

## 4 STUDY OF EXISTING COUNTER MAGNET AREAS

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### 4.1 COUNTER MAGNET AREAS (CMA'S) – REGIONAL PLAN 2001

As mentioned earlier, the following urban centres were selected as counter magnet areas in the context of NCR Plan 2001.

1. Hissar in Haryana
2. Gwalior in Madhya Pradesh
3. Patiala in Punjab
4. Kota in Rajasthan
5. Bareilly in Uttar Pradesh

#### 4.1.1 Assigned role of counter magnet areas in Regional Plan – 2001

Regional Plan 2001 assigned two distinctive and mutually complementary roles in the context of NCR:

- (i) As interceptors of migratory flows into NCR, which may escalate, as the accelerated development of NCR would provide a pull to migrants from the less developed adjoining areas
- (ii) As regional growth centres, which would be able to achieve a balanced pattern of urbanization in the its region over a period of time

#### 4.1.2 Policy guidelines of Regional Plan – 2001

As per NCR Plan 2001, development of CMAs would require coordinated efforts of the state government, central government and NCRPB. The broad policy guidelines for development of CMAs in terms of the role to be played by respective governments and NCRPB have been stipulated in the region Plan-2001. The state government/implementing agencies were proposed to prepare integrated development programme for CMAs for strengthening the economic base functions and upgradation of physical and social infrastructure. The concerned state governments were proposed to take steps to strengthen organizational capacities of the local/development authorities in the counter magnet cities and provide adequate financial resources for development. The central government and NCRPB were proposed to provide financial assistance for strengthening of regional linkages (transportation and communication etc.) for development of counter magnet towns.

Respective state governments were required to take the following actions in order to make CMAs eligible for assistance from NCRPB:

- i. Finalization of Development Plan for counter magnet town
- ii. Constitution of project sanctioning committee at town level
- iii. Preparation of Annual action plan

- iv. Allocation by state government of its matching share in the development fund for CMAs.

In most of the cases, state governments managed to take required actions for the selected CMAs.

#### 4.2 Selection process for identifying counter magnet Areas

To select CMA's in regard to NCR Plan 2001, initially 36 cities falling within 100-400 km from Delhi were considered and analysed in respect of various parameters i.e. their size and status, population growth, work participation ratio, population density and spatial parameters like accessibility, congruence with in-migration corridors and proximity to other contenders in the region. Based on the analysis of these parameters and after discussions and consultations with the concerned state governments, following urban centres were recommended as possible contenders for further scrutiny to decide/finally select the counter magnet areas.

- a. Hissar, Yamuna Nagar, Ambala and Karnal in Haryana
- b. Gwalior in Madhya Pradesh
- c. Patiala, Bhatinda and Ludhiana in Punjab
- d. Kota, Sikar and Ajmer in Rajasthan
- e. Bareilly, Moradabad, Saharanpur and Allahabad in Uttar Pradesh

Final selection of five existing counter magnets was based on the cumulative evaluation of these urban centres by preparing city profile for all of them and by using certain indicators such as demographic changes, productive activity, finance & commercial services, public & semi public facilities, urban management, infrastructure (utilities & services) and growth impulse.

#### 4.3 CMA DEVELOPMENT STRATEGY

##### 4.3.1 General approach to development

The development of counter magnets is viewed in larger perspective for achieving balanced development and equitable growth in the adjoining states/territories as a complementary planning process for orderly growth of Delhi and NCR. As such, development of counter magnets have been considered as an integral part of the extended decentralization strategy of NCR plan itself, requiring sequential development strategy and programme in relation to the priority towns.

It was suggested in the policy guidelines that the development of priority towns within NCR would be the direct responsibility of NCR board in terms of funding and higher level institutional support. While the development of counter magnets would be the responsibility of the concerned State Government with funds coming from its own urban development and infrastructure development budget. The role of Central Government, State Government and NCR board in the development of counter magnets would be both promotional (through policy intervention at various levels of government decision making) and investment oriented.

#### 4.3.2 Areas of intervention

The selected counter magnets had potential to grow and develop on their own with inputs from state and local governments, certain sectors including regional linkages and social and economic infrastructure needed immediate attention to promote accelerated development in these cities to enable them to function effectively as counter magnets to NCR and also as regional growth centre. The areas of intervention are:

- **Up gradation of regional linkages**

The suggestive development programme would specify necessary improvements in regional linkages which includes physical linkages (transport and telecommunication), economic linkages (trade and tourism) and infrastructure linkages (higher order educational, health and socio-cultural institutions)\

- **Improvement of economic base viability**

The selected counter magnets are also expected to enjoy sufficiently high economic viability. Intervention required inducing certain sectoral shifts within the economy so as to make it more attractive. In this regard the suggestive development programme would specify suitable interventions with reference to the exiting sectoral distribution and to conceptually balanced. To ensure sufficient number of jobs and adequate sectoral diversification by directing inputs towards lagging key sectors of economy

- **Upgradation of infrastructure**

It includes both basic (land and economic base) and supporting infrastructure (housing, physical and social amenities)

#### 4.4 PROPOSALS AND RECOMMENDATIONS FOR CMA'S AS IN REGIONAL PLAN-2021

Based on the review of regional plan-2001 on counter magnets, NCR Plan 2021 suggested pursuing the policy of development of counter magnets in more effective manner. Further in order to make counter magnets capable to undertake their assigned roles more effectively, their future development must be directed to cover the following aspects:

- Ø **Strengthening of economic base**

The success of counter magnet as interceptors of migration entirely depends upon their capacity to generate more and more economic activities so that they can provide adequate opportunities to working age-group population of the surrounding areas, who would otherwise be tempted to migrate to Delhi. The counter magnet areas may be declared as SEZ for attracting economic investment and projects to be taken up jointly by the state governments and central Ministry of Commerce and Industry. Simultaneously, other physical infrastructure and fiscal incentives could be provided so as to attract industry to these CMAs.

