profile of Total (Main + Marginal) Workers in NCT of Delhi, 2011

Figure 3.18 present the district wise occupational profile of total workers in NCT of Delhi in 2011 in four categories. From figure it appears, North West Delhi has the maximum number of workers, with a major proportion are other workers (11,27,927), followed by HH industries workers (35,896), then as Agriculture labor (39,475) and the lowest number are employed as cultivators (11,433). The other sector mainly comprise of teritiary secor and industries apart from household industries. All the districts in NCT report the same pattern, except for North and South West district which have more of cultivators than agriculture labors.



	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

Figure 3.18: District wise occupational profile of total workers in NCT of Delhi, 2011

Nine Category Wise Main Workers in Delhi Region, 2001

Table 3.19 and Figure 3.18 present the district-wide proportion of main workers in NCT of Delhi disaggregated by employment category in 2001.

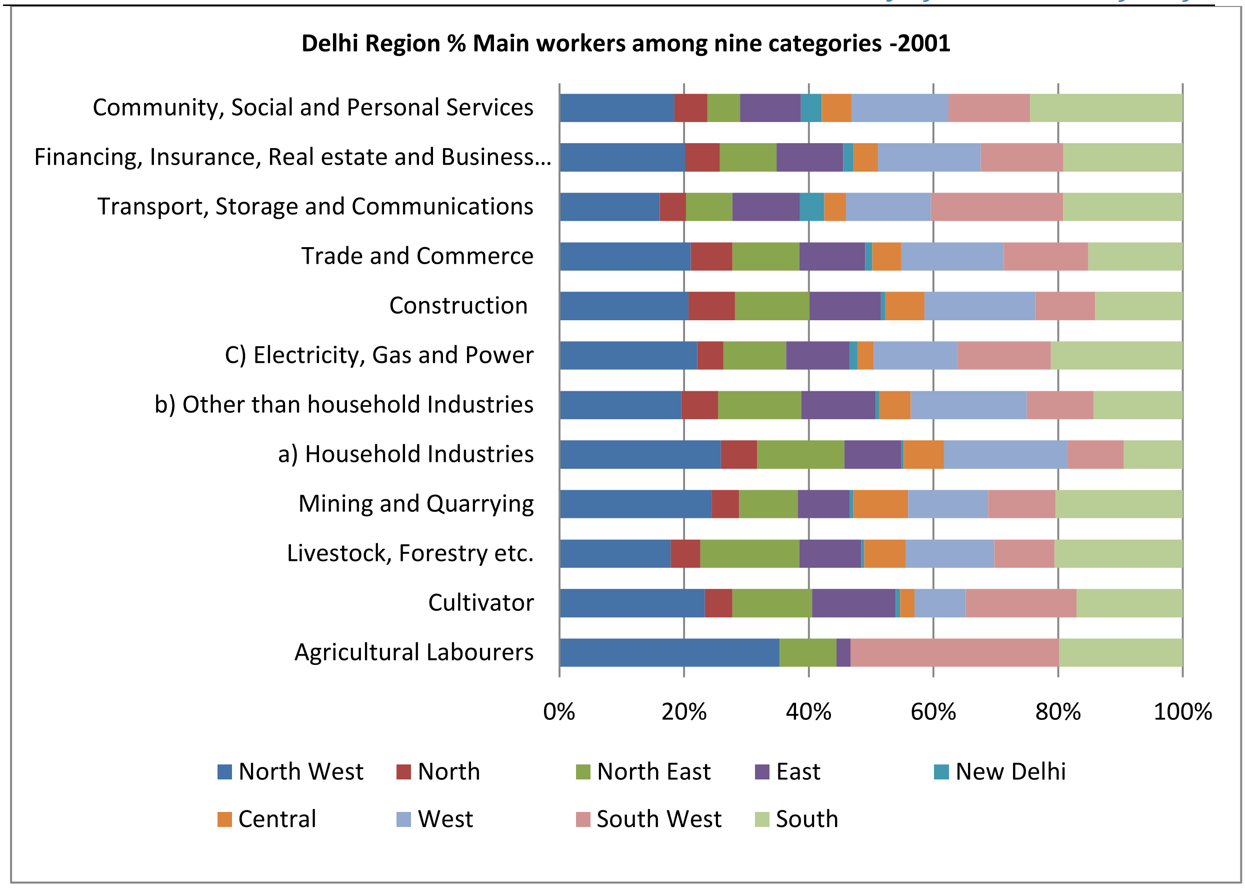


Figure 3.19: Delhi Region % Main workers among Nine Categories, 2001

Table 3.18: Main Workers among Nine Categories for NCT of Delhi, 2001

Districts	Cultivator	Agricultural Labourers	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
North West	6823	14125	9580	88917	3813	108210	45846	86464	219285	101070	118926	56330	62988
North	1163	1477	1651	23621	684	24327	14000	16153	78027	31972	30942	15597	18189
North East	615	1256	4622	81352	1470	59879	32084	39958	127442	52190	55105	25432	18314
East	692	1116	4662	48771	1283	37815	27704	39528	120486	50538	80191	29825	33400
New Delhi	84	105	292	2466	88	1460	1172	5406	7846	5320	28738	4518	11062
Central	214	220	840	33554	1410	27162	12068	10044	66904	22976	26080	11038	16430
West	837	2998	2978	70799	2002	82745	43751	53878	188024	78807	100576	45768	53415
South West	3603	14128	6654	48218	1852	37930	24973	59174	102844	64858	155943	36804	44642
South	1742	2006	6074	102550	3271	39745	33943	85003	150356	72849	141679	53170	83003

3.6 Uttar Pradesh Sub-Region

Table 3.19 represents the time series data on the distribution of the main workforce in the Uttar Pradesh sub-region and Figure 3.20 presents workforce information disaggregated by employment categories in 2001. Table 3.20 gives the same disaggregated at district level.

Table 3.19: Distribution of Main Workforce in Uttar Pradesh Sub-Region (1971, 1991 and 2001)[39]

Year	1971		1991		2001	
Category of workers	Workers	Percentage	Workers	Percentage	Workers	Percentage
Cultivators	6,53,043	44.05	8,57,869	34.69	1110693	38.00
Agricultural Laborers	2,34,258	15.8	4,73,885	19.16	-	-
Livestock, Forestry etc.	22364	1.51	21662	0.88	146294	5.01
Rural Industries	N.A.	N.A.	N.A.	N.A.	224482	7.68
Mining and Quarrying	460	0.03	376	0.02	3348	0.11
Manufacturing, Processing						
a) Household Industries	90998	6.14	53978	2.18	158564	5.43
b) Other than household Industries	1,09,850	7.41	3,09,259	12.5	102794	3.52
Electricity, Gas and Power	N.A.	N.A.	N.A.	N.A.	172967	5.92
Construction	20886	1.41	61123	2.47	375954	12.86
Trade and Commerce	93755	6.32	2,33,030	9.42	158929	5.44
Transport, Storage and Communications	42195	2.85	82169	3.32	278696	9.54
Other Services	214618	14.48	3,79,953	15.36	189783	6.49
Total Main Workers	14,82,427	100	24,73,304	100	2922504	100.00
Population	54,40,296		90,01,704		11567090	
Participation Ratio	27.25		27.48		25.27	

[39] Census of India, 1971, 1991 and 2001, Govt. of India, * includes agriculture labor also

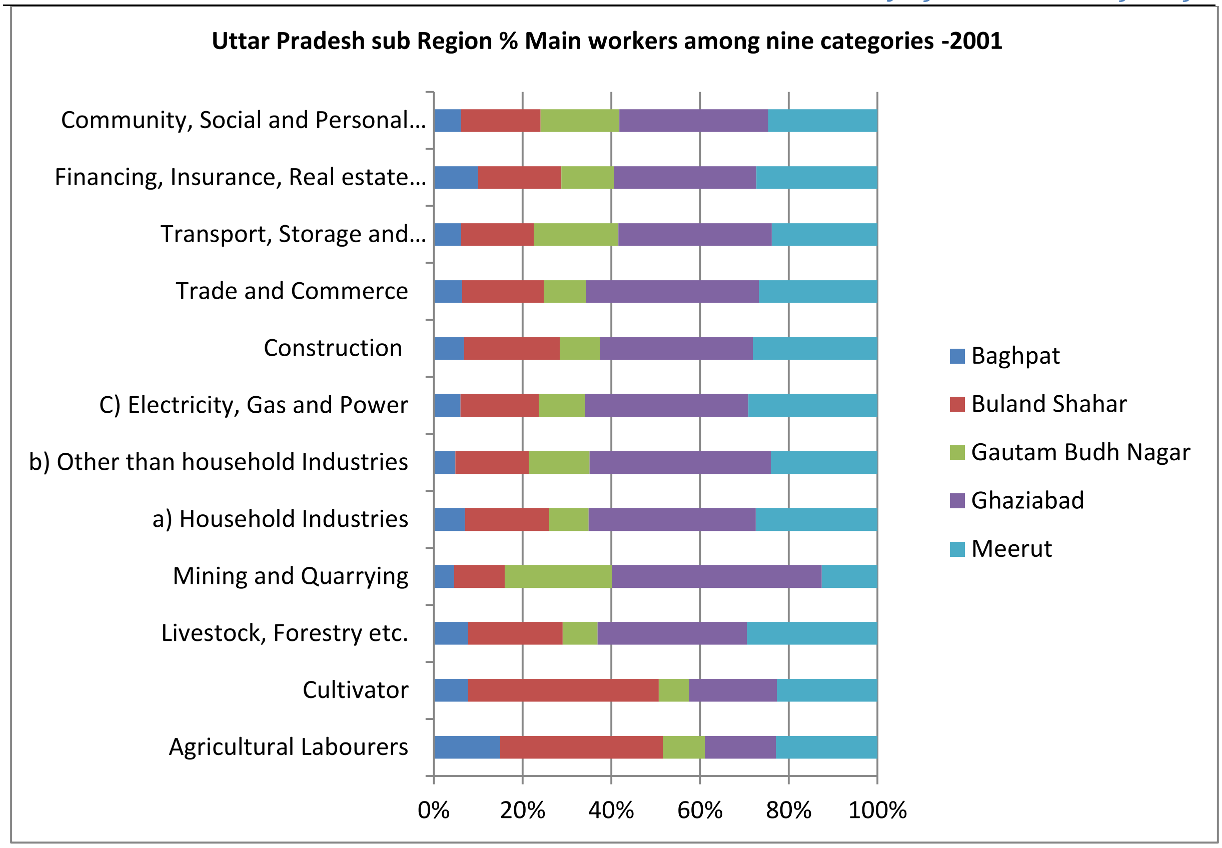


Figure 3.20: Uttar Pradesh Sub-Region % Main workers among Nine Categories -2001[40]

Table 3.20: Uttar Pradesh Sub-Region Main workers among Nine Categories

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	Community, Social and Personal
Baghpat	70220	151325	16827	21571	173	15989	5975	13478	28858	11145	20196	11068	6110
Bulandshahar	195852	419885	140583	82754	417	38343	22806	41351	98260	32489	60295	21461	19330
Gautam Budh Nagar	34338	93015	13884	20839	850	17772	16761	21637	37036	16594	59172	12950	16917
Ghaziabad	69775	160566	38113	89367	1638	66885	46526	81035	141734	66229	104783	35586	32203
Meerut	110440	217120	45821	80514	471	50441	29050	65168	114126	46239	72331	30345	24363

Table 3.20 demonstrates that Ghaziabad contributes the maximum towards the workforce of most categories, followed by Meerut and Bulandshahar. Baghpat makes the least contribution towards the workforce of all the categories. Ghaziabad is the biggest

[40] Source: Census of India, 2001, Govt. of India

contributor of workforce in the mining and quarrying category, followed by Gautam Budh Nagar. The only categories, it doesn't significantly contribute towards working population, are cultivation and agricultural labor in which Bulandshahar is the biggest contributor, followed by Meerut. The above also indicates that the maximum numbers of employed persons are employed in the cultivation and agricultural labor category and the least in mining and quarrying category. Across all the sectors, of the workforce employed in the cultivation and agricultural labor category the maximum belonged to Bulandshahr district while, in mining and quarrying category, the maximum belonged to Ghaziabad district.

Workforce Distribution in Uttar Pradesh Sub-Region, 2011

Table 3.21: 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	266268	68251	334519	71295	10881	82176	690460	195893	886353	337563	79132	416695
Bulandshahr	666615	218601	885216	252858	35186	288044	1712269	613642	2325911	919473	253787	1173260
Gautam Budh Nagar	156310	302182	458492	60363	50254	110617	457133	621873	1079006	216673	352436	569109
Ghaziabad + Hapur	385408	867503	1252911	110669	156958	267627	1023021	2138086	3161107	496077	1024461	1520538
Meerut	429083	461727	890810	114283	85446	199729	1141141	1212009	2353150	543366	547173	1090539
Uttar Pradesh Sub-Region	**1903684**	**1918264**	**3821948**	**609468**	**338725**	**948193**	**5024024**	**4781503**	**9805527**	**2513152**	**2256989**	**4770141**

Table 3.21 present the district wise number of workers (comprising of main & marginal) and non-workers in Uttar Pradesh Sub Region in 2011, as per Census 2011. The sub-region has a total of 4770141 workers and over half of them resided in the rural areas, in 2011. Ghaziabad (including Hapur) during the period had the maximum number of workers (1520538), of which 1024461 were in urban area and 496077 were in rural area. Baghpat had the least number of workers in the sub-region during the period of 416695 workers. The sub-region has a total of 3821948 and 948193 main and marginal workers, respectively. The maximum number of main workers was observed in Ghaziabad and least in Baghpat, however it was Bulandshahr that had the maximum number of marginal workers and Baghpat had the least. In terms of the non-workers, the sub region had a total of 98,05,527 non working population of which over half of them reside in rural areas. Ghaziabad had the maximum number of nun workers of which nearly one third reside are urban. Baghpat had

the least number of non workers, however it is also to be noted that the dstrict had the minimum population during the same period in the sub region.

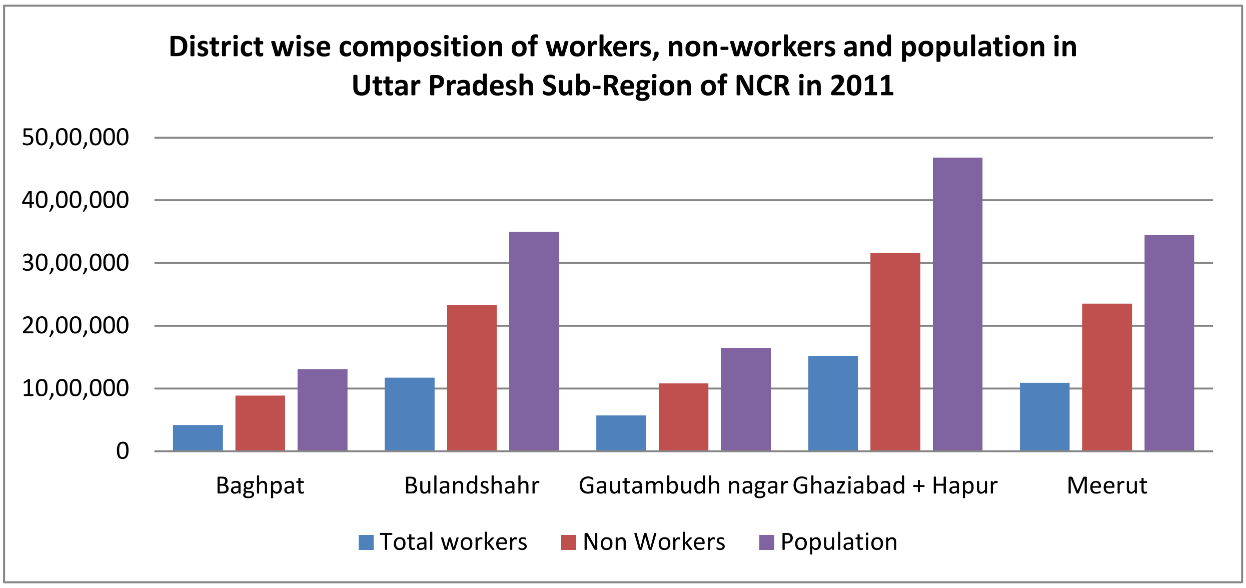
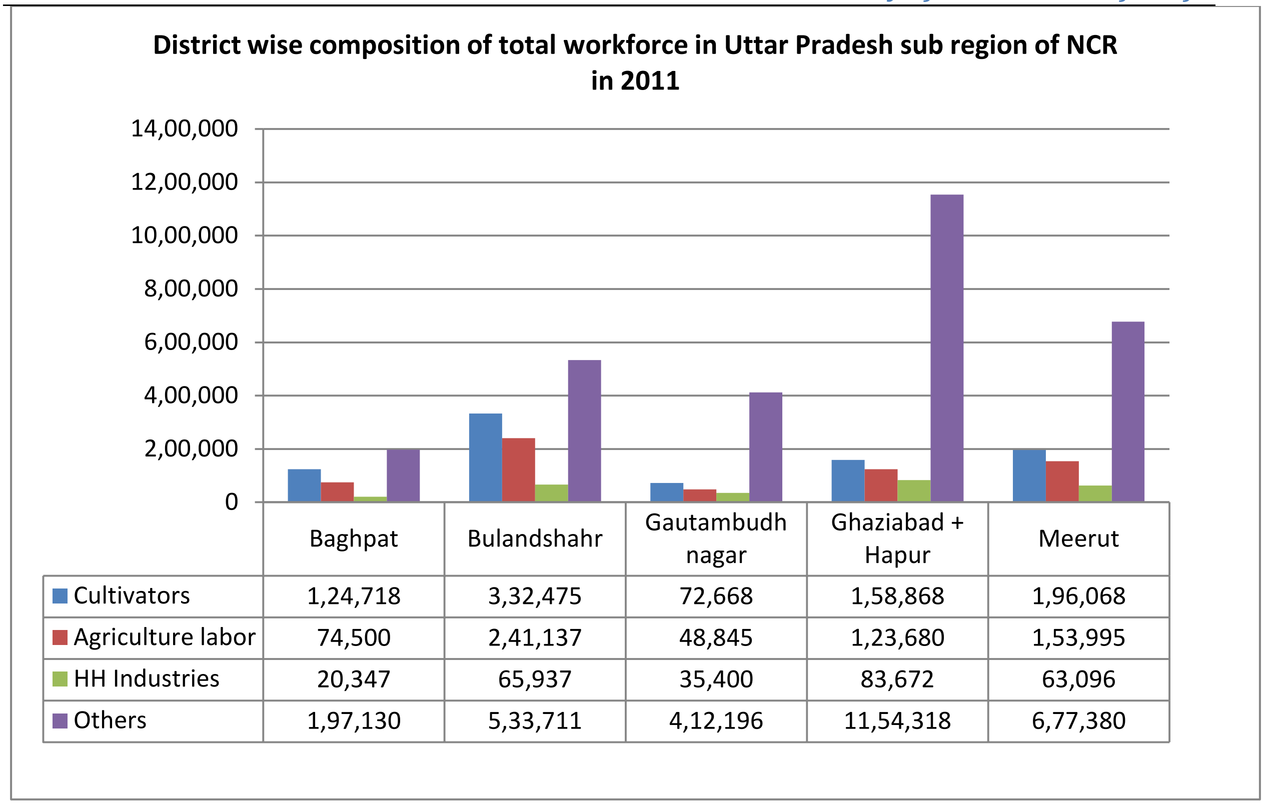


Figure 3.21: District wise composition of workers, non-workers and population in Uttar Pradesh Sub-Region of NCR in 2011[41]

Figure 3.21 presents the District wise composition of workers, non-workers and population in Uttar Pradesh Sub-region of NCR in 2011. During the period, Ghaziabad including Hapur had the maximum population (46,81,645) in the Sub-region with maximum workers (15,20,538) while Baghpat is last in the series with minimum population (13,03,048) and total workers (4,16,695) in the sub-region. The Figure 3.22 presents district wise composition of total workforce in Uttar Pradesh Sub-region of NCR in 2011, into cultivators, agriculture labors, household industry workers and other workers.

[41] Source: Primary Census Abstract, Census of India, 2011, Govt. of India



	Baghpat	Bulandshahr	Gautambudh nagar	Ghaziabad + Hapur	Meerut
Cultivators	1,24,718	3,32,475	72,668	1,58,868	1,96,068
Agriculture labor	74,500	2,41,137	48,845	1,23,680	1,53,995
HH Industries	20,347	65,937	35,400	83,672	63,096
Others	1,97,130	5,33,711	4,12,196	11,54,318	6,77,380

Figure 3.22: District wise occupational profile of total workers in Uttar Pradesh Sub-Region in 2011

In terms of the number of cultivators and agricultural laborers in the sub region, Bulandshahr have the maximum number of cultivators, followed by Meerut and least with Gautambudh Nagar, followed by Baghpat. Meantime, Ghaziabad (11,54,318) has the maximum number of industrial and tertiary sector workers in the sub region in 2011, followed by Bulandshahr (11,73,260) and the least with Baghpat (416,695), followed by Gautambudh Nagar (569,109). For the household industries workers, the same pattern follows with Ghaziabad (83,672) with maximum number of these workers, followed by Bulandshahr (65,937), Meerut (63,096), Gautambudh Nagar (35,400) and Baghpat (20,347). However it needs to be understood that among the sub regions of NCR, Uttar Pradesh sub region has the highest number of household industries workers.

CHAPTER IV

4. INDUSTRIAL DEVELOPMENT IN NCR

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 characterized is by the 'scale factor', wherein developments can be characterized by large and medium units, small-scale industries (SSIs) and development in 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 the proposed creation of Special Economic Zones (SEZs)/industrial zones (see Table 4.1 for the list of approved SEZs in the region).

Table 4.1: SEZs in NCR[42]

SEZ in NCR where in principle approvals granted under the SEZ Act, 2005		
S. No.	**Name of SEZ**	**Type**
1	Reliance Haryana SEZ Limited Jhajjar	Multi Product
2	Reliance Haryana SEZ Ltd. Gurgaon	Multi Product

Operational SEZ in NCR as on 5 Dec, 2014		
S. 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

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

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

NCT of Delhi has close to one lakh manufacturing units employing nearly six lakhs people, 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 this region (NSSO, 2005). In terms of manufacturing units in the organized sector, only 3,312 units are recorded employing 1.2 lakhs workers (Annual Survey of Industries, 2005). NCT of Delhi has a significant presence of garment and furniture manufacturers followed by electrical machinery production and repair services. Manufacturing in Delhi is widely small-scale and low-skilled, making Delhi a preferred destination for the migrants from neighboring regions, putting strain on NCT's 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 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 units generate seven times the employment generated by the medium and large industries (as seen in Alwar district), and are thus critical from the employment generation point of view. However, the sub-region also houses much medium and large units; Alwar hosts over 300 medium and large units across 15 industrial areas developed by RIICO. The key industries in the state 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 adequate industrial infrastructure available across the state. The Greater NOIDA region, which forms the heart of the NCR in Uttar Pradesh, has 19% land reserved for industrial use. An integrated Agro-food processing zone is proposed at Hapur in the Ghaziabad district as well as 40 IT-ITEs parks, a knowledge park, and two biotech zones are also proposed. 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.

Delhi-Mumbai Industrial Corridor (DMIC)

DMIC is a mega infrastructure project aiming high-speed connectivity between Delhi and Mumbai. DMIC and 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 as general manufacturing investment region;
- Manesar-Bawal Investment Region in Haryana as auto component/automobile investment region; and
- Khushkhera-Bhiwadi-Neemrana Investment Region in Rajasthan 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).

The important industrial sector locations in NCR are Meerut, Ghaziabad, Gautambudha 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 of 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 and causal factors. DMIC Progress

- MoUs has been signed with all the DMIC States and a few EBPs finalized for all the DMIC States. EBPs in the States of UP, Haryana and Rajasthan are currently at an early stage of implementation.
- Draft concept plan for the Khushkhera – Bhiwadi – Neemrana Investment region prepared. The draft concept plan placed before the State Government Steering Committee and was approved; now the State Government of Rajasthan is now proceeding ahead with land acquisition.
- Location for Green Field Integrated Industrial Township selected. Master Plan submitted.
- Pre-feasibility study report (Technical) on Fresh Water sourcing for Manesar Bawal Investment Region and Revised report on Regional Profile and Industry Market Assessment for MBIR submitted by the consultant is being reviewed.
- For the project on Mass Rapid Transit System (MRTS) in MBIR, technology options and two alignment profiles discussed with HSIIDC.
- Study on two additional MRTS alignments in MBIR under progress. Joint meetings to be held with the NCRPB who is working on the RRTS project for Delhi-Gurgaon-Rewari-Alwar to share studies/ surveys etc. which would be useful for MRTS.
- DMICDC apprised the CM of Haryana about the MRTS project proposed between Gurgaon&Bawal. The pre-feasibility study MRTS between Gurgaon and Bawal was presented for approval.
- The State of Haryana has selected the following projects for conducting pre-feasibility studies: Low Cost Housing Project, Integrated Multi Modal Passenger Hub at Panchgaon Chowk and Education & Health City Project

- The pre-feasibility study of Low cost housing was presented for approval. Draft pre-feasibility report of Education and Medical Hub sent to the State for their comments. Draft pre-feasibility study on integrated Multi Modal Passenger Hub has also been submitted.

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

Table 4.2: Registered industrial units, employment and investment in the NCR (2010-11)[43]

District / Sub-region	No. of Units (existing registered)	Employment	Investment (in Lakhs INR)
Meerut	8197	51605	66856.49
Bagpat	2613	12665	9386.09
Ghaziabad	45282	226824	326676.13
Gautambudh Nagar	9880	141295	147215.53
Bulandshahr	4629	23566	2465.1
Total of Uttar Pradesh Sub-region	**70601**	**455955**	**552599.34**
Delhi	20648	22709	24300
Total of NCT of Delhi	**20648**	**22709**	**24300**
Alwar	551	NA	1400
Total of Rajasthan Sub-region	**551**	**0**	**1400**
Faridabad	17291	104452	189517
Palwal	59	1960	9621.08
Gurgaon	22491	329340	67126
Jhajjar	1849	17882	29307
Panipat	4068	41456	82687.45
Rewari	1370	30313	11200
Rohtak	4761	8201	10592.96
Sonipat	8743	59707	1033.18
Mewat	42	1156	3193.28
Total of Haryana Sub-region	**60674**	**594467**	**404277.95**
Grand Total/ NCR	**152474**	**1073131**	**982577.29**

Industrial Development - National Capital Territory

The manufacturing sector in Delhi contributes to around 10% of the GSDP. There has been a phenomenal growth of SSIs in NCT of Delhi in the last four decades, from 17,000 in 1961 to

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

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. Figure 4.1 depicts the trends in factories in Delhi outlines that the number of factories that saw a spurt in the period 1981-2001 after which there was very gradual increase till 2005 and then a dip in trends.

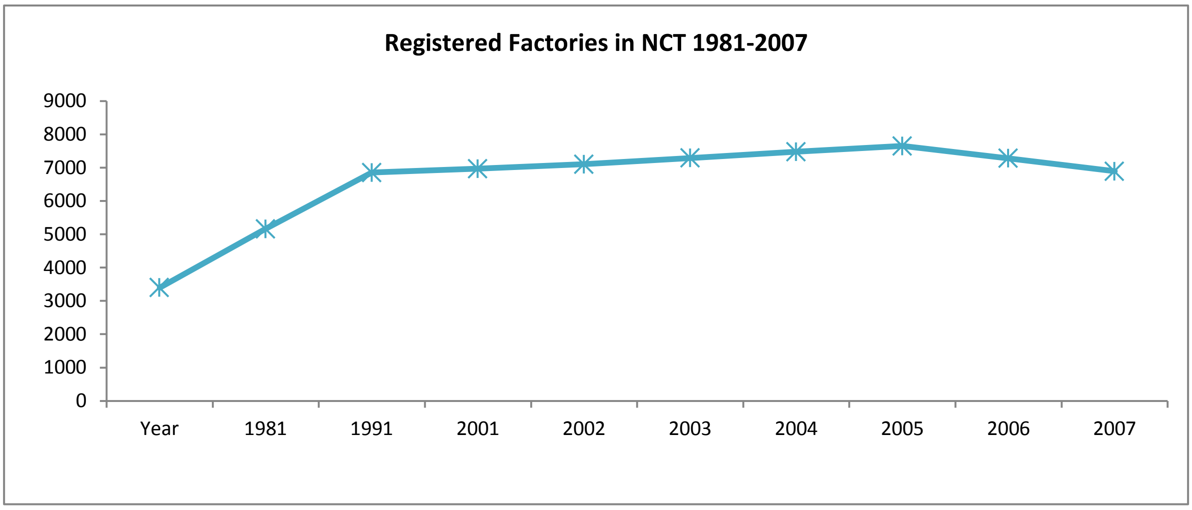


Figure 4.1: Registered Factories in NCT 1981-2007[44]

In contrast, the GDP growth contributed by the unorganized sector kept growing (Figure 4.2); the growth was more significant after 2003-04.

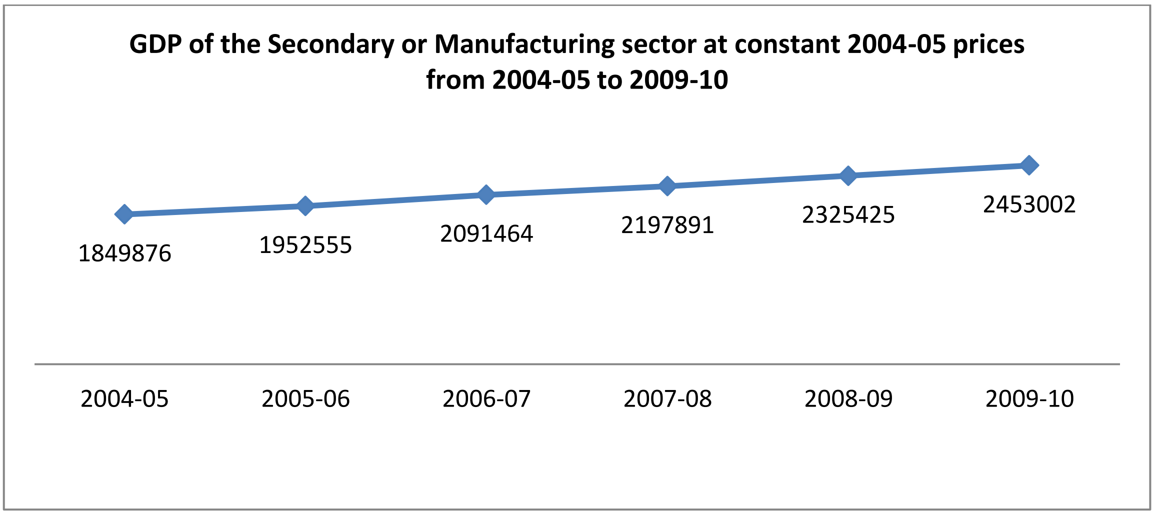


Figure 4.2: GDP of the Secondary or Manufacturing sector at constant 2004-05 prices from 2004-05 to 2009-10[45]

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

Structure of Working Factories

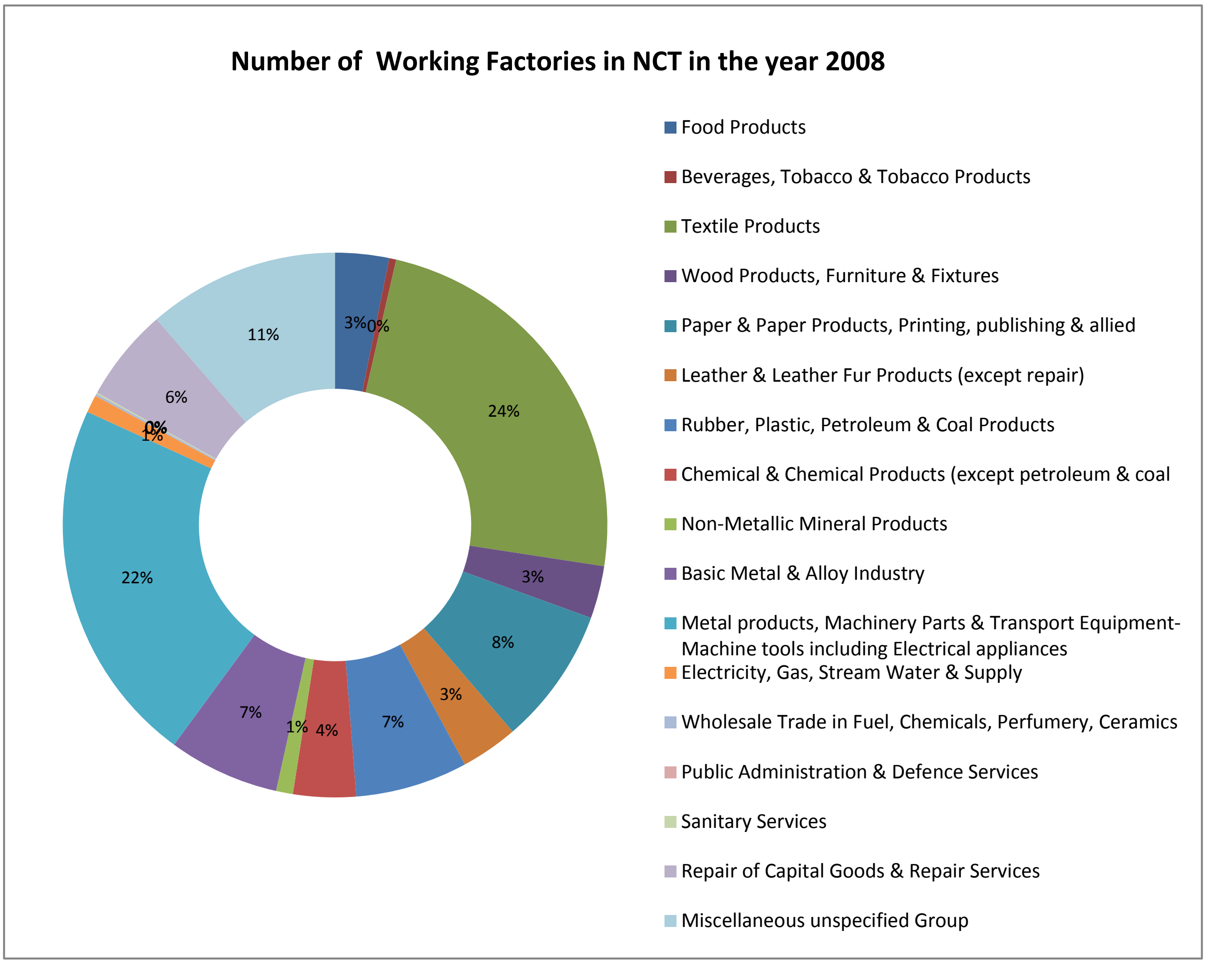


Figure 4.3: Number of Working Factories in NCT in the year 2008[46]

Figure 4.3 presents the break-up of types of factories in the NCT of Delhi in 2008. During this period, the NCT of Delhi, had the maximum numbers of working factories are in the area of textiles (24%) followed by metallic products and machinery parts at (22%), while the minimum number of factories operated in non-metallic industry.

Industrial Employment – NCT of Delhi

Figure 4.4 presents a break-up of workforce in the organized sector in NCT of Delhi. The largest share (36%) was employed in the textile products category, followed by metal products, machinery parts & transport equipment (Economic Survey of Delhi, 2008-09).

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[45] Source: Directorate of Economics & Statistics, Delhi; Estimates of State Domestic Product of Delhi of 2012-13
[46] Source: Economic Survey of Delhi, 2008-09

The manufacturing units in NCT of Delhi were substantially impacted by the Honorable Supreme Court order in 2005, requiring closure/relocation of polluting industries. Historically, Delhi has 32 industrial and flatted factory complexes; of this, 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. However recent employment trends in manufacturing sector suggest that SSIs still operate largely from non-conforming zones. This may still result in more pollution and waste, and may require major structural correction in the relocation policy.

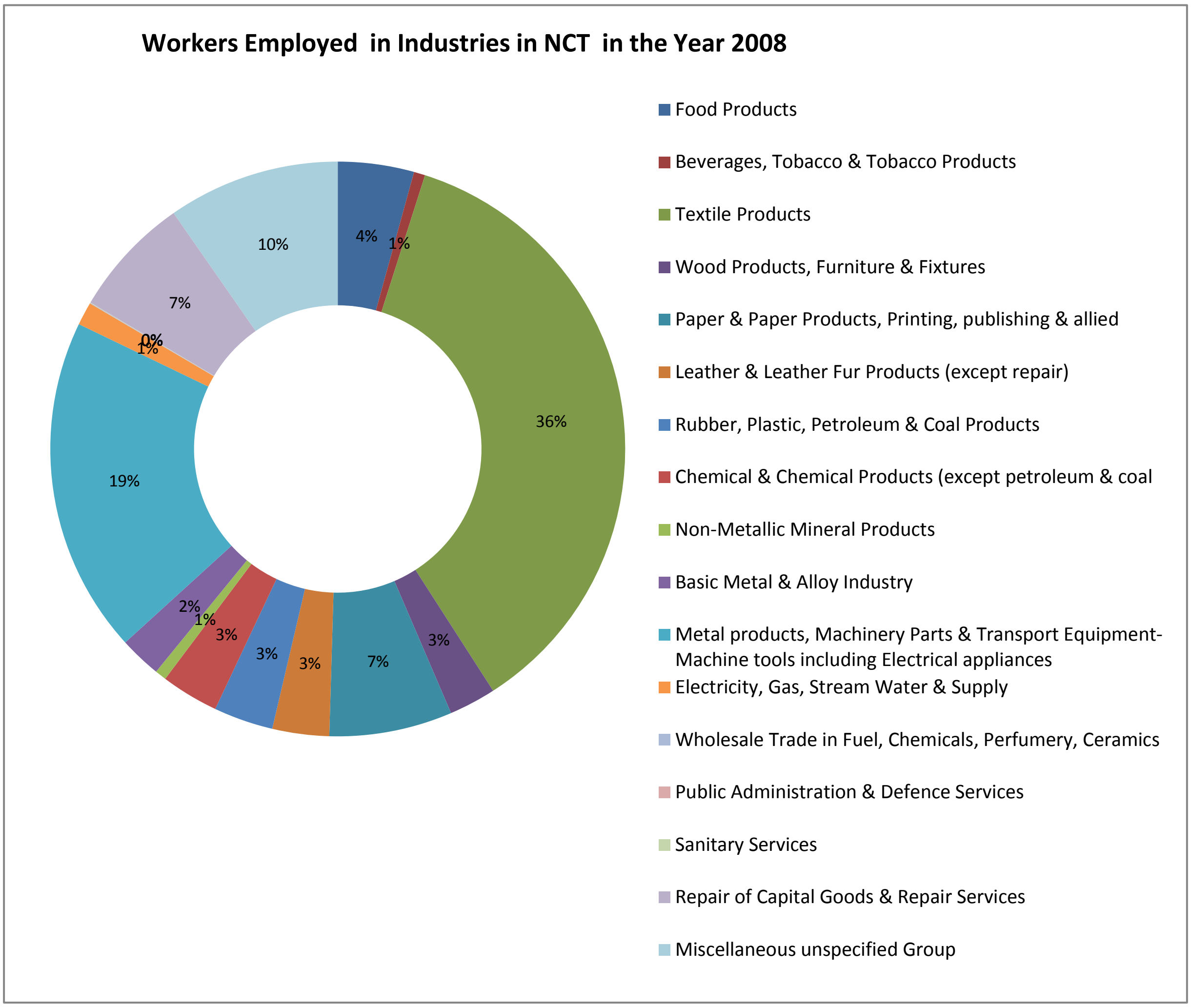


Figure 4.4: Workers Employed in Industries in NCT in the Year 2008[47]

[47] Source: Economic Survey of Delhi, 2008-09

Industrial areas in NCT of Delhi were mainly developed in the 70s 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 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 seven main locations with 70% of industrial activity concentration viz. Jawahar Nagar, Karawal Nagar, Haiderpur, Shalimar Village, New Mandoli, BasaiDarapur, Khyala, Rithala and Mundka. However, main industrial activities still take place in the unplanned areas.

Haryana Sub-Region

Nine districts of Haryana fall under the NCR. Some districts including 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, especially in the NCR 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 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

Figure 4.5 presents the distribution of factories across the districts of the sub-region. Gurgaon has the maxim number of registered units in the sub region followed by one of the oldest industrial towns, Faridabad, then Sonipat, Rohtak, Panipat, Jhajjar and Rewari. Most of the growth of such factories in the last 5-7 years has been concentrated in Gurgaon district. At the same time, Palwal and Mewat, the new districts, have the least number of registered factories.

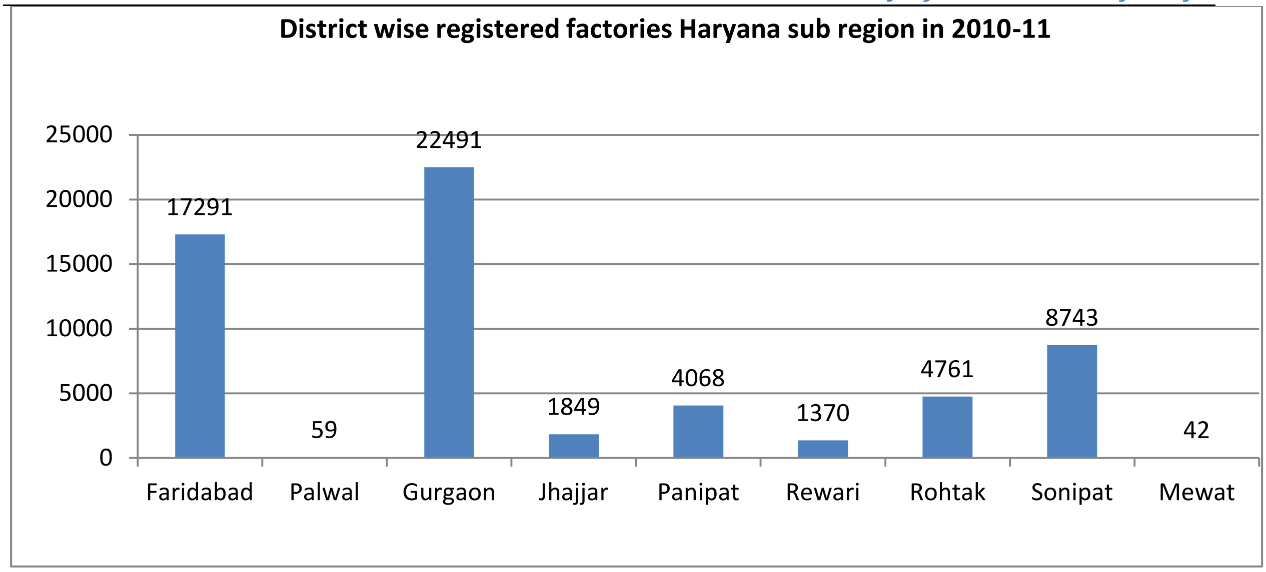


Figure 4.5: District wise registered factories Haryana Sub-Region in 2010-11[48]

Figure 4.6 present the time-series data on a number of registered factories across the sub-region. Trends indicate that the growth in Panipat has been constant throughout, whereas Jhajjar and Sonipat have experienced negligible growth. Gurgaon, on the other hand, demonstrates substantial growth since 2005-06.