- Ø **Upgradation of physical and social infrastructure**

In order to support and sustain the economic infrastructure suggested in CMAs, physical and social infrastructure of a very high order needs to be provided in these areas for which the

CMA's development authorities and the state governments will have to prepare joint projects which could be financially supported by NCRPB through its prevailing funding pattern for NCR areas.

### Ø Strengthening of regional linkages

In order to make meaningful use of economic and physical infrastructure proposed to be developed in these CMA's, their linkages with hinterland as well as with the other important metropolitan centres need to be very strong. Central ministries of railways, shipping, road transport and highways as well as communications and information technology will have to put in a lot of efforts in improving the transport and communication linkages in these CMA's in a planned manner within a specified time frame.

## 4.5 REVIEW OF EXISTING CMA'S DURING THE INTERVENING PERIOD

### 4.5.1 Factors reviewed to assess existing CMA's

Comparative performance of existing CMA's has been analyzed in terms of population growth rate, workers participation rate, economic base of the city / district and change in migration pattern. The factors have been tabulated in Table 4.1 which shows that workers participation rate in all the five counter magnets have improved in general. Population growth rate has improved in Hissar & Patiala while it is reduced in other counter magnets. The in-migration to the respective counter magnet from all other districts of the country varies from 86352 to 130869 migrants during 1991-2001. On the other hand, there is out-migration from these CMA's which varies from 53867 to 117814 migrants. The migration pattern shows low level of net migration (in-migrants minus out-migrants) which is positive in remaining four counter magnets except Bareilly. It can be observed from the economic base study that Hissar & Kota are functioning as industrial towns while Patiala & Gwalior are service towns and Bareilly have low level of industrial activities. There is marginal shift in occupation structure in the existing counter magnets from primary sector to secondary and tertiary sector.

**Table 4.1: Comparative table of counter magnets to Delhi and NCR**

Aspects/Factors	Year	CMA towns				
		Hissar	Patiala	Bareilly	Kota	Gwalior
Population 2001		2.63 lakh	3.24 lakh	6.99 lakh	7.03 lakh	8.26 lakh
Population growth rate	1981-91	31.95	23	37.36	50	30.36
	1991-2001	45.14	27.66	13.36	30.08	15.20
In-migration (from Six States and Delhi)	1991-2001	129,056	130869	86352	107511	113587
Out-migration to 6 states	1991-2001	88306	98264	117814	53867	58852
Out-migration to Delhi	1991-2001	6894	3363	17180	2202	4692
WPR	1991	28.74	29	26.89	28.43	25
	2001	33.51	31.90	30.30	29	25.99
Economic base		Industry, Trade & Commerce and Institution	Service town (govt. employees), Trade & Commerce, and Institution	Agro based and other industries	Industry, Trade & Commerce	Trade & Commerce and service sector

To some extent, the importance given by NCRPB to these five towns, has affected/ influenced the development process and also helped in accelerated/induced population growth rate in these towns. Other important factors responsible for affecting/reducing the migration flow to Delhi from the state representing counter magnets are as follows:

- The overall development of the state specially Haryana, Punjab & Rajasthan
- Creation of better employment opportunities in other towns/cities in their own state

**4.6 RECONNAISSANCE OF EXISTING CMA'S: Hissar, Patiala, Gwalior, Bareilly & Kota**  
Reconnaissance survey of the five existing counter magnet towns (Hissar, Patiala, Gwalior, Bareilly & Kota) has been conducted by the consultant covering the following aspects for each town.

1. Location and connectivity
2. Regional importance
3. Population, growth rate, migration and economic base
4. City map / district map
5. Master Plan
6. Status report of NCRPB funded projects

**4.6.1 Hissar**

**1 Location and connectivity**

Hissar located at 29° 10' North latitude and 75° 45' east longitude, is one of the important and fast growing urban centre of Haryana. The town caters to the needs of 15.37 lakh population of Hissar district and has trade links with adjoining areas of Rajasthan and Punjab. There is no other major urban centre around 100 km radius of Hissar.

**Map 4.1 District Map of Haryana**



Hissar district is well connected with other districts of the state as well as other states by road and rail. Hissar is located on NH-10 which links it with other important urban centres i.e. Delhi, Rohtak and Sirsa. The other important road links (state highways) are Hissar-Rajgarh highway (NH-65), Hissar Tohana-Chandigarh road, Hissar-Tohana-Bhiwani road and Hissar-Balsamand-Bhadra road. The total road length per sq km area of the district has improved from 0.41 km to 0.50 km during 1981-2001.

**2 Regional importance**

Industrial activities in and around the city, construction of new Judicial complex & district administrative complex, relocation of Haryana State Electricity Board, setting up of cantonment have made this city as a potential growth centre in the region.

### **3 Population, growth rate, migration and economic base**

#### *3.1 Population*

The population of Hissar has increased from 1,37,369 in 1981 to 1,81,255 in 1991 (decadal growth rate of 31.95 percent) while it has registered a decadal growth rate of 45.14 percent during 1991-2001 (population as per 2001 census is 2,63,070).

#### *3.2 Migration*

Total in-migration to Hissar from all districts of India during last decade is 129056, out of this, 98134 persons have migrated from rural areas and 28274 persons have migrated from urban areas of the country. On the contrary, 6894 persons have out-migrated to Delhi, which includes persons migrated from urban and rural areas of Hissar having corresponding figures of 3565 and 3114 respectively.

#### *3.3 Economic base and occupation structure*

The economic base of the town is industrial, trade and commerce and institution. As per the observation of Master Plan of Hissar, there is shift in occupation structure of the city i.e. workers engaged in primary sector have reduced from 14.21 percent to 3.2 percent in 2001. Hissar has become one of the largest pipe manufacturing centre in Haryana due to the existence of Jindal group in the town. Major industrial houses in Hissar includes Hissar textile mill, United Textile mill, Jindal industries and its sister industry i.e. Jindal strips.