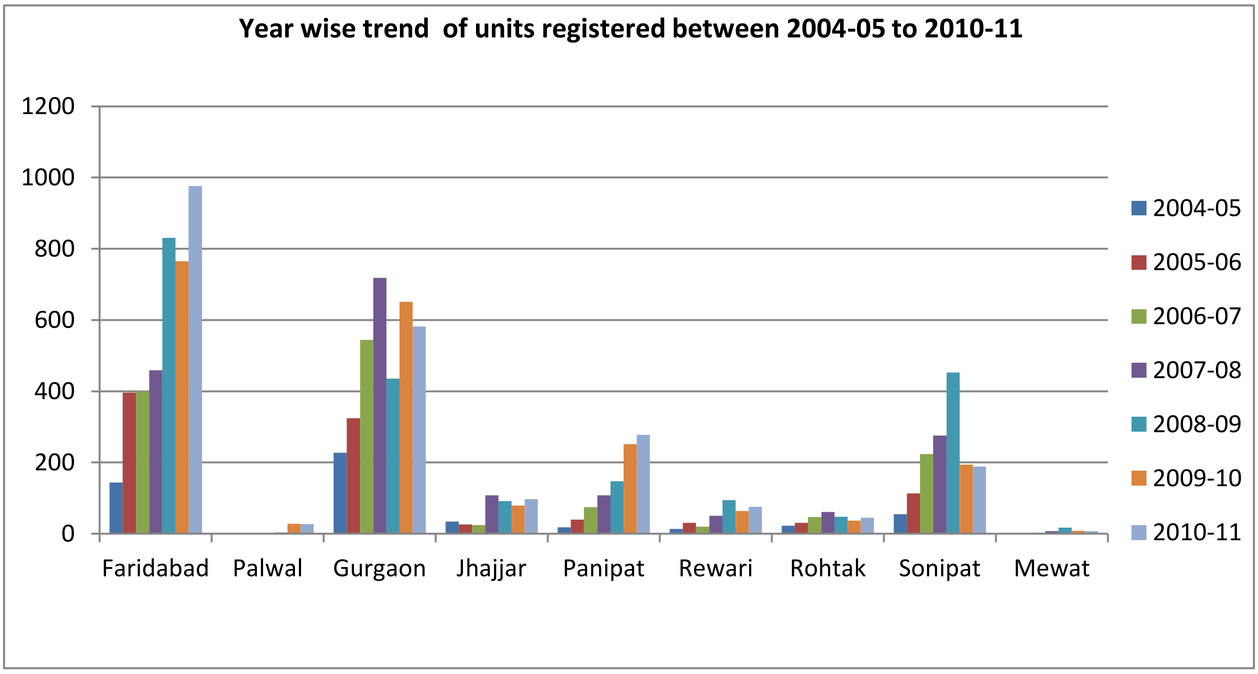


Figure 4.6: Year wise trend of units registered between 2004-05 to 2010-11[49]

[48] Source: District wise Industrial Profile, DC MSME
[49] Source: District wise Industrial Profile, DC MSME

District wise Workers Employed in Factories

Figure 4.7 presents the distribution of workers engaged in factories across the sub-region. In terms of employment, Gurgaon leads followed closely by Faridabad, a trend contradictory to the distribution of factories (Faridabad has more factories than Gurgaon). The spurt in employment in Gurgaon district since 2005-06 is visible.

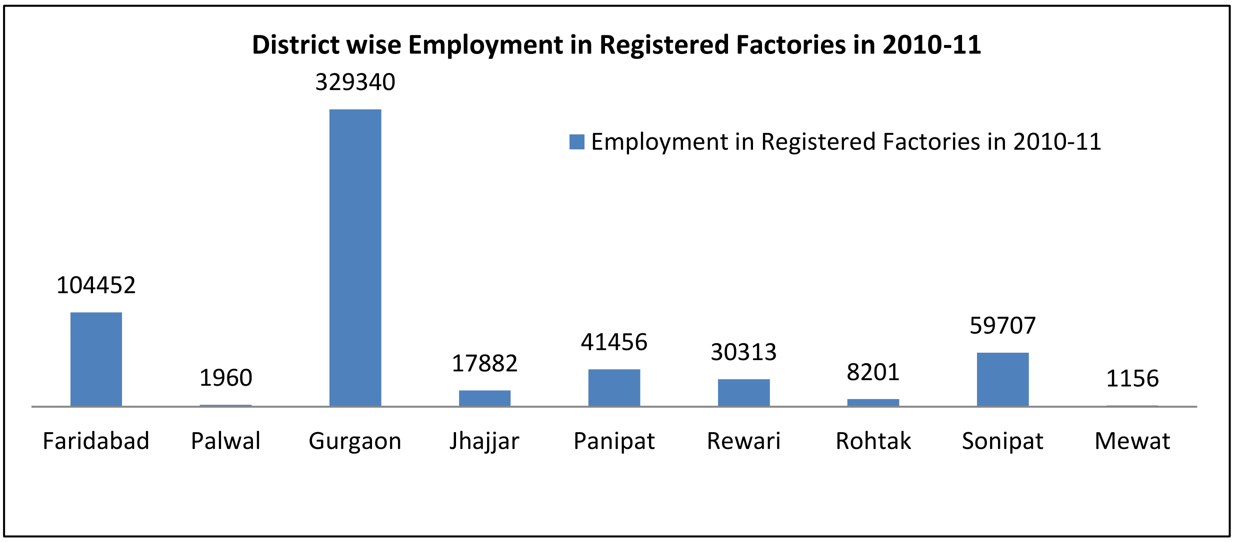


Figure 4.7: District wise Employment in Registered Factories in 2010-11

Major Industrial Sectors

Among the major industrial groups, Haryana sub-region and NCT of Delhi present similar patterns of sectoral evolution. Textiles and allied products are on the top of the list of factories in Haryana, followed by machinery and basic metal products (mainly engineering and auto-components items). In terms of growth, again textile and allied products are growing at very fast pace (growth rate) followed by food items (refer Figure 4.8).

In this sub-region, distinguished acceleration in wearing apparel, dressing and dyeing of the fur industry as well as food products and beverages, motor vehicles, trailers and semi–trailers is visible. Another prominent feature is visible in the paper and paper products industry, where there has been negative growth over the years (refer Figure 4.8).

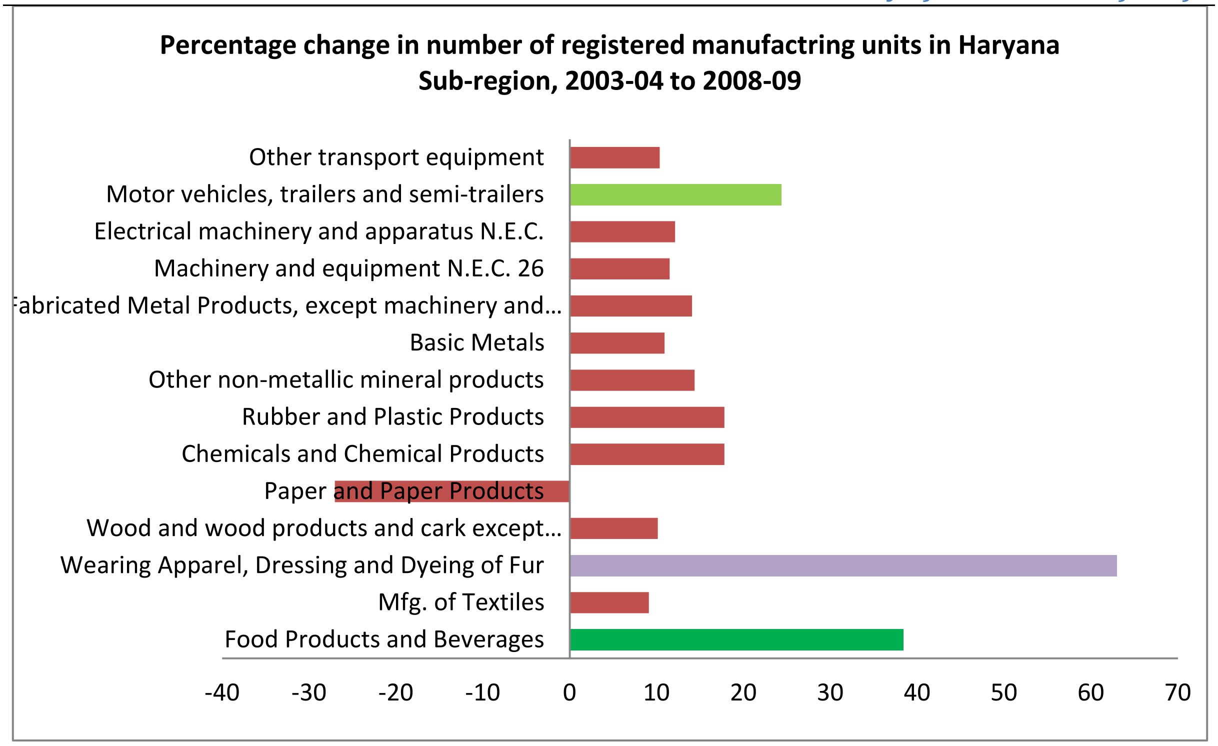


Figure 4.8: Percentage change in number of registered manufacturing units in Haryana Sub-Region, 2003-04 to 2008-09[50]

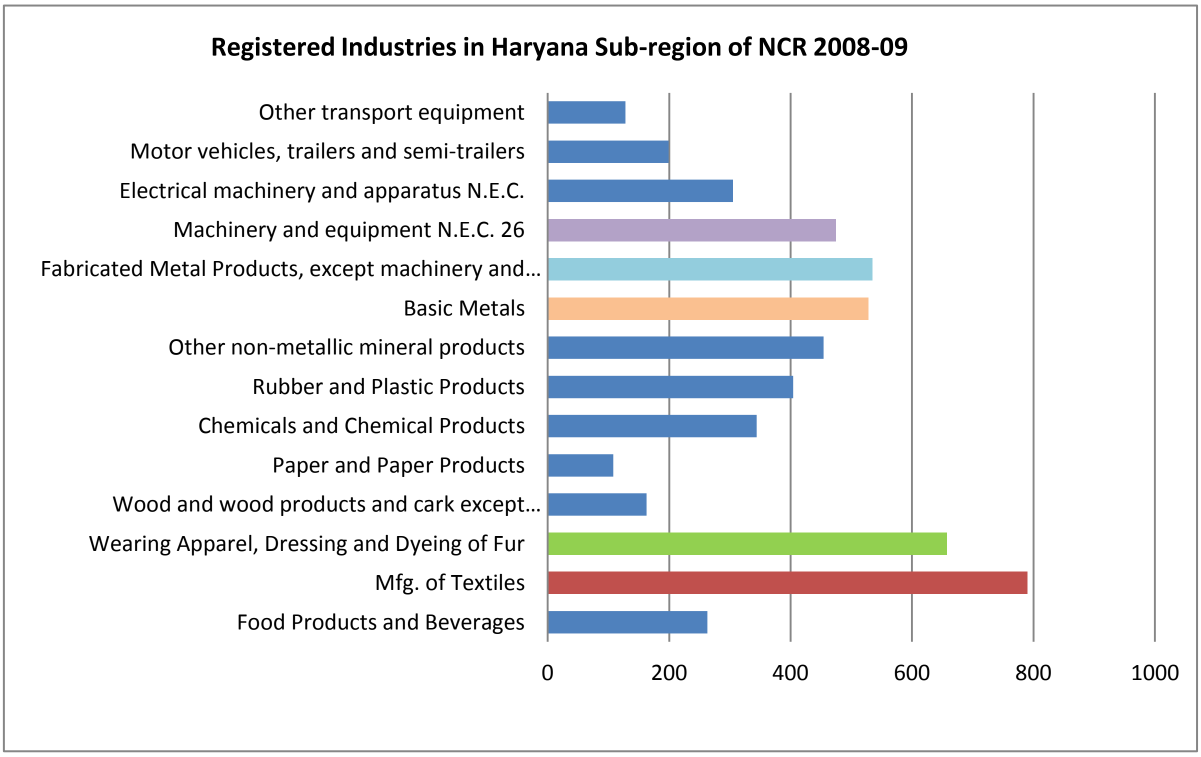


Figure 4.9: Registered Industries in Haryana Sub-Region of NCR 2008-09[51]

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

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

UTTAR PRADESH SUB-REGION

In 2005-06, industrial activities in Uttar Pradesh sub-region are concentrated mainly in Gautambudha Nagar (83%), signifying that Ghaziabad, the traditional industrial hub of the region, has gradually lost its importance (refer Figure 4.10).

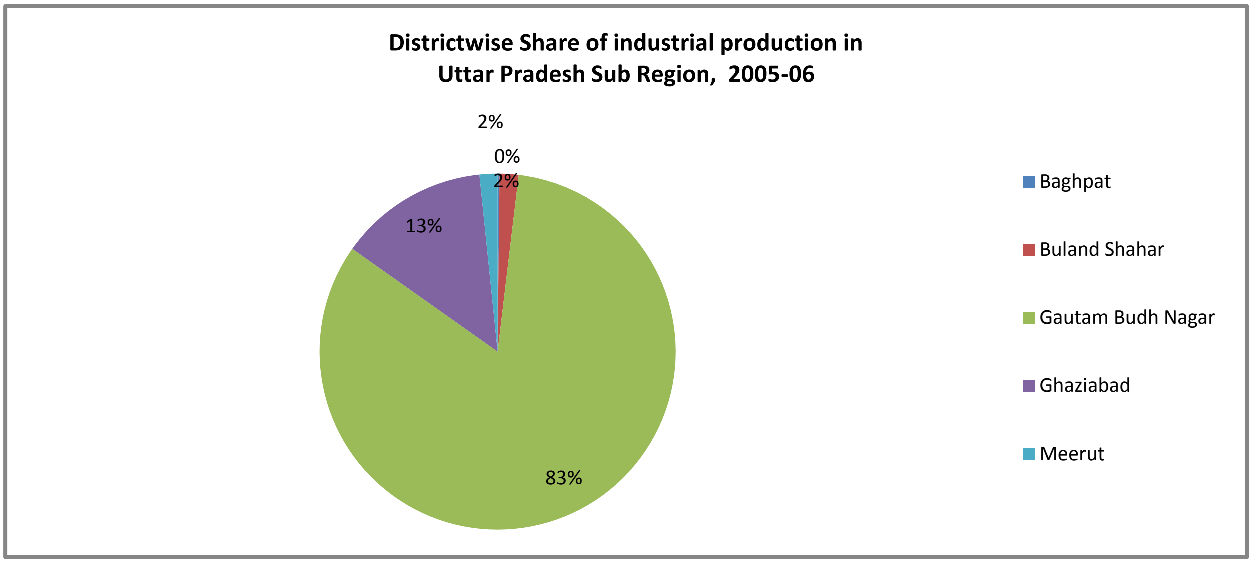


Figure 4.10: District wise Share of industrial production in 2005-06[52]

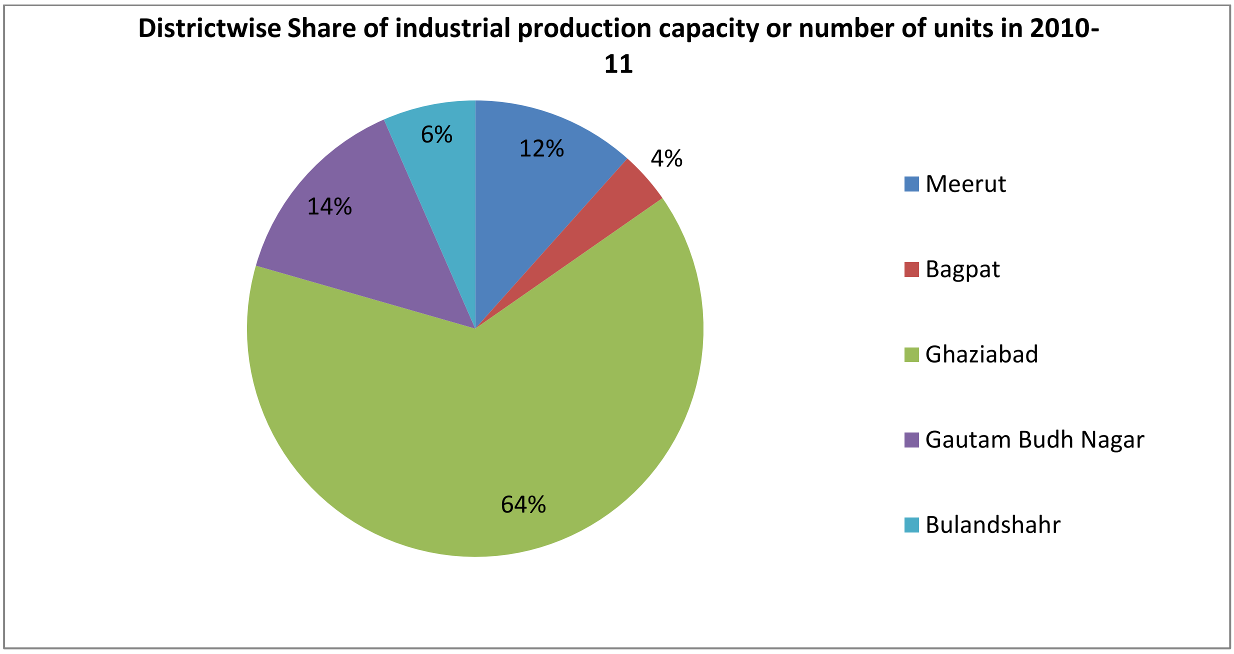


Figure 4.11: District wise Share of industrial production capacity or number of units in 2010-11[53]

[52] Source: Annual Survey of Industries, Uttar Pradesh 2005-06
[53] Source: District wise Industrial Profile, DC MSME

In 2010-11, when we compare the share of industrial capacities or number of units during this period, majority of the industrial units are concentrated in Ghaziabad although its shining was on decline befor 2005-06. Over the period from 2005 to 2011, a number of industries have been started in small and medium sector in the regions like Meerut, Bulandshahr etc. This can also be a reason for the shrink in the share of Gautam Budh Nagar in industrial capacity in the sub region; despite new industries have been started in the district.

Figure 4.12 presents the number of District wise Industrial Units in the Uttar Pradesh sub region in 2010-11. In this period, Ghaziabad (45282) have the maximum number of industries, followed by Gautam Budh Nagar (9880), Meerut (8197), Bulandshahr (4629) and the least number of industries in Bagpat (2613).

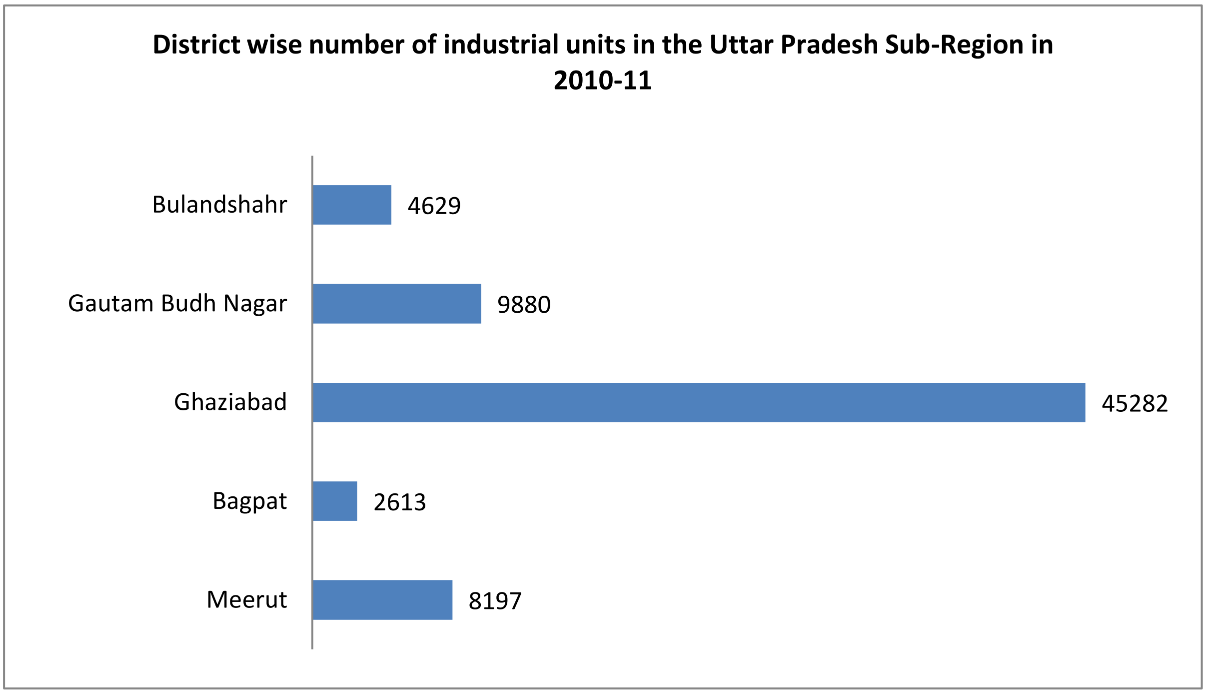


Figure 4.12: District wise number of industrial units in the Uttar Pradesh Sub-Region in 2010-11[54]

District-wise Workers in Industries

In terms of the number of industrial workers employed, Ghaziabad (which new includes Hapur) outnumbers other districts with a significant margin during 2010-11 (refer Figure 4.13). During this period, Ghaziabad has total industrial workers of 226824 persons which

[54] Source: District wise Industrial Profile, DC MSME

accounts for nearly half of the industrial workers with registered units in the sub region. After Ghaziabad, Gautambudh nagar (141295) has the maximum number of these workers employed in the sub region followed by Meerut (51605), Bulandshahr (23566) and least with Bagpat (12665).

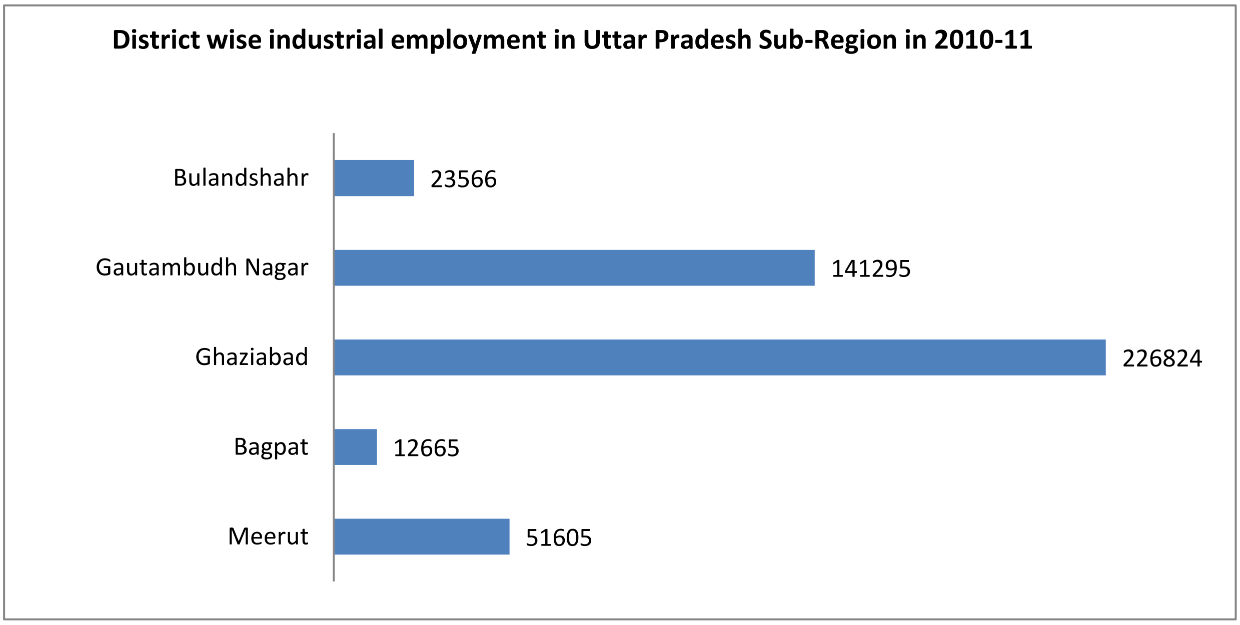


Figure 4.13: District wise industrial employment in Uttar Pradesh Sub-Region in 2010-11[55]

In terms of number of workers employed in registered industries in the sub-region, manufacturing industries of wearing apparel, dressing and dyeing of fur 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.

[55] Source: District wise Industrial Profile, DC MSME

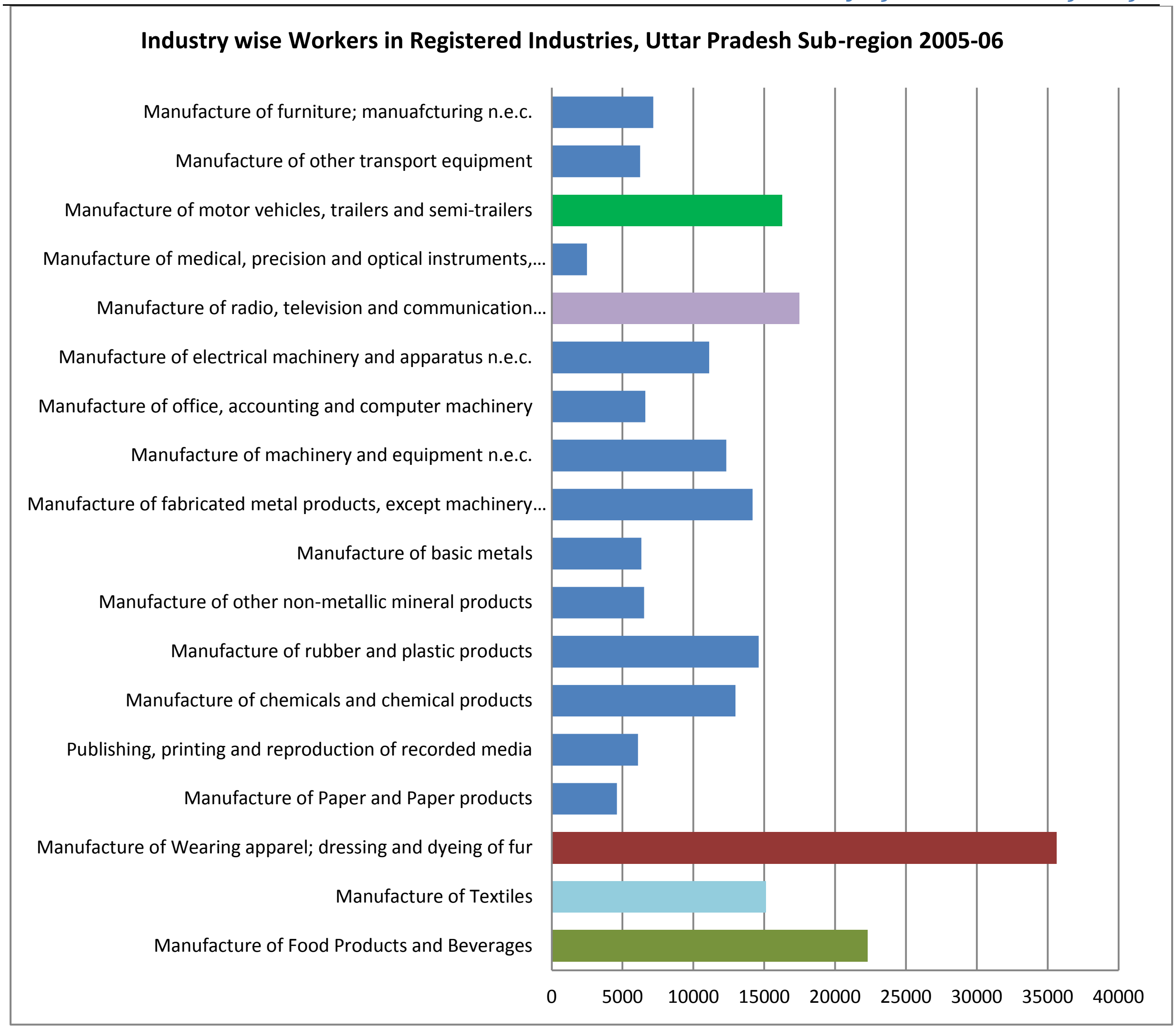


Figure 4.14: Industry wise Workers in Registered Industries, Uttar Pradesh Sub-Region 2005-06

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 4.3). The details related to existing industrial areas in the district are as given under.

Table 4.3: Industrial Areas Developed by RIICO in Alwar District-2010[56]

S.No.	Location	Total Areas in Acres
1	M.I.A.	1804.32
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	2138
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)	2125.96
20	EPIP Neemrana	210.51
21	SareKhurd	94.55
22	Manjara Path (Japanese Zone)	1166.33
	Total	**12045**

Figure 4.15 presents the number of factories set up in Rajasthan sub-region disaggregated by sector. The pack is led by non-metallic minerals and followed by basic metal, rubber and rubber products, and chemical and chemical products; units producing wood-based product are the least developed. Figure 4.16 presents the same data disaggregated by employment across these sectors.

[56] Source: Alwar District Administration, alwar.nic.in

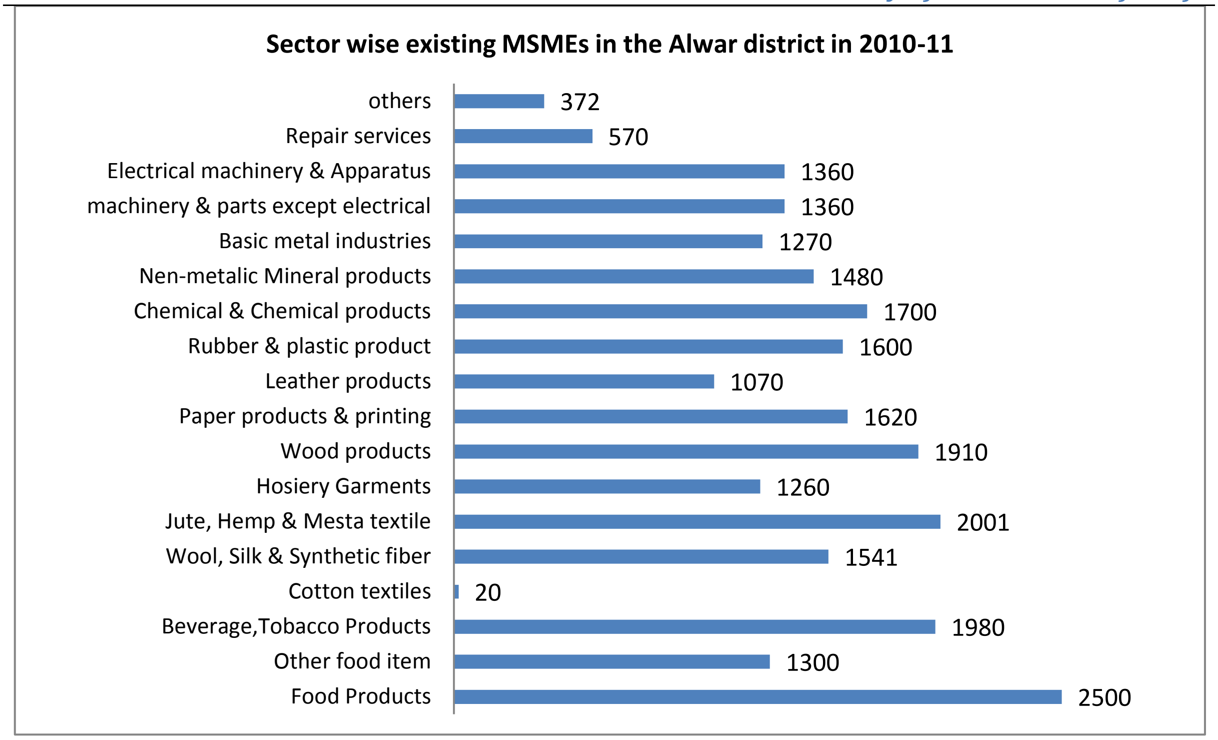


Figure 4.15: Sector wise existing MSMEs in the Alwar district in 2010-11[57]

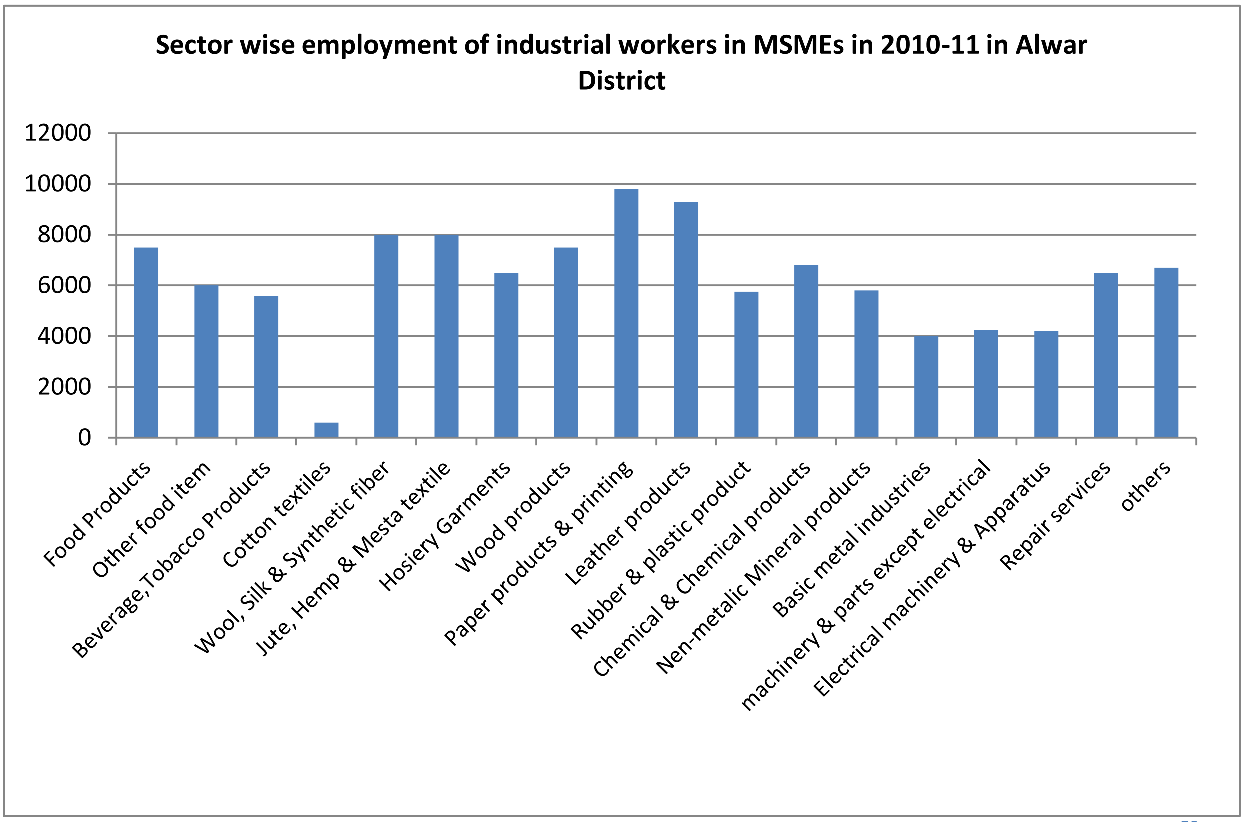


Figure 4.16: Sector wise employment of industrial workers in MSMEs in 2010-11 in Alwar District[58]

[57] Source: District Industrial Profile, Alwar District, DC MSME
[58] Source: District Industrial Profile, Alwar District, DC MSME

Interestingly, although the top three categories of units that account for the largest number of units in the region provides for employment demands of a substantially lower proportion of workers. The higher proportion of workers are engaged in the 'Others' sector, followed by food produce and beverage, and chemical and chemical produce units indicating these units employ on average a larger number of employees.

In terms of investment in industrial units Alwar district in Rajasthan sub-region, the Wool, Silk and Synthetic units record the maximum investment in the sub-region and the least by Hosiery garment units (refer Figure 4.17).

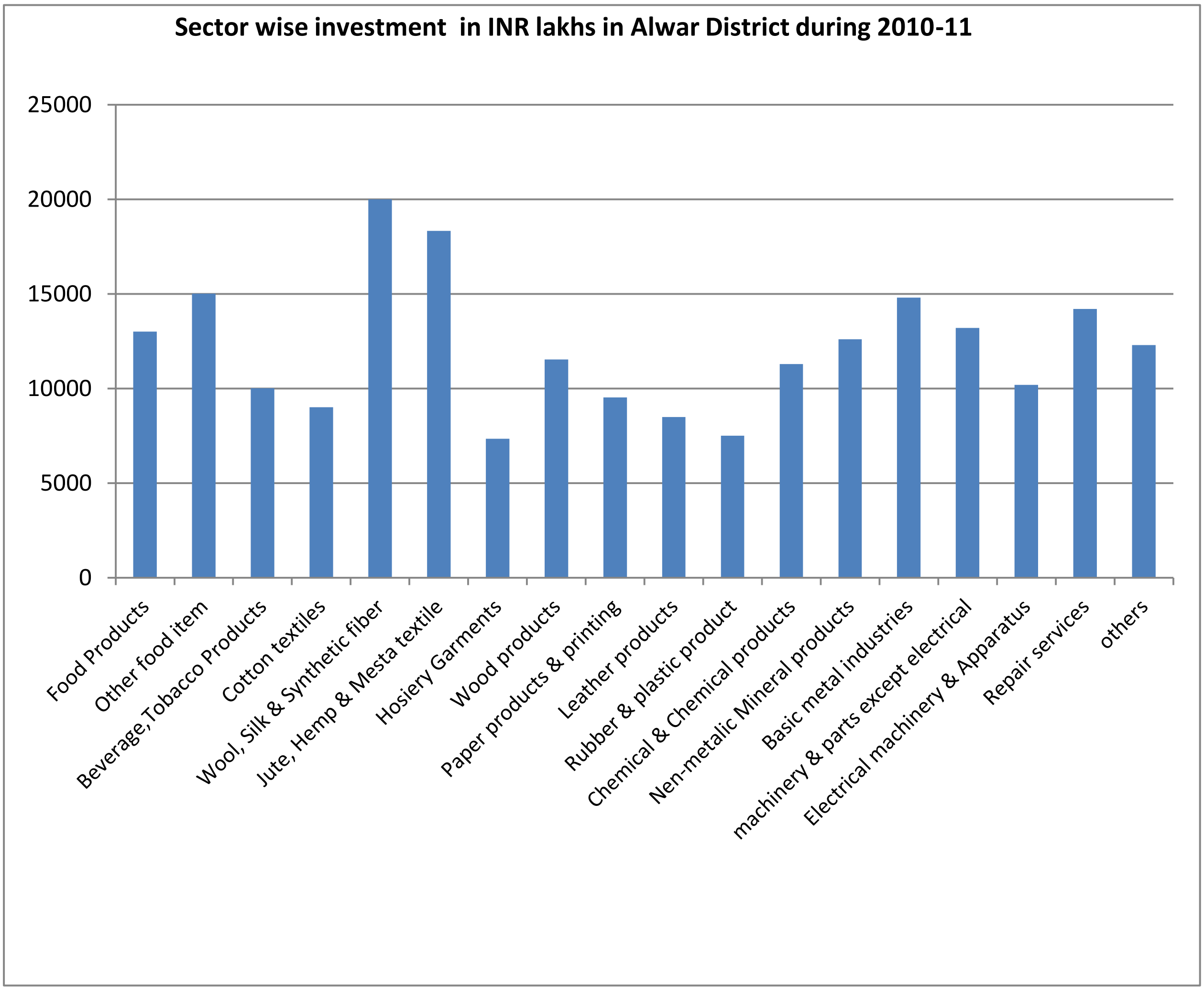


Figure 4.17: Sector wise investment in INR lakhs in Alwar District during 2010-11[59]

[59] Source: District Industrial Profile, Alwar District, DC MSME

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. Table 4.4 presents the types of produce available in this sub-region.

Table 4.4: Category wise number of units in Alwar District[60]

S. No.	Type of Product	Bhiwadi (No.s)	Khushkher (No.s)	Chaupanki (No.s)
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

[60] Source: Bhiwadi Manufacturers' Association

	TOTAL	**1455**	**87**	**183**

4.3 Industrial Clusters, Sectors and Industries

CLUSTERS

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. Based on the experience of UNIDO's work in India, if there are more than 100 units in related and complementary business in the radius of 60 K.M. it will be called an industrial cluster. 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. Natural cluster is historically evolved whereas; induced cluster is an outcome of the government policy.

According to United Nations Industrial Development Organization (UNIDO),[61] there are 388 industrial clusters in India. The estimated number of firms in these clusters is 490,000 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.

CLUSTERS IN NCR

The important industrial locations in NCR are Meerut, Ghaziabad, Guatambudha Nagar, Bulandshahr, Delhi, Gurgaon, Faridabad and Panipat. There 53 industrial clusters in the areas of auto component, textiles, general engineering, power looms, carpet etc. The estimated total number of people employed is over 15 Lakhs with a total turnover of over Rs. 1000 billion. The textile industry reports the largest number of units and the largest employer of workforce (refer Figure 4.19 and Table 4.6).

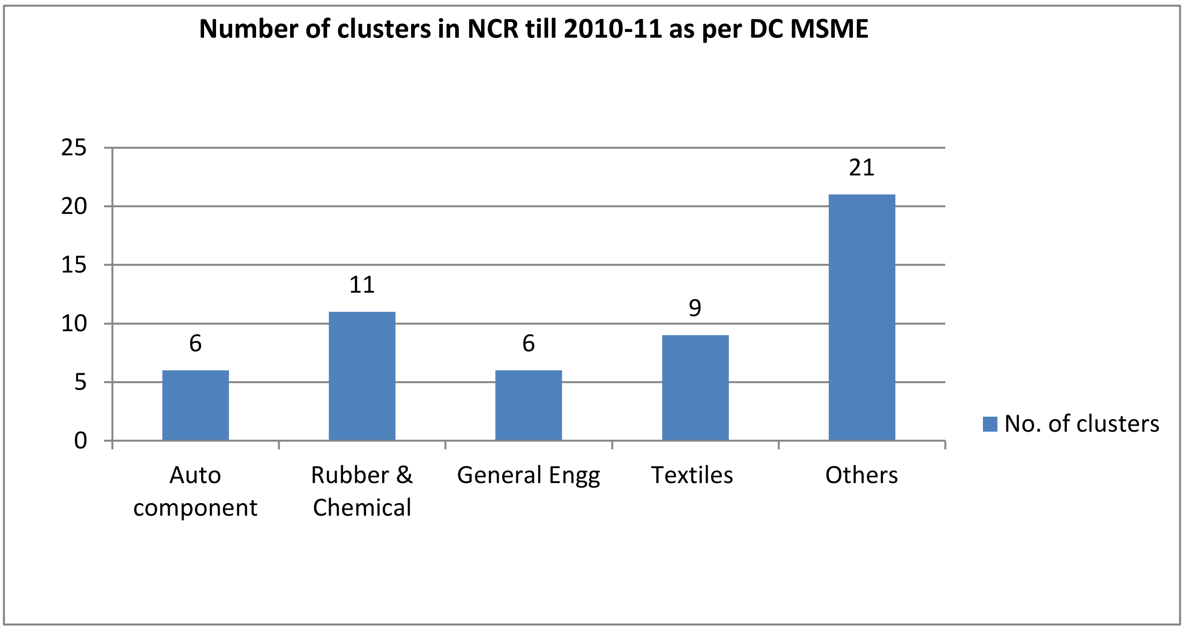


Figure 4.18: Number of clusters in NCR till 2010-11 as per DC MSME

Among the existing number of clusters, textile clusters (9 clusters; refer Figure 4.18) has the maximum agregate turnover of INR 21561.32 Crore. In terms of employment, Auto component sector (6 clusters) employ 565500 workers (refer Figure 4.19). Its worth noting that Rubber and Chemicals sector has maximum solo clusters (11 clusters) with least

[61] UNIDO Cluster Development Programme in India, 2004.

number of units in NCR with a turnover of over Rs. 33 hundred crore. It implies that the industry units/ are scattered, compared to other industries, who have sizable number of number of units but with lesser number of clusters.

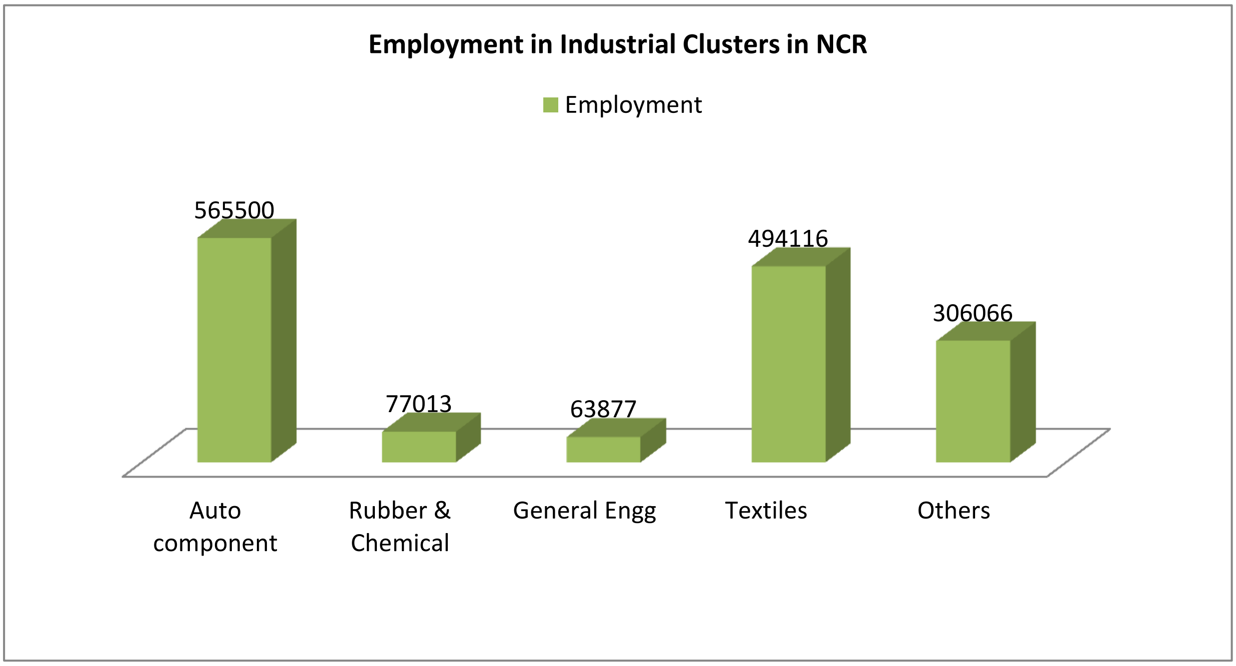


Figure 4.19: Employment in Industrial Clusters in NCR[62]

Table 4.5: Industrial Sectors and Clusters in NCR

Cluster/ product	No. of clusters	No. of Units	Employment	Turnover (INR Crore)
Auto component	6	25900	565500	63897.2
Rubber & Chemical	11	3095	77013	3300.91
General Engineering	6	3841	63877	4042.4
Textiles	9	15965	494116	21561.32
Others	21	10578	306066	7408.13
Total	**53**	**59379**	**1506572**	**100210**

[62] Source: Industrial Estimates, DC MSME; Cluster Observatory

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.

4.4 Important Clusters Profiles

Manufacturing Clusters Profile

i Okhla Readymade Garment Cluster

Post independence, Delhi's garment industry primary role 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 and out of the 40% is being manufactured in the Okhla Industrial Area itself.

At the time of its inception, the garment products were made on 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 done 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 of 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 have 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.

ii NOIDA Readymade Garment Cluster

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 6000 garment units with a turnover of INR 3600 Crore in the cluster.

iii NOIDA General Engineering and Auto Cluster

General Engineering cluster is one of the largest employers in GautamBudh 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.

The future scheme of industrial development also bodes well for export growth in the NOIDA cluster. The newly envisaged Taj SEZ includes special projects like economic zones, Taj city and the Taj expressway. The Zone is expected to offer world-class facilities comprising of convention centers, entertainment and sports facilities along with reputed hotels and housing and urban development components. Moreover, there is also an Export Promotion Council for Handicrafts (EPCH) SEZ coming up at NOIDA that will cater only to the handicrafts segment.

iv Panipat Textiles Cluster

The town has three major public sector projects – Indian Oil Company refinery, NFL and thermal power station. It is the largest center 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. This sector at present is not doing well due to recession in the blanket industry.

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.

v. Faridabad General Engineering and Auto Component Cluster

The industrial base of Faridabad is not just an economic base of Faridabad, but a 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 is home to 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 big 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.

vi. Gurgaon Auto Component Cluster

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 growth. Maruti Udyog Ltd. started in 1982 as a joint venture firm between the Indian government and a Japanese automaker, Suzuki Motor Corporation. Gurgaon cluster is an induced cluster started with Maruti in 80s.

vii. Meerut Auto Parts Cluster

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 1000 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 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.

viii. Meerut Power loom Cluster

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 then 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.

ix. Meerut Sports Goods Cluster

The sports goods cluster has 3500 units, employing nearly 70000 workers and producing goods worth Rs. 2000 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 even 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) for sports goods, which is a central government organization.

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 close to 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. Even greater scope lies in diversifying to other sports good segments. Several attempts towards the development of the cluster have already been done/is on-going.

SERVICE CLUSTER PROFILE

i IT& ITES in Delhi NCR

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, CRM, online office automation, etc. The NCT of Delhi has become a cluster of software production, which is almost as significant as Bangalore and Mumbai. After a rather slow start, Delhi in the past few years has been catching up with the software industry and today the Indian capital houses almost the same number of the software company headquarters as other software hubs. Projections by NASSCOM indicate that a co-ordinate 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.

NCR has an inherent advantage of saleable high-quality infrastructure, technically qualified and talented pool of professionals, strong leadership oriented companies, respondent state government and 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 Delhi, recognizing the enormous potential of IT and IT enabled services, has embarked upon an ambitious journey to spread its benefit all over the city. This includes several measures such as 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.

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, 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

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.

TEXTILES CLUSTERS

Strength

- 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.

Threat

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

4.6 Micro Small and Medium Enterprises in NCR

CLASSIFICATION OF MSMEs

Table 4.6: Classification of SMEs, according to Micro, Small and Medium Enterprises Development Act 2006

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 INR 25 lakh	Does not exceed INR 10 lakh
Small enterprise	More than INR 25 lakh but	More than INR 10 lakh

	does not exceed 5crore rupees	but does not exceed INR 2 Crore
Medium enterprise	More than INR 5 Crore but does not exceed 10 Crore rupees	More than INR 2 Crore but does not exceed INR 5 Crores

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 one lakh SSIs and over 15000 medium and large-scale units in the NCR (refer Table 4.7 for data disaggregated by districts). In Haryana sub-region, the maximum number of SSI units is in Gurgaon district followed by Faridabad. A similar trend can be seen in the number of Large and Medium enterprises.

Table 4.7: Number of SSI and L&M units in NCR till March 2011, as per Dept. of Industries, DCMSME[63]

District / Sub-region	SSI Units	Estimated Avg. No. Of Daily Worker Employed in SSI	Large and Medium	Employment In Large And Medium Industries
Meerut	8184	48280	13	3325
Bagpat	2608	8765	5	3900
Ghaziabad	NA	17221	NA	72749
Gautambudh Nagar	9521	77260	359	187572
Bulandshahr	4624	80000	5	87
Total of Uttar Pradesh Sub-region	**24937**	**231526**	**382**	**267633**
Delhi	20648#	975194	NA	NA
Total of NCT of Delhi	**20648**	**975194**	**NA**	**NA**
Alwar	464	1,12,554*	87	8,100
Total of Rajasthan Sub- region	**464**	**1,12,554***	**87**	**8,100**
Faridabad	17111	4500	180	1600
Palwal	19	7200	40	8000
Gurgaon	22055	186040	436	143300
Jhajjar	NA	16082	NA	1000
Panipat	4025	80667	43	14192

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

Rewari	1229	9313	141	21000
Rohtak	4746	NA	15	2820
Sonipat	8737	59707	6	17031
Mewat	26	800	16	1200
Total of Haryana Sub-region	**57948**	**364309**	**877**	**210143**
Grand Total/ NCR	**103997****	**1571029**	**1346****	**485,876**
*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 between 157362 Units.				
# MSMEs				

In Uttar Pradesh sub-region, the maximum number of SSIs and L&M units would be concentrated in Ghaziabad region 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 L&M units. In Rajasthan sub-region, the number of SSI units was 464, and the number of large and medium enterprises was 87. NCT of Delhi has over 20,000 units in 2010-11 as per DCMSME Industrial profile of NCT of Delhi.

CHAPTER V

5. RURAL ECONOMY OF NCR

5.1 Background

Rural Population of India is at 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 smallholder 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 lead 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. The NCT of Delhi demonstrates a drop in rural economic development due to change of the land as to support 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. One must recognize that the Master Plan Delhi 2021 proposed for urbanization of the entire NCT of Delhi except for a distinct green belt of one revenue village.

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 distinct 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 the districts undertaken, 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 for this 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 an agrarian economy, predominantly. This sub-region has also seen comparative increase in agricultural and non-agricultural establishments, although the latter is pacing ahead as a result of increasing urbanization in this sub-region.

Rajasthan sub-region is the rural of the four sub-regions. Agriculture is the primary occupation of workers in this 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 fueled by agriculture.

5.2 Rural Workforce and Occupation in NCR

Table 5.1 presents the rural population and workforce figures for all districts under the NCR for 2011. The NCR reported 37.41% population residing in rural areas and close to 60% of the rural workforce are employed as cultivators and agricultural labors. Rajasthan has the highest proportion of the rural population (over 82%) while Uttar Pradesh has the highest number of population residing in rural areas. Haryana and Uttar Pradesh are also largely rural (56.73% and 51.71% rural population) while NCT of Delhi is almost completely urban (2.50% rural population).

In terms of workforce distribution (refer Table 5.1 and Figure 5.1), Rajasthan Sub-region contributes highest to rural workforce (87.09%) compared to its total workforce, followed by Haryana sub-region (57.10%), Uttar Pradesh sub-region (52.96%), and NCT of Delhi (2.33%). In terms of trends of growth (refer Table 5.3 during a period of 1971 to 2001), proportion of workers engaged in primary sector reduced from 44% to 37% over this period, while proportion of workers in secondary sector increased from 18% to 34% over the same period. The proportion of workers engaged in the tertiary sector also reduced from 37% to 28% over the same period.

Table 5.1: Rural Population and Workforce in 2011[64]

Districts	Total Population	Rural Population	% of rural population	Total work force	Rural work force	% of rural workforce
North West	3656539	213950	5.85	1,188,545	67492	5.68
North	887978	17746	2.00	296,446	5278	1.78
North East	2241624	21527	0.96	661,386	5988	0.91
East	1709346	3530	0.21	579,692	1348	0.23
New Delhi	142004	0	0.00	59,541		0.00
Central	582320	0	0.00	207,374		0.00
West	2543243	6420	0.25	874,320	1846	0.21
South West	2292958	143676	6.27	795,352	44049	5.54
South	2731929	12193	0.45	924,393	4226	0.46
NCT of Delhi	**16787941**	**419042**	**2.50**	**5,587,049**	**130227**	**2.33**
Faridabad	1809733	370878	20.49	579,229	106758	18.43
Gurgaon	1514432	472179	31.18	544,716	158462	29.09
Rewari	900332	666902	74.07	337,727	264375	78.28
Rohtak	1061204	615040	57.96	345,967	212681	61.47
Sonipat	1450001	996637	68.73	523,179	376188	71.90
Panipat	1205437	650352	53.95	412,318	221931	53.83
Jhajjar	958405	715066	74.61	326,534	253833	77.74
Mewat	1089263	965157	88.61	289,964	258721	89.23
Palwal	1042708	806164	77.31	309,563	242228	78.25
Haryana Sub region	**11031515**	**6258375**	**56.73**	**3,669,197**	**2095177**	**57.10**
Alwar	3674179	3019728	82.19	1,708,542	1487935	87.09
Rajasthan sub region	**3674179**	**3019728**	**82.19**	**1,708,542**	**1487935**	**87.09**
Baghpat	1303048	1028023	78.89	416,695	337563	81.01
Bulandshahr	3499171	2631742	75.21	1,173,260	919473	78.37
Gautambudh	1648115	673806	40.88	569,109	216673	38.07

[64] Source: Census of India 2011, Primary Census Abstract 2011

Nagar						
Ghaziabad + Hapur	4681645	1519098	32.45	1,520,538	496077	32.63
Meerut	3443689	1684507	48.92	1,090,539	543366	49.83
Uttar Pradesh Sub region	**14575668**	**7537176**	**51.71**	**4,770,141**	**2513152**	**52.69**
NCR	**46069303**	**17234321**	**37.41**	**15,734,929**	**6226491**	**39.57**

Table 5.2: Distribution of Rural Workforce in NCR Sub-Regions[65]

Sub regions	Cultivators	Agriculture labor	HH Industries	other workers	Total work force	Rural WPR
NCT of Delhi	13614	8528	3284	104801	130227	31.08
Haryana Sub region	769412	394428	57078	874259	2095177	33.48
Rajasthan sub region	884054	209057	27004	367820	1487935	49.27
Uttar Pradesh Sub region	815313	542382	140501	1014956	2513152	33.34
NCR	**2482393**	**1154395**	**227867**	**2361836**	**6226491**	**36.13**

Table 5.3: Distribution of Rural Workforce in NCR (1971, 1991 and 2001)[66]

Year/	1971		1991		2001	
Category of workers	Workers	Percentage	Workers	Percentage	Workers	Percentage
Cultivators and Agricultural Laborers	1672667	42.99	2611535	33.78	3613413	33.76
Livestock, Forestry etc.	44485	1.14	58378	0.76	339775	3.17
Mining and Quarrying	6457	0.17	13884	0.18	38098	0.36
Sub-total Primary Sector	**1723609**	**44.3**	**2683797**	**34.71**	**3991286**	**37.29**
a) Household Industries	166572	4.28	128661	1.66	773216	7.22
b) Other than household Industries	464125	11.93	1281140	16.57	1168879	10.92

[65] Source: Census of India 2011, Primary Census Abstract 2011
[66] Source: Census of India 1971, 1991 and 2001

Construction	107937	2.77	354049	4.58	1734125	16.20
Sub-total Secondary Sector	**738634**	**18.98**	**1763850**	**22.81**	**3676220**	**34.35**
Trade and Commerce	414000	10.64	1137207	14.71	794641	7.42
Transport, Storage and Communications	184839	4.75	411842	5.33	1248730	11.67
Other Services	829850	21.33	1734993	22.44	992787	9.28
Sub-total Tertiary Sector	**1428689**	**36.72**	**3284042**	**42.48**	**3036158**	**28.37**
Total Main Workers	**3890932**	**100**	**7731689**	**100**	**10703664**	**100.00**
Participation Ratio	**27.4**		**29**		**34.97**	

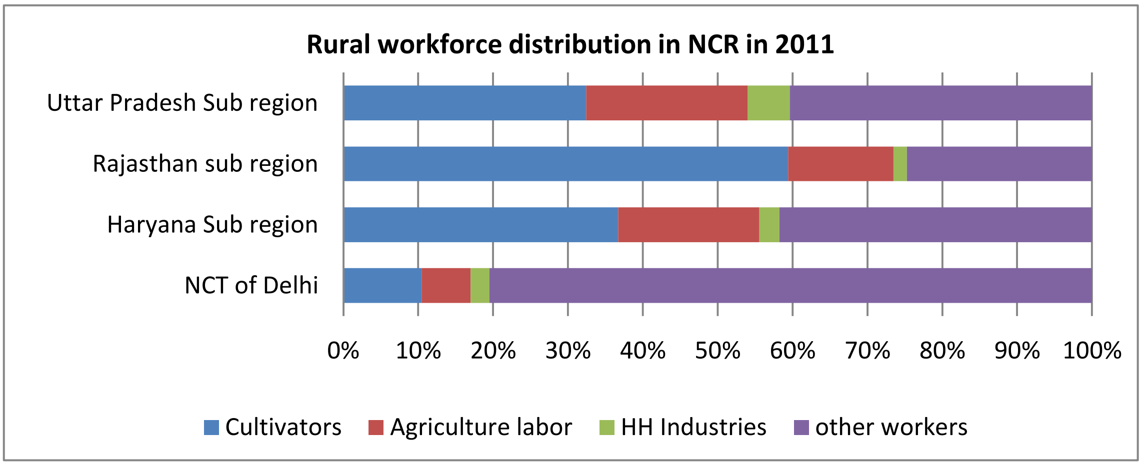


Figure 5.1: Rural workforce distribution in NCR in 2011[67]

According to Economic census 2005 there are more than 1.5 million workers involved in non-farm activities in rural areas. Haryana Sub-region has maximum non-farm employment with 4.84 lakhs workers (refer Table 5.4).

Table 5.4: Non Farm Employment in Rural Areas 2005[68]

Districts / Sub regions	AGRICULTURAL*			NON-AGRICULTURAL			ALL		
	OAE	EST.	TOTAL	OAE	EST.	TOTAL	OAE	EST.	TOTAL
Meerut	39150	11602	50752	30750	28720	59470	69900	40322	110222
Baghpat	12901	3224	16125	16997	20371	37368	29898	23595	53493

[67] Source: Primary Census Abstract, 2011, Census of India, 2011, Govt. of India
[68] Source: Economic Census, 2005

Ghaziabad	1774	1177	2951	24002	24433	48435	25776	25610	51386
Gautam Buddh Nagar	6735	369	7104	14487	33471	47958	21222	33840	55062
Bulandshahr	11061	4530	15591	28885	20062	48947	39946	24592	64538
Uttar Pradesh Sub Region	**71621**	**20902**	**92523**	**115121**	**127057**	**242178**	**186742**	**147959**	**334701**
Panipat	931	1188	2119	16368	38809	55177	17299	39997	57296
Sonipat	2094	1460	3554	16373	61144	77517	18467	62604	81071
Rohtak	4255	641	4896	12179	15491	27670	16434	16132	32566
Jhajjar	1510	625	2135	11473	39417	50890	12983	40042	53025
Rewari	2448	602	3050	13351	34858	48209	15799	35460	51259
Gurgaon	6875	1721	8596	26076	115790	141866	32951	117511	150462
Faridabad	2678	2225	4903	12368	41140	53508	15046	43365	58411
Haryana Sub Region	**20791**	**8462**	**29253**	**108188**	**346649**	**454837**	**128979**	**355111**	**484090**
Delhi NCT	**800**	**839**	**1639**	**17692**	**50732**	**68424**	**18492**	**51571**	**70063**
Rajasthan	**11489**	**2812**	**14301**	**38998**	**86979**	**125977**	**50487**	**89791**	**140278**
NCR	**125492**	**41477**	**166969**	**388187**	**958066**	**1346253**	**513679**	**999543**	**1513222**

*Farming of animals, Agricultural services, forestry, hunting etc.

A calculation of LQ to understand the concentration of non-farm workers across different sub-regions and in agriculture and non-agriculture sector in rural areas was undertaken (Table 5.5). The non-farm sector employment was found to be highly significant in Meerut, Baghpat, Bulandshahr, Panipat, Sonipat, Jhajjar, Rewari and Gurgaon and Alwar.

Table 5.5 also demonstrates that Baghpat, Sonepat, Jhajjar, Rewari, Gurgaon and Alwar districts have a higher concentration of rural employment, more than three times than that of the NCR average. Only NCT of Delhi reports a low LQ of 0.11 indicating very low concentrations of rural employment.

Faridabad, Ghaziabad and Gautam Budha Nagar have an LQ almost equal to one 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-sections, Rajasthan reported highest concentration of rural employment (combined OAE and Enterprise) followed by Haryana, Rajasthan and NCT of Delhi.

Table 5.5: L. Q. of Persons by Type of Enterprises in NCR Rural Areas-2005

DISTRICT	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 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

Agricultural marketing and external trade in agricultural commodities are of imperative importance as the industry ushering in the second green revolution. The challenges facing the marketing system today are different those faced two decades earlier. Current agricultural marketing system in the country is the outcome of several years of government interventions. The system has undergone varied alteration over the last 60 years owing to the increased market surplus. Due to an increase in urbanization and income levels, has shifted the pattern of demand for marketing services, increase in linkages with distant and overseas markets and changes in the form and degree of government intervention.

An essential characteristic of agricultural produce markets in India is that the private trade has continued to dominate the market. 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.

Table 5.6 presents the location and number of major rural markets in the NCR. 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.

Table 5.6: District wise Major Rural Markets, Sub-Yards and Cold Storages in NCR-2010[69]

Sub-region	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	**3**	**16**	**3**
Baghpat	2	5	8

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

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**

There are three main agencies in the public sector, which are engaged in building large-scale storage capacity, namely the State Warehousing Corporation (SWC), Central Warehousing Corporation (CWC) and Food Corporation of India (FCI).

Agricultural commodity markets in the NCR are limited geographically and have not seen much change in structure over time. Table 5.7 presents the location of various Mandis in the NCR. In all, there are 23 fruits and vegetable markets in the NCR, 47 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.

Table 5.7: District Wise/ Region Wise Mandis in NCR-2010[70]

Sl. No.	Sub-region	Fruit and vegetable	Fodder market	Fish market	Grain market	Cotton market	Wool market	Diary	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				

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

Delhi Sub-region									
1	Delhi	3		1				2	1

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 of 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 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

Agro Processing Industries refer to those that create value-added products sourced from agriculture, forestry and fisheries. It is the main component and a subset of rural industries. There is no uniformly accepted definition of rural industries. However, simplistically put, rural industries are firms set up in rural areas using rural technology and raw material produced in the rural areas. Table 5.8 presents the district-wide distribution of agro-processing units.

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	Sugar cane processing, rice,
Gautam Budh Nagar	Wheat, Sugarcane and vegetable processing
Ghaziabad	Sugarcane,
Meerut	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	Fruit and Vegetable processing, Mushroom
Alwar	Wheat, Groundnut, Soyabean, edible oil extraction

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 the same. 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- or post-harvest wastage, employment generation and export growth.

The NCR belt 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 and Meerut, Bulandshahr and Ghaziabad in Uttar Pradesh. The NCR and adjoining areas are called the Rice Bowl of the country, mainly due to the production of Basmati Rice, long grain aromatic rice that is popular all over the world. For this reason, there are ample opportunities for the Processed Agro products. Today, there are a number of such processing units that exist in the NCR, especially around Panipat. In addition, due to an abundant availability of investment opportunities for the expansion of the export market in the NCR. The Agro process product market demand will be met by the increasing acceptance of the new products coupled with market development efforts witnessed lately in lieu of the strong international demand for certain fruits and vegetable products.

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 only includes the manufacturing of value added products but also the associated service industry which provides the required 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 NCR Haryana near Rai; 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 (Haryana) to serve as a knowledge centre for food processing.

UTTAR PRADESH SUB-REGION

The State has given a number of incentives for Agro-based and Food Processing industries, like electricity and interest-free loans. NCR has a substantial base of Horticulture industries. There is a tremendous scope for development of floriculture and homogeneous industries in the NCR. Saharanpur, Meerut, Ghaziabad 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, the NCR sub-regions of Haryana and Uttar Pradesh have potential for the development of the Agro-based industries.

Some of the major challenges in the growth of Food processing industry in NCR are:

- Size of production unit due to urbanization pressure and increasing cost of land;
- The irrigation facilities within NCR are limited. Hence, the ground water availability is also low in the region;
- The price of fruit and vegetable often fluctuate specially in the areas near to NCT;
- Horticulture practices in NCR are not standardized; and
- It is a business investment pertaining to perishable goods so difficult to get financial support from banks.

RAJASTHAN SUB-REGION

There is scope for development of food products 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. The availability of onion, tomato, chilly, garlic, Ker and sangri is very good in Alwar and nearby areas.

5.5 Government Programmes in Rural NCR

Several Rural development and employment generation programmes are being implemented in NCR.16 flagship programme of government of India are listed in the Table 5.9.

Table 5.9: Programmes of Government of India for rural development and employment generation

S. No	Name of the Programme
1	Pradhan Mantri Gram Sadak Yojana(PMGSY)
2	Accelerated Irrigation Benefit Programme(AIBP)
3	Rajiv Gandhi Gramin Vidyutikaran Yojana(RGGVY)
4	Accelerated Power Development & Reforms Programme(APDRP)
5	Indira Awaas Yojana - (IAY)
6	Mahatma Gandhi National Rural Employment Guarantee Act Scheme (MNREGA)
7	National Horticulture Mission(NHM)
8	Rashtriya Krishi Vikas Yojana(RKVY)
9	Sarva Shiksha Abhiyan - (SSA)
10	Mid Day Meal Scheme - (MDM)
11	Integrated Child Development Scheme- (ICDS)
12	National Social Assistance Programme(NSAP)
13	National Rural Health Mission (NRHM)
14	Jawahar Lal Nehru National Urban Renewal Mission (JNNURM)
15	Sampoorn Swachchhata Abhiyan (Total Sanitation Campaign)
16	National Rural Water Supply Programme (NRWSP)
17	National Rural Drinking Water Programme
18	Rashtriya Madhyamik Shiksha Abhiyan (RMSA)
19	Indira Awas Yojana (IAY)
20	Rashtriya Swasthya Beema Yojna
21	Swarnjayanti Gram Swarojgar Yojana (now called National Rural Livelihood Mission)
22	Indira Gandhi Old Age Pension Scheme
23	Indira Gandhi National Widow Pension Scheme

24	Indira Gandhi National Disability Pension Scheme
25	Scholarship Schemes for SC/ ST/ OBC/ Minorities/ Disabled
26	Multi Sectoral Development Programme (MSDP) in Minority Concentration Districts
27	Members of Parliament Local Area Development Scheme (MPLADS)
28	Ddp Watershed Development Projects/Hariyali Scheme

Out of these programmes, districtwise expenditure detail of the four programmes is given in table 5.10.

Table 5.10: Status of expenditure made during 2011-12 in various programmes in districts of NCR (Rs. in Crores)

S. No.	District/Prog	PMGSY	RGGVY	NREGS	TSC#
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
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
1	Alwar	298.26	51.14	0	9.68
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, NREGS - National Rural Employment Guarantee Scheme, TSC - Total Sanitation Campaign also Sampoorn Swachchhata Abhiyan

Bulandshahar district in UP sub region has made maximum expenditure under NREGA of Rs. 30.42 crores during the financial year 2011-12 followed by Mewat 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. Again under TSC maximum expenditure has been made in Bulandshahr district followed by Meerut and Bhagpat district of UP sub-region.

Under PMGSY maximum expenditure has been made in Alwar district of Rajasthan sub region close to 300 crores followed by Ghaziabad, Bulandshahr, Meerut and Bhagpat district all in UP sub-region of NCR.

5.6 NCR Rural Economy Major Issues, Problems and Conclusions

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 NCR to a large extent and thus reduce social costs of urbanization. It has been established that the NCR region, from a rural development perspective, is not a homogeneous entity and that the four sub-regions have their unique rural development issues.

The NCT of Delhi has very limited access to 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 seen substantial changes in their rural economy structure over the last decade due to increasing urbanization and modernization of rural sectors in these sub-regions.

On one hand NCT of 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% and 39% percent of the total production. Another major obstacle to the proper functioning and development of cold storages and food processing industries is non-availability of regular power supply in the outskirts of the NCR.

CHAPTER VI

6. INFORMAL SECTOR IN NCR

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 our 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 are of three different types. The first type consists of micro and small units, they are found in the vicinity of organized large industries. Their primary role is to serve large industries as sub-contractors. For instance, Govindpuri in South–East Delhi mainly provides sub-contracting services 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 Delhi NCT area. The second type consists of unique units producing specialized products. For example; Khurza 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.

Table 6.1: Estimates of Employment in Informal Sector[71]

Share of Informal sector in NDP: 2001-02						
S. 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					
9	Of dwellings	2.6	2.9	5.4	7.6	13.0
10	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**

6.2 Definition of Informal Sector

The informal sector, 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. According to the Task Force on Definitional and Statistical issues relating to the Unorganized Sector defined the term as: "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 NCEUS also defines the informal sector employment as “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

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

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 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. Informal sector is also called ‘unorganized sector’ in the Indian context.

The First Indian National Commission on Labour (1966-69) defined unorganized sector as “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, conducting surveys of unorganized enterprises at periodical intervals, has the following criteria for the identification of unorganized sector:

In the case of manufacturing industries, 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 industries, 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 the ease of accessibility of data availability 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 require registration under factory Act 1948 are considered organized or formal. We 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 is not available the chapter for informal sector estimates heavily relies on two sources: (i) NSS data for informal sector data in NCT Delhi and (ii) Economic Census data for Uttar Pradesh, Haryana and Rajasthan Sub-Regions. There are two possible approaches that can identify the employment level in an informal sector in the country; namely: residual and direct approaches. While scholars in the past have employed the residual approach, estimation through direct approach can now be carried out due to the availability of enterprise module in different NSS rounds. In our analysis, we will be using Economic Census as the residual approach for informal sector.

6.4 Delhi Region

The Delhi manufacturing sector contributes to about 9.38% of the GSDP (2005-06). Furthermore, 7% is contributed by the unorganized sector, and only 2.38% comes from the organized manufacturing sector. As per the NSS survey, in 2006-2007 the total number of unorganized manufacturing enterprises was at 1,00,740 units. Out of the total enterprises, 20.3% were located in rural areas, and 79.70% were operating in urban areas of Delhi.

Un-Organised Manufacturing Sector in NCT

The manufacture of wearing apparels, dressing and dyeing (NIC 18) contributes at 28.29%, followed by manufacture of fabricated metal products (NIC 28) at 22.00% and manufacture of furniture (NIC 36) at 7.25%. More than 50% of the total enterprises in Delhi are the subset of the above-mentioned three groups.

Other major sectors contributing are as follows; food products and beverages (5.86%), motor vehicle, etc. (5.31%) and machinery and equipments (4.88%). According to NSS (2005-06) total employment generated by the unorganized manufacturing enterprises was at 4.82 lakh.

Table 6.2: Unorganised Manufacturing Enterprises[72]

Industry Code	Description	Enterprise	Percentage	Rank
15	Manufacture of Food Products & Beverages	5907	5.86	4
17	Manufacture of Textiles	3941	3.91	8
18	Manufacture of Wearing Apparels; Dressing & Dyeing of Fur	28495	28.29	1
19	Tanning & Dressing of Leather: Mfg of Luggage, Handbags, Footwear, etc.	3467	3.44	10
20	Manufacture of Wood Products	1239	1.23	15
21	Manufacture of Paper & Paper Products	2380	2.36	11
22	Publishing, Printing & Reproduction of Recorded Media	4256	4.22	7
24	Manufacture of Chemicals & Chemicals Products	164	0.16	19
25	Manufacture of Rubber & plastic Products	1862	1.85	13
26	Manufacture of Other Non-Metallic Mineral	683	0.68	16

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

	Products			
27	Manufacture of Basic Metals	603	0.6	18
28	Manufacture of Fabricated Metal Products, Except Machinery & Equipment	22165	22	2
29	Manufacture of Machinery & Equipment	4916	4.88	6
30	Manufacture of Office, Accounting & Apparatus	1	0	20
31	Manufacture of Electrical Machinery & Apparatus	3480	3.45	9
32	Manufacture of Radio, Television & Communication Equipment & apparatus	2179	2.16	12
33	Manufacture of Medical, Precision & Optical Instruments, Watches & Clocks	672	0.67	17
34	Manufacture of Motor Vehicles, Trailers & Semi- Trailers	5354	5.31	5
35	Manufacture of Other Transport Equipment	1676	1.66	14
36	Manufacture of Furniture; Mfg. NEC	7300	7.25	3
	Total	**100740**	**100**	

Informal Service Sector

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

Table 6.3: Unorganized Service sector in Delhi[73]

Sector	Own Account Enterprises	Establishments	All	Percentage to Total
Rural	18184	8060	26244	10.96
Urban	129097	84106	213203	89.04
Delhi	147281	92166	239447	100
Percentage to total	61.51	38.49	100	

Out of the total enterprises, about 89.04% operate in the urban areas and only 10.96% in the rural areas. The types of enterprises have been classified into own account enterprises

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

and establishments in terms of service sector. Out of the total enterprises in service sector, the own account enterprises accounts for 61.51% and while establishments contributing 38.49% (refer Figure 6.1).

Table 6.4: Distribution of Enterprises in Service Sector[74]

Tabulation Category	Description	Number of Enterprises	Percentage
H1	Hotels	1757	0.73
H2	Restaurants	28498	11.9
I1	Storage and Warehousing	0	0
I2	Mechanized road transport	21519	8.99
I3	Non-mechanized transport, water transport and other related activities	26065	10.89
I4	Communication	44054	18.4
J1	Non-Banking financial institutions except Insurance and Pension funding	1035	0.43
J2	Insurance and Pension funding and Auxiliary activities	1923	0.8
K	Real estate, Renting and Business activities	2958	17.23
M	Education	41246	5.69
N	Health and Social work	20035	8.37
O	Other community, Social and Personal service activities	39696	16.57

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

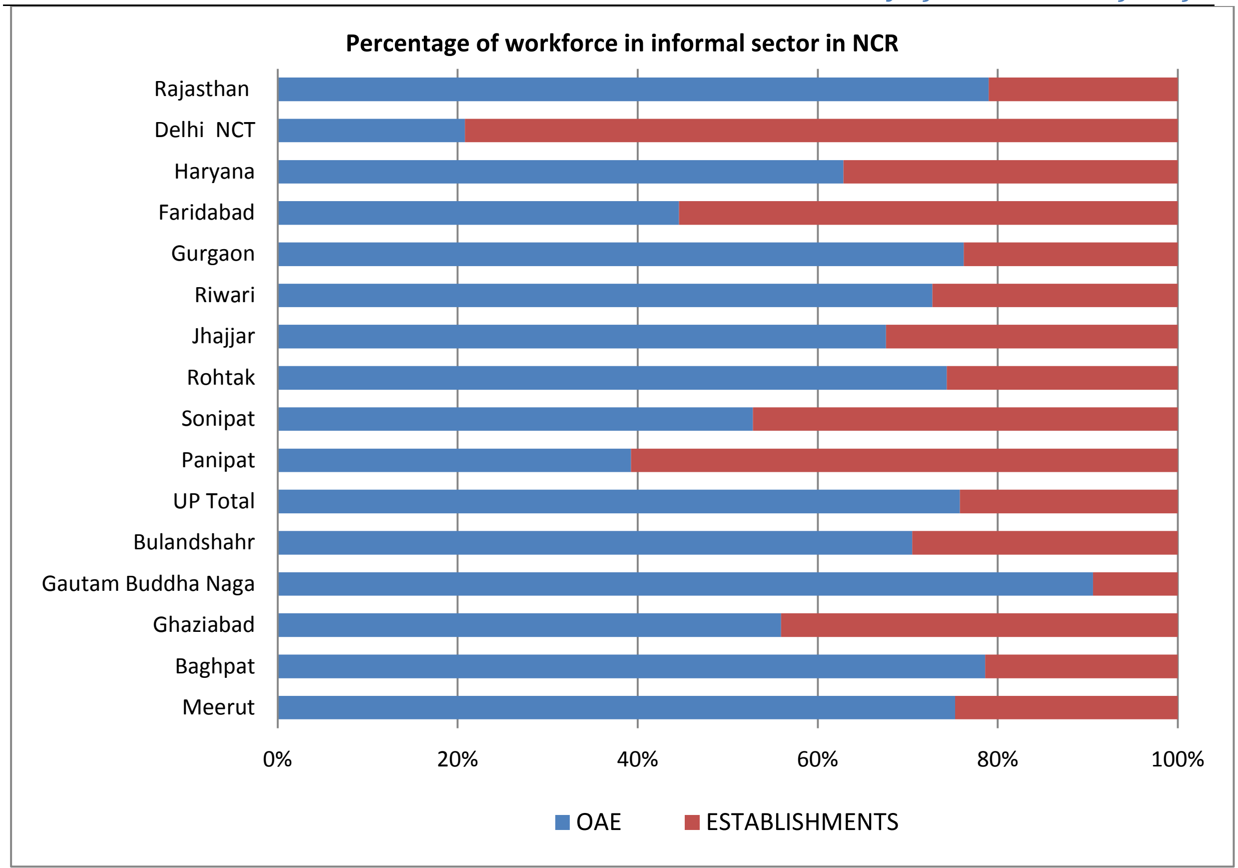


Figure 6.1: Percentage of workforce in informal sector in NCR[75]

6.5 Informal Sector Concentration

Table 6.5: Employment in Agriculture and non Agriculture areas

DISTRICT	NO. OF PERSONS USUALLY WORKING								
	AGRICULTURAL			NON-AGRICULTURAL			ALL		
	OAE*	EST.*	TOTAL	OAE	EST.	TOTAL	OAE	EST.	TOTAL
Meerut	43046	14152	57198	80947	119815	200762	123993	133967	257960
Baghpat	13886	3778	17664	31026	36571	67597	44912	40349	85261
Ghaziabad	3084	2431	5515	87309	165277	252586	90393	167708	258101
Gautam Buddh Nagar	10958	1140	12098	35889	258591	294480	46847	259731	306578
Bulandshahr	11444	4790	16234	69507	45510	115017	80951	50300	131251
Uttar Pradesh Total	**82418**	**26291**	**108709**	**304678**	**625764**	**930442**	**387096**	**652055**	**1039151**
Panipat	1127	1743	2870	30807	100632	131439	31934	102375	134309
Sonipat	2431	2175	4606	28797	98125	126922	31228	100300	131528
Rohtak	4964	1713	6677	30280	55981	86261	35244	57694	92938
Jhajjar	1608	771	2379	19187	71403	90590	20795	72174	92969
Rewari	2544	954	3498	18853	55815	74668	21397	56769	78166

75 Source: Economic Census, 2005, UP, Haryana, Rajasthan and NCT of Delhi

Gurgaon	7007	2184	9191	43441	204672	248113	50448	206856	257304
Faridabad	3204	3982	7186	40217	228834	269051	43421	232816	276237
Haryana	**22885**	**13522**	**36407**	**211582**	**815462**	**1027044**	**234467**	**828984**	**1063451**
Delhi NCT	**2551**	**9711**	**12262**	**379259**	**3164866**	**3544125**	**381810**	**3174577**	**3556387**
Rajasthan	**12292**	**3267**	**15559**	**54848**	**145448**	**200296**	**67140**	**148715**	**215855**
NCR	**143031**	**66313**	**209344**	**1161949**	**5567002**	**6728951**	**1304980**	**5633315**	**6938295**

*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).

An enterprise can named establishment as and when at least one worker is hired worker on a fairly regular basis is termed as an establishment. 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.

Some of the salient features of informal sector activities in NCR are as under:

- According to Economic Census 2005 there are 69,38,295 workers engaged mostly in informal activities;
- 13,04,980 units are household units, without any hired worker, working mainly in non-agriculture areas;
- After NCT of Delhi, it is Gautam Budha Nagar that has maximum (more than 3 Lakhs) number of workers;
- Rewari district of Haryana sub-region has least number of workers at 78,166;
- Gautam Budha Nagar also has the highest number of OAE in the agriculture sector;
- NCT of Delhi has the least number of workers in OAE in the agriculture sector;
- NCT of Delhi has maximum a number of hired persons in their enterprises; and
- Uttar Pradesh and Haryana sub-regions of NCR have almost equal number of workers in the informal economy.

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

The following informal sector activities in the various towns in NCR:

- Meerut, Ghaziabad, Bulandshahr and Delhi are home to 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 the presence of 10 artisanal clusters and Delhi and Bulandshahr have presence of 9 artisanal clusters in their boundaries.
- Jhajjar settles with only one such cluster that is of grass, reed and fiber. Whereas, just ahead of Jhajjar stand Palwal and Faridabad with presence of 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 that are prevalent because in Rewari Textile, hand embroidery, jewelry, leather footwear and wood inlay works exist.
- There are few works, which exist only in few of the 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 don’t have access to basic protections and services. Informal businesses also lack the potential for growth, trapping employees in menial jobs indefinitely. On the other hand, the informal sector can allow a large proportion of the population to escape extreme poverty and earn an income that is satisfactory for survival. From the viewpoint of governments, the informal sector can create a vicious cycle. Being unable to collect taxes from the informal sector, the government may feel hindered in financing public services, which in turn, makes the informal sector more attractive. Conversely, some governments view informality as a benefit, enabling excess labor to be absorbed, mitigating unemployment issues.

CHAPTER VII

7. POLICY FRAMEWORK OF NCR

7.1 Background

The new policy which recognizes the changing dynamics of economic activity while accounting for the limitations of NCR in terms of space and resource constraint is a necessity. 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. Different state governments (constitutents of NCR) have worked with different intensity with the basic objective of:

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

The following page give the existing policies of the respective sub-regions of NCR in order understand the thrust of different governments to shape industrial, investment and other related activities in NCR.

7.2 Policies for Future Development - REGIONAL PLAN 2021

It is obvious from the above that the policy to contain the population of Delhi and deflecting 20 lakhs population outside to NCR has met with very little success. Also the induced growth envisaged for the Priority towns in the Rest of NCR has not taken place.

Accordingly, 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".

Therefore, 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.

7.2.1 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) To provide 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) To minimize the adverse environmental impact that may occur in the process of development of the National Capital Region.

(iv) To develop selected urban settlements with urban infrastructural facilities such as transport, power, communication, drinking water, sewerage, drainage etc. comparable with NCT-Delhi.

(v) To provide a rational land use pattern in order to protect and preserve good agricultural land and utilize unproductive land for urban uses.

(vi) To promote sustainable development in the region to improve quality of life.

(vii) To improve 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.

Keeping the above objectives in view, the Regional Plan-2021 has proposed the development of NCR through four policy zones namely- (i) NCT-Delhi, (ii) Central National Capital Region (CNCR), (iii) Highway Corridor Zone and (iv) Rest of NCR (Map 3.1 National

Capital Region: Policy Zones) for which the following development policies have been envisaged.

7.2.2 NCT of Delhi

The basic policy for NCT-Delhi (1,483 sq kms) 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.

7.2.3 Central National Capital Region Excluding NCT of Delhi

The Central NCR (earlier Delhi Metropolitan Area as defined in Regional Plan-2001) comprised the notified controlled/development/regulated areas of contiguous towns of Ghaziabad-Loni, NOIDA, Gurgaon, Faridabad-Ballabgarh, Bahadurgarh and Sonepat-Kundli and the extension of the Ridge in Haryana. These controlled/development/regulated areas, measuring 1,696 sq kms, have undergone changes. In many cases, new areas have been added.

In view of this, the present notified controlled areas of the above towns of Ghaziabad-Loni, Noida, Gurgaon-Manesar, Faridabad-Ballabgarh, Bahadurgarh and Sonepat-Kundli are designated as Central National Capital Region (CNCR) for Regional Plan-2021. The total area of CNCR (excluding NCT Delhi) would be 2,000 sq kms approximately.

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 wanting to get located in NCT-Delhi should be located in the urban areas planned in this zone.

Keeping in view the physical growth and excessive pressure of development in the CNCR, the participating states will prepare a Plan for their respective areas falling in CNCR and a

CNCR Planning Group would be assigned the power to coordinate and harmonize the Plan for CNCR under Section 32 of the NCRPB Act, 1985. Emphasis should be given to transportation, civic infrastructure, land use and conservation.

7.2.4 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. Area of the Highway Corridor Zone is 300 sq kms approximately.

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.

7.2.5 Rest of NCR

In the Rest of NCR (approximately 29,795 sq kms), the basic policy of Regional Plan-2001 for accelerated development of both urban and rural areas will continue. 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.

7.3 NCT of Delhi

7.3.1 Industrial Policy – Current Status

Since Delhi is the National Capital and a Metropolis, the thrust is on encouraging modern Hi-tech, sophisticated export-oriented small-scale industries. Among all the States, Delhi has the largest share of skilled workforce, indicating that the State is ideal for knowledge-based economic activities like IT/ITeS services, financial and business services, designing, R&D etc. Delhi has good infrastructure in terms of wide roads, mass rapid transport in the form of metro and better power situation than neighboring States of Uttar Pradesh and Haryana. These strengths of Delhi are suitable in attracting high-technology industries.

7.3.2 Thrust Areas

- IT Enabled services
- Electronics and High Tech Industries
- Small Scale Industry
- Promotion of small scale industries

7.3.3 Small Scale Sector

The small-scale sector plays an important role in the industrial development of Delhi and the Industry Department has been instrumental in promoting small-scale industries in the Capital.

7.3.4 Institutions for Promoting Small Scale Industries (SSI) in Delhi

- Delhi Khadi & Village Industries Board (DKVIB)
- Delhi State Industrial Development Corporation (DSIDC)
- Delhi Financial Corporation (D.F.C)

7.3.5 Infrastructure Facilities for Industrial Development

- Provision of developed plots and flatted factories
- Assistance in procuring imported scarce raw material, fuels and other inputs
- Assistance to traditional industries

7.3.6 Business Parks & Centres

- Information Technology Park
- An information Technology Park has been proposed to provide the state-of-art facilities for software driven Information Technology and the Telecommunication industry, with modern infrastructure facilities.