The workers participation rate of Hissar has increased from 28.74 percent in 1991 to 33.51 percent in 2001 i.e. workforce increased from 52,103 to 88,145 during the same period.

### **4 City map/District map**

The district spreads over an area of 3983 sq km which comprises of four tehsils namely Adampur, Narnod, Hansi and Hissar. As per District Statistical Handbook 2004-2005, the total population of Hissar district is 15,37117 which is distributed among five towns and 275 villages. The population density in the district has increased from 237 persons per sq km in 1981 to 386 persons per sq km in 2001. During last two decades (1981-2001), the sex ratio of the district has slightly reduced from 867 to 851 females per 1000 males.

### **5 Master Plan**

The revised Draft Development Plan – 2021, Hissar, as prepared by Town and Country Planning Department, Hissar was published in Haryana Government Gazette on December 30th, 2003 as per the Town and Country Planning Department notification of December 19th 2003.

### **6 Status report of NCRPB funded projects**

Hissar being the counter magnet to NCR, NCR planning Board is empowered to finance any development project in the town. As a part of this strategy, NCRPB has funded the Augmentation and extension of Water Supply and Sewerage Project, Hissar which is being executed by PWD (Public Health) and monitored by HUDA. The total project cost under NCRPB scheme is Rs 15.94 Crore, out of this Rs 922 lakh allocated for water supply works and the balance amount of Rs 672 lakh were allocated for sewerage works. The implementing

agency for this project has already incurred the expenditure of Rs 881.65 lakh including the loan amount of Rs 660 lakh received from NCRPB. The project started in the year 2003-04 and the completion year is 2006-07.

On the basis of field observations and discussions held with the officials of implementing agency, the present status report for this project is discussed below:

*6.1 Water supply*

The total project cost for augmentation of water supply scheme in the town is Rs 922 lakh, while the amount spend till August 2006 is Rs 435.77 lakh. The Hissar city is served by canal based water supply system through three water filtration plants having capacity of 3 MGD, 2 MGD & 2 MGD respectively. There are two huge water storage reservoirs having total capacity of 10 MGD. Water stored in these reservoirs is being purified with the help of 3 filtration plants (refer photographs).



**Photo 4.1 View of water storage reservoir near water filtration plant in Hissar**

As a part of NCRPB funded scheme, water supply works includes construction of filtration plant, 2 underground water storage tanks with booster station, main and distribution water supply lines. Water is being supplied to two underground water tanks (one functional and other under construction) through the filtration plant constructed under this scheme for further water distribution in the local area with the help of boosting station located at these water tanks. The underground water tank with boosting station of 468750 gallon capacity, located in Model town is commissioned and functional (refer photographs). The other underground tank with boosting station of 380000 gallon capacity, located in mill road area is under construction. All the civil works of the boosting station are completed (refer photographs). Laying of rising main from existing filtration plant as well as laying of distribution system works are under progress.



**Photo 4.2 View of water filtration plant**



**Photo 4.3 View of underground water tank with booster station**

**(both are commissioned and functional)**





**Photo 4.4 View of underground water tank under construction**

#### 6.2 Sewerage

The total project cost for improvement of sewerage system in the town is Rs 672 lakh, while the amount spend till August 2006 is Rs 445.88 lakh. Laying of sewer line works are completed in Patel Nagar, Bank colony to Camp chowk, Subzi mandi to Mahavir colony, Hari Das colony, bye pass road at Sunder Nagar and Mini-Secretariat area. Rest of the works for improvement of sewerage system in other areas to be taken up under NCRPB funded scheme are under progress.



**Photo 4.5 View of manhole showing newly laid sewer line in Model town area**

Recently government of Haryana has regularized 32 unauthorized colonies which do not have water supply and sewerage system. Now provision of water supply and sewerage system has become the responsibility of PWD (PH). They have also prepared the scheme for raising funds from the state government to provide water supply and sewerage system in these 32 colonies

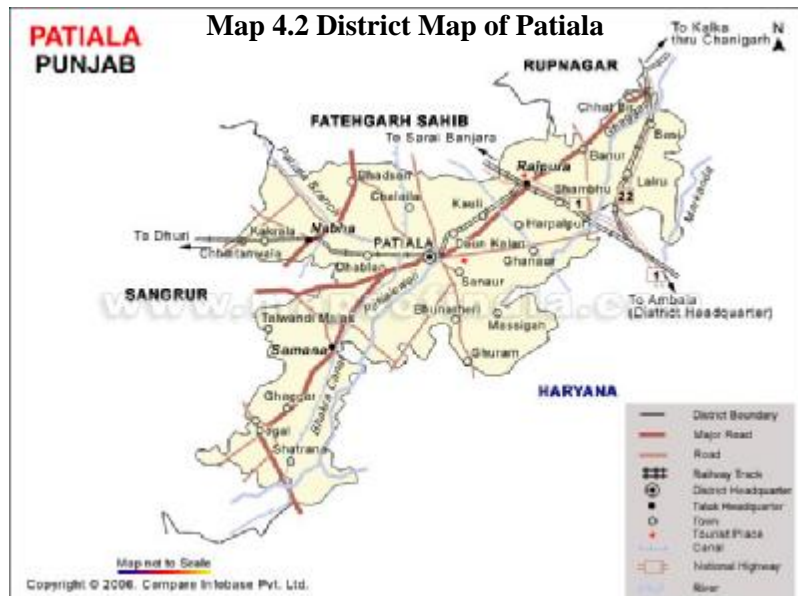


but it is being deferred due to paucity of funds. They have also shown their interest to take loan from NCRPB for this project after taking approval/consent of the state government, Haryana.