- A Biotechnology park is being set up in collaboration with Delhi University with a view to strengthen Research and Development linkages, upgradation of technologies of existing industries and development of high-tech and non-polluting industries in Delhi.

7.3.7 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.

7.3.8 Delhi Industrial Policy 2010-2021

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 following basic principles: Infrastructure Development Decongestion Promoting `Walk to Work' Simplifying Business Industry Consultation in Decision Making & Sustainability.

Salient Features

- 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.

- Government's role will be to provide good infrastructure, investor friendly environment with a responsive feedback and consultation mechanism.
- Promotion of sophisticated industries which could achieve optimum level of production with less, space, power, water etc.
- Generate employment avenues in non-polluting industries.
- Emphasis on encouraging non-polluting industries.
- Emphasis on promotion of Computer Software, I.T., I.T. Enabling Service, Electronics and High-Tech Industries irrespective of investment limits.
- No new industrial unit shall be permitted in residential areas except household industries.
- 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.
- 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.
- 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.

7.3.9 Information Technology Policy 2000

The Government of 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 development 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.

Policy Objectives

6 E's govern the aspirations of the IT policy namely

- E-Governance: Tool of e-governance to aid the government to deliver proactive and efficient services to its citizens.
- Equality: Achieve the objectives of poverty eradication, improving healthcare, empowering women and economically weaker sections of the society through the medium of information technology.
- Education: Encourage the use of IT in schools, colleges and educational institutions thus enabling skill upgradation, knowledge and job prospects in the industry.
- Employment: Generate additional employment for the new digital economy.
- Entrepreneurship: Unleash the incubation engine, promote entrepreneurship, earn foreign exchange and increase its contribution to the economic growth of the state.
- 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.

7.3.10 Industrial Location Scheme 2006

Consequently, Delhi government 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 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.

7.4 Haryana

7.4.1 Background

To support industrial, investment and infrastructure activities in the Haryana sub-region of NCR HSIIDC is the important organization implementing most of the schemes and policies of the state government.

Haryana State Industrial Infrastructure Development Corporation (HSIIDC)

HSIIDC was setup in 1967 for promoting medium and large scale industries so as to ensure balanced regional development of Haryana, by acting as an institutional entrepreneur and a financial institution. HSIIDC serves as the single most important platform for providing services in the following areas:-

- Providing financial assistance by way of term loans, equipment re-finance/equipment leasing and working capital. Infrastructural development in the State of Haryana. Performing Agency functions on behalf of the State Government/ IDBI/SIDBI.
- Performing Agency functions for entrepreneurs and established industries for enhancement of capacity/modernization

Financial Services offered by HSIIDC

The scope of financial services provided by HSIIDC has been enlarged over the years keeping in view the ever-growing needs of industrial sector. The services now being provided include:

- General Term Loan
- Equipment Finance Scheme (EFS)
- Working Capital Term Loan (WCTL)
- Loan under TUF Scheme
- Line of credit Scheme (LOC)
- Scheme for Financing Commercial Complexes
- Scheme for Corporate Loans
- Scheme for Take-Over of loans of other institutions/banks

The state government of Haryana has formulated different policies to foster the growth and development of the state. The Industrial Policy, 2005 of Haryana has the strategic mission to develop economic hubs through infrastructural initiatives, encourage public private partnership (PPP) in infrastructure projects, focus on economic activities enjoying comparative advantage in the state; in particular development of food processing industry, Electronics, Information & Communication Technology industry, promote mega projects particularly in backward regions, focus on development and support to the small and medium enterprise segment. The state government has also laid focus on infrastructural support for synergistic growth of key enterprises, for enhancing export competitiveness, creating investor-focused approach in administrative processes and bringing about efficiency, transparency and accountability by using modern technological and management solutions. The main features of Haryana Industrial Policy are as under:

7.4.2 Industrial Policy 2005

The state has laid down the following objectives of the Industrial Policy

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

Strategy of the Policy

The State Government intends to realize the objectives of the policy by emphasizing a coordinated development strategy in mission mode approach. The strategy proposed by the state is outlined below

- Develop economic hubs through infrastructural initiatives.
- Encourage public-private partnership in infrastructure in infrastructure projects.
- Focus on economic activities enjoying a comparative advantage in the state in general and develop the food processing ICT and frontier technologies in particular.
- Promote mega projects with economic spin-off potential, particularly in backward regions.

- Adopt sector-specific approach, providing incentives and infrastructural support, for the synergetic growth of key enterprises.
- Develop services sector especially tourism, transport, education, healthcare and financial services.
- Focus on development and support to the small and medium enterprises. Enhance export-competitiveness and enable Compounded Annual Growth Rate of 20 per cent.
- Create investor-focused approach in administrative process and bring about efficiency, transparency and accountability using modern technological and management solutions.
- Human resource development by establishing strategic linkages between the industry and technical institutions to meet future manpower requirements

7.4.3 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:

The following key objectives are sought to be achieved through the industrial policy:

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

• Promote private sector investment through Public Private Partnerships;

• Employment generation and enhanced employability through skill development;

• Continued thrust on manufacturing sector as a key driver of economic growth;

• Generation of entrepreneurial opportunities across all sectors of the economy;

• Facilitation of spatial dispersal of economic activities particularly in industrially lesser developed regions of the State;

• Sustainable development by adopting environment friendly technologies.

Strategies to meet the key objectives:

The State Government proposes to achieve the objectives set out in the policy by:

- 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;
- 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;
- Strengthening of institutional support mechanism through a Grievance Redressal Mechanism for industry and joint consultative framework;
- Promoting quality competitiveness, research & development and technology upgrade & modernization, strengthening of Small & Medium Enterprises (SMEs)

- One of the key objectives of Haryana Industrial 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 lacks persons.

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

A. Agro-based, Food Processing and Allied Industry

B. Automobile & Automotive Components

C. Education & Skill Development

D. Electronics, Information & Communication Technology

E. Footwear and Accessories

F. Handloom, Hosiery, Textile and Garments Manufacturing

G. Health and Healthcare

H. Pharmaceutical Industry

I. Research & Development and Frontier Technologies

J. Transport Network and Services

K. Waste Processing and re-cycling Industry

Impact of Indusrial Policy 2010

The new Industrial and Investment Policy-2011 is expected to expand the investment horizons to the relatively backward areas of the State. It is felt that notwithstanding the development of quality industrial infrastructure by the HSIIDC across the State, it may not be able to meet the growing demand of developed industrial space on its own. Availability of developed industrial land is becoming difficult and costlier in the areas situated in close vicinity of Delhi. The Government is conscious of these constraints but it also recognizes that attracting industrial investment to the newer areas may need the requisite push from the private sector. It is for this reason that Public-Private Partnership model has been accorded due recognition for development of industrial infrastructure in the backward areas.

7.4.4 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.

7.4.5 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 in partnership with the industry. These centers would address the common needs of the MSMEs in the areas of Research and Development (R&D); provide technology upgradation support, standardization of products, quality testing and marking facilities, marketing initiatives with promotion of branding of products etc.

7.4.6 DMIC and DFC

Overarching infrastructure projects steered by the HSIIDC, such as the Kundli Manesar Palwal (KMP) Expressway and the Delhi-Mumbai Industrial Corridor (DMIC) would open up newer opportunities of investment and growth. Under the Delhi-Mumbai Industrial Corridor (DMIC) project, a band of 150-200 Kilometers is envisaged to be developed on both sides of the Dedicated Freight Corridor (DFC) to create a base with globally competitive environment and state-of-the art infrastructure. Mass Rapid Transport System (MRTS) between Gurgaon & Rewari, Exhibition–cum-Convention Centre & Multi-modal Logistics Hub have been identified as Early Bird Projects.

7.4.7 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 PPPs in setting up technology parks and other supportive infrastructure and services. Other salient features of the policy areas under:

- **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.

- **LABOUR POLICY 2006**

The 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 also aims to intervene proactively to avoid industrial mishaps, lay-offs, retrenchments and strikes.

To work towards creating an atmosphere wherein both workers and management perform their legally laid down roles, which will, in turn, contribute to the economic growth of the state.

- **INVESTMENT INCENTIVES**

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

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

7.4.8 Theme Parks:

In the new 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.

(a) Food Parks

Food Processing Industry is a sunrise sector. The growth potential for this sector is enormous as the demand for processed food products is increasing in the domestic as well as in the overseas markets. The State Government shall promote this sector through public investment and by facilitating private investment in development of processing industry and supportive infrastructure. Private/ public/Joint Sector initiative for development of cold chains, grading, and transportation and post harvest storage facilities will be supported.

Government of India has planned to set up of six Mega Food Parks in India. The Central Government is also in the process of establishing a “National Institute for Food Technology, Entrepreneurship and Management” which will be first of its kind in India.

Haryana being a leading State in agriculture would make strenuous efforts to get one such Mega Food Park and the National Institute for the Food Technology Management located in the State.

The State Government is also developing four food parks at Rai, Saha, Narwana and Dabwali for the promotion of agro based and food processing industries. Expeditious completion of these parks shall be ensured. The Government shall also strive to develop a state of art Food Processing Hub around Sampla in District Rohtak.

(b) Gems and Jewelry Park

Gems & Jewelry has been identified as an industry having good potential for development in the state. Government will develop a Gems and Jewelry Park Complex at Udyog Vihar to promote this sector. It will be endeavor of the Government to seek SEZ status for this park.

(c) Apparel Park

Two Apparel Parks would be developed, one each at SEZ Gurgaon; and at Barhi in District Sonipat under the “Apparel Parks for Exports” Scheme of the Government of India.

(d) Free Enterprise Zones:

State Government will identify Free Enterprise Zones (FEZ) to promote industry without seeking the permission for change of land use. The setting up of these zones will help in development of semi-urban areas in the economically backward regions of the state. The State Government shall notify the framework for development and operation of Free Enterprise Zones.

7.4.9 Other Important Infrasructure and Other Projects

- **Power Plant at Jhajjar**

A coal based Super Thermal Power Project is being set up at Jhajjar (Haryana), 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.

- **Kundli Manesar-Palwal Expressway**

Haryana government has finalized Development Plans for Kharkhoda and Sampla to harness the economic potential of the Kundli-Manesar-Palwal 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 Kundli-Manesar-Palwal Expressway and at other strategic locations all over the state.

❖ **Model Townships**

An Industrial 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. It is in this complex that 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 these NCR areas.

❖ **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.

❖ **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.**

7.4.10 Impact of KMP Expressway

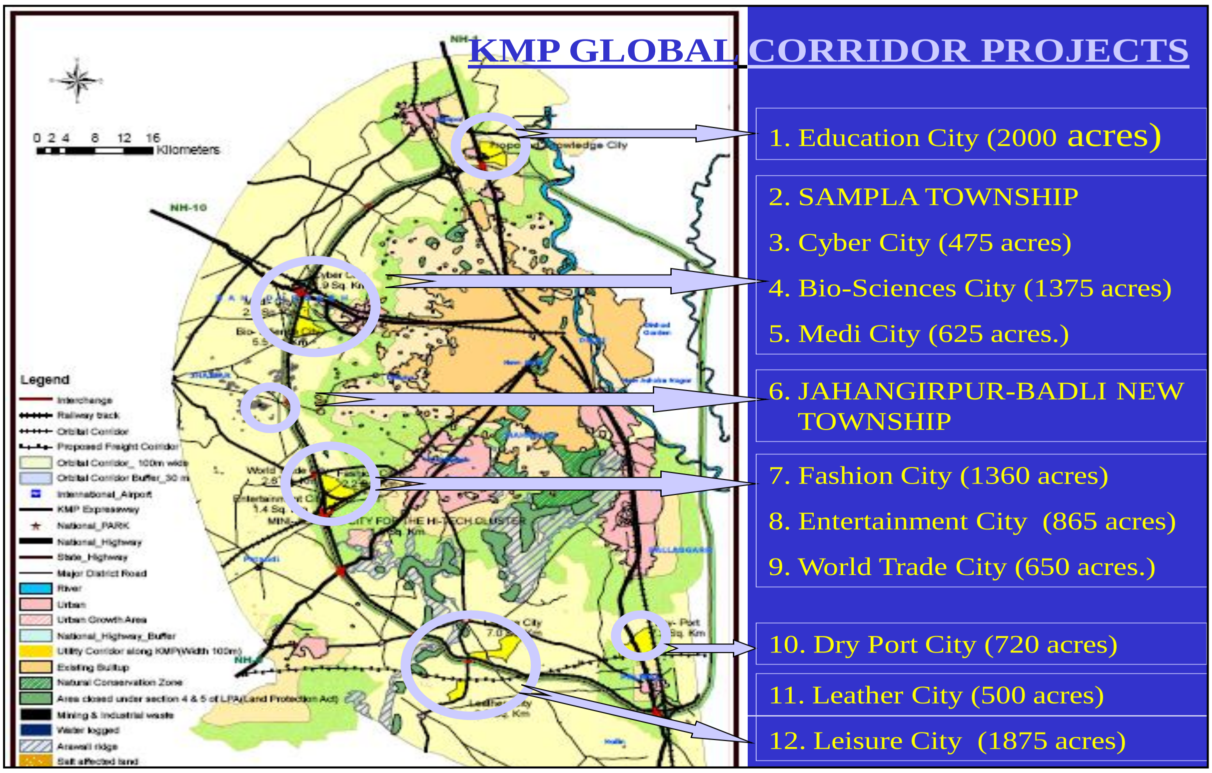


Figure 7.1: KMP Global Corridor Projects

The development of Kundli-Manesar-Palwal (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.

7.4.11 Reliance Haryana SEZ and Garhi Harsaru SEZ

These two SEZ along with 20 other principally approved SEZ by Central Government in Haryana will play a very important role in the economic development of the area. The reliance Haryana SEZ is being set up by Reliance and Garhi Harsaru SEZ is being set up by HSIIDC. With new Policy measure taken by the Centre Government, such as SEZ Act in 2005, NCR part of Haryana has also witnessed a surge in the development plans Special Economic Zones (SEZs) being proposed in the state. Currently there are about 80 SEZs in the pipeline. The successful implementation of these projects in the next 5-10 years will give strong impetus to industrial activities in the NCR.

7.4.12 Delhi-Mumbai Industrial Corridor and Dedicated Freight Corridor

Another significant development likely to impact the NCR sub-region of Haryana is the development in DMIC (Delhi Mumbai Industrial Corridor) and DFC (Dedicated Freight Corridor). This 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 Region 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 at this location include Light Engineering, Casting and Forging, Electrical Appliances, Textile and Apparel. This region would include an Integrated Logistic, which constitutes an Inland Container Depot and a truck terminal with warehousing facility. The region will also host 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 includes

- Linkage with NH-2, the Golden Quadrilateral NHDP Corridor.
- Linkage with proposed western and eastern peripheral expressways of the NCR of Delhi.
- 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.

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 and proposed International airport at Jeur near Greater Noida are two other important projects to address rail and air connectivity issue.

Another area likely to be impacted is Kundli-Sonipat Investment Region, in the north-western Haryana. This region 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 the National Capital Region of Delhi. The 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 in the region 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 Region, 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 3rd 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. 1200MW Coal based power plant at Hissar is also proposed.

7.4.13 Manesar-Bawal Investment Region

Manesar-Bawal Investment Region, 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', to be spread over 800 Sq.km., is also being planned at Rewari-Manesar-Bawal to promote investment in the Automobile and Auto Component Industries.

Proposed projects in the region include:

- Export-oriented Industrial Units/ SEZ
- IT/ITES/Biotech Hub
- Knowledge Hub/Skill Development Centre
- Integrated Logistics Hub with ICD
- Integrated Township

Overall 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. 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. 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 Region, thus having a substantial "trainable" population.

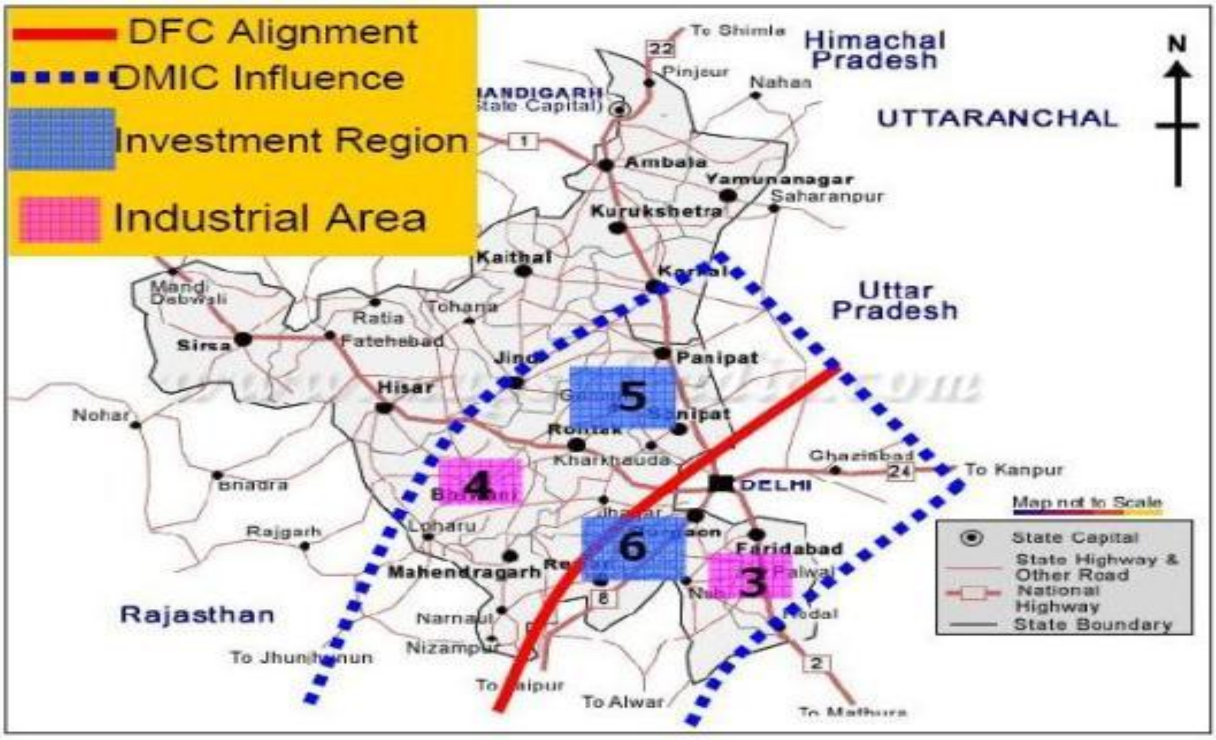


Figure 7.2: Location Map for Proposed Development Nodes in DMIC-Haryana

Another area likely to be impacted is Kundli-Sonipat Investment Region, in the north-western Haryana. It has the advantage of availability of good connectivity by road, rail and air, besides quality urban infrastructure.

7.4.14 Industrial Model Townships (IMTS)

HSIDC has developed an industrial model township at 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 during 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. Industrial Model Townships (IMTs) is coming at three NCR locations (Rohtak, Kharkhauda and Faridabad).

7.4.15 Special Economic Zones (SEZS)

SEZs are being consistently encouraged by the State Government to provide a boost to the exports. A separate Act/Policy on setting up SEZs is proposed to be formulated by the Government in order to facilitate public and private sector investment, exclusively or in partnership mode. 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. HSIDC has already envisaged one such zone over an area of 3000 acres at Garhi Harsru, New Gurgaon. 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 67 approved SEZs in Haryana; 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.

7.4.16 Inland Container Depots

There are three Inland Container Depots (ICDs) in Haryana NCR sub-region. 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.

7.4.17 Major Policy 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 here. 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 Rs.4200 crore Oil refinery set up by Indian Oil Corporation in Panipat district. In the last 6 years, 2962 Industrial Entrepreneur Memoranda 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 to develop 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.

Further the town of Gurgaon has been proposed for setting up of Special Economic Zones (SEZs). These include SEZ by Reliance Industries Ltd. with an investment of Rs. 40000 crore (not much progress so far), multi-product SEZ at Gurgaon by M/s DLF Universal Limited with an investment of Rs. 1950 crore, and another multi-product SEZ by M/s Unitech Haryana SEZ Ltd. at Kundli with an investment of Rs. 22000 crore. 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.

7.5 Uttar Pradesh

7.5.1 Background

Uttar Pradesh State Industrial Development Corporation (Uttar Pradesh SIDC) is the premier industrial promotion and infrastructure development undertaking of the Uttar Pradesh State Government. It has been the driving force behind scores of industrial ventures in Ghaziabad, NOIDA, and Greater NOIDA. The focus of its activities is primarily on:

- To develop industrial areas and provide primary infrastructure.
- Development of infrastructure, through private sector participation.
- Comprehensive and rapid development of selected geographical corridors, with high quality infrastructural facilities.
- Upgrading of existing infrastructure facilities.
- State will develop industrial corridors in the various regions of the State in a phased manner.

The industrial development at NOIDA owes itself to the creation of a Special Economic Zone here. Earlier this was NEPZ (NOIDA Export Processing Zone) which got converted into an SEZ as part of the SEZ policy of the Government of India. The NOIDA SEZ has been developed in a phased manner on 310 acres of land in which an area of 260 acres is fully developed. The future scheme of industrial development also bodes well for export growth in the NOIDA cluster. The newly envisaged Taj SEZ includes special projects like Special Economic Zone, Taj city and the Taj Expressway. The Zone is projected to offer world-class facilities comprising of convention centers, entertainment and sports facilities along with reputed hotels, and housing and urban development components. Moreover, there is also an EPCH-SEZ coming up at NOIDA to be developed by Export Promotion Council for Handicrafts (EPCH), which will cater to the Handicrafts segment only.

The state government has not only provided an overall policy relating to the industrial sector but also has catered to the individual needs of the sectors by formulating sector-specific policies such as IT Policy 2004, Food Processing Policy 2004, Biotech Policy 2004, Power Policy 2003, SEZ Policy (2007).

7.5.2 Hi-Tech Policy of Uttar Pradesh

Main Objective: Promotion of Private Investment in 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. It is proposed that for promoting development of such townships in the private sector, involving a minimum investment of Rs.750 crores (during the five year time frame) and a land area of about 1500 acres for each project.

Land for the development of township shall be acquired for such private developer by the development authority/ Housing Board or any other state agency, under the provisions of Land Acquisition Act, 1894 or U.P. Housing and Development Board Act 1965 and as for as possible compensation shall be determined through negotiations. The developer shall also be involved in the process of negotiation. The total cost of land would be borne by the developer company; however, 10% acquisition charges levied by the Collector shall be waived in this package. The developer shall be exempted from stamp duty for initial purchase or transfer of land, which will be on a lease hold title for ninety years. Stamp duty charges on the properties sold after the development and freehold conversion charges at the rate of 12 percent of the lease premium of the land shall be payable by the developer to the concerned acquiring body at the time of subsequent sale/freehold conversion.

The land use structure in the proposed township, comprising of residential, commercial, institutional, green areas and community facilities, etc., shall be in accordance with the norms and standards prescribed in the Master Plan Guidelines and the Building Bye-laws for the time being in force. The proposed township shall be environmentally sustainable.

The developer shall prepare and submit a Detail Project Report (DPR) of the township within 180 days after the selection and this report will comprise layout of the proposed township, land use plan, infrastructure and services development plan, standards and specifications, implementation schedule, resource mobilization, property management, operation and maintenance details etc. Government policies and the relevant codes of B.I.S. / I.S. relating to disaster management shall be strictly adhered to in the land use planning and construction works.

7.5.3 Industrial and Service Sector Investment Policy 2004

Industrial and service sector investment policy aimed at creating comprehensive reforms and restructuring of the economy is 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 government has formulated the Industrial and Service Sector Investment Policy 2004. This policy aims to create conditions for balanced, harmonious growth of all segments of the industrial sector such as heavy, medium, and small scale industry, besides strengthening traditional industries. The policy 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 Uttar Pradesh 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%.

IT Policy (2004) – Identifying the vast employment generating potential of the IT services industry, the State Government shall 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.

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.

7.5.4 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.

7.5.5 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 inherent potential in this sector. The state also has diverse agro climate conditions, which are conducive for a variety of crops round the year.

7.5.6 Investment Incentives

The Government of Uttar Pradesh is committed to provide high standard, plentiful infrastructure facilities, enabling conducive 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 outstanding infrastructure to the industry.

7.5.7 Other Important Infrastructure Projects

DMIC

Important industries that are likely to be benefitted due to DMIC infrastructure in the 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.

Important industries that are likely to be benefitted due to DMIC infrastructure in the 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. There are two important nodes to be developed along DMIC in Uttar Pradesh sub-region viz.

Node-1: Dadri-Noida-Ghaziabad Investment Region

Node-2: Meerut-Muzaffarnagar Industrial Area

7.5.8 Dadri-Noida-Ghaziabad Investment Region

The proposed Dadri-Noida-Ghaziabad Investment Region would be located close to Delhi, the National Capital. This region has good connectivity by road and rail to rest of India. Besides, it comprises of Noida, the vibrant satellite town of Delhi with 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.

The proposed investment region has the advantage of availability of good connectivity by road, rail and air, besides quality urban infrastructure and Proximity to the National Capital Region of Delhi. Well established IT/ITES base in Noida and Greater Noida with quality commercial, residential and institutional infrastructure also put this region at advantageous position. 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. With respect to Air connectivity, Delhi International Airport and proposed Greater Noida Airport will offer the air connectivity to the region.

Following projects are proposed in this 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 of Delhi.

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 in the 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.

Following feeder rail links are proposed:

- 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.
- Development of Regional MRTS network between Ghaziabad, Noida and proposed Greater Noida International Airport at Jewar as well as between Greater Noida International Airport and Palwal/Faridabad.

7.5.9 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 investment region 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 INR 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. The state government envisages development of expressway connectivity between Delhi, Meerut and Muzaffarnagar which is expected to offer enhanced connectivity to the proposed industrial area. Major proposed components of DMIC in the region are Export-oriented Industrial Units/ SEZ, Augmentation of Existing Industrial Estates, Agro/Food Processing Zone, Truck Terminal with Warehousing Facility and integrated townships.

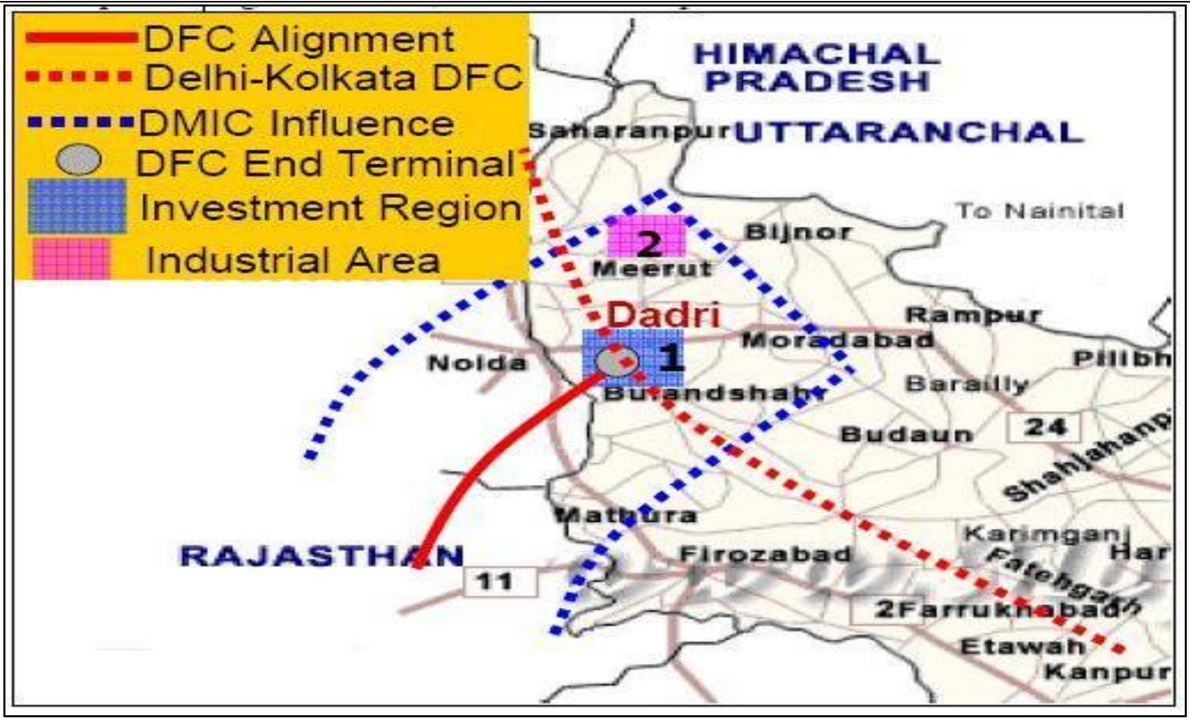


Figure 7.3: Location Map for Proposed Development Node in DMIC - Uttar Pradesh[76]

The Yamuna Expressway: The Yamuna Expressway Project road 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 comes into being.

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 old Shershah Suri Road (NH-91) connecting Kanpur-Aligarh-Khurja-Bullandshahar-Ghaziabad and Delhi. The Expressway has a great

[76] Source: http://delhimumbaiindustrialcorridor.com/dmic-uttar-pradesh.php

economic potential of attracting investment by providing better transport and other infrastructural facilities.

The Yamuna Expressway will provide connectivity between the various satellite towns of National Capital Region of Delhi 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 the existing NH-2 and NH-91 and interconnectivity between all three of them will form a good network of roads which in turn, open 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 proposed Yamuna Expressway would actually be an extension of 6-lane Expressway from Noida to Greater Noida thus opening up the vast virgin 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 will be 165.537 kilometers.

7.5.10 Impact of Policies

Uttar Pradesh sub-region of NCR is the IT hub 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).

Notified and functional Export Processing Zone in NOIDA are:

Table 7.1: Notified NEPZ

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

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

7.6 Rajasthan

7.6.1 Background

Rajasthan has an enterprise friendly business environment. The state has rich mineral and agro resources, good infrastructure. This is especially true in case of NCR sub-region. The region has a tradition of entrepreneurship and there is good availability of skilled manpower. Important minerals of the state are silver, limestone, phosphorite, rock phosphate, copper ore, zinc, gypsum, clay, granite, marble, sandstone, dolomite, calcite, etc. The State has also been taking increasingly progressive measures in Public Private Partnership, especially in infrastructure and social sectors.

7.6.2 Industrial and Investment Promotion Policy-2010

The industry and Investment Policy is aimed at

Improving the Business Climate

- Simplification and rationalization of regulatory mechanisms.
- Setting up of Udyogik Salahkar Samiti.

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.

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.

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.

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

Promotion of thrust areas

- Knowledge sector including IT and ITES.
- Gems and Jewelry.
- Handicrafts and handlooms.

7.6.3 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

7.6.4 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.

This Policy is aimed at the following 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.

7.6.5 Other Important Infrastructure and Other Projects

Khushkhera-Bhiwadi-Neemrana Investment Region

Khushkhera-Bhiwadi-Neemrana Investment Region, in North-Eastern Rajasthan, would be located within 50 km from the alignment of Dedicated Freight Corridor. This region also falls under the National Capital Region of Delhi and 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 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. Detailed master planning is being carried out for the project.

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.

Along with, Export-oriented Industrial Units/ SEZ, IT/ITES/Biotech Hub, Integrated Logistics Hub an International Airport Complex is 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.

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

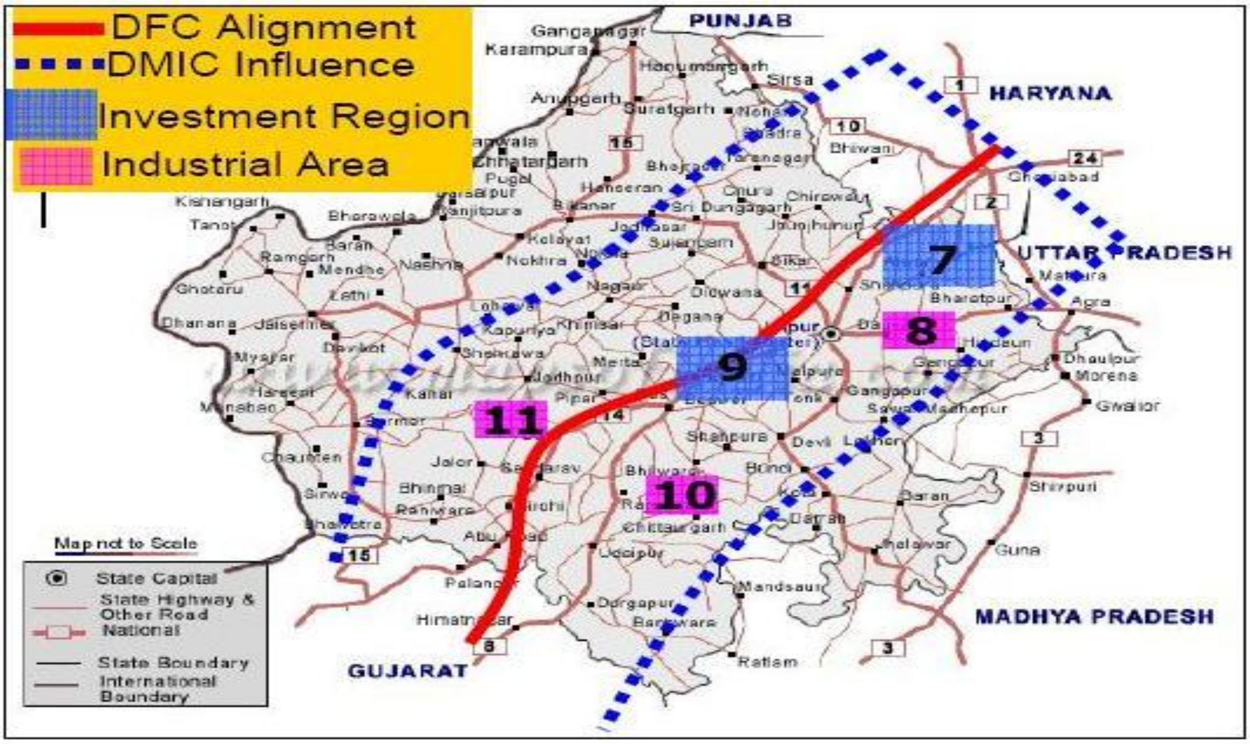


Figure 7.4: Location Map for Proposed Development Nodes in DMIC-Rajasthan

List of Early Bird Projects from Japanese side 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)

7.7 Foreign Direct Investment in NCR

NCR is able to attract good amount of Foreign Direct Investment (FDI) due to improved infrastructure.

Table 7.3: FDI Inflow in NCR from April 2000 to March 2015[77]

Sl. No.	States covered	Cumulative Inflows (April 2000 to March 2015) Rs Crores (US$ millions)	%age to total Inflows
1	Maharashtra, Dadra & Nagar Haveli, Daman & Diu	353022 (73118)	28.62
2	Delhi, Part of UP and Haryana	249023 (49410)	20.19
3	Tamil Nadu, Pondicherry	88766 (17014)	7.20
4	Karnataka	82121 (16120)	6.66
5	Gujarat	53797 (11041)	4.36
6	Andhra Pradesh	49240 (10015)	3.99
7	West Bengal, Sikkim, Andaman & Nicobar Islands	14627 (2981)	1.19
8	Chandigarh, Punjab, Haryana, Himachal Pradesh	6360 (1331)	0.52
9	Rajasthan	6795 (1264)	0.55
10	Madhya Pradesh, Chattisgarh	6096 (1216)	0.49
11	Kerala, Lakshadweep	6150 (1211)	0.50
12	Goa	3867 (823)	0.31
13	Uttar Pradesh, Uttranchal	2444 (483)	0.20
14	Orissa	1961 (398)	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)	0.00

[77] 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

18	Region not indicated	308060 (61951)	24.97
Sub Total		1233005 (248512)	99.96
19	**RBI's NRI Scheme (from 2000-2002)**	533 (121)	0.04
Grand Total		1233538 (248633)	

NCR has been main receiver of FDI funds in India. From April 2000 to March 2015, NCR attracted approx. $ 49.410 billion (Rs 249,023 Crore) FDI; wchich 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%.

7.8 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 diminishing 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 is 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 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 the construction of this KMP expressway these three locations will be the future 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 discussed.

CHAPTER VIII

8. ISSUES AND RECOMMENDATIONS

8.1 Major Issues - Background

The National Capital Region is rapidly emerging as a global economic hub and is among the fastest growing economic regions in India with a CAGR of GDP at 8.76% (2000-2008) CAGR of GDP of India being 7.8% during the same period. The NCR economy is driven by the service sector accounting for 66% of its GDP (2007-08). However, NCR need to balace out between service sector and manufacture sector in the 5-10 years. The main drivers of NCR GDP should come from more joint ventures and collaboration in manufacture to fulfill the objective of *Make in India*. As we see 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 agriculture-led 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, remains an agriculture economy.

The 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 regions of NCR economically strong. An integrated planning process started with preparation of regional plan for 2001 and 2021. As indicated, at present the critical development issue is to increase overall competitiveness of the NCR so that the existing growth path not only becomes sustainable but grow at an even faster pace. 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 in the NCR undertaken in this study reveals some important facts. 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 of Delhi, it remains one of the major employment generators in the overall NCR economy. Manufacturing has shown a substantial concentration in cities immediately bordering Delhi, especially Faridabad.

This chapter attempts to throw light on some of the critical challenges for overall development of the NCR, and also presents an outlook of likely GDP growth rate across the NCR. The recommendation section presents a list of projects that may be taken up by the respective state governments towards overall development of the region.

All efforts have been made to capture the latest available GDP data and to provide analysis of the pattern of changes. However, currently, the GDP 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.

8.1.1 Activity Specific and Region Specific Issues

A. Economic Growth

High differentials in GDP growth and per-capita Income among sub regions

Of the four sub-regions of the NCR, NCT of Delhi has highest GDP followed by Haryana (2009-10). There is contrast in the growth rates of NCR sub-regions. Over the entire period 2004-05 to 2009-10, Haryana sub-region had recorded highest growth rate at 11.77%, followed by Delhi region at 11.10%, Rajasthan sub-region at 9.5%, and the Uttar Pradesh sub-region at 5.51%. On the other hand, the per capita income of Uttar Pradesh sub-region (Rs 35,036) is almost one third of that of Delhi (Rs 98,262) in 2009-10.

Uttar Pradesh and Rajasthan Sectoral composition

The size of primary and secondary sectors in the NCR economy is decreasing; a strong tertiary sector is emerging today is the backbone of the economy of NCT of Delhi. However, in Rajasthan and Uttar Pradesh sub-regions, the primary sector still contributes significantly to the economy (change in LQ of Uttar Pradesh is positive (0.22) from 2000-01 to 2005-06 and same is the case with Rajasthan). On the other hand, in NCT of Delhi and Haryana sub-region, the importance of agriculture has declined during the same period (LQ has declined during the same period for agriculture sector). This could be reflective of the relatively slower urbanization and industrialization in Uttar Pradesh and Rajasthan sub-regions. Table 8.1 presents the LQ of GDP of all sub-regions disaggregated at district level.

Table 8.1: LQ GDP 2000-01 and 2005-06

District / Region	PRIMARY			SECONDARY			TERTIARY		
	LQ2005 - 06	LQ2000 - 01	Change	LQ2005 - 06	LQ2000 - 01	Change	LQ2005 - 06	LQ2000 - 01	Change
Meerut	3.31	2.51	0.79	0.88	1.08	-0.20	0.71	0.68	0.03
Baghpat	4.28	4.22	0.06	0.56	0.44	0.11	0.70	0.63	0.07
Ghaziabad	2.09	1.58	0.51	1.28	1.43	-0.15	0.72	0.71	0.01
Gautam Buddha Nagar	1.04	1.35	-0.32	2.13	1.91	0.22	0.51	0.54	-0.03
Bulandshahr	3.86	3.63	0.23	0.82	0.78	0.03	0.65	0.60	0.05
UP Total	**2.61**	**2.39**	**0.22**	**1.25**	**1.23**	**0.02**	**0.65**	**0.64**	**0.01**
Panipat	1.38	1.47	-0.09	0.84	0.96	-0.12	1.01	0.93	0.08
Sonipat	2.65	3.12	-0.47	1.07	0.81	0.26	0.72	0.68	0.04
Rohtak	2.77	2.29	0.48	0.84	1.00	-0.16	0.80	0.76	0.05
Jhajjar	2.41	2.17	0.25	1.40	1.42	-0.02	0.62	0.60	0.02
Rewari	1.70	1.63	0.07	1.68	1.47	0.21	0.60	0.68	-0.08
Gurgaon	0.31	0.77	-0.45	1.51	1.56	-0.05	0.88	0.80	0.08
Faridabad	0.98	1.06	-0.08	1.34	1.55	-0.21	0.86	0.75	0.10
Haryana	**1.22**	**1.43**	**-0.21**	**1.31**	**1.36**	**-0.05**	**0.83**	**0.77**	**0.07**
Delhi NCT	**0.11**	**0.12**	**-0.01**	**0.73**	**0.73**	**0.00**	**1.25**	**1.28**	**-0.03**

Rajasthan	**3.02**	**2.43**	**0.59**	**1.11**	**1.11**	**0.00**	**0.65**	**0.68**	**-0.03**

B. Workforce

Disguised employment in agriculture sector in all sub regions except NCT of Delhi

The central weakness in the NCR's employment performance is the failure of the Rajasthan sub-region to create employment opportunities in manufacturing or service sectors. In Rohtak, about 80% of the working population is still employed in primary sector. Even in the case of Haryana and Uttar Pradesh sub-regions cultivation is still the most common occupation (around 28% of total working population). The existing business environment is unable to support large scale employment in non-agriculture activities in these sub-regions, although most industrial development in these two sub-regions is in large scale industries. The NCT of Delhi, on the other hand, has seen a mushrooming of SSIs. It seems that the other sub-regions have failed to formulate an effective employment policy in industrial sector for promoting MSME units.

High Concentration of productive workforce in NCT of Delhi

NCT of Delhi is still main centre for employment as number of main workers is highest here. This may be attributed to better connectivity of Delhi with other parts of the NCR.

Industrial Development

Industrial Congestion around NCT of Delhi

In pursuance to 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 Delhi; however a quick visit to these locations highlighted many challenges including:

- poor 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 around land acquisition and land availability; and
- numerous 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 is largely missing.

C. 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 service oriented employment becoming the key economic driver. While NCT of 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 Delhi is moving towards non-agricultural employments, agriculture and allied activities still remain an important source of livelihood in the remaining sub-regions.

Limited non farm sector employment

Alternative employment options in NCR's rural economy are limited. Most of non-farm sector's informal employment concentrated in the Uttar Pradesh sub-region and the NCT of Delhi (25.1%) is in agricultural establishments.

Poor 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 weak 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 of Delhi. This leads towards distress sale of farm produce by farmers, and therefore, has direct bearing on the low-growth of rural income.

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. There is complete absence of required know-how for growth of such industries in the rural areas. Uttar Pradesh sub-region and the north-western parts of Haryana sub-region with good irrigation facilities are potential areas for establishment of food processing industries. Currently, related industries the NCR are dominated by traditional agro industries like rice mills, khandsari and gur making units. Panipat is one of the places in NCR known for its agro processing industries in pickle making.

D. Informal Sector

The informal sector can be an asset to rural as well as urban system, if given an opportunity to develop. 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. Technical training programs are needed tailored to requirements of the existing workforce. Programs for technical training conducted by Industrial Training Institutes (ITIs) or similar institutions are generally out of reach of the informal workforce. Moreover, most of the existing courses in these institutes are not suited to the current skill demands. There is need for 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 craft clusters in NCR. An integrated strategy may be evolved to provide Common Facility Centres (CFCs) to these craft centre to make craft clusters vibrant and play an important role in income generation. 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. An integrated development policy for street vendors may help informal sector workers to be more productive.

8.1.2 Sub Region Wise Issues

NCT of Delhi

Overall, the economy of NCT of Delhi appears to be on a sound footing. 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. The major points include:

1. More focus required on major value-add sectors like Software, BPO, communications and biotechnology;
2. Inadequate support provided to MSMEs while shifting out polluting industries;
3. Poor quality infrastructure (roads, water, sanitation etc.) in industrial areas; and
4. Lack of a comprehensive policy for strengthening of the craft-based Informal sector that flourishes in urban centers.