#### 4.6.2 Patiala, Punjab

##### 1 Location and connectivity

Patiala lies just off the excellent National Highway 1 (Delhi-Amritsar) and is about 250 Km from Delhi. It is located at a distance of 24 km from Rajpura, 50 km from Ambala and 65 km from Chandigarh. Patiala is located on Ambala-Bathinda railway line but don't have direct rail links with Chandigarh and other parts of the country. It is well connected with other urban centres of Punjab and Haryana via NH-22 and other major roads of the district. Four state highways (SH-8, 10, 11 & 12) converge at Patiala. The town is located at a distance of 62 km towards SW of Chandigarh. Its cardinal points are 30° 2' North latitude and 76° 20' East longitude. In addition to administrative primacy in the region, Patiala is an important collection and distribution centre of agriculture produce and other goods. Patiala is also well connected with fast developing industrial towns of Gobindgarh, Rajpura and other market towns like Sirhind, Nabha, Samana, Sangrur and Patran. Total road length in the district has increased from 3569 km in 1981 to 4105 km in 2001.



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##### 2 Regional Location:

It is surrounded by the districts of Fatehgarh Sahib, Rupnagar and the Union Territory of Chandigarh in the north, Sangrur district in the west, Ambala and Kurukshetra districts of neighbouring state of Haryana in the east and Kaithal district of Haryana in the south.



**Photo 4.6 View of Traffic during peak hours near bus stand of Patiala**

### 3 Regional importance

Patiala is important urban centre of Punjab state. Patiala being the administrative headquarter of the district, houses/locates number of state and regional level government offices such as PSEB, Income Tax commissioner, Excise & Taxation commissioner, Chief Engineer of PWD & Public Health Department, Punjab Public Service Commission, Punjab state pollution control board and Water supply & sewerage board. The town, in addition to service city, is also a premier educational centre in the state. Some of the important education institutions in the district are Punjabi University, Thapar Engineering College, North zone cultural centre, Rajinder medical college & hospital and two dental colleges. It has also been developed as second largest cantonment in Punjab. In addition to the administrative and institutional primacy, Patiala is an important collection and distribution centre of agricultural produce and other goods. It has fertile agricultural hinterland which could provide base for development of large number of agro-based industries. Due to the establishment of premier education institutions, Patiala also has the potential to be developed as Knowledge city. (refer photographs)



**Photo 4.7 View of Patiala-Rajpura Road**

Sirhind, Nabha, Samana, Rajpura of Patiala district and Bhawanigarh block of Sangrur district have both physical and functional integration with Patiala city which can be considered as its influence zone and broad region.

### 4 Population, growth rate, migration and economic base

#### 4.1 Population and growth rate

The population of Patiala has increased from 151041 in 1971 to 323884 in 2001. It has registered a decadal population growth rate of 36.55 percent during 1971-1981 (mainly due to annexation of area within the municipal limits) which has reduced to 23 percent during 1981-1991. The population growth rate has slightly improved during the last decade i.e. 27.66 percent during 1991-2001. Refer Table 4.2

**Table 4.2: Population 1971-2001**

Decades	Population	Increase in population	Decadal growth rate in %
1971	151041	-	-
1981	206254	55213	36.55
1991	253706	47452	23
2001	323884	70178	27.66

#### 4.2 Migration

Total in-migration to Patiala from all districts of India during last decade is 130869, out of this, 88879 persons have migrated from rural areas and 39230 persons from urban areas of the country. On the other hand, 3363 persons have out-migrated to Delhi, which includes persons migrated from urban and rural areas of Patiala having corresponding figures of 2374 and 989 respectively.

#### 4.3 Economic base and occupation structure

The economic base of the town is service (government employees), trade and commerce and institution. Patiala is predominantly an agricultural district as 65.06% of its total population resides in rural area. The prominent industrial town in its vicinity is Gobindgarh which is also known as steel town of the state, Punjab. Patiala is famous for wholesale tractor spare parts market which is also known as Kabadi market. Recently Indian Railways have established Diesel components workshop. Patiala district is fast emerging as an important industrial growth centre. The industrial units are scattered all over the district mainly at Rajpura, Dera bassi, Patiala, Samana and Nabha. There are large and medium industrial units located at Rajpura producing Vanaspati ghee, power cables, bicycles and bicycle components and at Dera bassi producing spun-yarn and alcohol. Among the small scale industry in the district are those producing agriculture implements, rice shellers, cutting tools, electrical goods and bakeries. There are Industrial Focal Points at Patiala, Rajpura, Nabha and Dera bassi and three Industrial Estates at Rajpura, Patiala and banur.

As per 2001 census, main workers in Patiala district have increased from 469151 in 1981 to 589015 in 2001. The workers participation rate of Patiala has improved from 29 percent in 1981 to 31.90 percent in 2001, which is also comparable with the state's average of 32.20 percent. According to Development Plan of Patiala – 2001, the workers engaged in various economic activities in 1981 were 59873.

#### 4.4 Tourism

There are many places of historical and religious importance in the district which could be developed to promote tourism and related activities. Patiala is one of the princely states of erstwhile PEPSU which merged with Punjab in 1956. Important tourist spot having historical importance are Quilla Mubarak, Sheesh Mahal, Bara Dari Garden, Rajendra Gymkhana & Maharani club and cricket stadium.

### 5 City map/District map

Patiala district with an area of 3625 Sq. km and population of 18.45 lakh, is the 5th largest district of the Punjab (area wise) after Ferozepur, Amritsar, Sangrur and Ludhiana as per 2001 census. Patiala district comprises of 1084 villages which are sub-divided into 5 sub-divisions / tehsils, 4 sub-tehsils and 9 blocks. Population density of the district has increased from 342 persons per sq km in 1981 to 359 persons per sq km in 2004 which is higher than the state average density of 350 persons per sq km. The literacy rate of the district has also improved from 65.09 % in 1981 to 69.80 % in 2001. The literacy rate for urban and rural areas is 81.70 % and 63.20 % respectively.

## 6 Master Plan

The Master Plan – 2001, Patiala, as prepared by Town and Country Planning Department, Patiala was published in Punjab Government Gazette with reference to Punjab Government Gazette notification no 8/8/80-IHG-IV/10059 dated July 19th 1989. it comprises of Patiala city and 49 villages covering total area of 165.04 sq km with a population of 244341 persons as per 1981 census. The Master Plan period for the same has been extended upto 2016.

## 7 Status report of NCRPB funded projects

Patiala being the counter magnet to NCR, NCR planning Board is empowered to finance any development project in the town. As a part of this strategy, NCRPB has funded two projects viz: (i) Integrated township project at Baran (implemented directly by PUDA) and; (ii) Augmentation & extension of Water Supply, Sewerage and solid waste management Project (being executed by water supply and sewerage board, Punjab and monitored by PUDA). On the basis of field observations and discussions held with the officials of implementing agencies, the present status report for these projects is discussed below:

### Project 1 Integrated township at Baran, Patiala

NCRPB funded Integrated township project having total area of 342.55 acres, is being implemented through PUDA. The site of proposed township is located along Sirhind road at a distance of 7 km from Patiala city (refer map). The total project cost is Rs 66.24 crores, out of this, PUDA has already incurred the expenditure of Rs 38.91 crore which includes NCRPB's share of Rs 28.80 crore. This amount is being spend on land acquisition and construction of boundary wall (refer photograph). Feedback Ventures Pvt. Ltd. has been appointed as the consultants for the formation of joint venture with private developer for further implementation of this project.



**Photo 4.8 Site photograph of proposed Integrated Township at Baran showing boundary wall constructed**

### Project 2 Extension and Augmentation of water supply, sewerage and solid waste management project, Patiala

This project includes construction of 55 tubewells, laying of 172 km water supply line, laying of 114 km lateral sewer line, 17 km intercepting/outfall sewer, construction of sewerage pumping station and covering of ganda nallah. Total cost of this project is Rs 59.93 crores having following break-up (refer photographs 4.9 to 4.12):

Water supply works	-	Rs 12.05 crore
Sewerage	-	Rs 36.91 crore



Covering of Ganda Nallah - Rs 10.97 crore

The implementing body, Water supply and sewerage board, Punjab have spend Rs 39.59 crore including the NCRPB's share and the works completed are as given below:

- 43 tubewells commissioned and laying of 188.74 km water supply line
- 113.46 km lateral sewer line out of the total length of 114 km has been laid and the work in under progress at three locations.
- 14.8 km of main sewer line has been laid and work in progress at 2 sites.
- Sewerage pumping station having capacity of 110 MLD, is under construction. Foundation work completed and concreting of walls in progress (50% completed). Primary & secondary collection chamber as well as disposal chamber is under construction.

Presently there is one existing pumping station for disposal of untreated sewage into the Jacob drain. The old city area was already covered by sewerage system. The areas covered under current scheme includes newly developed areas in the periphery of the town and excludes the unauthorized areas and the areas having their own arrangements i.e. defense area, University area, sectors of PUDA etc.



A

B

**Photo 4.9 View of SPS of 110 MLD capacity under construction near Jacob drain**



**Photo 4.10 View of existing sewage pumping station (SPS)**



**Photo 4.11** View of manhole near proposed SPS    **Photo 4.12** View of SPS site near Jacob drain

### 4.6.3 Bareilly, Uttar Pradesh

#### 1 Location and connectivity

Bareilly is an important district in Uttar Pradesh. It is located on the Ramganga River in the fertile Indo-Gangetic Plain. It is located at a distance of 250 km from Delhi, 91 km from Muradabad, 62 km from Rampur, 81 km from Shahjahanpur and 53 km from Pilibhit. It is situated between the latitudes of 28 degree 10 minutes and 28 degree 54 minutes and longitudes of 78 degree 58 minutes and 79 degree 47 minutes. The adjoining districts of Bareilly are Rampur in the north- west, Udham Singh Nagar in the north, Pilibhit in north - east, Shahjahanpur in South -East and Budaun in the south.

**Map 4.3 District Map of Bareilly**

Bareilly is an important junction of the Northern Railways lying on the Lucknow - Delhi section of the Howrah-Punjab main route with branch-line connections to Aligarh / Mathura / Agra. It also have rail linkages with Haldwani in the north and Kasganj in the south-west. Bareilly is well connected with major cities of north India and it is strategically located on the NH-24 which connects it with Rampur and Moradabad in the north-west and Shahjahanpur in the south-east.



In addition, three state highway, one from Haldwani in the north, one from Pilibhit in the north-east, and one from Kasganj in the south-west converges at Bareilly.

## **2 Regional importance**

It is the headquarter of the Rohilkhand Division and Bareilly District. Bareilly is one of the 18 districts constituting western zone of Uttar Pradesh which is economically more advanced as compared to Central and Eastern Zones.

Bareilly has well developed infrastructure and various services & amenities, it caters to its large regional population. It is the largest collection and distribution center for agriculture produces. Bareilly being the largest urban center in the region serves as a regional growth centre by providing various kinds of regional services i.e. wholesale, technical, professional, higher education and specialized medical facilities, employment opportunities, administrative and other services.

## **3 Population, growth rate, migration and economic base**

### *3.1 Population*

The population of the Municipal Corporation, Bareilly as per 2001 census is 6,99,839. The total population of the district has increased from 2834616 in 1991 to 3598701 in 2001. The decadal growth rate has increased from 24.7 percent during 1981-91 to 26.96 percent during 1991-2001.

### *3.2 Migration*

The total in-migration to the Bareilly district during last ten years (1991-2001) is 86,352 which includes 24,009 males and 62,343 females. It includes 46,998 persons migrated from rural areas and 39,354 persons from urban areas. On the contrary, 17,180 persons have out migrated from Bareilly district to Delhi in 1991-2001 which includes 964 persons migrated from rural areas and 16216 persons from urban areas of the district.

### *3.3 Economic Base and Occupation Structure*

There are several agro and forest based industries which draw upon raw materials from the region and generate employment for the hinterland population. Capital goods industry (especially agricultural tools and implements) supports the agricultural economic base both within and outside the region.