Haryana Sub-Region

Haryana is on the fast track of industrial development courtesy its location advantage and infrastructural investment made in the last decade. However, for a more balanced approach the following challenges need to be addressed:

1. Need to strengthen rural infrastructure to promote agro base industries;
2. Weak infrastructure in industrial areas especially those developed by HUDA;
3. Poor quality power availability for industries;
4. Unabated pollution in industrial towns (Bahadurgarh, Faridabad, Panipat etc.);
5. Slow progress on infrastructure projects like KMP Expressway and some SEZs;
6. MSME support very limited and need for propagating cluster development programs in major industrial clusters; and

7. Inability of some districts to mainstream their development process including Jhajjar and Rewari.

Uttar Pradesh Sub-Region

Low progress is reported in terms of modern economic development. Some key challenges in the Uttar Pradesh Sub-region include:

1. Land acquisition and land availability;
2. Non-availability of common infrastructure (power, roads, etc.) for industries;
3. Heavy congestion and pollution in industrial areas of Ghaziabad;
4. Inability of Meerut to perform well irrespective of many old industrial clusters;
5. Comprehensive policy for MSMEs is almost nonexistent;
6. Lack of rural infrastructure strengthening leading to losing opportunities of modernization of non-farm activities; and
7. Many traditional craft clusters like khurja not provided suitable support.

Rajasthan Sub-Region

This Sub-region reports a very low growth rate and an agrarian dominated economy. The major challenges for development of this sub-region are:

1. Poor infrastructure (power and water) in industrial sector;
2. Rural infrastructure for non-farm activities is almost missing; and
3. Growth of industrial development limited in comparison with neighboring sub-regions.

8.2 Fututre Growth Pattern

8.2.1 GDP Projections

As per the projections with current rate of growth (from 2004-05 to 2009-10), the GDP of NCR in 2021 & 2031 will become three times and nine times of the GDP in 2009-10. Over the next 23 years, GDP of Mewat will be doubled, while Gurgaon and Panipat will register a 25 times and 19 times respective growth by 2031.

GDP Projections of NCR

The 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 prices of 2004-05. The impact of various factors might result in deviation from the projected values. Still the projected data gives a fair idea of the trends of economic growth of the given 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. The same is discussed below (also refer Figure 8.1 at end of this section).

NCT of Delhi

NCT of Delhi has already had an impact of all of the above-mentioned forces. The new planning is focused on decongesting the region and on the other sub-regions of the NCR. Tertiary sector is the main contributor to the GDP of this region. Human capital development and technological progress will be the key factor impacting economic growth of the region. The region should have the GDP as per the projections. Development of Delhi as a hub for hi-tech industry and trade centre will lead to higher levels of GDP. Development of other constituents of the NCR will lead to reduced migration of labour force as well.

Haryana Sub-Region

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 are primarily due 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, etc. will attract further investments in these districts.

Mewat and Palwal are newly developed 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

Gautam Budhnagar and Ghaziabad are already moving along a high growth trajectory. Upcoming infrastructural projects in Greater NOIDA and Yamuna Expressway 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 scarcity of educational and technical training institutions in the district and GDP growth at current low level of CAGR is expected.

Rajasthan Sub-Region

Though the current rate of GDP growth is low, the state government is investing a lot in this sub-region. The current projections of GDP growth for this sub-region are not likely to have many deviations.

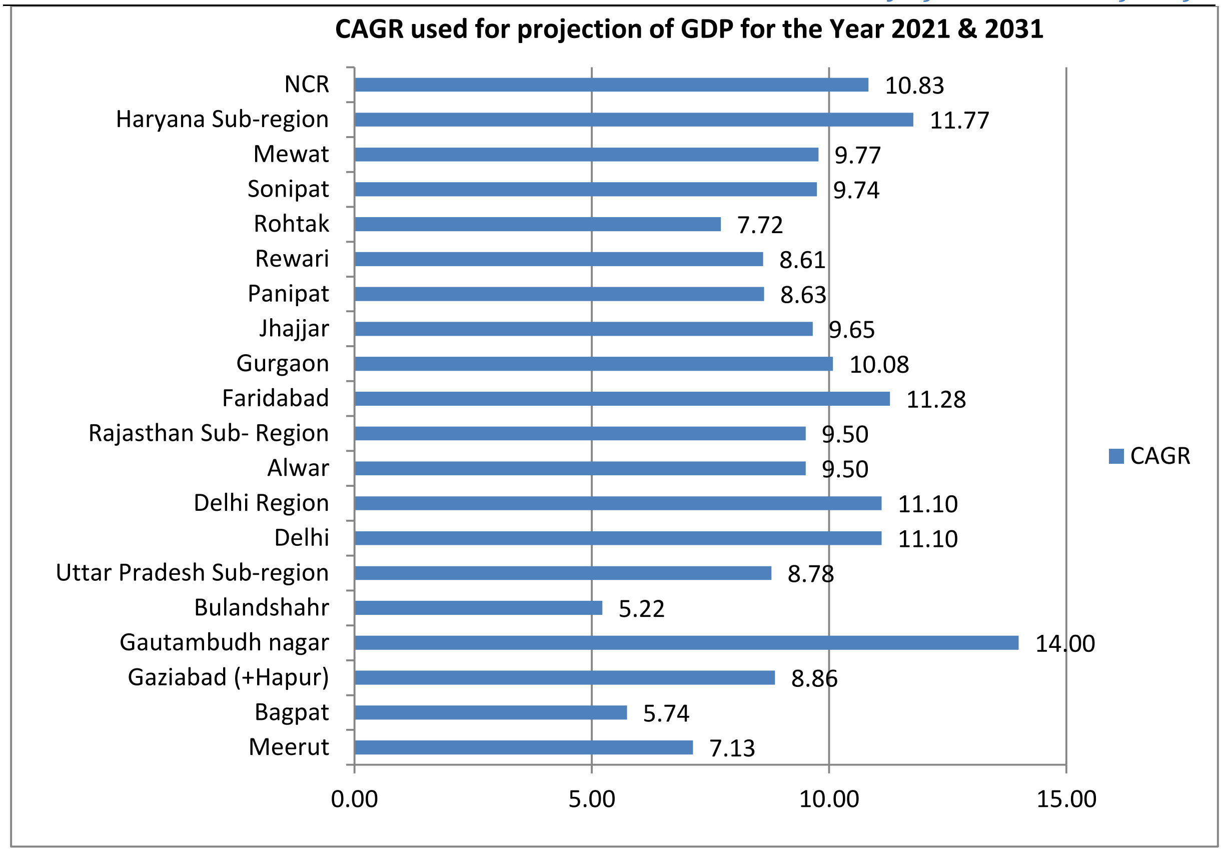


Figure 8.1: CAGR (2004-05 to 2009-10) used for projection of GDP for the Year 2021 & 2031[78]

A review of the above graph and Table 8.2 indicates the following trends:

- Haryana sub-region will have highest projected CAGR at 11.77% 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 has been projected at 9.50% and 8.78% respectively. There seem two different groups; the first group contains NCT of Delhi and Haryana sub-regions and other group containing Rajasthan and Uttar Pradesh sub-regions with close to 10% CAGR.
- 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 Gautambudh Nagar is projected highest at 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%).

[78] Source: Directorate of Economic and Statistical, Rajasthan; Economic Survey of Delhi, 2012-13; Department of Economics & Statistics, Haryana; updes.up.nic.in; and ACDS estimates for 2021 & 2031 based on CAGR

- Only NCT of Delhi and one district each from Haryana and Uttar Pradesh sub-region have a projected CAGR higher than that of the NCR as a whole.

Table 8.2: GDP of NCR for 2009-10 and projected GDP for 2021 & 2031 at Constant 2004-05 Prices[79]

Regions	Actual GDP in 2009-10 (In Rs Millions)	Projected GDP for 2021 (In Rs Millions)	Projected GDP for 2031 (In Rs Millions)	CAGR (% age)	Times (2021 projected GDP of Actual GDP in 2009-10)	Times (2031 projected GDP of Actual GDP in 2009-10)
Meerut	101254.56	215962	429966	7.13	2.13	4.25
Bagpat	38426.16	70980	124000	5.74	1.85	3.23
Gaziabad+Hapur	136475.9	347226	811521	8.86	2.54	5.95
Gautambudh nagar	141557.06	598025	2216243	14.00	4.22	15.66
Bulandshahr	88739.5	155341	258433	5.22	1.75	2.91
Total of Uttar Pradesh Sub-region	**506453.18**	1278687	**2967724**	**8.78**	**2.52**	**5.86**
Delhi	1698389.8	5407842	15498318	11.10	3.18	9.13
Total of Delhi Region	**1698389.8**	5407842	**15498318**	**11.10**	**3.18**	**9.13**
Alwar	121901	330935	820441	9.50	2.71	6.73
Total of Rajasthan Sub- Region	**121901**	330935	**820441**	**9.50**	**2.71**	**6.73**
Faridabad	190014.6	615728	1792966	11.28	3.24	9.44
Gurgaon	269905.5	776230	2027973	10.08	2.88	7.51
Jhajjar	44947.9	123834	311144	9.65	2.76	6.92
Panipat	99297.5	246841	564863	8.63	2.49	5.69
Rewari	65930.6	163564	373606	8.61	2.48	5.67
Rohtak	47052.3	106578	224118	7.72	2.27	4.76
Sonipat	77067.6	214314	543060	9.74	2.78	7.05
Mewat	29967.8	83590	212400	9.77	2.79	7.09
Palwal	42546.5	NA	NA	NA	0.00	0.00
Total of Haryana Sub-region	**866730.3**	2948453	**8973610**	**11.77**	3.40	**10.35**
Grand Total/ NCR	**3193474.28**	**9894847**	**27663372**	**10.83**	**3.10**	**8.66**

Region wise GDP growth rate projections for the year 2021 & 2031 are as follows:

- Haryana sub-region : 11.77%;
- Uttar Pradesh sub-region : 8.78%;
- Rajasthan sub-region : 9.50%; and

[79] Source: Directorate of Economic and Statistical, Rajasthan; Economic Survey of Delhi, 2012-13; Department of Economics & Statistics, Haryana; updes.up.nic.in; and ACDS estimates for 2021 & 2031 based on CAGR

- NCT of Delhi : 11.10%.

In absolute terms the projected GDP of NCR in the year 2021 & 2031 is Rs. 9894 Billion & Rs. 27663 Billion, respectively.

8.2.2 Employment Projections for 2021 & 2031

The employment projections in the region are based on two scenarios

1. Constant participation rate
2. 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 decline in participation rate of Agriculture sector 1-2 percentage points in all districts of Haryana sub region, Uttar Pradesh and Rajasthan Sub-regions by 1-2 percentage points. 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 1-2 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 1-2 percentage points.

Table 8.3: Activity wise employment projections for 2021 & 2031[80]

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	5789083	42439	1381743	865302	1852217	835849	1315842	532301	540755	13155531
2021 Constant Participation rates	8607549	64301	2036919	1281750	2695338	1216754	1932741	772535	784393	19392280

80 Source: ACDS estimates for 2031 based on compound annual growth rates

2021 adjusted Participation rates	7887272	64301	2196595	1281750	2920969	1388529	1953202	997889	784393	19474900
2031 Constant Participation rates	10449079	74841	2442944	1539133	3203048	1443364	2309591	916913	927448	23306361
2031 adjusted Participation rates	9573701	74841	2640878	1539133	3484477	1650411	2334060	1187410	927448	23412359

As per projections, the total workforce in NCR will increase from 13155531 in 2001 to 19474900 & 23412359 in 2021 & 2031, respectively. The highest workforce shall be employed in agriculture activity followed by construction and manufacturing, in 2021 & 2031.

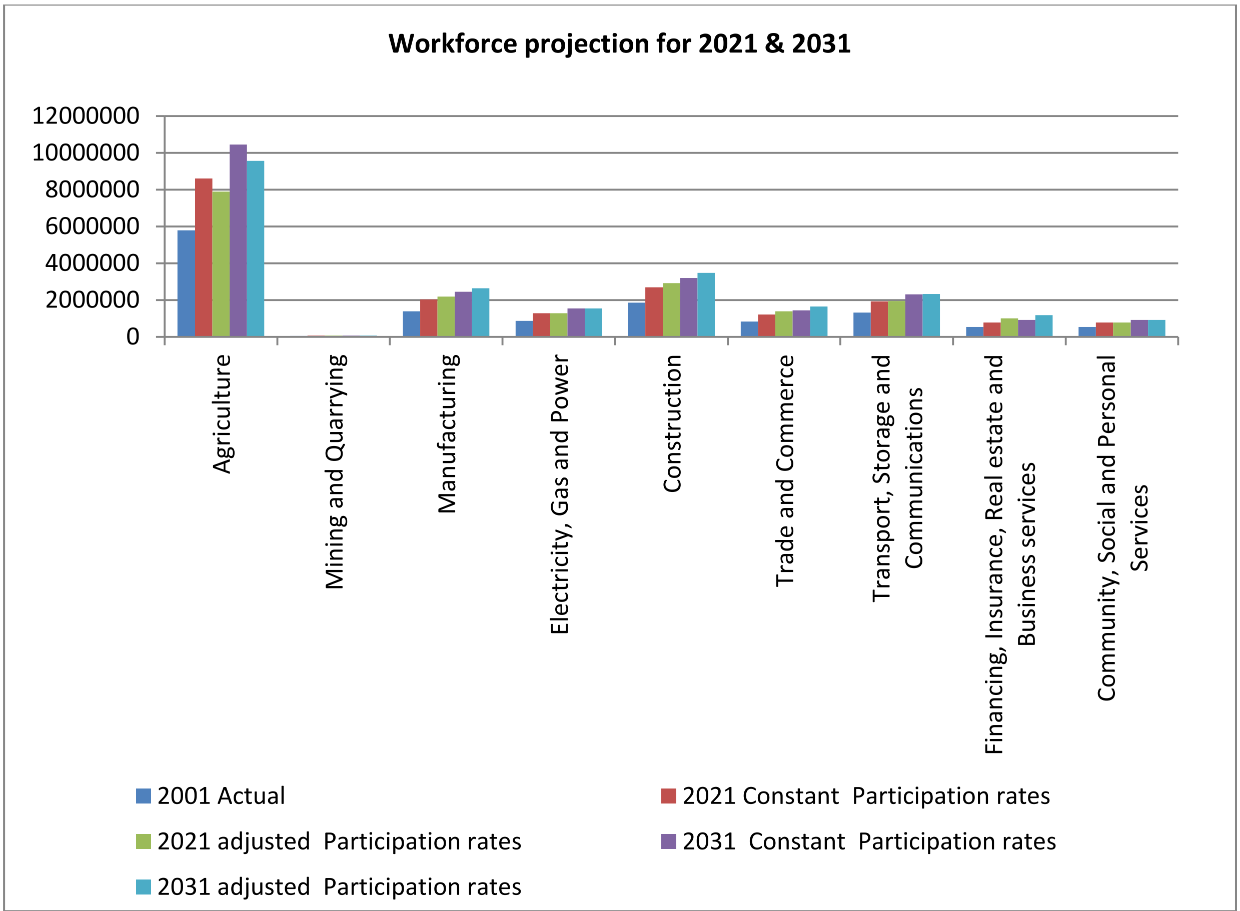


Figure 8.2: Workforce Projections for 2021 & 2031[81]

[81] Source: ACDS estimates for 2021 & 2031 based on Compound Annual Growth Rates (CAGR)

Table 8.4: Activity Wise Workforce Growth from 2001 to 2021 & 2031[82]

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 2031 constant (% age)	48.69	51.51	47.42	48.13	45.52	45.57	46.88	45.13	45.06	47.41
2001 to 2031 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

The activities are likely to grow at faster rate in NCR are real-estate, financial services, trade and commerce and manufacturing.

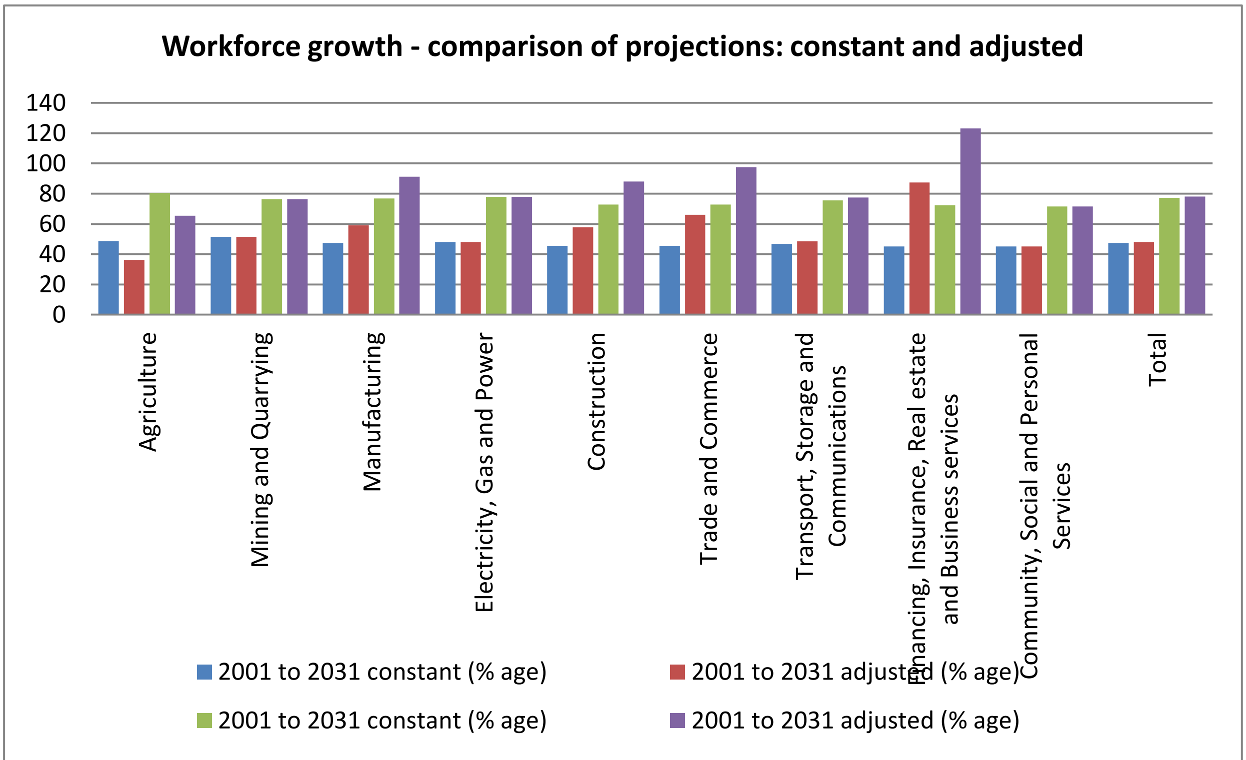


Figure 8.3: Workforce Growth Rates - Comparison of Projections

[82] Source: ACDS estimates for 2021 & 2031 based on Compound Annual Growth Rates (CAGR)

8.3 Policy Response

There are going to be four main drivers of NCR in the long-run including demography, environment, economy, and technology.

Due to pressure on land, manpower, energy, water and transport due to demographic change over the next 2-3 decades. 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 to locate near to the mother units. There will be increased demand for housing, energy, food, water and transport, which will, in-turn will put pressure on the relocation of economic activities in the NCR.

The pollution and environment impact will become the major issue

The urbanization and industrialization will further increase pressure on scarce resources to be used in the most environmentally friendly way. NCT of Delhi is already on nil tolerance on environmental pollution. The next will be sub-regions of Haryana and Uttar Pradesh. This means that most of the industrial activities are likely to be relocated again. The major impact will come on nearer towns like Bahadurgarh, Ghaziabad, Kundli, Meerut, etc. it is therefore necessary that respective state governments should prepare a suitable policy response.

Economy's Response- 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[83]. The demand for low cost, efficiency and flexibility is likely to increase. It is,

[83] 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.

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.

NANO Technology will dominate NCR

To compete internationally, the technology base of the NCR is going to be completely revamped. The role of R&D will become more important. Currently, the NCR has a fairly good base for R&D activities. However, cutting edge thinking on technology lines is still missing. 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 district), Rohtak and Greater Noida are coming as good knowledge and innovation centers, but there is a need to do much more.

Public Private Partnership

To involve stakeholders in the planning process, government needs to make PPPs an integral part their location and industrial policies. The recent issues relating land acquisition has further highlighted need for PPPs. Gradually, role of the government as the main driver of economic activities in NCR will decline. The role for PPPs will increase to minimize the impact of business cycles and decrease the turn-around time.

The current sub-regional allocations will take a different route. Sectors like biotechnology, nano-technology and optical technology will have strong bearing on the eco-system 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 be shorter and deeper.

The future policy needs to be developed around these priorities for development. So far, in spite of a number policy measures by state and central governments, there is very limited progress on this in Uttar Pradesh and Rajasthan sub-regions. Haryana sub-region's districts closer to NCT Delhi are growing quite fast on the industrial front. De-industrialization of NCT of 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 results of moving out of industries from Delhi is that most of the industrial clusters are now outside NCT of Delhi. In all NCR sub regions, other than NCT of Delhi, industry clusters are very significant from policy perspective.

The existing industrial policies of corresponding state governments of different sub-regions of the NCR 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.

8.3.1 Sector/ Cluster Specific Recommendations

The following sectors are emerging as priority sectors in the NCR:

- **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.
- **Electronics and Information & Communication Technology**
    - SEZs in Haryana (slow growth).
    - Software Development in Delhi, Gurgaon and NOIDA (need intensification especially in case of Delhi).
    - Infrastructure development for General engineering (Faridabad, NOIDA, Gurgaon).

- **Automobiles & Automotive Components**
    - Induced cluster at IMT Manesar and Bawal for automobiles and auto components (need skilled manpower and infrastructure like workers' hostel etc.)
    - National automotive testing, research and development infrastructure project in Haryana with assistance from Government of India (presently coming up).
    - Auto-park at Alwar (presently coming up).
    - Infrastructure support for auto component for Faridabad, Gurgaon, NOIDA, Meerut and Alwar.
- **Handloom, Hosiery, Textile and Garments Manufacturing**
    - Apparel park in Gurgaon SEZ and at Barhi under the Apparel Park for Exports Scheme of Government of India.
    - International Trade and Conventional 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.
- **Logistics**
    - Inland Container Depot in Haryana.
- **Footwear, leather garments and accessories**
    - Infrastructure for leather development at Bahadurgarh, Haryana.

Cluster Specific Recommendations (soft inputs for MSMEs)

- **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 atomization of the machines has not happened. There is a possibility of introducing advanced equipment, improve shop floor practices, induce quality systems and promote standardization.
- **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 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.
- **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.
- **Textiles (Okhla, Gurgaon)**
    - The main focus would be quality improvements, technology up-gradation, skilled labor development and encouraging the entrepreneurs to be a member of global supply chain. The following soft activities are suggested a part of the action plan:
        - ✓ cutting Room Layout and workflow;
        - ✓ lean manufacturing;
        - ✓ manpower training;
        - ✓ quality of management; and
        - ✓ Production improvement plan (technology adoption).
- **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.

8.3.2 Sub-Region Wise Recommendations

HARYANA SUB-REGION

The structure of Haryana's economy has undergone significant changes after 2000. The primary sector and secondary sector have gone down and tertiary sector share has increased from 41% in 1999-2000 to 56% in 2007-08. The service Sector especially IT and ITEs has positively impacted the Haryana sub-region. Some districts like Gurgaon and Faridabad played an important role in this shift.

State Government Focus

There are number of policy statements especially after the liberalization since 1991. The common key words in these policy statements are like high tech, efficient use, environment friendly, etc. In actual practice what prevails is the investment and only investment. The current success parameters are based on hard core facts i.e. investment figures. Most of the policies including the latest policy of 2010-11 of Haryana lacks in perspective thinking and integrated development. There is need for more integrated planning in terms of resource input outputs and sustainability of growth in the long run.

Major Cities/ Towns' Potential

Gurgaon

Gurgaon is evolving as the main centre for high-value added services. This is reflected in our 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 transport system within Gurgaon city and other parts of Gurgaon. The work to strengthen rail and road infrastructure is in progress. For Gurgaon to evolve as a state of art location for financial, insurance, real-estate and business service sector a far better infrastructure is needed.

- 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 completely missing. There is need to work on cluster based approach at least in two verticals, namely, auto component and readymade garments.
- Some of the non strategic and polluting industries require shifting from Gurgaon for the long term sustainable development especially heavy engineering goods, pharmaceuticals, air conditioners, shoes, pesticides, insecticides etc.

Faridabad

Faridabad is one of the oldest industrial towns of Haryana. There is need to decongest Faridabad from its existing manufacturing (specially dyeing and processing house facilities) activities base towards Palwal and other nearby areas to evolve Faridabad for more dynamic and sustainable options. As we know that:

- Faridabad has emerged as a real estate destination as construction activities have grown by 17% from 1999-2000 to 2007-08.
- Infrastructure for wholesale trade in auto parts may be encouraged by providing Faridabad necessary infrastructure

Sonepat

With availability of land and strategic location of Sonepat, a large number of industrial units shifted to Kundli and nearby areas from NCT of Delhi. The district is emerging as a major destination for construction and industrial activities. The district can also serve as knowledge centre for the NCR in different cutting edge knowledge areas as state government is already planning for setting up of a huge university. A food processing knowledge centre (NIFTEM by Ministry of Food Processing Industry) has already been set up. There is need to evolve the whole belt into food processing industry belt, as well as to relocate polluting industry in the district like industrial base rubber, plastic and chemical products, paints, varnishes, drugs and pharmaceuticals, dyes, PVC shoes etc. , in order to make it knowledge and food processing hub.

Bahadurgarh

Bahadurgarh in Jhajjar district is impacted by dislocation of polluted industry from NCT Delhi. From 1999-2000 to 2007-08 the manufacturing sector has grown by 17% CAGR against the NCR average of 7.5%. Bahadurgarh has good potential for products like ceramics, glass, chemicals, engineering, electrical &and electronics. Haryana is also planning to promote footwear industries in Bahadurgarh. Owing to its proximity to Delhi, Bahadurgarh should be promoted as trade and commerce centre also. The KMP Expressway which is very near to Bahadurgarh will change Bahadurgh's economic structure in big way. Good logistic infrastructure between Bahadugarh and Rohtak should be promoted to evolve this area as a major service centre.

Jhajjar

Jhajjar is a comparatively new district. It completely lacks in business or industrial activities. Traditionally it was a trade and commerce centre but could not grow fast due to its poor infrastructure base. Recently, the district has become very vibrant due to increased investments in the areas like power and the upcoming Reliance SEZ (though the progress of SEZ is very slow). Consequently, the property prices have shot up in and around Jhajjar. Due to the recent upcoming infrastructure and construction activities, it has become a strategic location for industry, trade and commerce. There is need to develop rural infrastructure and encourage MSME to come up Jhajjar. An initial infrastructure for entrepreneurship development and other CFC for micro and small enterprises may stop a number of young persons from commuting daily to Gurgaon and Delhi. The district gives very high value to government jobs and most of election in Rohtak and Jhajjar district are fought on the basis of government jobs provided to locals.

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 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. Once the six lane road via Bahadurgarh to Rohtak is completed and KMP express way becomes operational the city will become even more vibrant.

Panipat

Panipat is a historical city and very well connected by rail and road to other towns of the NCR. The city houses 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. Panipat need support to existing industries in the form of common facility centers. It is also a potential induced chemical park location. The district need special attention toward environmental issues as most of the economic development in the district will not be sustainable because of environmental problems. There is need to gradually orient Panipat in to a nonmanufacturing base. The existing handloom and powerloom require immediate shifting into more organized and competitive environment. There is need for stringent policy measures to decongest the city of Panipat from its current industrial base.

Rewari

Rewari is well connected to other cities by rail and road. It is majorly an agrarian centre. With very limited but fast upcoming industrial activities at the centre the city serves hinterland as trade centre and retail market. Two very important industrial growth centre situated in the district are Dharuhera Industrial Complex and Bawal Growth Centre. These two locations have huge employment potential in future industrial developments. The heavy industries should be encouraged to come up in Rewari district not only to decongest Gurgaon for its future role to support service industries but also for the optimum growth of large industries in the NCR.

UTTAR PRADESH SUB-REGION

Government Focus

The state government focus on policy incentives, infrastructure and climate in the Uttar Pradesh sub-region has encouraged investments in sectors, such as, IT, agro-based and food processing, light engineering goods, sports goods, textiles, leather-based, tourism and biotechnology. 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 Delhi including Sahibabad and Surajpur in district Ghaziabad, Khurja, NOIDA and Greater NOIDA. Some SEZs have come up in the region to facilitate investment. These include NOIDA Special Economic Zone, Software Technology Park, and Export Promotion Industrial Park at Greater NOIDA.

Gautambudh Nagar - NOIDA and Greater NOIDA

The state government policy to induce investment in Gautambudh Nagar has by and large remained successful. The two locations namely NOIDA and Greater NOIDA have emerged as important centre of production for electronics, textiles, engineering, computer software, etc. Due to the support to large number of educational institutions, Greater NOIDA is also known as an Educational Park. The district has all features to become an international city especially with upcoming formula-one track, Yamuna expressway and international airport. There is need to encourage the district further in the areas of nano technology, biotechnology and information technology by encouraging investment in R&D in the above mentioned areas. The district needs to improve its availability of power and other infrastructure base especially for MSMEs.

Ghaziabad

Ghaziabad is an old industrial town and one of the most industrialized cities in Uttar Pradesh. The district lacks in systematic evolution of economic activities. The government’s role in shaping the economic activities of the district is very limited. Consequently, most of polluting and less eco-friendly industrial activities have come up in the district. The most dominant sector that is driving the local economy of Ghaziabad district is financial services, insurance, real estate and business services. The district will be greatly benefitted by DMIC with improved logistic and development of more planned industrial activities. There is a need to frame a sustainable environment policy for the district. The polluting industries need to be relocated to Bulandshahr district with a sustainable planning for polluting industries.

More growth centers in Ghaziabad need be developed on more modern lines by providing infrastructure for agro based industries. One growth centre could be Modinagar, another 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. Philkhawa, a small town in Ghaziabad district, is a centre for making traditional textile items.

Hapur is a major mandi town in Ghaziabad district. The place is known for its facilities for wheat processing. There is huge potential to process more grain and make grain based products. Similarly potato processing can also be done in and around Hapur.

Bulandshahr

Bulandshahr district is known for its three important activities i.e. its agriculture, milk production and ceramics. Nothing significant has been done in terms of policy measures to utilize the agro processing and milk processing potential in 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. Good rural infrastructure in the form of cold storage chains and Food Park will add significant value to the district production base.

An important centre located in the district is Khurja, a small town famous for its pottery products. Currently, pottery production in Khurja is a polluting industry. There is need to modernize the units 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. The infrastructure is in really bad shape in Sikandrabad. The place is very good location for processing milk and developing dairy products.

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 completely lacks in infrastructure and competitive environment. There is an urgent need to support MSMEs in the city by providing CFCs Greenfield production locations including Sports Goods Park, Scissor Park, Handloom Park and soft interventions in these areas.

Baghpat

Baghpat has a strong agrarian base and is a major centre of gur 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.

NCT OF DELHI

The economic structure of NCT Delhi has been undergoing complete change after 2000's. Due to rapid urbanization, the agrarian base of NCT of Delhi is shrinking. The important manufacturing industries in the NCT of 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 very weak. 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 Delhi has maximum non-farm employment of informal sector there is need to create a suitable informal sector policy for the NCT of Delhi.

RAJASTHAN SUB-REGION

Alwar

The main challenge in Alwar district is still its heavy dependence on agri sector. There is need to support manufacturing activities in the district in a big way. The DMIC and master plans prepared for Rajasthan sub region of NCR by Rajasthan government is likely to significant impact on Alwar activities. The three important areas in Alwar have been identified for future intensive development. These are Bhiwadi-Tapookara-Khushkhera Complex, Alwar and 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 which are becoming non viable in Gurgaon and Faridabad. Greenfield investment in auto and textiles sector should also be encouraged in Alwar. An induced cluster based approach with strong support for infrastructure and other support services will be very useful for Alwar's future development in manufacturing sector. It is expected that Alwar will observe structural change in its economic activities in the next two decades.

8.3.3 Locations of Major Heavy Industry, Medium and Small Scale Industry, BPOs, IT Sector, Commerce

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 mainly works on the location of heavy and small scale industries and diversion of manufacturing activities from one state to another state.

NCT Delhi has been de-industrialized due to closure of polluting units and fast urbanization resulting into higher service sector base. Both push (environment concerns, inability to accommodate demands on infrastructure, service needs of power and water or public transport) and pull factor (new trends in business and investment opportunities represented by the IT/ITES sectors) promote the growth of the 'cleaner' service sector in NCT Delhi. Therefore, NCR is recommended as best location for sophisticated hi-tech industries, with special emphasis on high value added items without effluents like SSI, BPOs and IT/ITES.

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 current locations of most of manufacturing sectors like Faridabad, Gurgaon and Panipat has become unviable due to fast increase in the real estate prices, transportation, energy and other infrastructure related issues. The upcoming projects such as KMP highway, DMIC corridor and proposed SEZs will provide sufficient support for the growth of industries in the Haryana sub region. It is therefore, recommended that most of manufacturing activities should gradually move to areas such as Rewari, Jhajjar, Rohtak, Palwal and Sonepat especially medium and heavy industries. The districts adjacent to NCT Delhi should be gradually evolved into high-tech industries including BPOs and IT/ITES and MSMEs.

From Location perspective Uttar Pradesh like Haryana has big advantage due to the proximity of NCT Delhi. However as result of industrial policy changes in NCT Delhi, a number of polluting industries have shifted to 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, there is presence of IT/ITES and BPOs of many large software and BPO companies , notable being Adobe Systems, TCS, Interra, AgreeYa Solutions, GlobalLogic (previously Induslogic), 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 can become a environment friendly industrial belt with IT/ITES BPOs and R&D, Biotechnology etc. However traditional manufacturing location in Ghaziabad need to decongest shift towards Bulandsahar for their medium and heavy Industries which can be further helped by DMIC and related projects.

Rajasthan sub-region relatively new for industries (except Bhiwadi and Neemrana) are very good location for Medium and Large industries supported by DMIC and state government policies.

Location Wholesale Trade

NCR over a period of time has emerged as a happening and prospering business location especially for wholesale trade. NCT of Delhi which 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 of 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, iron and steel and building materials cater to the whole of NCR and beyond.

The major parts of the commodities, which are brought to Delhi, are distributed outside Delhi. The major items exported out of Delhi are Vegetable and fruits, fuel oil, food grains, iron and steel.

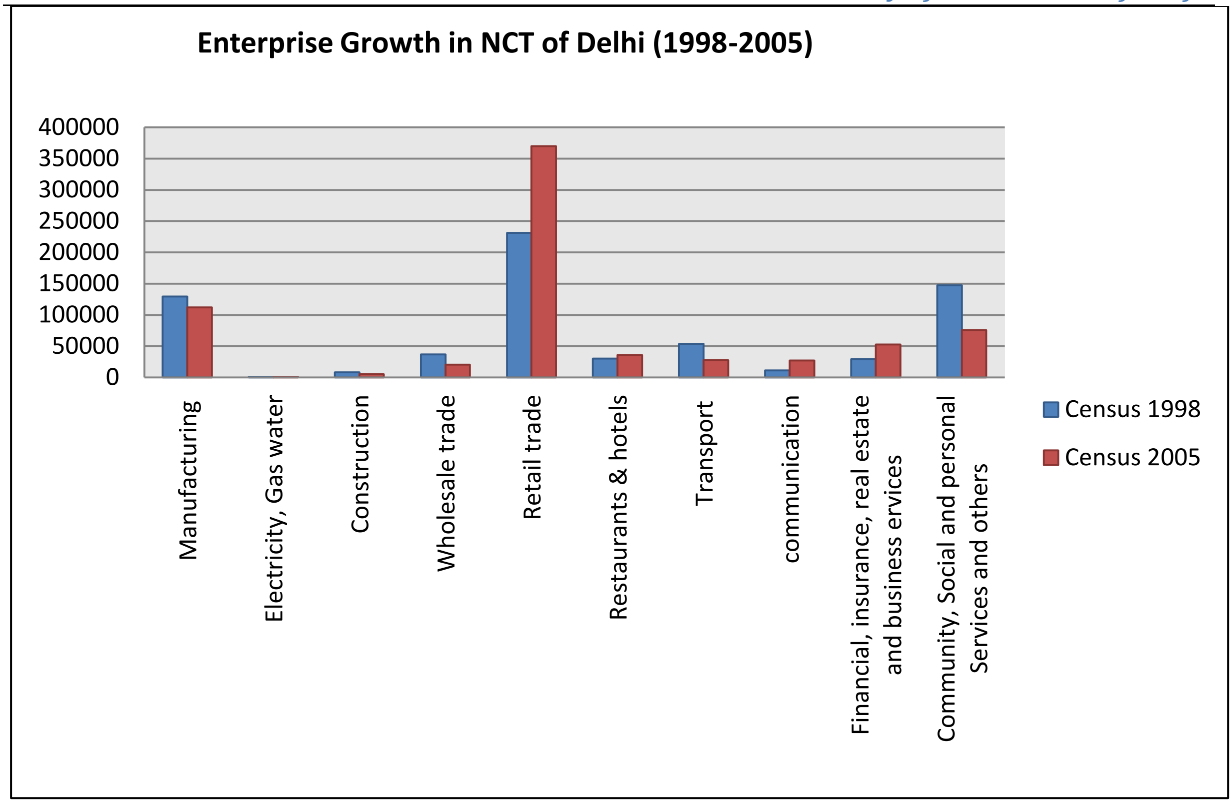


Figure 8.4: Enterprise Growth in NCT of Delhi (1998-2005)

The wholesale trade already started declining in NCT of 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 of 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 8.5: 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

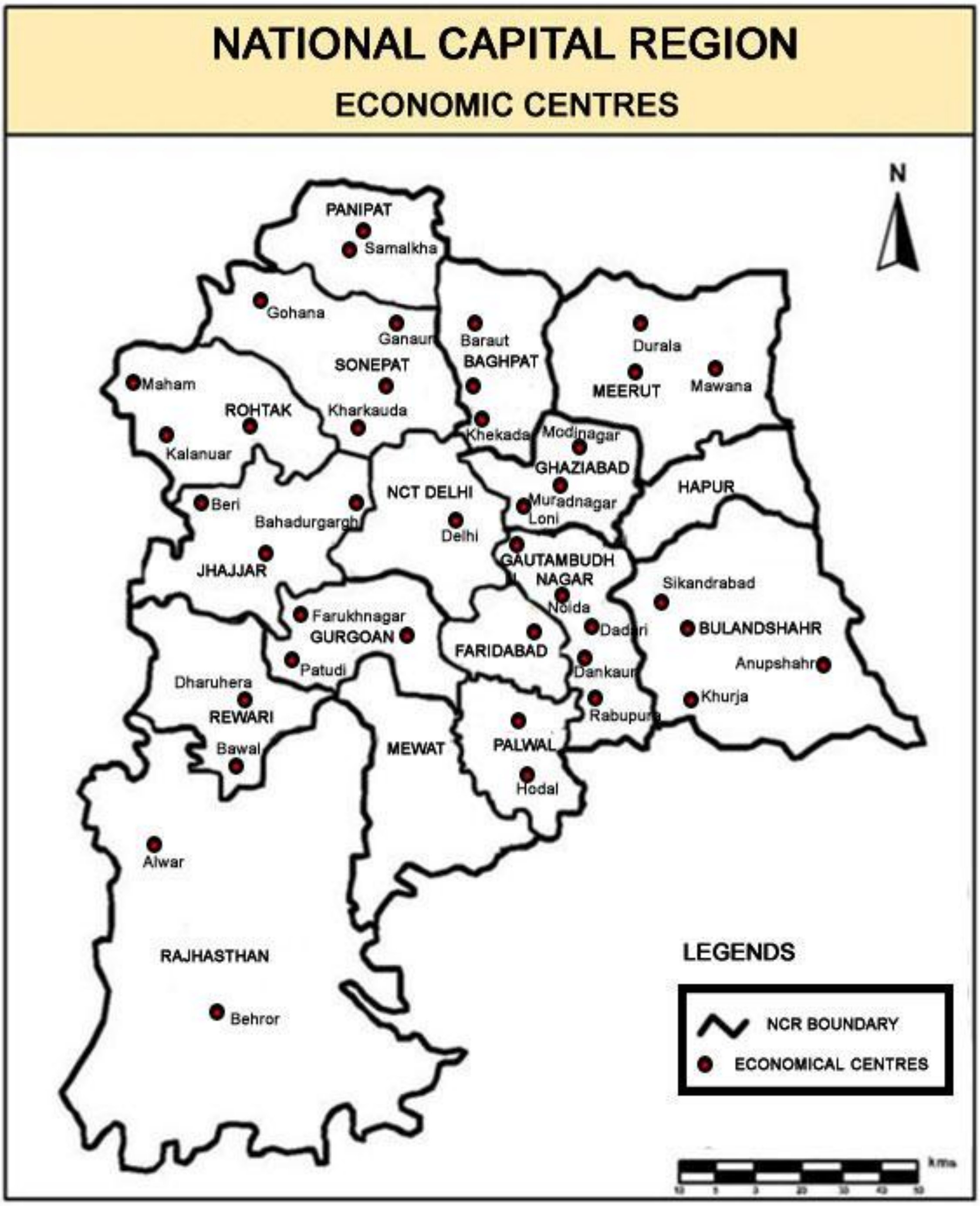
	vegetables)
Textiles and Readymade Garments	Meerut and Rohtak
Iron and Steel Auto Parts	Ghaziabad, Gurgaon, Faridabad
Fuel Oils	Rewari
Hardware and Building Materials	For hardware – Ghaziabad, For Building Material-Alwar, Dharuhera or Bhiwadi

Table 8.6: Important Economic Centres

Locations	Employment		Income		Policy/ schemes		Special projects (DMIC/ SEZ)	Clusters		Economy		Economic centers
	Current	**Proposed**	**Current**	**Proposed**	**Current**	**Proposed**		**Current**	**Proposed**	**Current**	**Proposed**	
Meerut	High	Medium	Low	Medium	Not effective	MSME ministry schemes of clusters to be used	Yes	9 cluster	Modernization	Local non farm	Regional	Durala, Mawana,Meerut
Baghpat	High	Medium	Low	Medium	Not effective	Food park scheme	Non	Non	Non	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	Mediu	Medium	Medium	Food			Non	Non	Local	National	Gohana,

		m			park - Barahi							Ganaur, Sonipat, Kharkauda
Rohtak	High	Medium	Medium	Medium	Investment in R &D skill and management institutions	Knowledge city and it park				Regional	National	Maham, Kalanuar, Rohtak
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	Infrastructure		4 clusters	Moderniza	National	Internatio	Faridabad,

					of industrial activities. Need right policy	development policies of the central and state government			tion and relocation		nal	Palwal, Hodal
Delhi NCT	Medium	Low	Medium	High	Service and industry base	Soft and hard inputs from existing policies		12 clusters	Moderniza tion and relocation	Internati onal	Internatio nal	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 manufacturin g/ automobile/ auto component investment region			Local	Regional	Behror, Alwar



Map 1: District wise Economic Centers in NCR

8.4 Suggested Projects

Table 8.7: Industrial and Infrastructure Projects in Haryana Sub-Region of NCR

S. No.	Location	Project Area	Project Title	Investment (Million Rs)	Employment (direct)	Employment (indirect)
1	Rai	Food Processing	Agriculture and Food testing Research Centre	500	50	1000
2	Barhi	Environment	Modernization of Dyeing Units	200	50	500
3	Barhi	Textile Infrastructure	Training and Development Centre for Textiles	50	50	4000
4	Kundli	Infrastructure	Gas Supply for Units	2000	1000	5000
5	Panipat	Environment	Modernization of Dyeing Houses	1000	100	15000
6	Panipat	Trade and Commerce	Modern Domestic and International Trade centre for Textiles	1500	1000	20000
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	1000	100	1000
9	Rohtak	Footwear	Footwear Design and Development Institute	500	50	1000
10	Rohtak	Footwear	Exhibition-cum-Display Centre	500	100	1000
11	Rohtak	Infrastructure upgrading	Modernization of all Trading Activities viz. Textiles Trade etc.	1000	100	1000
12	Jhajjar	Common facility Centre	Industry cum Service Centre	500	100	1000
13	Faridabad	General engineering	Quality and Testing Centre	750	100	15000
14	Faridabad	General engineering	Reverse Engineering and CAD and CAM Centre	1000	100	10000
15	Faridabad	Textiles	Process House Modernization	750	50	100
16	Rai	Food Processing	Agriculture and Food Testing Research Centre	1000	50	500
17	Rai	Food Processing	Food Processing Infrastructure (Milk and Mango)	5000	100	10000
18	Gohana	Food Processing	Infrastructure for Vegetable Pack Houses	100	100	10000

19	Mewat	Food Processing	Infrastructure for Vegetable Pack Houses	100	100	10000
Informal Sector Projects in Haryana sub region of NCR						
20	Kharkhoda	Informal Sector	Developing Tourism Infrastructure	100	100	10000
21	Panipat	Rugs Infrastructure	Rugs Training and Technology Centre	100	100	20000
22	Jhajjar	Informal Sector	Entrepreneurship Development Centre	500	50	1000
23	Jhajjar	Service sector	Service Sector Skill Development Centre - BPO and Retailing	500	50	1000
24	Mewat	Informal sector	Entrepreneurship development Centre in Non industrial Activities	500	50	1000
25	Jhajjar	Craft	Basketry Craft Training and Resource centre	50	25	5000
Industrial and Infrastructure Projects in Uttar Pradesh sub-region of NCR						
26	Meerut	Sport Goods	Cricket Bat innovation and Research centre, Meerut	100	100	6000
27	Meerut	Auto component	Modern Common Facility point for Auto Component	500	100	5000
28	Meerut	Transformers and Voltage Regulators	Research Designs and Standards Centre	500	50	1000
29	Ghaziabad	Chemical and Rubber	Research and Development Centre	1000	100	1000
30	Greater Noida	Biotech	Research and Development and Skill Upgrade Centre	1000	50	500
31	Greater Noida	IPR	National Institute of Intellectual Property	500	50	100
32	Bulandshaher	Food Processing	Dairy Development Research Institute (On the pattern of Karnal and Anand)	1000	200	5000
33	Bulandshahr	Food Processing	Food Processing Park (Milk and Mango)	5000	5000	40000
34	Hapur	Food Processing	Infrastructure for Vegetable Pack Houses	100	100	10000
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
36	Meerut	Handloom	Handloom Design and Technology centre.	300	50	5000
37	Khurja	Pottery	Infrastructure up gradation	500	100	5000

			project.			
38	Ghaziabad	Rugs	Design and Resource centre for Rugs	500	100	10000
39	Bulandshaher	Embroidery	Design and Resource centre for Embroidery	500	100	5000
40	Philkuwa	Printing	Textiles Printing Training and resource centre	500	100	10000
Industrial and Infrastructure Projects in NCT of Delhi sub-region of NCR						
41	NCT of Delhi	Textiles	Industry E-readiness Centre	500	20	500
42	NCT of Delhi	Textiles	Textile Common Facility Centre including Training and Skill Development for in Service Workers	1000	100	1000
43	NCT of Delhi	Textiles and Hard goods	Design City Centre	1000	300	1500
44	NCT of Delhi	Gems and Jewelry	Upgrade of existing Gems and Jewelry Centre	500	100	5000
45	NCT of Delhi	Infrastructure	Upgrade of existing Infrastructure in Okhla Industrial Areas Phase-I and II	1000	5000	50000
46	NCT of Delhi	Environment	Common Effluent Treatment Plants in Industrial Areas	1000	100	1000
47	NCT of Delhi	Infrastructure	Improved Logistic facilities in Okhla	1000	25	1000
48	NCT of Delhi	Infrastructure	Improved Parking Infrastructure in Industrial Areas	1000	100	1000
49	NCT of Delhi	Infrastructure	Improved Logistic Infrastructure for Electronic Industry in Okhla and Nairana	1000	2000	5000
Informal Sector Projects in NCT of Delhi sub-region of NCR						
51	NCT of Delhi	Training	Entrepreneurship Development centre in West Rural Delhi	1000	1000	5000
52	NCT of Delhi	Training	Craft Development Centre in East Delhi	1000	1000	5000
53	NCT of Delhi	Training	Skill Development Centre in Non industrial Trades like Mobile Repairing, Auto Mechanic etc.	500	1000	5000
54	NCT of Delhi	Training	Centre for Ethnic Food Quality and Standards	500	100	5000
55	NCT of Delhi	Training	10 Modern Garment Stitching Centers in Rural and Resettlement Colonies	500	5000	50000
Industrial and Infrastructure Projects in Rajasthan sub-region of NCR						
56	Alwar	Auto	Tooling and Die Common Facility	1000	500	5000

		Component	Centre			
56	Alwar	Auto component	Technology and CAD, CAM Training Centre	1000	200	1000
57	Alwar	Textiles	Readymade Garment Park	1000	10000	30000
Industrial and Infrastructure Projects in Rajasthan sub region of NCR						
58	Alwar	Rugs	Training and Design Center for Rugs	100	20	1000
59	Bassod Alwar	Footwear leather	Resource and Training Centre for Leather Footwear	100	20	1000
60	Golaka bas, Alwar	Idol making	Design and Training Centre for Idol Making	100	20	1000
61	Ramgarh, Alwar	Pottery and Terra Cotta	Modern Common Facility Centre for Terracotta	100	20	1000
	TOTAL			**46320**	**36600**	**424800**

ANNEXURE I: NOTE ON MEWAT DISTRICT, HARYANA

1.1 Background

The Comparative data for Mewat district is not available as district came into existence only in 2005. The following note will provide basic information on Mewat District

The Mewat district was carved out from erstwhile Gurgaon and Faridabad districts, which came into existence on 4th April, 2005 as the 20th district of the Haryana state. The newly constituted district comprises of three sub-divisions namely, Nuh, Ferozpur Zhirka and Hathin. The district headquarter is located at Nuh. The district comprises of six blocks namely, Nuh, Tauru, Nagina, F.P. Zhirka, Punhana and Hathin. There are 532 villages in the district. Out of which 27 villages are either un-inhabited or are under the jurisdiction of municipal committees.