Bareilly, besides catering to the regional population's needs of retail shopping as well as wholesale trade-in both consumer and capital goods serves as a major collection center for the rich agricultural hinterland not only for consumption but also for trans-shipment which has been possible on account of its transport nodality in the extended region.

## **4 City Map / District Map**

The total area of the district is 4120 sq. km. which includes 1851 habitated villages and the population of 3598701(as per 2001 census). The entire area is divided into 6 tehsils and 15 community development blocks. Bareilly is the largest urban center in the western zone of Uttar Pradesh. Population density of the district has increased from 688 to 873 persons per sq km during 1991-2001. As per census, the literacy rate of the district has improved from 32.7



% in 1991 to 47.8% in 2001 while the sex ratio has also improved from 839 to 871 females per 1000 males during the same period.

## 5 Master Plan

Town and Country Planning Department, Bareilly has prepared the Master Plan for the planning period 1971-1999 for the population of 9.25 lakh. However the Master Plan for 2021 is under preparation.

## 6 Status report of NCRPB funded projects

Bareilly being the counter magnet to NCRPB, two projects have been funded by NCRPB which are as discussed below:

### Project 1 Residential and Transport Nagar schemes

This scheme has been completed. Under this scheme only transport Nagar has been developed which is functional since 1998-99.

### Project 2 Ram Ganga Nagar residential scheme

This is the ongoing scheme being implemented by BDA and funded by NCRPB. The site for this scheme is located on Pilibhit bye-pass road after Nakatia River near Rohilkhand University. The scheme was started in Dec. 2004 and will be completed by Nov. 2009. The total area of earmarked for this scheme is 269.96 hectares, out of which 44.22% will be used for residential, 3.22% for commercial and 2.32% for educational, 5.55% for public amenities and 3.61% for institutional purpose. 27% of the total area will be used for roads and 14.08% will remain for open spaces. The total project cost is Rs. 99.37 crores out of which Rs. 41.07 crores will be spent on land acquisition. The estimated expenditure for the trunk infrastructure development is Rs. 58.30 crores. The implementing agency, BDA has taken loan of Rs. 37 crores from NCRPB.



A



B

Photo 4.13 View of Ram Ganga Nagar Residential Scheme



**Photo 4.14 Lohia Vihar Project Site**

**Project 3 Lohia Vihar**

It is a residential development scheme located along Rampur road at a distance of 4-5 km from the city in the periphery of Bareilly. The details of the scheme are given below:

**Table 4.3: Land use breakup of area earmarked for residential development**

Categories	Area (Sq m)	% of land
Total area	1,19,167.98	
Net area	1,18,993.01	
Residential	54496.43	45.08%
Commercial	12743.66	10.70%
Nursing home	680.66	0.57%
Electric sub-station	956.93	0.80%
Community hall/ club/ banquet hall	4668.26	3.92%
Nursing school	1743.32	1.47%
Parks / green / open spaces	17856.80	15.01%
Roads	25846.95	21.73%

The construction work including internal roads and other utilities is going on at the site. As per the information available this scheme has got high response from the public and all the residential plots were sold readily.

A



B



**Photo 4.15 View of road under construction**

#### 4.6.4 KOTA, RAJASTHAN

##### 1 Location & Connectivity

Kota, the industrial capital of Rajasthan is located in the South-East part of the state along the eastern bank of Chambal River. Its cardinal points are 25 degree 11 minutes north latitude and 75 degree and 51 minutes east longitude.

Kota is the regional headquarter for southern Rajasthan and forms a part of Hadothi region of Rajasthan comprising Kota, Bundi and Jhalawar district. Important towns in the regional context are Bundi to northwest, Jhalawar to southeast, Baran towards the east, and Rawatbatta to the west.



**Map 4.4 District Map of Kota**

The city has good rail and road linkages to other parts of the state and the country. Kota is located 240 Km. away from Jaipur, the capital of Rajasthan and is 470 Km. away from Delhi. Kota is located on NH-12 linking it with Jaipur and Jabalpur. Other state highways, Kota-Baran and Kota-Rawatbhatta, pass through the city. Kota Railway station is an important junction on the Delhi – Mumbai broad gauge line. In addition to this, the city has a domestic airport, having direct flights to Delhi and Jaipur.

##### 2 Regional Importance

Kota is a well established regional urban center and is a focal point for all industrial development in the state. Kota's identity as a major industrial center with abundant infrastructure (power & water supply), rich rural hinterland, excellent linkages with Delhi and Mumbai, and identification as a counter magnet to the national capital makes it an important regional growth center. Hence, over the years it has emerged as important regional center.

##### 3 Population, Growth Rate, Migration and Economic Base

###### 3.1 Population

The population of Kota Municipal Corporation as per 2001 census is 695899. The decadal growth rate of Kota has increase of 37.53% in 1951 to 50.0% in 1991. The population of Kota

has increased from 1,20,345 in 1961 to 5,37,371 in 1991 and 7,04,731 in 2001. Kota district spreads over an area of 5197.88 sq. km which comprises of 1568525 population as per 2001 census. The sex ratio of the district has slightly improved from 865 in 1991 to 896 females per 1000 males in 2001. The literacy rate as per 2001 census is 74.25 percent.

### 3.2 Migration

The total in-migration from all other districts of India to Kota is 107511. This includes 45958 males and 61,553 females. Persons migrated to Kota from rural areas is 32,144 people while persons migrated from urban areas is 75, 367 people. On the contrary, 2202 persons have out migrated from Kota to Delhi which includes 1069 males and 1133 females.

### 3.3 Economic base and Occupation structure

Major economic base of Kota is industrial activities, trade and commerce and presently 21.5 percent of the total workers are engaged in industrial activities and 21 percent in trade and commerce while the corresponding figure for service sector is 33 percent of the total workers. There are 29 large and medium scale industries and 873 small scale industries. Kota is famous for its stones. The fine-grained variety of limestone is known as Kota stone. Kota Stone is mainly used for Exteriors, Pathways, Corridors, Driveways, Balconies, Commercial buildings etc. It is available in Kota Green, Black & Brown colors.

As per Master Plan 2023, work force participation ratio has increased from 28.43% in 1991 to 29 % in 2001. A shift in occupation pattern is seen towards trade and commerce category which had shown an increase from 16% (1971) to 19.85% (1991). The transportation storage and communication category has registered a decline in share from 15.75% to 9.49% (1991). Total workers engaged in various economic activities have increased from 1,52,793 in 1991 to 2, 04,372 in 2001.

## 4 City Map / District Map

The total area of the Kota district is 5197.88 sq. km which comprises of total population of 15,88,525 as per 2001 census. The population density of the district has increased from 224 in 1991 to 288 persons per sq. km in 2001. For administrative purposes the area has been divided into two sub-divisions viz. Kota, Ramganj - Mandi, which is turn is divided into Five tehsils namely Digod, Ladpura, Pipalda, Ramganjmandi, Sangod.

## 5 Master Plan

The Master Plan 2023 was prepared by Town Planning Department, under Rajasthan City Improvement Act, 1959, section 3 of sub-section 1. This was published with reference to Rajasthan Govt. Notification dated 27/12/01. The planning area of 1,25,000 acres covered under Master Plan includes 64 revenue villages.

## 6 Status report of NCRPB funded projects

At present Kota is not taking any loan from NCRPB. The developments taking place is through the revenue generated by Urban Improvement Trust and other governing agencies. However, the details of two projects sanctioned by NCRPB are as given below:

**Project 1 Construction of integrated township at Srinathpuram, Kota:**

Rs. 2 crore loan was taken for the township development but at the later stage they stopped taking the monetary help. The township is under the stage of development, few plots are vacant and few are occupied.

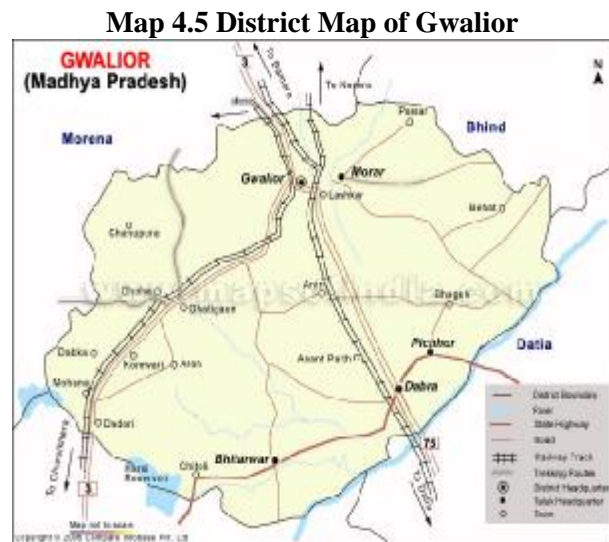
**Project 2 Providing feeder main to provide drinking water facility for the newly developed colonies of UIT / RHB / Medical College:**

This project is being developed by the State Govt. funds through Urban Improvement Trust.

**4.6.5 Gwalior, Madhya Pradesh**

**1 Location and connectivity**

Gwalior is located in the state of Madhya Pradesh and is one of the counter magnets of NCR. It is 319 Km away from Delhi. Gwalior is strategically located in the center of the state and is well connected with other cities by road, rail and air due to its importance in the national transportation policy. The city is located on Delhi-Agra-Mumbai Road that is NH-3. It also has good rail network as it is located on major Delhi-Agra-Mumbai main rail line. It is also connected with Bhind and Shivpuri via rail network. There is air connectivity from Gwalior to Indore, Delhi & Mumbai.



**2 Regional importance**

Gwalior has been declared as the priority urban region of Madhya Pradesh. It is also one of the largest urban center in the Gwalior region which comprises of districts of Gwalior, Bhind, Morena, Shepur, Guna, Datia and Shivpuri.

**3 Population, growth rate, migration and economic base**

*3.1 Population*

The population of Gwalior as per 2001 is 8.26 lakhs having decadal growth rate of 15.2 percent during 1991-2001. Its population has increased from 4.01 lakhs in 1971 to 5.5 lakhs in 1981 & 7.17 lakhs in 1991. The population growth rate of Gwalior during 1971-91 was 3.5 percent annually.

*3.2 Migration*

Total in-migration from all other districts of India to Gwalior during the decade (1991-2001) is 113587 which includes 23,037 persons migrated from rural areas and 90,550 persons migrated from urban areas. On the contrary, total emigration from Gwalior to Delhi is 4692



during the same period which includes persons migrated from rural and urban areas of Gwalior having corresponding figures of 273 and 4419 persons respectively.

### 3.3 Economic Base and Occupation Structure

The major economic base of the city is trade & commerce and service sector. The workers participation rate has slightly increased from 25 percent in 1971 to 25.99 percent in 1991. As per 2001 census, the work force participation ratio for Gwalior District is 32.54 percent. The total workforce of Gwalior district engaged in various economic activities in 2001 is 530629 persons. The industrial growth within the city limits has slowed down while there is increase in the trade and commerce activities. The trend also indicates that large increase in industrial workforce has apparently been absorbed in the neighboring towns of Morena and Bhind.

## 4 City map / District map

The district spreads over an area of 4565 sq. km. which comprises of three tehsils viz. Gird, Pichor and Bhitwar. The population of Gwalior district has increased from 12,93,567 in 1991 to 16,32,109 in 2001. The population density in the district has increased from 283 to 358 persons per sq. km. during 1991-2001. Sex Ratio of the districts has also improved from 831 to 848 females per thousand males during 1991 to 2001.

## 5 Master Plan

The Gwalior Development Plan Perspective 2005 was prepared by the Directorate of Town and Country Planning. The development plan of Gwalior has proposed to retain the existing form of the city as a combination of three sub-city by integrating them physically without latter to lose their individual identities. A total area of 4331

hectares is proposed to be increased to 7481 hectares for development of urban uses.