The district of Mewat is one of the most backward regions of the state. The district is predominantly rural (95%) in its demography with a spread of over 1874 sq. kilometers. It lies between 26 degree and 30 degree North latitude and 76 degree and 78 degree East longitude, covering a portion of Indo-Gangetic plain to the west of Yamuna River and south-west of NCT of Delhi in the southern part of Haryana and North-Eastern part of Rajasthan. The district falls under sub tropical semi arid zone II of agro climatic zones of Haryana. Mewat district lags behind the rest of Haryana on almost every yardstick of development. The overall literacy percentage of the district is 44 percent with female literacy of only 24 percent. The economy is pre-dominantly agriculture based with about 70% irrigated area (about 30-35% of the area is economically irrigable out of which only 10-15% is irrigated with good quality water. The productivity of field crops, vegetable crops and animals in general is comparatively and considerably low on account of prevailing resource base and its utilization, educational, social and economic conditions of people, lack of awareness and adoption of improved farm practices, reach and sensitization of staff of different government departments and other agencies to the local needs and social environment.

1.2 Occupation

The main occupation of the people of Mewat district is agriculture, allied and agro-based activities. The agriculture in Mewat is mostly rain-fed except in small pockets where canal irrigation is available. Agriculture production measured in terms of crop yield per hectare in Mewat is comparatively low to the other districts of the state. Animal husbandry, particularly dairy is the secondary source of income of people of Mewat and those who live close to the hilly ranges of Aravali also keep a few sheep and goat. Poultry and fish farming will have a significant contribution in the economy of the district.

1.3 Infrastructure

Though the district is in NCR (National Capital Region) and just 50 km from Delhi airport, it has remained undeveloped. The industrial estates created by Haryana State Industrial Development Corporation remained underutilized. However, due to expansion of building activities in nearby Gurgaon, the land prices in Mewat have gone up considerably and the land is being bought by investors and developers. This has created sudden wealth with persons who have sold or are selling their agricultural land.

The planned Rewari-Bhiwadi-Palwal railway line will pass through Mewat and near its district headquarter town, Nuh, if and when it is constructed. The Gurgaon-Sohna-Nuh-Alwar road is planned to be widened to six or eight lanes and made a national highway. Another six-lane Kundli-Manesar-Palwal expressway has been constructed by NHAI through Mewat that bypasses Delhi while coming from just north of Delhi by NH 1 and emerges at Palwal on NH 2.

The district has neither good transport facilities nor any railway link. The district has only one state highway that is Gurgaon – Alwar road.

1.4 Marketing

There is intra and inter connection of all the villages by pucca roads, with all towns and cities in the district. The district has 6 regulated markets and sub-yards for marketing the product of the farmers. The vicinity to Delhi (around) 70 km from the district headquarter) offers vast potential for marketing of high value crops

1.5 Rural development and Informal sector

Agro-climatic conditions prevailing in the district may be suitably used for the cultivation of fruit trees like ber, guava, aonla, and citrus fruits etc. With National Horticulture Mission (NHM) under progress and financial and technical help available from the NHB, State government and other institutions, there is great potential for raising under all horticultural crops especially vegetable crops, floriculture, mushroom and bee keeping. The marketing, cold storage, post harvest and processing facilities need to be strengthened in the district which may provide additional opportunities for expansion of this sector through extended market reach, value addition and post harvest management.

The mushroom cultivation is a promising enterprise having market potential with income and employment generation at a comparatively higher scale. This vocation needs to be introduced and popularized in the district Mewat.

Poultry farming has established itself as one of the important independent commercial activity in the district. Climate, infrastructural facilities, easy finance and availability of ready market contributed favorably towards development of this activity.

Within the overall decreasing share of agriculture in gross domestic product, the share of allied activities is on the rise. With increasing pace of urbanization and changing diet patters, this trend is likely to continue at a much faster pace**.**

Table I: Per Capita Income of Mewat at Constant Price (1999-00) in Rupees[84]

Year/ District	2005-06	2006-07	2007-08	CAGR	2011	2016	2021	2026	2031	2036	2041
Mewat	14728	15156	16150	0.01	16718	17710	18760	19872	21051	22299	23621

Table II: GDP, (In Million) at Constant (1999-00) prices[85]

[84] Source: ACDS estimates
[85] Source: ACDS estimates

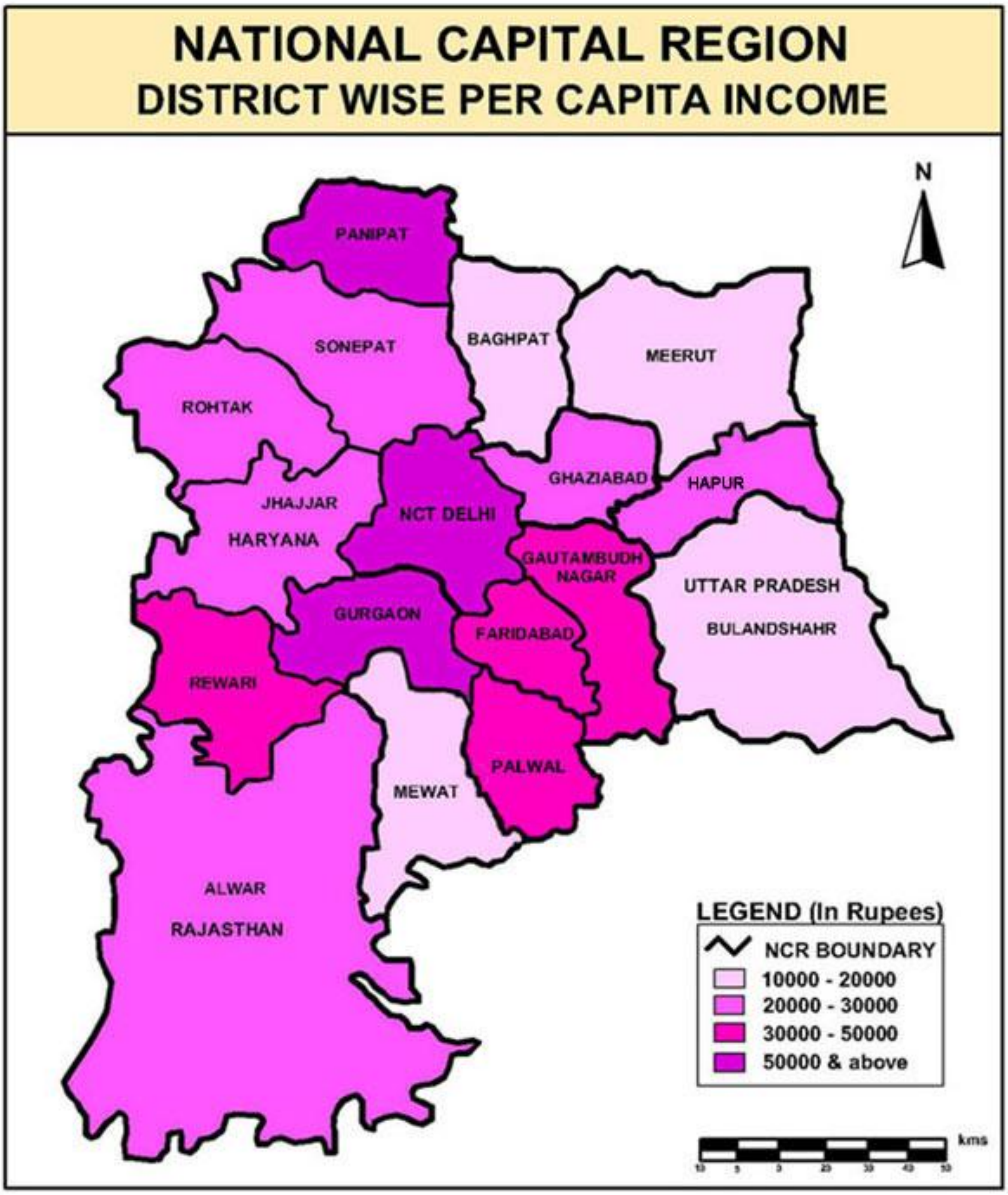
Year/ District	2005-06	2006-07	2007-08	CAGR	2011	2016	2021	2026	2031	2036	2041
Mewat	17475	18308	19887	0.050	22124	28237	36038	45995	58702	74921	95620

Table III: GDP of Mewat at Constant price (1999-00) till 2031[86]

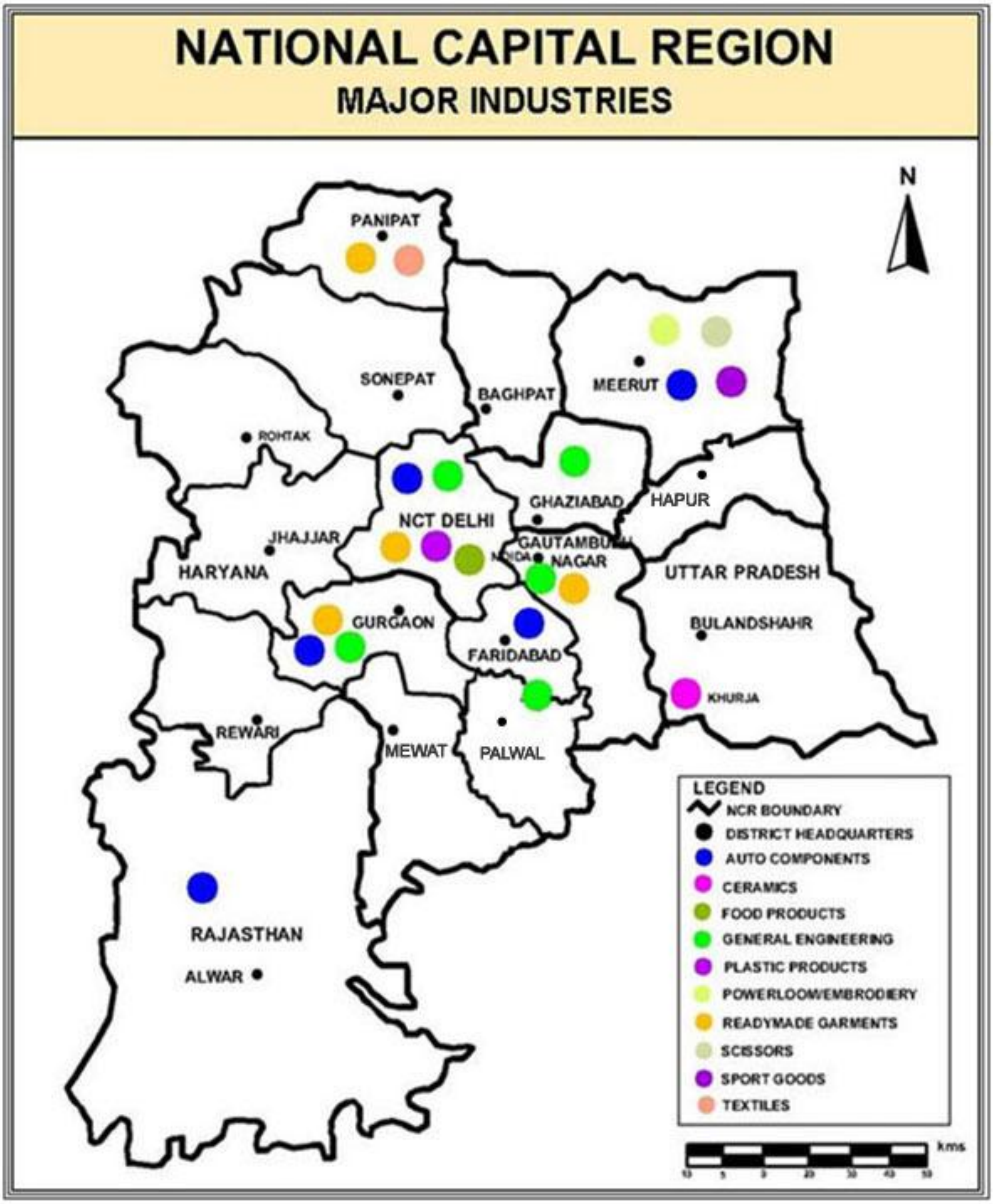
Main Sectors	Category	Year/ Sectors	2005	CAGR	2010-11	2015-16	2020-21	2025-26	2030-31
Primary Sector	**1**	Agricultural Laborers, Cultivator, and Livestock, Forestry etc.	6131	0.05	7934	10266	13284	17189	22242
	2	Mining and Quarrying	110	0.30	412	1552	5841	21989	82776
Secondary Sector	**3**	Manufacturing, Processing	1467	0.09	2257	3471	5338	8209	12625
	4	Electricity, Gas and Water Supply	650	0.03	754	874	1013	1174	1361
	5	Construction	2842	0.18	6442	14601	33098	75024	170059
Tertiary Sector	**6**	Trade and Commerce	259	0.09	405	634	991	1550	2424
	7	Transport, Storage and Communications	1723	0.16	3610	7565	15851	33213	69592
	8	Financing, Insurance, Real-Estate & Business Services	1738	0.16	3700	7874	16757	35663	75899
	9	Community, Social & Personal Services	2423	0.10	3924	6356	10294	16672	27003
	1 to 9	**Total GDP**	**17344**	**0.04**	**21502**	**26657**	**33048**	**40972**	**50795**

[86] Source: ACDS estimates

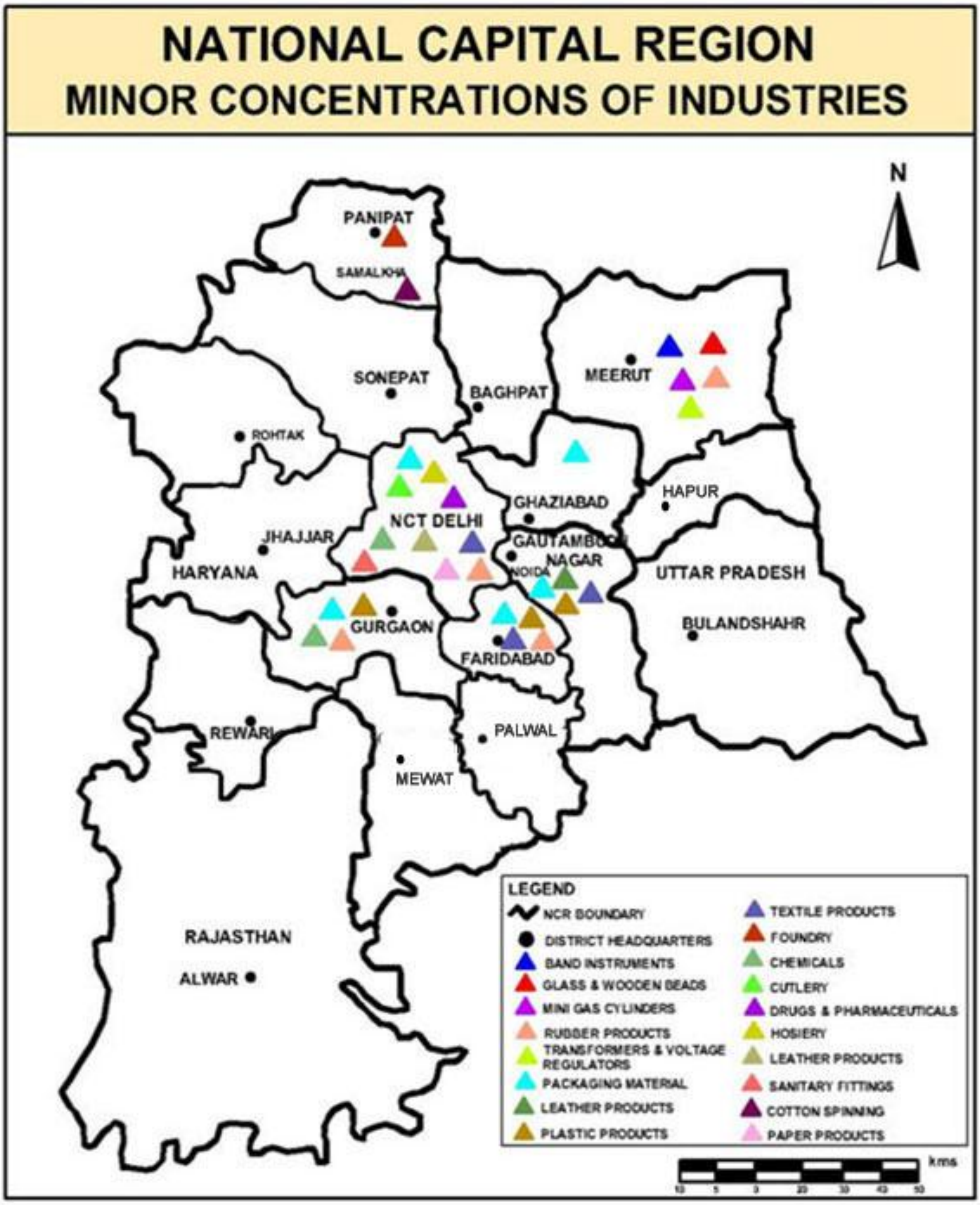
ANNEXURE II: MAPS



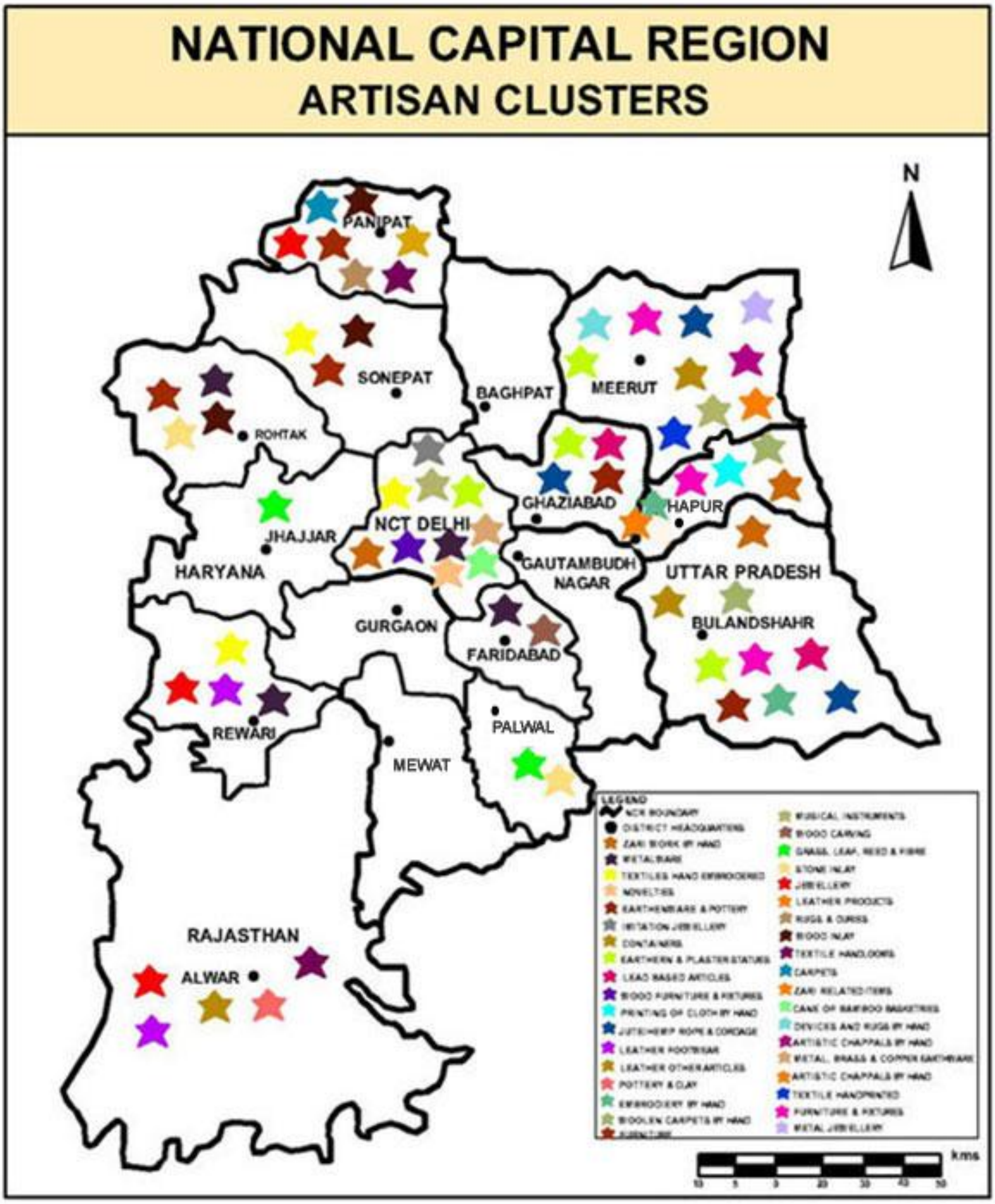
Map 2: District wise Per Capita Income in NCR



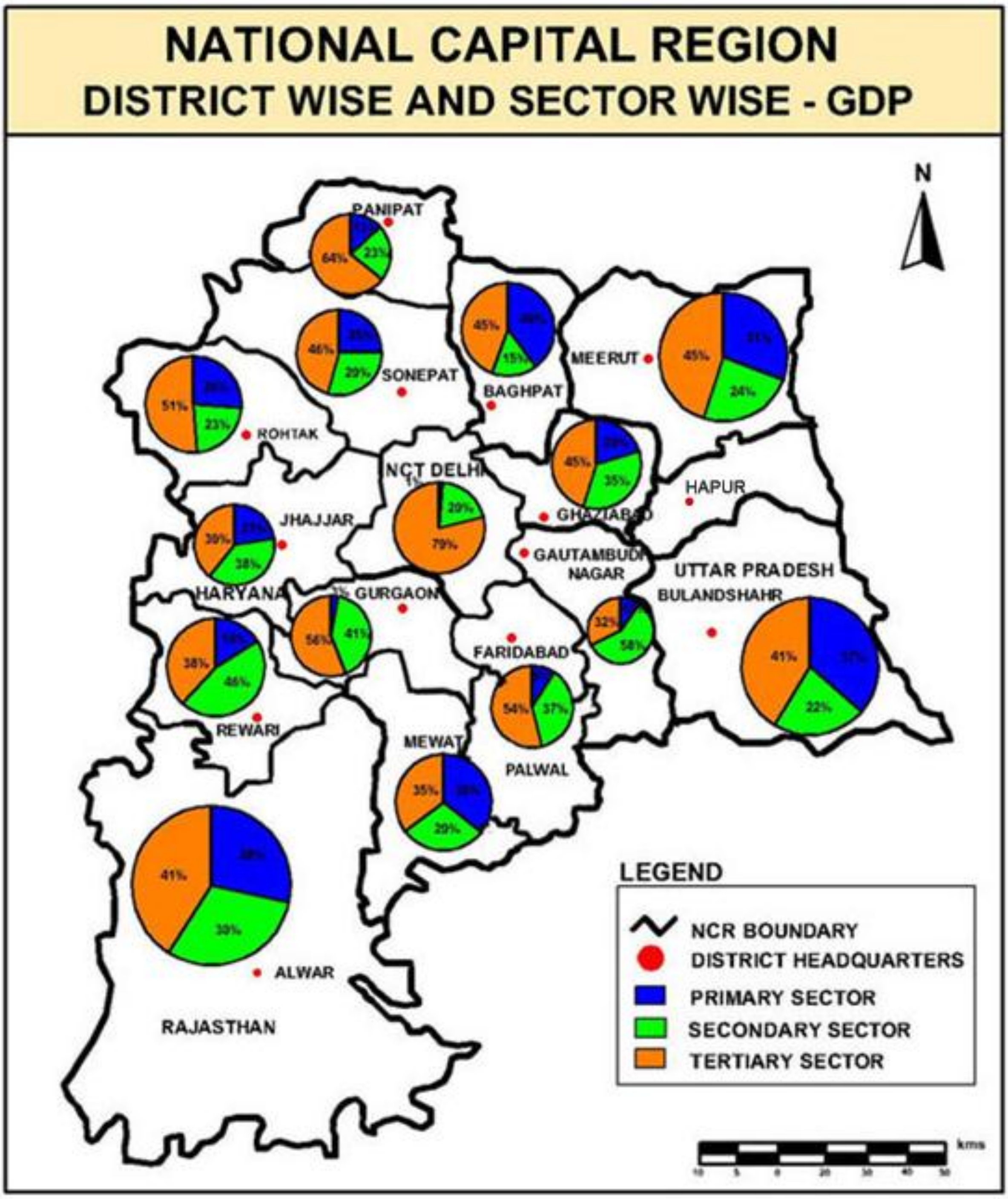
Map 3: District wise Industrial Locations (Major Industries) in NCR



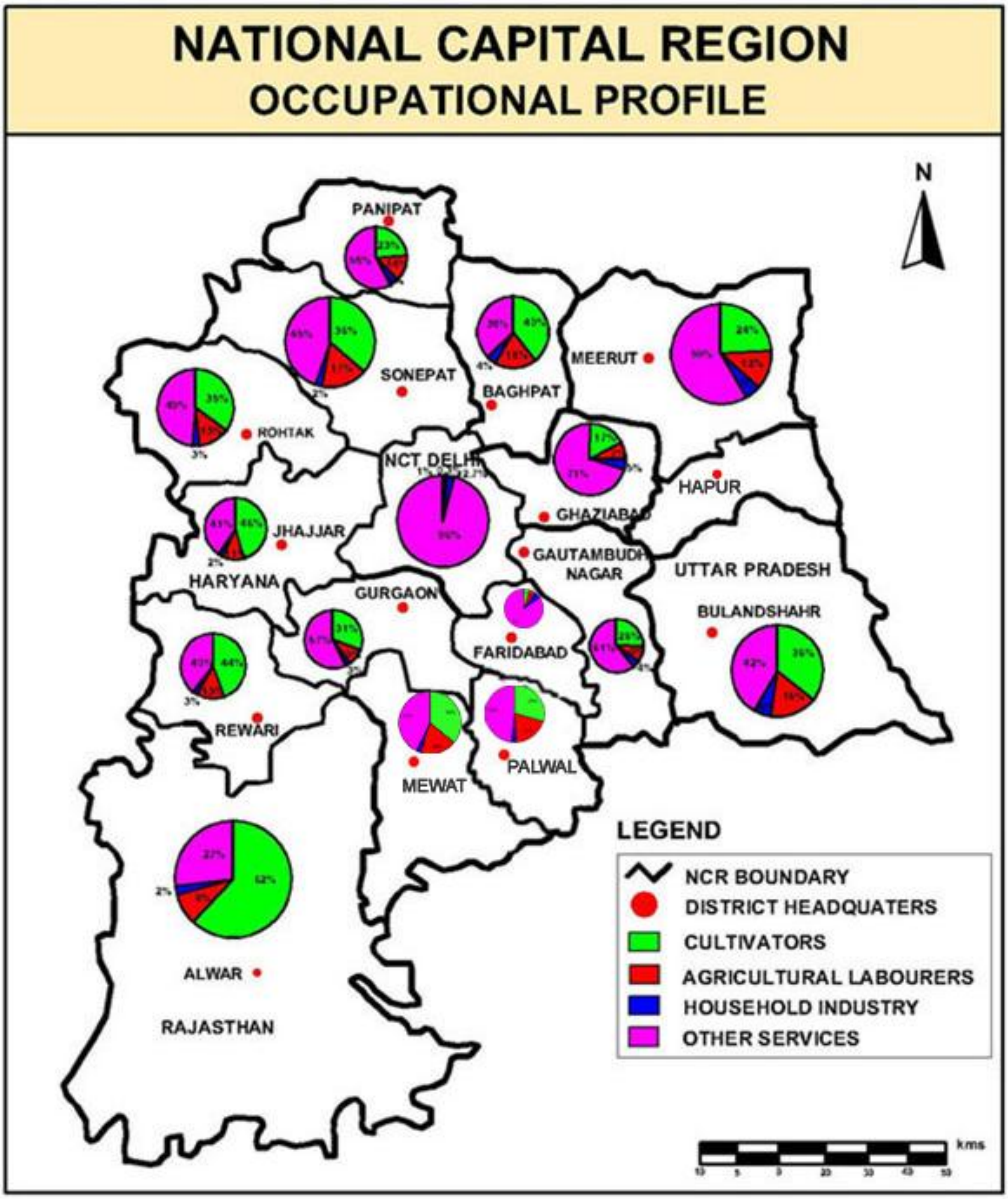
Map 4: District wise Minor Concentration of Industries in NCR



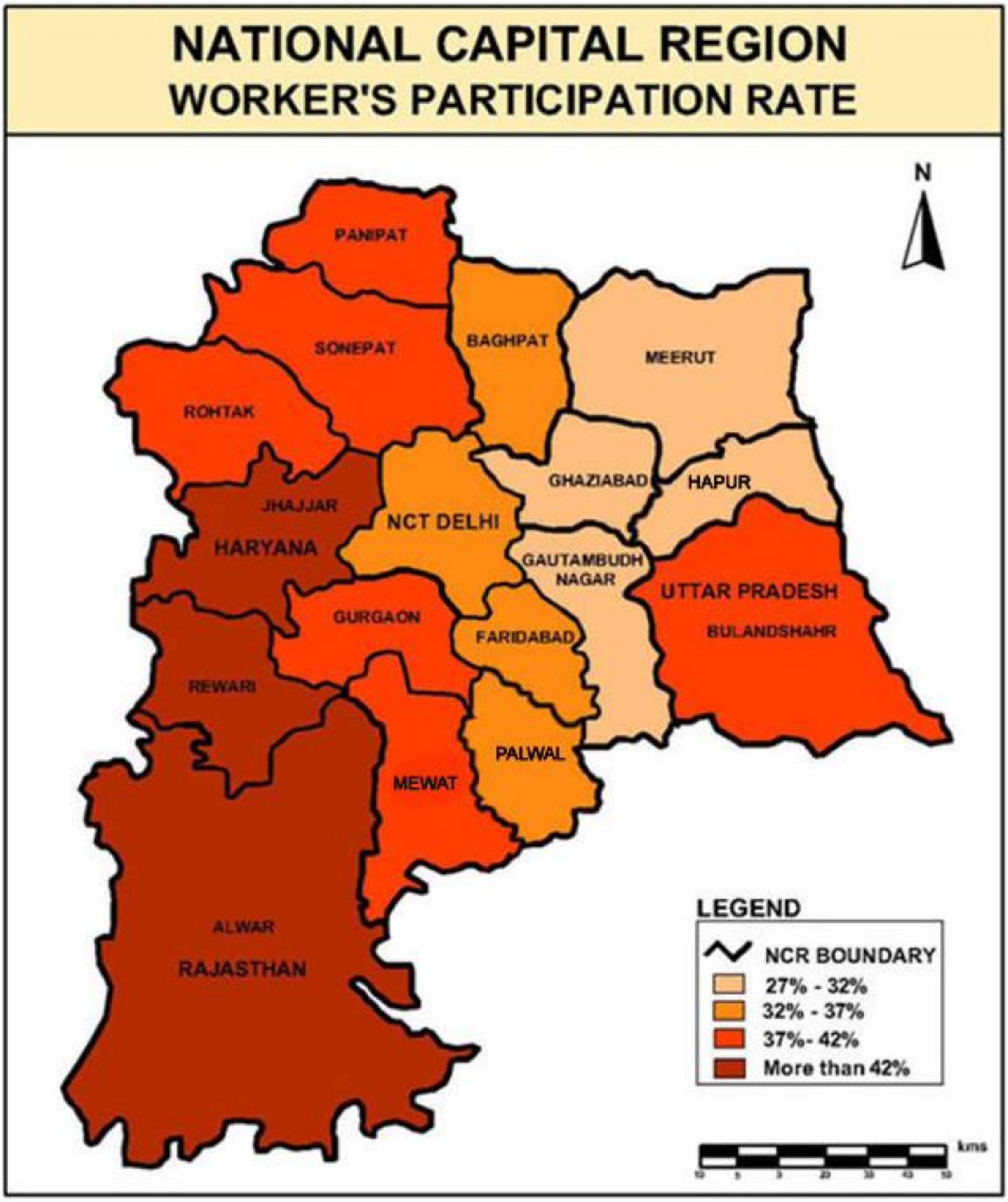
Map 5: District wise Artisan Clusters in NCR



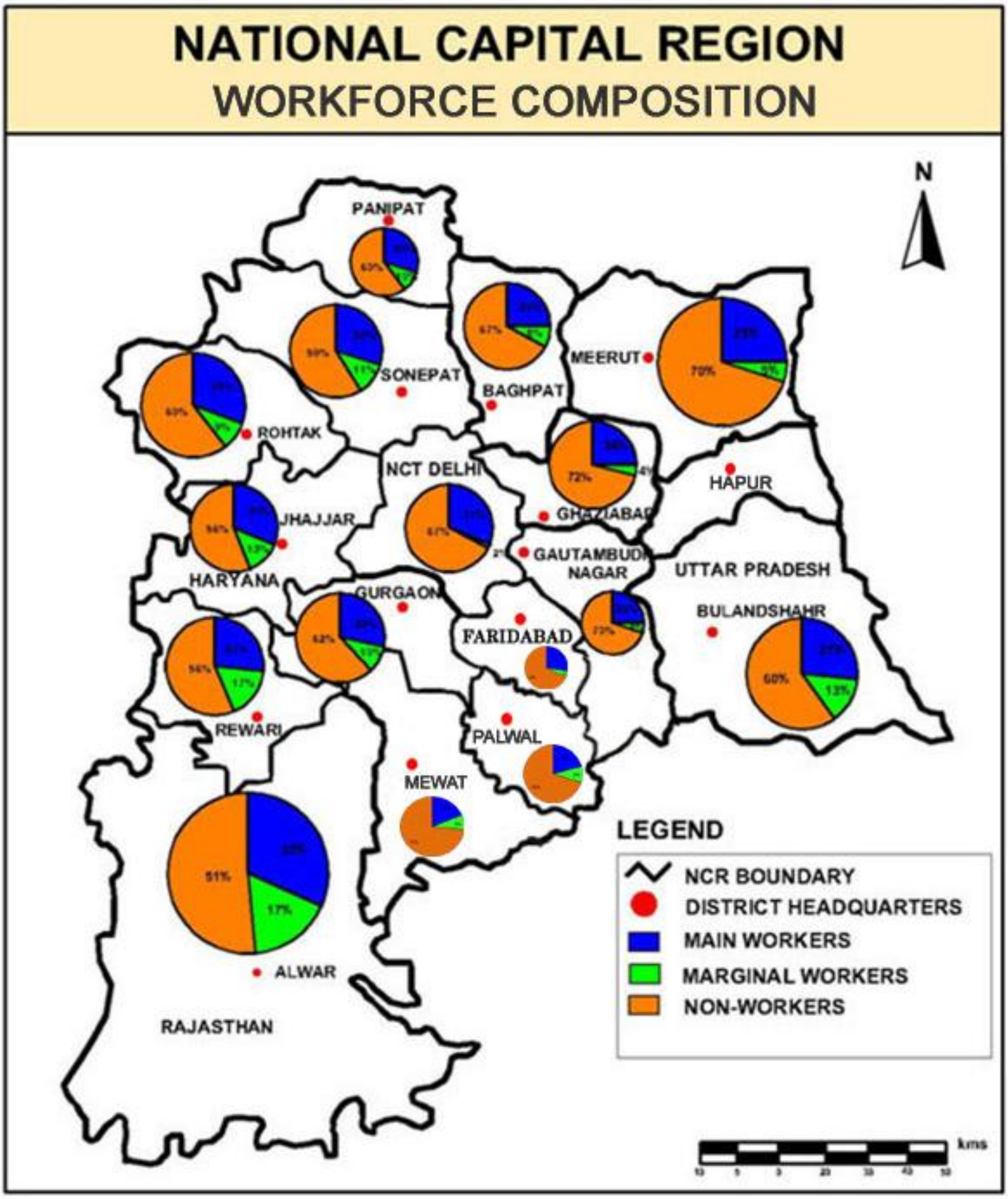
Map 6: District wise and Sector wise GDP in NCR



Map 7: District wise Occupational Profile in NCR



Map 8: District wise Worker's Participation Rate in NCR



Map 9: District wise Workforce Composition in NCR

ANNEXURE III: GDP AND INCOME ANALYSIS

IMPORTANT TABLES

MASTER TABLE 1: GDP of NCR in 1999- 2000 at Constant Prices (Base Year 1999-2000) in Million Rupees

Main Sectors	Category	Sectors/ Districts	Faridabad	Gurgaon	Jhajjar	Panipat	Rewari	Rohtak	Sonepat	Haryana Sub-region	Alwar	Rajasthan Sub-region	Meerut	Baghpat	Ghaziabad	Gautambudh nagar	Bulandshaher	Uttar Pradesh Sub-region	NCT of Delhi	Total NCR
Primary Sector	1	Agricultural Laborers, Cultivator, and Livestock, Forestry etc.	7124	6583	4697	5193	3871	4838	9527	41833	14697	14697	14623	8514	10568	6116	18535	58356	7620	122506
	2	Mining and Quarrying	1211	135	2	11	3	1	53	1416	199	199	192	209	293	163	95	952	20	2587
Secondary Sector	3	Manufacturing, Processing	19455	33919	3212	3849	5786	2553	3929	72703	11613	11613	11768	1221	18660	24023	6069	61741	63000	209057
	4	Electricity, Gas and Water Supply	839	468	148	1251	139	337	492	3674	21172	21172	1400	569	2252	851	1637	6709	6730	38285
	5	Construction	3595	1428	1558	1745	1138	1514	1917	12895	3050	3050	3450	606	3827	748	2106	10737	31080	57762
Tertiary Sector	6	Trade and Commerce	13902	15173	905	9767	3179	1374	2635	46935	10542	10542	6266	2762	5739	6891	6003	27661	117490	202628
	7	Transport, Storage and Communications	3559.8	3288	1366	1390	1186	1759	1997	14545.8	1893	1893	2876	906	4420	1358	2352	11912	58480	86831
	8	Financing, Insurance, Real-Estate & Business Services	6389	10123	1484	2050	1424	2187	2350	26007	3645	3645	4696	1544	6347	2474	3384	18445	178080	226177
	9	Community, Social & Personal Services	5124	4233	2462	2061	2395	3245	3042	22562	5524	5524	6392	1999	6731	2455	4403	21980	89720	139786
	1 to 9	Total GDP	61199	75350	15834	27317	19121	17808	25942	242571	72335	72335	51663	18330	58837	45079	44584	218493	552220	1085619

Source: www.planningcommission.gov.in And www.delhiplanning.nic.in

MASTER TABLE 2: GDP of NCR in 2000-01 at Constant Prices (Base Year 1999-2000) in Million Rupees

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.	7634	7227	4463	5208	3943	5353	9865	43693	14378	14378	15337	9366	11452	7008	19489	62652	7620	128343
	2	Mining and Quarrying	1335	205	2	12	3	1	60	1618	155	155	244	290	306	187	162	1189	20	2982
Secondary Sector	3	Manufacturing, Processing	24852	30531	5115	4645	6751	3394	3483	78771	10864	10864	10370	1114	18264	21486	5964	57198	63000	209833
	4	Electricity, Gas and Water Supply	903	484	153	1322	142	349	513	3866	21198	21198	1478	597	2371	892	1727	7065	6730	38859
	5	Construction	3983	3348	1364	1743	1177	1551	1857	15022	2119	2119	3409	599	3588	720	1910	10226	31080	58447
Tertiary Sector	6	Trade and Commerce	16808	18345	1095	11809	3844	1662	3186	56749	10104	10104	6842	2842	7924	7629	6771	32007	117490	216349
	7	Transport, Storage and Communications	4205	3809	1576	1613	1362	1997	2331	16893	2085	2085	3416	1121	5321	1701	2900	14457	58480	91914
	8	Financing, Insurance, Real-Estate & Business Services	7633	14899	1592	2123	1516	2365	2528	32656	3792	3792	5274	1728	7260	2819	3669	20750	178080	235278
	9	Community, Social & Personal Services	5232	4134	2329	1965	2032	3368	3431	22490	5703	5703	6855	1964	7459	3250	3820	23349	89720	141262
	1 to 9	Total GDP	72585	82982	17689	30438	20770	20039	27255	271757	70397	70397	53224	19620	63945	45692	46412	228893	552220	1123267

Source: www.planningcommission.gov.in And www.delhiplanning.nic.in

MASTER TABLE 3: GDP of NCR in 2001-02 at Constant Prices (Base Year 1999-2000) in Million Rupees

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.	8124	7060	4560	4877	3890	5643	10559	44712	15661	15661	15640	8549	10925	5962	20185	61261	7620	129254
	2	Mining and Quarrying	1701	222	5	26	3	1	87	2045	143	143	172	163	166	158	69	727	60	2975
Secondary Sector	3	Manufacturing, Processing	27671	32106	4393	3860	9603	3117	5157	85907	8919	8919	8994	1345	17369	22804	6156	56669	60060	211554
	4	Electricity, Gas and Water Supply	1373	761	441	468	124	231	340	3738	1904	1904	1498	596	2393	896	1735	7119	7810	20570
	5	Construction	4190	2825	1596	2577	1306	2002	2440	16934	3178	3178	3951	637	3490	829	2027	10935	40000	71046
Tertiary Sector	6	Trade and Commerce	18836	20559	1227	13234	4308	1862	3571	63597	9274	9274	6817	2764	7822	7949	7258	32610	131480	236960
	7	Transport, Storage and Communications	4892	4318	1891	1856	1576	2305	2667	19505	2333	2333	3568	1173	5566	1785	2985	15076	66990	103904
	8	Financing, Insurance, Real-Estate & Business Services	8912	19752	1686	2270	1590	2565	2704	39480	4039	4039	5614	1819	7773	2999	3832	22036	191780	257335
	9	Community, Social & Personal Services	5521	4364	2564	2129	2127	3602	3677	23983	5761	5761	6632	2191	7372	3392	3974	23561	92520	145826
	1 to 9	Total GDP	81219	91968	18362	31297	24526	21327	31201	299900	51212	51212	52887	19236	62876	46773	48221	229993	598320	1179425

Source: www.planningcommission.gov.in And www.delhiplanning.nic.in

MASTER TABLE 4: GDP of NCR in 2002-03 at Constant Prices (Base Year 1999-2000) in Million Rupees																				
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.	7255	7001	4622	5346	2990	5289	10514	43017	11918	11918	15854	8873	11715	5601	21400	63442	7490	125867
	2	Mining and Quarrying	509	554	5	23	70	1	91	1254	149	149	172	222	273	117	178	962	60	2425
Secondary Sector	3	Manufacturing, Processing	22983	34707	3174	7343	11857	4168	5659	89890	10342	10342	8380	1447	16568	22153	8372	56918	67790	224941
	4	Electricity, Gas and Water Supply	1039	553	173	1530	163	400	647	4504	2418	2418	1497	617	2409	906	1732	7161	8170	22253
	5	Construction	4612	3302	1998	2471	1456	2222	2846	18906	3434	3434	3237	647	4451	855	2019	11208	48270	81818
Tertiary Sector	6	Trade and Commerce	4612	3302	1998	2471	1456	2222	2846	18906	3434	3434	3237	647	4451	855	2019	11208	48270	81818
	7	Transport, Storage and Communications	5616	4919	2158	2086	1792	2636	3051	22258	2567	2567	3953	1234	6029	1930	3245	16392	73400	114617
	8	Financing, Insurance, Real-Estate & Business Services	10819	24755	1806	2478	1702	2772	2957	47288	4339	4339	6100	1978	8456	3251	4082	23868	204850	280345
	9	Community, Social & Personal Services	5794	4628	2622	2230	2194	3763	3828	25058	5750	5750	6996	2422	7407	3509	4101	24434	94480	149722
	1 to 9	Total GDP	63239	83721	18554	25977	23680	23471	32438	271080	44351	44351	49425	18086	61758	39177	47149	215594	552780	1083805
Source: www.planningcommission.gov.in And www.delhiplanning.nic.in																				

MASTER TABLE 5: GDP of NCR in 2003-04 at Constant Prices (Base Year 1999-2000) in Million Rupees

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.	7431	7316	4596	5561	3242	5748	11240	45134	20106	20106	17486	9168	12179	5809	20539	65182	7560	137982
	2	Mining and Quarrying	1280	1	3	22	11	1	57	1374	132	132	162	210	283	113	164	933	120	2559
Secondary Sector	3	Manufacturing, Processing	23499	45595	5503	5605	10350	2596	5678	98825	10688	10688	9338	1629	16741	24487	6305	58500	63260	231273
	4	Electricity, Gas and Water Supply	1142	586	185	1693	172	425	691	4895	2613	2613	1617	655	2679	978	1872	7801	8730	24039
	5	Construction	5234	4063	2117	3101	1708	2500	3095	21818	4292	4292	3910	743	4728	1026	2331	12738	52460	91308
Tertiary Sector	6	Trade and Commerce	21659	23640	1411	15217	4953	2141	4106	73126	10722	10722	7248	2956	7843	8167	7254	33467	145280	262594
	7	Transport, Storage and Communications	6616	5756	2519	2428	2066	3048	3567	26001	2947	2947	4350	1397	6688	2172	3691	18297	84630	131875
	8	Financing, Insurance, Real-Estate & Business Services	11618	30370	1897	2573	1762	2946	3116	54284	4467	4467	6253	1997	8860	3407	4135	24651	220980	304382
	9	Community, Social & Personal Services	6206	4908	2727	2397	2363	3889	4052	26542	6093	6093	7409	2571	7798	3687	4443	25908	97060	155603
	1 to 9	**Total GDP**	**84686**	**122235**	**20958**	**38595**	**26627**	**23296**	**35603**	**351999**	**62059**	**62059**	**57773**	**21326**	**67798**	**49845**	**50734**	**247476**	**680080**	**1341615**

Source: www.planningcommission.gov.in And www.delhiplanning.nic.in

MASTER TABLE 6: GDP of NCR in 2004-05 at Constant Prices (Base Year 1999-2000) in Million Rupees

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.	9131	8457	5231	6361	4577	5944	10082	49782	16645	16645	17687	9702	13234	6029	22341	68993	7620	143039
	2	Mining and Quarrying	1189	1	3	69	10	1	100	1372	219	219	202	262	345	162	217	1187	60	2839
Secondary Sector	3	Manufacturing, Processing	25618	49839	5990	6055	11291	2797	6163	107753	13349	13349	8232	1643	18314	32486	6660	67335	70660	259097
	4	Electricity, Gas and Water Supply	1210	627	198	1787	185	456	733	5196	2450	2450	1664	678	2737	1012	1939	8030	9900	25575
	5	Construction	6734	4300	2433	4946	1995	2983	3686	27077	5663	5663	4402	800	6035	1110	2504	14851	69560	117151
Tertiary Sector	6	Trade and Commerce	24398	26629	1589	17141	5580	2412	4625	82374	12696	12696	6988	3062	8509	10394	7863	36815	153840	285725
	7	Transport, Storage and Communications	7497	6582	2783	2734	2330	3502	4077	29506	3832	3832	4773	1547	7353	2404	4098	20175	96490	150003
	8	Financing, Insurance, Real-Estate & Business Services	12743	35789	2010	2687	1859	3154	3472	61715	3295	3295	6664	2119	9611	3701	4328	26423	241880	333312
	9	Community, Social & Personal Services	6538	5298	2937	2527	2418	4092	4259	28069	6505	6505	8023	2657	8080	3205	5300	27265	109810	171649
	1 to 9	**Total GDP**	**95057**	**137522**	**23173**	**44307**	**30245**	**25340**	**37197**	**392843**	**64654**	**64654**	**58635**	**22469**	**74217**	**60503**	**55250**	**271073**	**759820**	**1488390**

Source: www.planningcommission.gov.in And www.delhiplanning.nic.in

MASTER TABLE 7: GDP of NCR in 2005-06 at Constant Prices (Base Year 1999-2000) in Million Rupees																					
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.	6998	4266	6039	6131	6928	5326	6663	9931	52281	17747	17747	19651	8462	15536	6286	18902	68837	7410	146274
	2	Mining and Quarrying	2309	1	1	110	53	13	1	104	2591	193	193	245	337	431	173	245	1431	0	4215
Secondary Sector	3	Manufacturing, Processing	27725	53460	6551	1467	6603	12363	1949	6733	116851	12069	12069	8820	1734	19932	36005	7018	73509	77020	279449
	4	Electricity, Gas and Water Supply	1586	851	623	650	653	176	316	545	5399	2332	2332	1688	687	2713	1026	1967	8080	10200	26011
	5	Construction	7233	4902	2917	2842	4924	2690	3580	4443	33531	4689	4689	4821	896	5676	1212	2692	15297	806	54323
Tertiary Sector	6	Trade and Commerce	23930	31503	2028	259	25712	5488	1742	5398	96059	12086	12086	7789	2833	9602	11342	7009	38575	186870	333590
	7	Transport, Storage and Communications	8479	5334	3213	1723	3001	2572	3836	4546	32702	3323	3323	5207	1773	8102	2681	4545	22307	102620	160952
	8	Financing, Insurance, Real-Estate & Business Services	15429	39864	2154	1738	2854	1985	3412	3795	71230	4612	4612	7099	2249	10439	4033	4530	28349	264690	368881
	9	Community, Social & Personal Services	6532	3762	2996	2423	2769	2709	3997	4569	29757	5970	5970	8459	2818	8578	3326	5620	28801	114350	178878
	1 to 9	**Total GDP**	**100221**	**143943**	**26522**	**17344**	**53495**	**33320**	**25495**	**40064**	**440402**	**63018**	**63018**	**63778**	**21790**	**81010**	**66082**	**52526**	**285186**	**763966**	**1552572**
Source: www.planningcommission.gov.in And www.delhiplanning.nic.in																					

MASTER TABLE 8: GDP of NCR in 2006-07at Constant Prices (Base Year 1999-2000) in Million Rupees

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.	6977	3967	6297	7270	5617	7028	10000	46912	20535	20535	20274	10031	15673	6277	21051	73306	7410	148163
	2	Mining and Quarrying	2572	1	1	68	16	1	116	2726	280	280	290	383	525	216	293	1707	0	4713
Secondary Sector	3	Manufacturing, Processing	29414	57680	7380	7226	14034	1863	7367	124636	13475	13475	10886	2393	20135	35737	9213	78364	82700	299175
	4	Electricity, Gas and Water Supply	1763	940	792	586	183	313	555	4957	2159	2159	1908	778	3087	1162	2213	9149	10700	26965
	5	Construction	8129	6023	3239	5855	3105	4134	5113	35471	6287	6287	6763	1261	8081	1736	3952	21793	86160	149711
Tertiary Sector	6	Trade and Commerce	26202	35591	2320	30223	6012	1812	6085	107923	13910	13910	8444	3437	9761	11314	8220	41175	210670	373678
	7	Transport, Storage and Communications	9801	5782	3706	3412	2926	4369	5215	35147	5316	5316	5637	1932	8958	2965	4812	24305	137200	201968
	8	Financing, Insurance, Real-Estate & Business Services	17877	50117	2292	3016	2098	3674	4111	81887	5555	5555	7521	2394	10991	4264	4830	30001	320470	437913
	9	Community, Social & Personal Services	6802	3689	3096	2909	2765	4139	4890	28225	6759	6759	8607	2895	9170	3684	5985	30342	115550	180875
	1 to 9	**Total GDP**	**108826**	**160374**	**28907**	**59849**	**36558**	**27069**	**43080**	**464238**	**74276**	**74276**	**70330**	**25504**	**86381**	**67356**	**60571**	**310142**	**970860**	**1819516**

Source: www.planningcommission.gov.in And www.delhiplanning.nic.in

MASTER TABLE 9: GDP of NCR in 2007-08 at Constant Prices (Base Year 1999-2000) in Million Rupees

Main Sectors	Category	Sectors/ Districts	Faridabad	Gurgaon	Jhajjar	Panipat	Rewari	Rohtak	Sonepat	Haryana Sub-region	Alwar*	Rajasthan Sub-region	Meerut	Bagpat	Ghaziabad	Gautambudh nagar	Bulandshahr	Uttar Pradesh Sub-region	NCT of Delhi	Total NCR
Primary Sector	1	Agricultural Laborers, Cultivator, and Livestock, Forestry etc.	6956	3690	6567	7628	5924	7414	10070	47688	20011	20011	20015	9999	16060	6602	21584	74260	7130	149089
	2	Mining and Quarrying	2865	0	1	88	21	1	130	2993	971	971	254	342	481	183	183	1443	0	5408
Secondary Sector	3	Manufacturing, Processing	31207	62234	8312	7907	15931	1781	8060	134630	19446	19446	11563	2242	21063	36595	9334	80798	87960	322834
	4	Electricity, Gas and Water Supply	1961	1039	1007	525	190	310	564	5174	3566	3566	2246	910	3598	1357	2551	10663	12440	31843
	5	Construction	9136	7401	3597	6963	3585	4773	5883	40997	8127	8127	9969	1661	11656	2452	5507	31244	87480	167849
Tertiary Sector	6	Trade and Commerce	28689	40209	2655	35525	6586	1885	6859	121580	18009	18009	8373	3310	9891	11410	8181	41164	225290	406043
	7	Transport, Storage and Communications	11330	6269	4275	3880	3330	4976	5983	39877	4590	4590	6518	2232	10284	3453	5639	28126	186150	258743
	8	Financing, Insurance, Real-Estate & Business Services	20713	63008	2439	3188	2218	3958	4454	96494	9007	9007	8991	2934	13381	5198	5545	36049	365180	506730
	9	Community, Social & Personal Services	7084	3617	3199	3056	2823	4285	5234	29144	9841	9841	8347	2755	9650	3964	5802	30518	12037	81540
	1 to 9	**Total GDP**	**118169**	**178681**	**31508**	**66958**	**40111**	**28741**	**46323**	**509427**	**93568**	**93568**	**76274**	**26387**	**96063**	**71216**	**64326**	**334266**	**983667**	**1920928**

Source: www.planningcommission.gov.in And www.delhiplanning.nic.in *Base year 2004-05

MASTER TABLE 10: Calculation of CAGR of GDP from 2004-05 to 2009-10 at Constant 2004-05 Prices and projection of GDP for 2011, 2016, 2021, 2026, 2031

	Actual GDP based on 2004-05 constant prices							Projected GDP for the years from CAGR				
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)		2011 GDP in Millions)	GDP (In ₹ Millions)	GDP (In ₹ Millions)	GDP (In ₹ Millions)	GDP (In₹ Million)
Meerut	71760.6	81598.94	85739.16	91741.39	93859.36	101254.56	7.13	108473	153055	215962	304723	429966
Bagpat	29072.7	28550.69	30675.61	32878.24	34721.48	38426.16	5.74	40631	53703	70980	93817	124000
Gaziabad+Hapur	89271.38	97684.35	116072.75	124785.67	131283.88	136475.9	8.86	148568	227127	347226	530830	811521
Gautambudh nagar	73533.04	75276.19	117301.88	126289.94	131113.97	141557.06	14.00	161369	310649	598025	1151247	2216243
Bulandshahr	68799.56	66288.34	74341.09	78724.65	83337.35	88739.5	5.22	93373	120436	155341	200363	258433
Total of Uttar Pradesh Sub-Region	**332437.28**	**349398.51**	**424130.49**	**454419.89**	**474316.04**	**506453.18**	**8.78**	550941	839334	1278687	1948022	2967724
Delhi	1003245.2	1104060.7	1240795.8	1379608.6	1557910.9	1698389.8	11.10	1886963	3194432	5407842	9154914	15498318
Total of Delhi Region	**1003245.2**	**1104060.7**	**1240795.8**	**1379608.6**	**1557910.9**	**1698389.8**	**11.10**	1886963	3194432	5407842	9154914	15498318
Alwar	77420.3	77425.7	90451.3	93576.1	110109.8	121901	9.50	133487	210179	330935	521069	820441
Total of Rajasthan Sub- Region	**77420.3**	**77425.7**	**90451.3**	**93576.1**	**110109.8**	**121901**	**9.50**	133487	210179	330935	521069	820441
Faridabad	111351.3	121775.9	136362.8	151289.1	162483.8	190014.6	11.28	211449	360825	615728	1050704	1792966
Gurgaon	166984.4	180864	202167	227493.5	242417.8	269905.5	10.08	297111	480236	776230	1254661	2027973
Jhajjar	28356.3	30757.1	34252.7	36861.3	40157	44947.9	9.65	49286	78123	123834	196291	311144
Panipat	65641	72170.5	79052.8	88334.2	100821.3	99297.5	8.63	107868	163175	246841	373405	564863
Rewari	43623.8	47154.9	51646.3	56206.5	60465.4	65930.6	8.61	71608	108224	163564	247201	373606
Rohtak	32447.2	34565.7	37592.9	40120.7	41930.8	47052.3	7.72	50683	73496	106578	154551	224118
Sonipat	48414.2	52734.5	58439.5	62897.9	68729.4	77067.6	9.74	84577	134633	214314	341153	543060
Mewat	**NA**	20637.4	21933.9	23362.9	27919.4	29967.8	9.77	32897	52439	83590	133246	212400
Palwal						42546.5	NA	NA	NA	NA	NA	NA
Total of Haryana Sub-region	**496818.2**	**560660**	**621447.9**	**686566.1**	**744924.9**	**866730.3**	**11.77**	968771	1690082	2948453	5143760	8973610
Grand Total/ NCR	**1909920.98**	**2091544.91**	**2376825.49**	**2614170.69**	**2887261.64**	**3193474.28**	**10.83**	3539265	5917810	9894847	16544631	27663372

Source: Planning Commision, updes.nic.in, Dept. of Economics and Statistics of Haryana & Delhi ; and ACDS estimates.

Master Table 11: Gross Domestic Product from 2004-05 to 2009-10 based on Constant 2004-05 Prices of NCR						
Regions	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**
	GDP (In Rs Millions)	**GDP (In Rs` Millions)**	**GDP (In Rs Millions)**	**GDP (In Rs Millions)**	**GDP (In RS Millions)**	**GDP (In Rs Millions)**
Meerut	71760.6	81598.94	85739.16	91741.39	93859.36	101254.56
Bagpat	29072.7	28550.69	30675.61	32878.24	34721.48	38426.16
Gaziabad+Hapur	89271.38	97684.35	116072.75	124785.67	131283.88	136475.9
Gautambudh nagar	73533.04	75276.19	117301.88	126289.94	131113.97	141557.06
Bulandshahr	68799.56	66288.34	74341.09	78724.65	83337.35	88739.5
Total of Uttar Pradesh Sub-region	**332437.28**	**349398.51**	**424130.49**	**454419.89**	**474316.04**	**506453.18**
Delhi	1003245.2	1104060.7	1240795.8	1379608.6	1557910.9	1698389.8
Total of Delhi Region	**1003245.2**	**1104060.7**	**1240795.8**	**1379608.6**	**1557910.9**	**1698389.8**
Alwar	77420.3	77425.7	90451.3	93576.1	110109.8	121901
Total of Rajasthan Sub-Region	**77420.3**	**77425.7**	**90451.3**	**93576.1**	**110109.8**	**121901**
Faridabad	111351.3	121775.9	136362.8	151289.1	162483.8	190014.6
Gurgaon	166984.4	180864	202167	227493.5	242417.8	269905.5
Jhajjar	28356.3	30757.1	34252.7	36861.3	40157	44947.9
Panipat	65641	72170.5	79052.8	88334.2	100821.3	99297.5
Rewari	43623.8	47154.9	51646.3	56206.5	60465.4	65930.6
Rohtak	32447.2	34565.7	37592.9	40120.7	41930.8	47052.3
Sonipat	48414.2	52734.5	58439.5	62897.9	68729.4	77067.6
Mewat	**NA**	20637.4	21933.9	23362.9	27919.4	29967.8
Palwal						42546.5
Total of Haryana Sub-region	**496818.2**	**560660**	**621447.9**	**686566.1**	**744924.9**	**866730.3**
Grand Total/ NCR	**1909920.98**	**2091544.91**	**2376825.49**	**2614170.69**	**2887261.64**	**3193474.28**
Source: Department of Economic and Statistical Analysis, Haryana, Uttar Pradesh, Delhi, Central Statistical Organization,, www.planningcommission.nic.in, Economic Scenario of NCR 2010						

MASTER TABLE 12: 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	7633	7827	7673	7549	7676	7675	7406	7409	7134
Secondary	100817	111293	107871	124232	124448	150117	167832	179558	187879
Tertiary	443751	456926	482769	511748	547950	602028	668532	783890	896995
GDP- NCT of Delhi	**552201**	**576046**	**598313**	**643529**	**680074**	**759820**	**843770**	**970857**	**1092008**
Primary	14896	14535	15804	12066	20237	17939	16865	20815	20984
Secondary	16781	15802	14001	16195	17638	19320	20109	21920	31140
Tertiary	21604	21683	21407	22108	24261	26161	27295	31540	41451
GDP- Rajasthan Sub-Region	**53281**	**52020**	**51212**	**50369**	**62136**	**63420**	**64269**	**74275**	**93575****
Primary*	43255	45323	46756	44270	46508	51154	54872	57096	59410
Secondary*	91077	97664	106578	113300	125539	140025	156879	171792	188123
Tertiary*	93986	128788	146565	163675	179952	201663	235574	274645	320195
GDP- Haryana Sub-region	**228318**	**271775**	**299899**	**321245**	**351999**	**392842**	**447325**	**503532**	**567728**
Primary	59312	63851	61988	64404	66114	70179	70268	75013	75704
Secondary	79195	74492	74721	75287	79039	90215	96886	109306	122705
Tertiary	80017	90562	93284	96885	102323	110678	118032	125823	135858
GDP- UP Sub-region	**218524**	**228905**	**229993**	**236576**	**247476**	**271072**	**285186**	**310142**	**334266**
Primary	**125096**	**131536**	**132221**	**128289**	**140536**	**146947**	**149410**	**160333**	**163231**
Secondary	**287870**	**299251**	**303171**	**329014**	**346619**	**399446**	**443059**	**482576**	**529846**
Tertiary	**639358**	**697959**	**744025**	**794416**	**854454**	**940358**	**1050078**	**1215897**	**1394499**
TOTAL GDP at Constant Prices of NCR	**1052324**	**1128746**	**1179417**	**1251719**	**1341609**	**1486751**	**1642547**	**1858806**	**2087577**
Source: www.planningcommission.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**									

Master Table 13: District wise Per Capita Income of NCR and respective CAGR at Constant 2004-05 Prices from 2004-05 to 2009-10							
District	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**CAGR**
NCT of 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
Gautambudh 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	41590	49408	54359	58882	61787	106896	20.78
Gurgaon	81478	165878	181730	199095	206817	229208	22.98
Jhajjar	26820	28525	31238	32824	35032	38665	7.59
Mewat	NA	17715	17764	18529	21706	27327	NA
Panipat	57436	61273	66607	73095	81678	79047	6.60
Rewari	46259	50036	52634	55463	58120	63075	6.40
Rohtak	28959	29624	32219	33665	34429	38167	5.68
Sonipat	31723	33441	36879	38747	41496	46071	7.75
Palwal						41658	NA
Haryana Sub region	44895	54487	59179	63788	67633	74457	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: updes.up.nic.in, Department of Economic and Statistical Analysis, Haryana; Directorate of Economics and Statistics, Rajasthan							

Master Table 14: GDP of Indian States & 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 Crores Rs.)**		**Rank**	**Country/ State**	**GDP (in Crores Rs.)**
India				**India**		
	India	**10472807**			**India**	**5741791**
States				States		
1	Maharashtra	1476233		1	Maharashtra	897786
2	Uttar Pradesh	890265		2	Uttar Pradesh	465969
3	Andhra Pradesh	854822		3	Andhra Pradesh	457351
4	Tamil Nadu	854238		4	Tamil Nadu	480618
5	West Bengal	700117		5	West Bengal	374899
6	Karnataka	582754		6	Karnataka	314356
7	Rajasthan	513688		7	Rajasthan	244997
8	Madhya Pradesh	450900		8	Madhya Pradesh	238526
9	Delhi	404576		9	Delhi	236156
10	Haryana	383911		10	Haryana	198858
11	Bihar	343054		11	Bihar	174734
12	Punjab	317054		12	Punjab	173221
13	Orissa	288414		13	Orissa	148226
14	Chhattisgarh	185060		14	Chhattisgarh	94560
15	Jharkhand	172773		15	Jharkhand	109408
16	Assam	162652		16	Assam	88537
17	Uttara-khand	122433		17	Uttara-khand	67927
18	Jammu & Kashmir	87319		18	Jammu & Kashmir	45399
19	Himachal Pradesh	82585		19	Himachal Pradesh	47255
20	Chandigarh	29076		20	Chandigarh	15688
21	Puducherry	21061		21	Puducherry	13813
22	Meghalaya	21045		22	Meghalaya	13465
23	Nagaland	17749		23	Nagaland	11367
24	Arunachal Pradesh	13491		24	Arunachal Pradesh	6141
25	Sikkim	12377		25	Sikkim	6152
26	Andaman & Nicobar Islands	6150		26	Andaman & Nicobar Islands	4220
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
Source : For Sl. No. 1-32 -- Directorate of Economics & Statistics of respective State Governments, and for All-India -- Central Statistics Office				Source : For Sl. No. 1-32 -- Directorate of Economics & Statistics of respective State Governments, and for All-India -- Central Statistics Office		

Master Table 15: 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				**India**		
	India	**74380**			**India**	**39904**
States				States		
1	Delhi	219979		1	Delhi	127667
2	Sikkim	176491		2	Puducherry	96222
3	Chandigarh	156951		3	Sikkim	83527
4	Puducherry	148784		4	Chandigarh	82798
5	Haryana	132089		5	Andaman & Nicobar Islands	72716
6	Maharashtra	114392		6	Maharashtra	69584
7	Tamil Nadu	112664		7	Haryana	67317
8	Andaman & Nicobar Islands	107418		8	Tamil Nadu	62361
9	Uttara-khand	103349		9	Uttara-khand	56822
10	Punjab	92638		10	Himachal Pradesh	54494
11	Himachal Pradesh	92300		11	Nagaland	49963
12	Andhra Pradesh	88876		12	Punjab	49411
13	Arunachal Pradesh	84869		13	Andhra Pradesh	46788
14	Karnataka	84709		14	Karnataka	45024
15	Nagaland	77529		15	Arunachal Pradesh	37767
16	West Bengal	69413		16	Meghalaya	37439
17	Rajasthan	65098		17	West Bengal	36527
18	Jammu & Kashmir	58593		18	Jammu & Kashmir	31054
19	Meghalaya	58522		19	Rajasthan	30120
20	Chhattis-garh	58297		20	Jharkhand	28882
21	Orissa	54241		21	Chhattis-garh	28113
22	Madhya Pradesh	54030		22	Madhya Pradesh	27917
23	Assam	46354		23	Orissa	25891
24	Jharkhand	46131		24	Assam	24533
25	Uttar Pradesh	37630		25	Uttar Pradesh	19234
26	Bihar	31229		26	Bihar	15650
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)**	**59264**
Source : For Sl. No. 1-32 -- Directorate of Economics & Statistics of respective State Governments, and for All-India -- Central Statistics Office; Note: Population as per the Provisional figures released by RGI for Census 2011 have been used by the States of Arunachal Pradesh, Himachal Pradesh, Manipur, Meghalaya , Nagaland, Odisha , Delhi and Puducherry				Source : For Sl. No. 1-32 -- Directorate of Economics & Statistics of respective State Governments, and for All-India -- Central Statistics Office; Note: Population as per the Provisional figures released by RGI for Census 2011 have been used by the States of Arunachal Pradesh, Himachal Pradesh, Manipur, Meghalaya , Nagaland, Odisha , Delhi and Puducherry		

ANNEXURE IV: WORKFORCE IN NCR - IMPORTANT TABLES

MASTER TABLE 16: Distribution and Participation Rate of Total Workforce in NCR

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	82175	186403	46513	39924	4476	65918	52788	57172	92582	38370	62321	27201	29113	785762	2194586	35.80
Gurgaon	57928	195768	72640	25719	10868	31668	25199	44611	54460	32733	47504	19397	18070	629658	1660289	37.92
Jhajjar	44844	177377	15765	11027	241	37547	7217	15602	20293	14025	22031	10505	6493	388715	880072	44.17
Panipat	55042	89493	21867	72535	598	22445	12926	21975	39523	13266	17259	9816	10394	382801	967449	39.57
Rewari	44441	148218	21187	11481	858	12622	11837	15437	21410	9703	17297	10018	4939	333622	765351	43.59
Rohtak	45462	143314	14530	13379	295	21377	6158	21724	34225	16835	25553	16602	7981	371073	940128	39.47
Sonipat	87390	189673	30471	19468	689	36666	12188	24694	37958	20508	33983	18987	8621	523031	1279175	40.89
Haryana Sub-region	**417282**	**1130246**	**218955**	**193533**	**18025**	**228243**	**128313**	**201215**	**300451**	**145440**	**225948**	**112526**	**85611**	**3414662**	**8687050**	**39.31**
Baghpat	70220	151325	16827	21571	173	15989	5975	13478	28858	11145	20196	11068	6110	380310	1163991	32.67
Buland Shahar	195852	419885	140583	82754	417	38343	22806	41351	98260	32489	60295	21461	19330	1173805	2913122	40.29
Gautam Budh Nagar	34338	93015	13884	20839	850	17772	16761	21637	37036	16594	59172	12950	16917	363814	1202030	30.27
Ghaziabad	69775	160566	38113	89367	1638	66885	46526	81035	141734	66229	104783	35586	32203	938251	3290586	28.51
Meerut	110440	217120	45821	80514	471	50441	29050	65168	114126	46239	72331	30345	24363	895856	2997361	29.89
Uttar Pradesh Sub-region	**480625**	**1041911**	**255228**	**295045**	**3549**	**189430**	**121118**	**222669**	**420014**	**172696**	**316777**	**111410**	**98923**	**3752036**	**1156709 0**	**32.44**
Alwar	128442	905207	82083	45703	4992	43016	16809	45810	70538	37133	34937	29883	14778	1458686	2992592	48.74
Rajasthan Sub-region	**128442**	**905207**	**82083**	**45703**	**4992**	**43016**	**16809**	**45810**	**70538**	**37133**	**34937**	**29883**	**14778**	**1458686**	**2992592**	**48.74**
Delhi Region	**15773**	**37431**	**37353**	**512571**	**15873**	**419273**	**235541**	**395608**	**1061214**	**480580**	**738180**	**278482**	**341443**	**4346710**	**1385050 7**	**31.38**
Workers in NCR	**1042122**	**3114795**	**593619**	**1046852**	**42439**	**879962**	**501781**	**865302**	**1852217**	**835849**	**1315842**	**532301**	**540755**	**1297209 4**	**3709723 9**	**34.97**

Source: Census India 2001

MASTER TABLE 17: Distribution and Participation Rate of Main Workforce in NCR																	
	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 Workers	Non - Workers	Total Population	Participation Rate of Main Workers
Haryana	Faridabad	164734	25824	33334	3891	59911	49091	44210	84524	35777	58619	25711	24037	609663	1408824	2194586	27.78
	Gurgaon	154526	37961	21173	8952	26230	23658	33868	49280	30132	45582	18298	14984	464644	1030631	1660289	27.99
	Jhajjar	144057	9806	8114	202	28547	6522	11371	18234	13112	21299	9889	5055	276208	491357	880072	31.38
	Panipat	93658	9662	60470	569	13861	11383	18235	35880	12472	15912	9152	7759	289013	584648	967449	29.87
	Rewari	96647	11504	7393	758	8820	11064	11027	19166	9003	16304	9439	3730	204855	431729	765351	26.77
	Rohtak	138743	8752	10607	287	16052	5266	16441	30822	15692	23896	15920	5747	288225	569055	940128	30.66
	Sonipat	179642	20456	16053	687	24274	11276	19254	34711	19327	32488	18348	6933	383449	756144	1279175	29.98
	Haryana Sub-region	972007	123965	157144	15346	177695	118260	154406	272617	135515	214100	106757	68245	2516057	5272388	8687050	28.96
Uttar Pradesh	Baghpat	166204	11349	17275	153	11131	4952	10368	25523	10131	17133	10494	5149	289862	783681	1163991	24.90
	Buland Shahar	407211	62779	47823	380	30124	17062	30616	81039	29197	45536	19713	15228	786708	1739317	2913122	27.01
	Gautam Budh Nagar	104669	10033	17665	810	14035	14054	17908	33954	15208	53155	12410	14983	308884	838216	1202030	25.70
	Ghaziabad	178028	28895	75715	1583	59724	41996	63711	129794	61939	96330	33750	28419	799884	2352335	3290586	24.31
	Meerut	254581	33238	66004	422	43550	24730	50364	105644	42454	66542	28742	20895	737166	855494	2997361	24.59
	Uttar Pradesh Sub-region	1110693	146294	224482	3348	158564	102794	172967	375954	158929	278696	105109	84674	2922504	6569043	11567090	25.27
Rajasthan	Alwar	611306	35375	35632	4299	36437	14843	38311	63738	34581	32487	28494	12084	947587	1533906	2992592	31.66
	Rajasthan Sub-region	611306	35375	35632	4299	36437	14843	38311	63738	34581	32487	28494	12084	947587	1533906	2992592	31.66
Delhi	Total of Delhi Region	32430	34141	469719	15105	400520	224302	342996	1021816	465616	723447	267712	319712	4317516	9305273	13850507	31.17
NCR	Total Workers in NCR	2726436	339775	886977	38098	773216	460199	708680	1734125	794641	1248730	508072	484715	10703664	22680610	37097239	28.85
Source: Census India- 2001																	

MASTER TABLE 18: Distribution and Participation Rate of Marginal Workforce in NCR

	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 Workers	Non - Workers	Total Population	Participation Rate
Haryana	Faridabad	104650	20689	6590	585	6007	3697	12962	8058	2593	3702	1490	5076	176099	1408824	2194586	8.02
	Gurgaon	92263	34679	4546	1916	5438	1541	10743	5180	2601	1922	1099	3086	165014	1030631	1660289	9.94
	Jhajjar	83912	5959	2913	39	9000	695	4231	2059	913	732	616	1438	112507	491357	880072	12.78
	Panipat	46539	12205	12065	29	8584	1543	3740	3643	794	1347	664	2635	93788	584648	967449	9.69
	Rewari	101902	9683	2372	100	3802	773	4410	2244	700	993	579	1209	128767	431729	765351	16.82
	Rohtak	54142	5307	2772	8	5325	892	5283	3403	1143	1657	682	2234	82848	569055	940128	8.81
	Sonipat	99156	10015	3415	2	12392	912	5440	3247	1181	1495	639	1688	139582	756144	1279175	10.91
	Haryana Sub-region	**582564**	**98537**	**34673**	**2679**	**50548**	**10053**	**46809**	**27834**	**9925**	**11848**	**5769**	**17366**	**898605**	**5272388**	**8687050**	**10.34**
Uttar Pradesh	Baghpat	62716	5478	4296	20	4858	1023	3110	3335	1014	3063	574	961	90448	783681	1163991	7.77
	Buland Shahar	208477	77804	34931	65	8219	5744	10735	17221	3292	14759	1748	4102	387097	1739317	2913122	13.29
	Gautam Budh Nagar	24733	3851	3174	40	3737	2707	3729	3082	1386	6017	540	1934	54930	838216	1202030	4.57
	Ghaziabad	56079	9218	13652	100	7161	4530	17324	11940	4290	8453	1836	3784	138367	2352335	3290586	4.20
	Meerut	82406	12583	14510	49	6891	4320	14804	8482	3785	5789	1603	3468	158690	855494	2997361	5.29
	Uttar Pradesh Sub-region	**434411**	**108934**	**70563**	**274**	**30866**	**18324**	**49702**	**44060**	**13767**	**38081**	**6301**	**14249**	**829532**	**6569043**	**11567090**	**7.17**
Rajasthan	Alwar	421698	46708	10071	693	6579	1966	7499	6800	2552	2450	1389	2694	511099	1533906	2992592	17.08
	Rajasthan Sub-region	**421698**	**46708**	**10071**	**693**	**6579**	**1966**	**7499**	**6800**	**2552**	**2450**	**1389**	**2694**	**511099**	**1533906**	**2992592**	**17.08**
	Delhi Region	9009	3212	30529	768	18753	11239	52612	39398	14964	14733	10770	21731	227718	9305273	13850507	1.64
NCR	**Workers in NCR**	**1447682**	**257391**	**145836**	**4414**	**106746**	**41582**	**156622**	**118092**	**41208**	**67112**	**24229**	**56040**	**2466954**	**22680610**	**37097239**	**6.65**

Source: Census India- 2001

MASTER TABLE 19: Distribution and Participation Rate of Urban Workforce in NCR in 2001, as per 2001 census

Region	Sectors / Districts	Agricultural Laborers	Cultivator	Livestock, Forestry etc.	Rural Industries	Mining and Quarrying	Manufacturing, Processing: a) Household Industries	b) Other than household Industries	C) Electricity, Gas and Power	Construction	Trade and Commerce	Transport, Storage and Communications	Other Services: Financing, Insurance, Real estate and Business services	Community, Social and Personal Services	Total Worker	Urban Population	NCR Rural Participation Rate
Haryana	Faridabad	6032	6743	32672	27924	2976	48748	45638	39892	76062	28550	48326	20186	21928	374777	1221344	30.69
	Gurgaon	3280	3724	3000	8144	288	7318	10374	11216	27460	10248	19014	9472	7220	112326	369004	30.44
	Jhajjar	1668	4644	2500	4912	116	8202	4572	6532	10978	5100	8116	4200	2558	59070	195097	30.28
	Panipat	1246	1463	2072	53990	388	6190	9246	11040	27638	7446	9284	5566	6094	87285	392080	22.26
	Rewari	1329	1370	752	2960	48	2762	3322	3762	11440	3208	5202	2888	1614	37649	136174	27.65
	Rohtak	2246	2229	2034	6604	220	5782	3088	12054	23380	8640	14318	10702	4446	88919	329604	26.98
	Sonipat	4066	2945	2896	6998	174	5986	5768	9754	22788	8698	12568	9482	4266	89217	321375	27.76
	Haryana Sub-region	**19867**	**23118**	**45926**	**111532**	**4210**	**84988**	**82008**	**94250**	**199746**	**71890**	**116828**	**62496**	**48126**	**849243**	**2964678**	**28.65**
Uttar Pradesh	Baghpat	4516	9644	1702	6286	68	3744	1760	4998	14428	4430	6086	3668	2190	57166	229432	24.92
	Buland Shahar	13284	12589	4488	25074	250	12228	7476	13476	51520	15654	26510	8986	6800	173011	674458	25.65
	Gautam Budh Nagar	2990	4491	3204	11464	500	7692	9436	13142	25696	10924	39882	7010	11002	135469	449415	30.14
	Ghaziabad	7510	10014	7588	56212	1348	42470	32486	48040	106694	50764	77148	25746	21178	429638	1816415	23.65
	Meerut	15275	12895	7366	46704	336	30286	17470	39948	86596	33874	57116	20660	14738	336224	1451983	23.16
	Uttar Pradesh Sub-region	**43575**	**49633**	**24348**	**145740**	**2502**	**96420**	**68628**	**119604**	**284934**	**115646**	**206742**	**66070**	**55908**	**1131508**	**4621703**	**24.48**
Rajasthan	Alwar	2133	9662	5928	13088	222	13016	5974	12460	31378	12058	16882	11528	5118	126359	434939	29.05
	Rajasthan Sub-region	**2133**	**9662**	**5928**	**13088**	**222**	**13016**	**5974**	**12460**	**31378**	**12058**	**16882**	**11528**	**5118**	**126359**	**434939**	**29.05**
	Delhi Region	7418	10730	25828	473528	13938	389888	221226	361038	1015604	449000	697740	263092	324828	3766392	12905780	29.18
NCR	**Workers in NCR**	**53126**	**70025**	**56104**	**632356**	**16662**	**499324**	**295828**	**493102**	**1331916**	**576704**	**921364**	**340690**	**385854**	**5024259**	**17962422**	**27.97**

MASTER TABLE 20: Distribution and Participation Rate of Rural Workforce in NCR -2001

	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 Rural Population	NCR Rural Participation Rate
Region	Districts						a) Household Industries	b) Other than household Industries	C) Electricity, Gas and Power				Financing, Insurance, Real estate and Business	Community, Social and Personal Services	Rural		
Haryana	Faridabad	76143	179660	13841	12000	1500	17170	7150	17280	16520	9820	13995	7015	7185	379279	973242	38.97
	Gurgaon	54648	192044	69640	17575	10580	24350	14825	33395	27000	22485	28490	9925	10850	515807	1291285	39.95
	Jhajjar	43176	172733	13265	6115	125	29345	2645	9070	9315	8925	13915	6305	3935	318869	684975	46.55
	Panipat	53796	88030	19795	18545	210	16255	3680	10935	11885	5820	7975	4250	4300	245476	575369	42.66
	Rewari	43112	146848	20435	6805	810	9860	8515	11675	9970	6495	12095	7130	3325	287075	629177	45.63
	Rohtak	43216	141085	12025	6775	75	15595	3070	9670	10845	8195	11235	5900	3535	271221	610524	44.42
	Sonipat	83324	186728	27575	12479	515	30680	6420	14940	15170	11810	21415	9505	4355	424916	957800	44.36
	Haryana Sub-region	397415	1107128	176576	80294	13815	143255	46305	106965	100705	73550	109120	50030	37485	2442643	5722372	42.69
Uttar Pradesh	Baghpat	65704	141681	15125	15282	105	12245	4215	8480	14430	6715	14110	7400	3920	309412	934559	33.11
	Buland Shahar	182568	407296	136095	57680	195	26115	15330	27875	46740	16835	33785	12475	12530	975519	2238664	43.58
	Gautam Budh Nagar	31348	88524	10680	9375	350	10080	7325	8495	11340	5670	19290	5940	5915	214332	752615	28.48
	Ghaziabad	62265	150552	30525	33155	335	24415	14040	32995	35040	15465	27635	9840	11025	447287	1474171	30.34
	Meerut	95165	204225	38455	33810	135	20155	11580	25220	27530	12365	15215	9685	9625	503165	1545378	32.56
	Uttar Pradesh Sub-region	437050	992278	230880	149302	1120	93010	52490	103065	135080	57050	110035	45340	43015	2449715	6945387	35.27
Rajasthan	Alwar	126309	895545	76155	32615	4770	30000	10835	33350	39160	25075	18055	18355	9660	1319884	2557653	51.61
	Rajasthan Sub-region	126309	895545	76155	32615	4770	30000	10835	33350	39160	25075	18055	18355	9660	1319884	2557653	51.61
	Delhi Region	8355	26701	11525	29720	2025	29385	14315	34570	45610	31580	40440	15390	16615	306231	944727	32.41
NCR	Workers in NCR	969129	3021652	495136	291931	21730	295650	123945	277950	320555	187255	277650	129115	106775	6518473	16170139	40.31

MASTER TABLE 21: Projection of Population of NCR									
Regions	**2000-01**	**2001-2011**	**2011**	**2016**	**2021**	**2026**	**2031**	**2036**	**2041**
	Population (in'00)	**CAGR**	**Population (in'00)**	**Population (in'00)**	**Population (in'00)**	**Population (in'00)**	**Population (in'00)**	**Population (in'00)**	**Population (in'00)**
Meerut	29772	0.015	34474	37097	39919	42955	46223	49739	53523
Bagpat	11594	0.012	13021	13799	14624	15497	16424	17405	18445
Ghaziabad	32403	0.037	46614	55909	67058	80429	96467	115703	138775
Gautambudh nagar	11750	0.036	16747	19993	23869	28496	34020	40615	48488
Bulandshaher	29051	0.019	34985	38392	42131	46234	50737	55678	61100
Total of Uttar Pradesh Sub-region	**114570**	**0.02**	**145841**	**164545**	**185647**	**209456**	**236318.15**	**266625.35**	**300819.37**
Delhi	149146	0.012	167532	177558	188185	199447	211383	224034	237442
Total of Delhi Region	**149146**	**0.012**	**167532**	**177558**	**188185**	**199447**	**211383**	**224034**	**237442**
Alwar	29583	0.021	36478	40506	44980	49947	55463	61588	68389
Total of Rajasthan Sub- Region	**29583**	**0.021**	**36478**	**40506**	**44980**	**49947**	**55463**	**61588**	**68389**
Faridabad*	21632	0.028	28393	32529	37267	42696	48915	56040	64203
Gurgaon**	16357	-0.008	15140	14566	14014	13482	12971	12479	12006
Jhajjar	8815	0.008	9569	9970	10387	10823	11276	11748	12241
Panipat	9567	0.023	12028	13487	15122	16956	19012	21318	23903
Rewari	7602	0.017	8961	9729	10563	11468	12451	13518	14677
Rohtak	9357	0.012	10586	11260	11976	12739	13549	14412	15329
Sonipat	12696	0.015	14800	15979	17253	18627	20112	21714	23445
Mewat		0.015	10894	11736	12643	13620	14673	15807	17028
Total of Haryana Sub-region	**86026**	**0.025**	**110371**	**125017**	**141606**	**160396**	**181679**	**205787**	**233094**
Grand Total/ NCR	**379325**	**0.030**	**460222**	**532903**	**617063**	**714513**	**827354**	**958016**	**1109312**

Source: www.planningcommission.gov.in And www.delhiplanning.nic.inand ACDS estimates

*** Faridabad includes Palwal also**

****Includes Mewat also**

MASTER TABLE 22: Projection of workforce in NCR according to 9 Category- 2011 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**	**Total**	**Total Population**
Faridabad	459309	5791	153579	73968	119780	49642	80629	35192	37666	1015556	2839300
Gurgaon	552036	17041	89170	69952	85395	51327	74488	30415	28334	998160	2603400
Jhajjar	270751	262	48672	16964	22065	15249	23954	11422	7060	416399	956900
Panipat	297063	743	43976	27321	49138	16493	21458	12204	12923	481318	1202800
Rewari	263821	1005	28637	18074	25068	11361	20252	11729	5783	385729	896100
Rohtak	243991	332	31005	24462	38538	18956	28773	18694	8987	413738	1058600
Sonipat	378340	797	56524	28571	43917	23728	39318	21968	9974	603137	1480000
Haryana Sub-region	**2465312**	**25972**	**451562**	**259311**	**383901**	**186756**	**288873**	**141625**	**110726**	**4314038**	**11037100**
Meerut	**522045**	**542**	**91426**	**74953**	**131261**	**53182**	**83191**	**34901**	**28021**	**1019522**	**3447400**
Baghpat	**290786**	**194**	**24570**	**15077**	**32282**	**12467**	**22592**	**12381**	**6835**	**417184**	**1302100**
Ghaziabad	**506884**	**2320**	**160657**	**114793**	**200778**	**93819**	**148434**	**50411**	**45618**	**1323715**	**4661400**
Gautam Budh Nagar	**225809**	**1184**	**48112**	**30145**	**51600**	**23119**	**82440**	**18042**	**23569**	**504021**	**1674700**
Buland Shahar	**1007682**	**501**	**73437**	**49660**	**118005**	**39018**	**72411**	**25773**	**23214**	**1409701**	**3498500**
Uttar Pradesh Sub-region	**2553206**	**4741**	**398202**	**284628**	**533926**	**221605**	**409069**	**141509**	**127258**	**4674143**	**14584100**
Alwar	**1415715**	**6085**	**72923**	**55839**	**85981**	**45263**	**42586**	**36425**	**18013**	**1778832**	**3647779**
Rajasthan Sub-region	**1415715**	**6085**	**72923**	**55839**	**85981**	**45263**	**42586**	**36425**	**18013**	**1778832**	**3647779**
Delhi Region	**714622**	**19200**	**792045**	**478517**	**1283616**	**581297**	**892883**	**336844**	**413000**	**5512023**	**16753200**
Total Workers in NCR	**7148855**	**55997**	**1714732**	**1078296**	**2287424**	**1034920**	**1633410**	**656403**	**668998**		**46022179**
Source: Census of India, 2001											

MASTER TABLE 23: Projection of workforce in NCR according to 9 Category- 2021 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	602865	7601	201579	97086	157217	65158	105830	46191	49438
Gurgaon	565236	17449	91302	71624	87437	52554	76269	31143	29012
Jhajjar	293910	284	52835	18415	23952	16554	26003	12399	7664
Panipat	373479	935	55288	34349	61778	20736	26977	15343	16247
Rewari	310984	1184	33757	21305	29549	13392	23872	13826	6817
Rohtak	276038	376	35077	27675	43600	21446	32552	21150	10167
Sonipat	441039	929	65891	33306	51195	27660	45834	25608	11627
Total of Haryana Sub-region	**2863551**	**28758**	**535729**	**303760**	**454728**	**217499**	**337338**	**165660**	**130971**
Meerut	604494	627	105865	86790	151992	61581	96330	40413	32446
Baghpat	326576	217	27594	16933	36255	14002	25373	13905	7676
Ghaziabad	729189	3338	231116	165138	288834	134965	213533	72519	65625
Gautam Budh Nagar	321840	1688	68573	42965	73544	32951	117500	25715	33593
Buland Shahar	1213513	603	88437	59804	142109	46987	87202	31038	27956
Total of Uttar Pradesh Sub-region	**3195610**	**6474**	**521586**	**371630**	**692734**	**290487**	**539937**	**183591**	**167297**
Alwar	1745670	7503	89919	68854	106021	55812	52511	44915	22212
Total of Rajasthan Sub-region	**1745670**	**7503**	**89919**	**68854**	**106021**	**55812**	**52511**	**44915**	**22212**
Total of Delhi Region	**802718**	**21566**	**889686**	**537507**	**1441855**	**652957**	**1002954**	**378369**	**463913**
Total Workers in NCR	**8607549**	**64301**	**2036919**	**1281750**	**2695338**	**1216754**	**1932741**	**772535**	**784393**
Source: Census of India, 2001 and ACDS estimates									

MASTER TABLE 24: Projection of workforce in NCR according to 9 Category- 2031 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	791288	9976	264582	127430	206355	85522	138906	60628	64890
Gurgaon	586166	18095	94683	74277	90675	54500	79093	32296	30086
Jhajjar	319050	309	57354	19990	26001	17970	28227	13460	8319
Panipat	469552	1175	69510	43185	77670	26070	33917	19290	20426
Rewari	366578	1396	39792	25114	34831	15786	28140	16298	8035
Rohtak	312294	425	39684	31309	49326	24263	36828	23927	11503
Sonipat	514129	1083	76811	38825	59679	32244	53430	29852	13554
Total of Haryana Sub-region	**3359057**	**32460**	**642416**	**360130**	**544537**	**256354**	**398542**	**195751**	**156813**
Meerut	699963	726	122585	100497	175997	71306	111544	46796	37571
Baghpat	366771	244	30990	19017	40718	15725	28496	15617	8621
Ghaziabad	1048990	4802	332476	237563	415508	194157	307182	104324	94406
Gautam Budh Nagar	458711	2406	97736	61237	104820	46965	167470	36651	47879
Buland Shahar	1461386	726	106501	72020	171136	56585	105014	37378	33666
Total of Uttar Pradesh Sub-region	**4035821**	**8904**	**690289**	**490334**	**908179**	**384738**	**719705**	**240766**	**222144**
Alwar	2152527	9252	110876	84901	130730	68820	64750	55383	27389
Total of Rajasthan Sub-region	**2152527**	**9252**	**110876**	**84901**	**130730**	**68820**	**64750**	**55383**	**27389**
Total of Delhi Region	**901674**	**24225**	**999363**	**603768**	**1619602**	**733451**	**1126594**	**425013**	**521103**
Total Workers in NCR	**10449079**	**74841**	**2442944**	**1539133**	**3203048**	**1443364**	**2309591**	**916913**	**927448**
Source: Census of India, 2001 and ACDS estimates									

MASTER TABLE 25: Projection of workforce in NCR according to 9 Category- 2011 (Adjusted Participated Rate)										
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**	**Total Population**
Faridabad	425895	5791	153579	73968	119780	56786	85179	39750	37666	2839300
Gurgaon	520680	17041	89170	69952	85395	52068	78102	39051	28334	2603400
Jhajjar	258363	262	71768	16964	28707	15249	23954	12440	7060	956900
Panipat	276644	743	43976	27321	54126	21650	24056	15636	12923	1202800
Rewari	241947	1005	44805	18074	35844	11361	22403	13442	5783	896100
Rohtak	222306	332	52930	24462	52930	18956	31758	21172	8987	1058600
Sonipat	340400	797	74000	28571	74000	23728	40700	29600	9974	1480000
Total of Haryana Sub-region	**2286235**	**25972**	**530227**	**259311**	**450783**	**199799**	**306152**	**171091**	**110726**	**11037100**
Meerut	517110	542	103422	74953	137896	60330	83191	51711	28021	3447400
Baghpat	273441	194	26042	15077	39063	19532	22592	19532	6835	1302100
Ghaziabad	466140	2320	167810	114793	223747	93819	148434	69921	45618	4661400
Gautam Budh Nagar	200964	1184	66988	30145	66988	33494	82440	25121	23569	1674700
Buland Shahar	944595	501	104955	49660	139940	69970	72411	34985	23214	3498500
Total of Uttar Pradesh Sub-region	**2402250**	**4741**	**469217**	**284628**	**607634**	**277144**	**409069**	**201269**	**127258**	**14584100**
Alwar	1276723	6085	91194	55839	127672	72956	42586	54717	18013	3647779
Total of Rajasthan Sub-region	**1276723**	**6085**	**91194**	**55839**	**127672**	**72956**	**42586**	**54717**	**18013**	**3647779**
Total of Delhi Region	**586362**	**19200**	**753894**	**478517**	**1283616**	**628245**	**892883**	**418830**	**413000**	**16753200**
Total Workers in NCR	**6551570**	**55997**	**1844533**	**1078296**	**2469705**	**1178143**	**1650689**	**845906**	**668998**	**46022179**

MASTER TABLE 26: Projection of workforce in NCR according to 9 Category- 2021 (Adjusted Participation Rate)										
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**	**Total Population**
Faridabad	559007	7601	201579	97086	157217	74534	111801	52174	49438	3726713
Gurgaon	533130	17449	91302	71624	87437	53313	79969	39985	29012	2665648
Jhajjar	280462	284	77906	18415	31162	16554	26003	13504	7664	1038749
Panipat	347807	935	55288	34349	68049	27220	30244	19659	16247	1512206
Rewari	285200	1184	52815	21305	42252	13392	26407	15844	6817	1056295
Rohtak	251505	376	59882	27675	59882	21446	35929	23953	10167	1197642
Sonipat	396812	929	86263	33306	86263	27660	47445	34505	11627	1725268
Total of Haryana Sub-region	**2653922**	**28758**	**625036**	**303760**	**532263**	**234118**	**357800**	**199624**	**130971**	**12922521**
Meerut	598779	627	119756	86790	159674	69858	96330	59878	32446	3991860
Baghpat	307096	217	29247	16933	43871	21935	25373	21935	7676	1462364
Ghaziabad	670575	3338	241407	165138	321876	134965	213533	100586	65625	6705753
Gautam Budh Nagar	286429	1688	95476	42965	95476	47738	117500	35804	33593	2386911
Buland Shahar	1137539	603	126393	59804	168524	84262	87202	42131	27956	4213109
Total of Uttar Pradesh Sub-region	**3000419**	**6474**	**612280**	**371630**	**789422**	**358759**	**539937**	**260334**	**167297**	**18759996**
Alwar	1574283	7503	112449	68854	157428	89959	52511	67469	22212	4497952
Total of Rajasthan Sub-region	**1574283**	**7503**	**112449**	**68854**	**157428**	**89959**	**52511**	**67469**	**22212**	**4497952**
Total of Delhi Region	**658647**	**21566**	**846831**	**537507**	**1441855**	**705693**	**1002954**	**470462**	**463913**	**18818473**
Total Workers in NCR	**7887272**	**64301**	**2196595**	**1281750**	**2920969**	**1388529**	**1953202**	**997889**	**784393**	**54998943**

MASTER TABLE 27: Projection of workforce in NCR according to 9 Category- 2031 (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	733722	9976	264582	127430	206355	97830	146744	68481	64890	4891482
Gurgaon	552871	18095	94683	74277	90675	55287	82931	41465	30086	2764354
Jhajjar	304452	309	84570	19990	33828	17970	28227	14659	8319	1127600
Panipat	437277	1175	69510	43185	85554	34222	38024	24716	20426	1901204
Rewari	336184	1396	62256	25114	49805	15786	31128	18677	8035	1245127
Rohtak	284539	425	67747	31309	67747	24263	40648	27099	11503	1354947
Sonipat	462572	1083	100559	38825	100559	32244	55307	40224	13554	2011182
Total of Haryana Sub-region	**3111617**	**32460**	**743908**	**360130**	**634523**	**277600**	**423011**	**235320**	**156813**	**15295897**
Meerut	693346	726	138669	100497	184892	80890	111544	69335	37571	4622309
Baghpat	344894	244	32847	19017	49271	24635	28496	24635	8621	1642353
Ghaziabad	964670	4802	347281	237563	463041	194157	307182	144700	94406	9646698
Gautam Budh Nagar	408241	2406	136080	61237	136080	68040	167470	51030	47879	3402008
Buland Shahar	1369895	726	152211	72020	202947	101474	105014	50737	33666	5073685
Total of Uttar Pradesh Sub-region	**3781046**	**8904**	**807088**	**490334**	**1036232**	**469197**	**719705**	**340437**	**222144**	**24387052**
Alwar	1941195	9252	138657	84901	194120	110925	64750	83194	27389	5546272
Total of Rajasthan Sub-region	**1941195**	**9252**	**138657**	**84901**	**194120**	**110925**	**64750**	**83194**	**27389**	**5546272**
Total of Delhi Region	**739842**	**24225**	**951226**	**603768**	**1619602**	**792688**	**1126594**	**528459**	**521103**	**21138346**
Total Workers in NCR	**9573701**	**74841**	**2640878**	**1539133**	**3484477**	**1650411**	**2334060**	**1187410**	**927448**	**66367567**

MASTER TABLE 28: 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 wise/ 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	10127	10553	33767	1080679	1135126	1306	2736	2129	47248	53419	11,433	13,289	35,896	1,127,927	1,188,545	67492	1121053	1,188,545
North	1967	1493	10403	269720	283583	220	298	625	11720	12863	2,187	1,791	11,028	281,440	296,446	5278	291168	296,446
North East	1738	1893	27587	591225	622443	497	513	3151	34782	38943	2,235	2,406	30,738	626,007	661,386	5988	655398	661,386
East	805	2841	18432	532948	555026	351	253	1109	22953	24666	1,156	3,094	19,541	555,901	579,692	1348	578344	579,692
New Delhi	80	223	962	55206	56471	41	52	68	2909	3070	121	275	1,030	58,115	59,541		59541	59,541
Central	463	511	10342	184662	195978	134	90	560	10612	11396	597	601	10,902	195,274	207,374		207374	207,374
West	2433	3725	27623	805840	839621	519	633	1399	32148	34699	2,952	4,358	29,022	837,988	874,320	1846	872474	874,320
South West	7832	5277	16956	719930	749995	1901	2476	1658	39322	45357	9,733	7,753	18,614	759,252	795,352	44049	751303	795,352
South	2314	4958	23054	838760	869086	670	950	2027	51660	55307	2,984	5,908	25,081	890,420	924,393	4226	920167	924,393
NCT of Delhi	**27759**	**31474**	**169126**	**5078970**	**5307329**	**5639**	**8001**	**12726**	**253354**	**279720**	**33,398**	**39,475**	**181,852**	**5,332,324**	**5,587,049**	**130227**	**5456822**	**5,587,049**
Faridabad	23,654	19,382	27,869	424411	495316	4,051	9,906	4,417	65,539	83913	27,705	29,288	32,286	489,950	579,229	106758	472471	579,229
Gurgaon	44,429	15,725	16002	411285	487441	11617	11372	2226	32060	57275	56,046	27,097	18,228	443,345	544,716	158462	386254	544,716
Rewari	73994	10452	6249	159524	250219	28704	17763	3533	37508	87508	102,698	28,215	9,782	197,032	337,727	264375	73352	337,727
Rohtak	80456	20616	6353	181524	288949	15,276	15,952	2168	23622	57018	95,732	36,568	8,521	205,146	345,967	212681	133286	345,967
Sonipat	110,262	54040	12405	220056	396763	32,082	47,693	5779	40862	126416	142,344	101,733	18,184	260,918	523,179	376188	146991	523,179
Panipat	61474	36191	12485	228866	339016	10,646	26,167	3339	33150	73302	72,120	62,358	15,824	262,016	412,318	221931	190387	412,318
Jhajjar	86313	19433	6520	134191	246457	26076	25412	2734	25855	80077	112,389	44,845	9,254	160,046	326,534	253833	72701	326,534
Mewat	81608	25426	4034	93110	204178	22629	29852	1989	31316	85786	104,237	55,278	6,023	124,426	289,964	258721	31243	289,964
Palwal	71540	26229	5616	113547	216932	19966	34456	2950	35259	92631	91,506	60,685	8,566	148,806	309,563	242228	67335	309,563
Haryana Sub region	**633,730**	**227,494**	**97,533**	**1,966,514**	**2925271**	**171,047**	**218,573**	**29,135**	**325,171**	**743926**	**804,777**	**446,067**	**126,668**	**2,291,685**	**3,669,197**	**2095177**	**1574020**	**3,669,197**
Alwar	608,718	95586	21588	453569	1179461	290173	121186	12974	104748	529081	898,891	216,772	34,562	558,317	1,708,542	1487935	220607	1,708,542
Rajasthan sub region	**608,718**	**95586**	**21588**	**453569**	**1179461**	**290173**	**121186**	**12974**	**104748**	**529081**	**898,891**	**216,772**	**34,562**	**558,317**	**1,708,542**	**1487935**	**220607**	**1,708,542**
Baghpat	112453	49442	13958	158666	334519	12265	25058	6389	38464	82176	124,718	74,500	20,347	197,130	416,695	337563	79132	416,695
Bulandshahr	292901	136780	44401	411134	885216	39574	104357	21536	122577	288044	332,475	241,137	65,937	533,711	1,173,260	919473	253787	1,173,260
Gautam Budh Nagar	60899	27618	26065	343910	458492	11769	21227	9335	68286	110617	72,668	48,845	35,400	412,196	569,109	216673	352436	569,109
Ghaziabad + Hapur	139829	83227	63604	966251	1252911	19039	40453	20068	188067	267627	158,868	123,680	83,672	1,154,318	1,520,538	496077	1024461	1,520,538
Meerut	175944	112247	48232	554387	890810	20124	41748	14864	122993	199729	196,068	153,995	63,096	677,380	1,090,539	543366	547173	1,090,539
Uttar Pradesh Sub region	**782026**	**409314**	**196260**	**2434348**	**3821948**	**102771**	**232843**	**72192**	**540387**	**948193**	**884,797**	**642,157**	**268,452**	**2,974,735**	**4,770,141**	**2513152**	**2256989**	**4,770,141**
NCR	**2,052,233**	**763,868**	**484,507**	**9,933,401**	**13234009**	**569,630**	**580,603**	**127,027**	**1,223,660**	**2500920**	**2,621,863**	**1,344,471**	**611,534**	**11,157,061**	**15,734,929**	**6226491**	**9508438**	**15,734,929**

Master Table 29: Distribution of total workforce, population and participation into rural and urban in 2011, as per census									
	Total Workers			Population			WPR		
District wise/ Sub region	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**	**Rural**	**Urban**	**Total**
North West	67492	1121053	1,188,545	213950	3442589	3656539	31.55	32.56	32.50
North	5278	291168	296,446	17746	870232	887978	29.74	33.46	33.38
North East	5988	655398	661,386	21527	2220097	2241624	27.82	29.52	29.50
East	1348	578344	579,692	3530	1705816	1709346	38.19	33.90	33.91
New Delhi		59541	59,541	0	142004	142004	0	41.93	41.93
Central		207374	207,374	0	582320	582320	0	35.61	35.61
West	1846	872474	874,320	6420	2536823	2543243	28.75	34.39	34.38
South West	44049	751303	795,352	143676	2149282	2292958	30.66	34.96	34.69
South	4226	920167	924,393	12193	2719736	2731929	34.66	33.83	33.84
NCT of Delhi	**130227**	**5456822**	**5,587,049**	**419042**	**16368899**	**16787941**	**31.08**	**33.34**	**33.28**
Faridabad	106758	472471	579,229	370878	1438855	1809733	28.79	32.84	32.01
Gurgaon	158462	386254	544,716	472179	1042253	1514432	33.56	37.06	35.97
Rewari	264375	73352	337,727	666902	233430	900332	39.64	31.42	37.51
Rohtak	212681	133286	345,967	615040	446164	1061204	34.58	29.87	32.60
Sonipat	376188	146991	523,179	996637	453364	1450001	37.75	32.42	36.08
Panipat	221931	190387	412,318	650352	555085	1205437	34.12	34.30	34.20
Jhajjar	253833	72701	326,534	715066	243339	958405	35.50	29.88	34.07
Mewat	258721	31243	289,964	965157	124106	1089263	26.81	25.17	26.62
Palwal	242228	67335	309,563	806164	236544	1042708	30.05	28.47	29.69
Haryana Sub region	**2095177**	**1574020**	**3,669,197**	**6258375**	**4773140**	**11031515**	**33.48**	**32.98**	**33.26**
Alwar	1487935	220607	1,708,542	3019728	654451	3674179	49.27	33.71	46.50
Rajasthan sub region	**1487935**	**220607**	**1,708,542**	**3019728**	**654451**	**3674179**	**49.27**	**33.71**	**46.50**
Baghpat	337563	79132	416,695	1028023	275025	1303048	32.84	28.77	31.98
Bulandshahr	919473	253787	1,173,260	2631742	867429	3499171	34.94	29.26	33.53
Gautam Budh Nagar	216673	352436	569,109	673806	974309	1648115	32.16	36.17	34.53
Ghaziabad + Hapur	496077	1024461	1,520,538	1519098	3162547	4681645	32.66	32.39	32.48
Meerut	543366	547173	1,090,539	1684507	1759182	3443689	32.26	31.10	31.67
Uttar Pradesh Sub region	**2513152**	**2256989**	**4,770,141**	**7537176**	**7038492**	**14575668**	**33.34**	**32.07**	**32.73**
NCR	**6226491**	**9508438**	**15,734,929**	**17234321**	**28834982**	**46069303**	**36.13**	**32.98**	**34.15**

Annexure V: INDUSTRIAL DEVELOPMENT IN NCR

MASTER TABLE 30: SEZ in NCR where formal approvals granted under the SEZ Act, 2005		
S. 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
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
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

MASTER TABLE 31: District wise List of Industrial Clusters in NCR				
Location	**Product**	**No of units**	**Employment (Direct)**	**Turnover (Crores)**
Meerut	Auto components	4700	26000	100
	Band Instruments	433	8500	20
	Glass & Wooden beads	3000	15000	0.7
	Mini Gas Cylinders	160	7500	100
	Power loom/ Embroidery	3000	30000	40
	Rubber Products	130	2500	40
	Scissors	225	5000	25
	Sport goods	3500	70000	200
	Transformers and voltage regulators	100	3500	400
Ghaziabad	Chemicals	224	1574	135.54
	Engineering Equipments	635	7400	340
	Pilkhuwa Textile Printing	400	20000	100
	Plastic Packaging	150	10000	350
Bulandshahr	Pottery Cluster Khurja	80	2500	450
	Khurja Ceramics	600	50000	200
NOIDA	Chemicals	111	2221	109.49
	Auto and engineering item	12000	200000	50000
	Garments	6014	94736	3200
	Packaging Material	124	1800	84.15
	Plastic Products	350	6500	250
Alwar	Auto Components	200	19500	250
Delhi	Auto Components	1500	50000	297.2
	Chemicals	339	3562	337.02
	Engineering Equipments	2691	47000	2,000.00
	Food Products	432	1939	594.28
	Textiles including garment	1901	132000	921.32
	Cosmetic & Packaging	240	7200	100
	Plastic Products	746	16478	54.22
	Rubber Products	178	18684	192.64
	Sanitary Fittings	100	900	30
	Printing & Packaging, Naraina	450	5000	400
Gurgaon	Automobile and engineering	5000	260000	10000
	Rubber & Chemicals	472	11619	907
	Electronic and Electricals	107	3427	702
	Readymade Garments	1310	87380	13000
	Leather and Leather and Fur Products, Manesar	205	35000	867
Panipat	Handloom	1800	23000	
	Powerloom	720	50000	600
	Cotton Spinning and Shoddy Yarn	500	50000	500
	Carpet	400	60000	150
	Home Furnishing Cluster	85	2800	465

	Textile machinery	28	477	32.4
	Samalkha Foundry Cluster	30	1200	95
Faridabad	Auto components and engineering	2500	10000	3250
	Chemicals	275	1375	825
	Electrical Engineering Equipments	203	5000	1500
	Textiles	320	7000	3,200.00
Jhajjar	General Engineering	134	1000	70
	Footwear	125	12400	1560
Sonipat	Stainless Steel Cluster- Kundli	72	8000	800
	Chemicals	120	2500	100
	General Engineering	150	3000	100
	Printing and Packaging Cluster, Rai	110	4400	165
Source: Clusterobservatory, MSME Foundation				

MASTER TABLE 32: Industrial Estates in NCR			
S. No.	**Name of the Industrial Area**	**District/ Zone**	**State**
1	GT Karnal Road Industrial Area	North	Delhi
2	Rajasthan Udyog Nagar Industrial Area	North	Delhi
3	S M A Industrial Area	North	Delhi
4	S S I Industrial Area	North	Delhi
5	Wazirpr Industrial Area	North	Delhi
6	Lawranc Road Industrial Area	North	Delhi
7	Udygo Nagar Industrial Area	North	Delhi
8	D.S.I.D.C. - Sheds Nagloi	North	Delhi
9	Mangol Puri Industrial Area (Both DDA & DSIDC)	North	Delhi
10	Badli Industrial Area	North	Delhi
11	Narela Industrial Area	North	Delhi
12	Bawana Industrial Area	North	Delhi
13	Okhla Industrial Area, Ph-I	South	Delhi
14	Okhla Industrial Area, Ph-II	South	Delhi
15	Okhla Industrial Estate	South	Delhi
16	Flatted Factory Complex Okhla	South	Delhi
17	Mohan Cooperative Industrial Estate	South	Delhi
18	Flatted Factory Complex, Jhandewalan	South	Delhi
19	Rani Jhansi Road	South	Delhi
20	Shahzeda Bagh Industrial Area	South	Delhi
21	Naraina Industrial Area Ph-I	West	Delhi
22	Naraina Industrial Area Ph-II	West	Delhi
23	Mayapuri Industrial Area Ph-I	West	Delhi
24	Mayapuri Industrial Area Ph-II	West	Delhi
25	Tilak Nagar Industrial Area	West	Delhi
26	Kirti Nagar Industrial Area	West	Delhi
27	D. F.L Industrial Area, Moti Nagar	West	Delhi
28	Najafgarh Road Industrial Area	West	Delhi
29	Jhilmil Industrial Area	East	Delhi
30	Friends Colony Industrial Area, Shahdara	East	Delhi
31	Patpar Ganj Industrial Area	East	Delhi
32	Shahdara Industrial Area	East	Delhi
33	Flatted Factory Complex at Jhilmil, Shahdara	East	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
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
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 VI: INFORMAL SECTOR IN NCR - IMPORTANT TABLES

MASTER TABLE 33: Number of Persons by Type of Enterprises in NCR -2005									
DISTRICT	AGRICULTURAL			NON-AGRICULTURAL			ALL		
	OAE	ESTABLISHMENTS	TOTAL	OAE	ESTABLISHMENTS	TOTAL	OAE	ESTABLISHMENTS	TOTAL
Meerut	43046	14152	57198	80947	119815	200762	123993	133967	257960
Baghpat	13886	3778	17664	31026	36571	67597	44912	40349	85261
Ghaziabad	3084	2431	5515	87309	165277	252586	90393	167708	258101
Gautam Buddha Nagar	10958	1140	12098	35889	258591	294480	46847	259731	306578
Bulandshaher	11444	4790	16234	69507	45510	115017	80951	50300	131251
UP Total	82418	26291	108709	304678	625764	930442	387096	652055	1039151
Panipat	1127	1743	2870	30807	100632	131439	31934	102375	134309
Sonepat	2431	2175	4606	28797	98125	126922	31228	100300	131528
Rohtak	4964	1713	6677	30280	55981	86261	35244	57694	92938
Jhajjar	1608	771	2379	19187	71403	90590	20795	72174	92969
Rewari	2544	954	3498	18853	55815	74668	21397	56769	78166
Gurgaon	7007	2184	9191	43441	204672	248113	50448	206856	257304
Faridabad	3204	3982	7186	40217	228834	269051	43421	232816	276237
Haryana	22885	13522	36407	211582	815462	1027044	234467	828984	1063451
Delhi NCT	2551	9711	12262	379259	3164866	3544125	381810	3174577	3556387
Rajasthan	12292	3267	15559	54848	145448	200296	67140	148715	215855
NCR	120146	52791	172937	950363	4751540	5701907	1070513	4804331	5874844
SOURCE: ECONOMIC CENSUS 2005 (Haryana, Delhi, Rajasthan and Uttar Pradesh)									

MASTER TABLE 34: Number of Persons by Type Of Enterprises in NCR Urban Areas -2005

DISTRICT	AGRICULTURAL			NON-AGRICULTURAL			ALL		
	OAE	ESTABLISHMENTS	TOTAL	OAE	ESTABLISHMENTS	TOTAL	OAE	ESTABLISHMENTS	TOTAL
Meerut	3896	2550	6446	50197	91095	141292	54093	93645	147738
Baghpat	985	554	1539	14029	16200	30229	15014	16754	31768
Ghaziabad	1310	1254	2564	63307	140844	204151	64617	142098	206715
Gautam Buddha Nagar	4223	771	4994	21402	225120	246522	25625	225891	251516
Bulandshaher	383	260	643	40622	25448	66070	41005	25708	66713
UP Total	**10797**	**5389**	**16186**	**189557**	**498707**	**688264**	**200354**	**504096**	**704450**
Panipat	196	555	751	14439	61823	76262	14635	62378	77013
Sonepat	337	715	1052	12424	36981	49405	12761	37696	50457
Rohtak	709	1072	1781	18101	40490	58591	18810	41562	60372
Jhajjar	98	146	244	7714	31986	39700	7812	32132	39944
Rewari	96	352	448	5502	20957	26459	5598	21309	26907
Gurgaon	132	463	595	17365	88882	106247	17497	89345	106842
Faridabad	526	1757	2283	27849	187694	215543	28375	189451	217826
Haryana	**2094**	**5060**	**7154**	**103394**	**468813**	**572207**	**105488**	**473873**	**579361**
Delhi NCT	**1751**	**8872**	**10623**	**361567**	**3114134**	**3475701**	**363318**	**3123006**	**3486324**
Rajasthan	**803**	**455**	**1258**	**15850**	**58469**	**74319**	**16653**	**58924**	**75577**
NCR	**15445**	**19776**	**35221**	**670368**	**4140123**	**4810491**	**685813**	**4159899**	**4845712**

SOURCE: ECONOMIC CENSUS 2005 (Haryana, Delhi, Rajasthan and Uttar Pradesh)

DISTRICT	MASTER TABLE 35: Number of Persons by Type of Enterprises in NCR Rural Areas-2005								
	AGRICULTURAL			NON-AGRICULTURAL			ALL		
	OAE	ESTABLISHMENTS	TOTAL	OAE	ESTABLISHMENTS	TOTAL	OAE	ESTABLISHMENTS	TOTAL
Meerut	39150	11602	50752	30750	28720	59470	69900	40322	110222
Baghpat	12901	3224	16125	16997	20371	37368	29898	23595	53493
Ghaziabad	1774	1177	2951	24002	24433	48435	25776	25610	51386
Gautam Buddha Nagar	6735	369	7104	14487	33471	47958	21222	33840	55062
Bulandshaher	11061	4530	15591	28885	20062	48947	39946	24592	64538
UP Total	**71621**	**20902**	**92523**	**115121**	**127057**	**242178**	**186742**	**147959**	**334701**
Panipat	931	1188	2119	16368	38809	55177	17299	39997	57296
Sonepat	2094	1460	3554	16373	61144	77517	18467	62604	81071
Rohtak	4255	641	4896	12179	15491	27670	16434	16132	32566
Jhajjar	1510	625	2135	11473	39417	50890	12983	40042	53025
Rewari	2448	602	3050	13351	34858	48209	15799	35460	51259
Gurgaon	6875	1721	8596	26076	115790	141866	32951	117511	150462
Faridabad	2678	2225	4903	12368	41140	53508	15046	43365	58411
Haryana	**20791**	**8462**	**29253**	**108188**	**346649**	**454837**	**128979**	**355111**	**484090**
Delhi NCT	**800**	**839**	**1639**	**17692**	**50732**	**68424**	**18492**	**51571**	**70063**
Rajasthan	**11489**	**2812**	**14301**	**38998**	**86979**	**125977**	**50487**	**89791**	**140278**
NCR	**104701**	**33015**	**137716**	**279999**	**611417**	**891416**	**384700**	**644432**	**1029132**
SOURCE: ECONOMIC CENSUS 2005 (Haryana, Delhi, Rajasthan and Uttar Pradesh)									

MASTER TABLE 36: Number of Enterprises by Type Of Enterprises in NCR-2005									
	AGRICULTURAL			NON-AGRICULTURAL			All		
Districts	**OAE**	**ESTABLISHMENT**	**TOTAL**	**OAE**	**ESTABLISHMENT**	**TOTAL**	**OAE**	**ESTABLISHMENT**	**TOTAL**
Meerut	19080	4562	23642	62171	33576	95747	81251	38138	119389
Baghpat	7535	1410	8945	23748	7841	31589	31283	9251	40534
Ghaziabad	2138	888	3026	72819	42369	115188	74957	43257	118214
Gautam Buddh Nagar	4035	267	4302	27572	15590	43162	31607	15857	47464
Bulandshaher	4404	1507	5911	48920	15594	64514	53324	17101	70425
Total UP	**37192**	**8634**	**45826**	**235230**	**114970**	**350200**	**272422**	**123604**	**396026**
Panipat	699	378	1077	26393	15280	41673	27092	15658	42750
Sonepat	1311	527	1838	24729	12263	36992	26040	12790	38830
Rohtak	3120	569	3689	26037	10209	36246	29157	10778	39935
Jhajjar	643	188	831	16519	7119	23638	17162	7307	24469
Rewari	1371	257	1628	16383	10774	27157	17754	11031	28785
Gurgaon	3583	597	4180	35853	26079	61932	39436	26676	66112
Faridabad	1606	1608	3214	34512	42510	77022	36118	44118	80236
Total Haryana	**12333**	**4124**	**16457**	**180426**	**124234**	**304660**	**192759**	**128358**	**321117**
Delhi NCT	**1187**	**2103**	**3290**	**312479**	**441974**	**754453**	**313666**	**444077**	**757743**
Rajasthan	**7029**	**1545**	**8574**	**44455**	**36497**	**80952**	**51484**	**38042**	**89526**
NCR	**57741**	**16406**	**74147**	**772590**	**717675**	**1490265**	**830331**	**734081**	**1564412**
SOURCE: ECONOMIC CENSUS 2005 (Haryana, Delhi, Rajasthan and Uttar Pradesh)									

MASTER TABLE 37: Number of Enterprises by Type of Enterprises in NCR Urban Areas – 2005									
Districts	**AGRICULTURAL**			**NON-AGRICULTURAL ALL**			**Total**		
	OAE	**ESTABLISHMENT**	**TOTAL**	**OAE**	**ESTABLISHMENT**	**TOTAL**	**OAE**	**ESTABLISHMENT**	**TOTAL**
Meerut	2409	749	3158	42249	25836	68085	44658	26585	71243
Baghpat	640	270	910	11871	4664	16535	12511	4934	17445
Ghaziabad	891	444	1335	52186	34595	86781	53077	35039	88116
Gautam Buddha Nagar	1623	184	1807	18446	13689	32135	20069	13873	33942
Bulandshaher	221	91	312	29237	8981	38218	29458	9072	38530
Total UP	**5784**	**1738**	**7522**	**153989**	**87765**	**241754**	**159773**	**89503**	**249276**
Panipat	127	176	303	12420	10495	22915	12547	10671	23218
Sonepat	185	177	362	11019	7356	18375	11204	7533	18737
Rohtak	406	330	736	15708	7548	23256	16114	7878	23992
Jhajjar	55	42	97	6587	3513	10100	6642	3555	10197
Rewari	80	48	128	4787	5630	10417	4867	5678	10545
Gurgaon	58	43	101	15147	12288	27435	15205	12331	27536
Faridabad	361	666	1027	24844	32374	57218	25205	33040	58245
Total Haryana	**1272**	**1482**	**2754**	**90512**	**79204**	**169716**	**91784**	**80686**	**172470**
Delhi NCT	**841**	**1872**	**2713**	**297081**	**431569**	**728650**	**297922**	**433441**	**731363**
Rajasthan	**473**	**181**	**654**	**13106**	**11809**	**24915**	**13579**	**11990**	**25569**
NCR	**8370**	**5273**	**13643**	**554688**	**610347**	**1165035**	**563058**	**615620**	**1178678**

DISTRICT	MASTER TABLE 38: Number of Enterprises by Type of Enterprises in NCR Rural Areas-2005								
	AGRICULTURAL			NON-AGRICULTURAL			ALL		
	OAE	ESTABLISHMENT	TOTAL	OAE	ESTABLISHMENT	TOTAL	OAE	ESTABLISHMENT	TOTAL
Meerut	16671	3813	20484	19922	7740	27662	36593	11553	48146
Baghpat	6895	1140	8035	11877	3177	15054	18772	4317	23089
Ghaziabad	1247	444	1691	20633	7774	28407	21880	8218	30098
Gautam Buddh Nagar	2412	83	2495	9126	1901	11027	11538	1984	13522
Bulandshaher	4183	1416	5599	19683	6613	26296	23866	8029	31895
Total UP	**31408**	**6896**	**38304**	**81241**	**27205**	**108446**	**112649**	**34101**	**146750**
Panipat	572	202	774	13973	4785	18758	14545	4987	19532
Sonepat	1126	350	1476	13710	4907	18617	14836	5257	20093
Rohtak	2714	239	2953	10329	2661	12990	13043	2900	15943
Jhajjar	588	146	734	9932	3606	13538	10520	3752	14272
Rewari	1291	209	1500	11596	5144	16740	12887	5353	18240
Gurgaon	3525	554	4079	20706	13791	34497	24231	14345	38576
Faridabad	1245	942	2187	9668	10136	19804	10913	11078	21991
Total Haryana	**11061**	**2642**	**13703**	**89914**	**45030**	**134944**	**100975**	**47672**	**148647**
Delhi NCT	**346**	**231**	**577**	**15398**	**10405**	**25803**	**15744**	**10636**	**26380**
Rajasthan	**6556**	**1364**	**7920**	**31349**	**24688**	**56037**	**37905**	**26052**	**63957**
NCR	**49371**	**11133**	**60504**	**217902**	**107328**	**325230**	**267273**	**118461**	**385734**
SOURCE: ECONOMIC CENSUS 2005 (Haryana, Delhi, Rajasthan and Uttar Pradesh)									

MASTER TABLE 39: SHARE OF NUMBER OF PERSONS BY TYPE OF ENTERPRISES IN NCR -2005																											
Rural										Urban										All							
DISTRICT	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		
	Oabdggfgffge	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
UP Total	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	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
Delhi NCT	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	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	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

ANNEXURE VII: LOCATION QUETIENT - IMPORTANT TABLES

	MASTER TABLE 40: Location Quotient and Growth Rate																				Growth rates 2000-01 to 2005-06			
	Significance																							
District / Region	LQ OR 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	11.8 7.0	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
UP Total	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	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
Delhi NCT	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	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

MASTER TABLE 41: 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																
	District Name	Agriculture			Forestry & Logging			Fishing			Mining & Quarrying			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	0.75	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 of 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: www.planningcommission.nic.in and ACDS estimates																

MASTER TABLE 42: 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																
		Secondary Sector														
		Manufacturing						Electricity, Gas & Water Supply			Construction			Total		
		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	Bulandshaher	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
Uttar Pradesh		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 of Delhi		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: www.planningcommission.nic.in and ACDS estimates																

MASTER TABLE 43: 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

	District Name	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
Uttar Pradesh 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 of Delhi		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: www.planningcommission.nic.in and ACDS estimates

MASTER TABLE 44: L. Q. of Persons by Type of Enterprises in NCR Rural Aeas-2005									
DISTRICT	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
UP Sub – Region Total	**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 Total	**1.10**	**1.42**	**1.17**	**2.13**	**3.13**	**2.82**	**1.85**	**3.04**	**2.60**
Delhi NCT	**0.01**	**0.04**	**0.02**	**0.10**	**0.14**	**0.13**	**0.08**	**0.13**	**0.11**
Rajasthan Total	**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 : ACDS calculations and estimates									

MASTER TABLE 45: L. Q. of Persons by Type of Enterprises in NCR Urban Aears -2005									
DISTRICT	**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
UP Total	**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 Total	**0.75**	**1.41**	**1.12**	**0.85**	**0.63**	**0.66**	**0.85**	**0.63**	**0.66**
Delhi NCT	**0.19**	**0.74**	**0.50**	**0.89**	**1.24**	**1.19**	**0.88**	**1.24**	**1.19**
Rajasthan	**1.42**	**0.63**	**0.97**	**0.64**	**0.38**	**0.42**	**0.66**	**0.39**	**0.42**
NCR Total	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**
Source : ACDS calculations and estimates									

MASTER TABLE 46: L. Q. of Persons by Type of Enterprises in NCR -2005									
DISTRICT	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
UP Total	**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 Total	**1.05**	**1.42**	**1.16**	**1.23**	**0.95**	**1.00**	**1.21**	**0.95**	**1.00**
Delhi NCT	**0.04**	**0.30**	**0.12**	**0.66**	**1.10**	**1.03**	**0.59**	**1.09**	**1.00**
Rajasthan Total	**2.78**	**1.68**	**2.45**	**1.57**	**0.83**	**0.96**	**1.71**	**0.84**	**1.00**
NCR Total	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**
Source : ACDS calculations and estimates									

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