**Photo 4.16 Projects funded by NCRPB**



## 6 Status report of NCRPB funded projects

For the implementation of the counter magnet project, the Government of Madhya Pradesh in the year 1992, Constituted a Special Area Development Authority (SADA). The SADA covers an area of 30,014 hectares.

Under NCRPB funded scheme, the present status of works being taken up by SADA are as discussed below:

- Road Constructed: 84 km arterial and sub-arterial road has been constructed.
- WTP of capacity 20 MLD have been constructed.
- 132 / 33 KVA and 33 / 11 KVA electric sub-station have been constructed.
- Construction of 2 OHTS and laying of 8 gravity and rising main pipe line works have been completed.
- Land allocated for SEZ- out of the total



land of 1000 hectares earmarked for SEZ, 721 hectares of SADA land has been transferred to Industrial Centre Development Corporation.

- City Forest scheme: 60,000 trees have been planted in SADA area.
- 5000 residential plots and 100 acre institutional area is being allocated to SADA.

#### 4.7 Financial assistance to CMA's by NCRPB

NCRPB have sanctioned loan amount of 767.82 crores and so far released Rs 368.75 crores to twelve projects in five existing CMA's. The present status of loan assistance for all the five CMAs is as tabulated below:

**Table 4.4: Status of NCRPB funded projects in CMAs (completed & on-going)**

**Rs in Crore**

Sr No.	Counter Magnet Areas	No of Projects	Estimated cost	Loan sanctioned	Loan released by NCRPB	Expenditure (March 2007)
1	Gwalior	4	133.65	101.24	89	134.18
2	Patiala	3	144.95	95.63	74.75	98.27
3	Bareilly	2	438.68	57	57	130.68
4	Hissar	2	4274.6	511.95	146	11.66
5	Kota	1	35.71	2	2	25.61
	<b>Total</b>	<b>12</b>	<b>5027.58</b>	<b>767.82</b>	<b>368.75</b>	<b>400.40</b>

*Source: NCR Planning Board*





The further details of six on-going projects along with six completed projects in all the five existing CMA's are given in Table 4.5.

**Table 4.5: Details of NCRPB funded projects in five CMA's**

Sr No	Name of the Projects	Town	Implementing Agency	Date of completion	Estimated cost (Rs in Cr)	Loan Sanctioned (Rs in Cr)	Actual loan amount released till March 07	Expenditure upto March 07
<b>I Status of Ongoing Projects in existing CMA's</b>								
<b>A Land development projects</b>								
1	1. Integrated township project, Patiala	Patiala	PUDA	Mar 05 (project being revised)	66.24	49.68	28.8	45.4
2	2. Ram Ganga Nagar residential scheme, Bareilly	Bareilly	BDA	Mar-10	99.37	37	37	39.06
<b>B Infrastructure development projects</b>								
3	1. Setting up of a coal based Thermal Power project under stage I for 1200 MW (2 X 600 MW) in Hissar district, Haryana	Hissar	HPGCL	Apr-10	4258.65	500	135	0
4	2. Augmentation & Extension of water supply/sewerage scheme in Hissar	Hissar	PWD (PH)	Sep 06 / Jan 08	15.93	11.95	11	11.66
5	3. Extension & Augmentation of water supply, sewerage & solid waste mgmt scheme, Patiala	Patiala	PUDA	Mar 05 / Dec 06	59.93	44.95	44.95	48.47
6	4. Water supply scheme for Gwalior	Gwalior	SADA	Mar 06 / Dec 08	29.65	22.24	10	8.96
<b>II Status of completed projects in existing CMA's</b>								
<b>A Land Development projects</b>								
7	Development of Integrated township in Gwalior	Gwalior	SADA		40	31	31	54.69
8	Development of Sewa Singh Tikri Wala Nagar & Extension of Karhari Farm, Urban Estate, Patiala	Patiala	PUDA/Improvement Trust, Patiala		18.78	1	1	4.4
9	Construction of Integrated township at Srinathpuram, Kota	Kota	UIT, Kota		35.71	2	2	25.61
10	Residential & transport nagar schemes, Bareilly	Bareilly	BDA		339.31	20	20	91.62
<b>B Infrastructure Development Projects</b>								
11	1. Construction of KV sub-station, Gwalior	Gwalior	SADA		16	12	12	16.48
12	2. construction of 6 lane arterial road in Gwalior	Gwalior	SADA		48	36	36	54.05

#### 4.8 MIGRATION PATTERN OF FIVE EXISTING CMA'S

The consultants have studied the out-migration and in-migration pattern from all the five existing counter magnets to Delhi and its six adjoining states in North India i.e. Haryana, Punjab, Rajasthan, Uttar Pradesh, Uttranchal and Bihar.

##### 4.8.1 Hissar

###### (i) Out migration from Hissar

It is revealed that 88306 persons have out migrated from Hissar to Delhi and six states, out of which 78.85 percent have migrated to top 10 districts of Haryana. On the other hand, only 7.81 percent (6894 persons) have out migrated to Delhi. The top ten districts receiving maximum migration from Hissar are its surrounding districts as mentioned in the Table 4.6. The districts receiving maximum migration are Jind, Fatehabad, Bhiwani, Sirsa and Rohtak. Refer Table 4.6 & Map 4.6

**Table 4.6: Out-migration from Hissar to 6 states and Delhi**

Districts	No of migrants	Percentage
District - Jind 09	18,306	20.73
District - Fatehabad * 10	16,473	18.65
District - Bhiwani 13	14,480	16.40
District - Sirsa 11	6,431	7.28
District - Rohtak 14	4,579	5.19
District - Kaithal 05	3,497	3.96
District - Karnal 06	1,606	1.82
District - Sonipat 08	1,460	1.65
District - Ganganagar 01	1,401	1.59
District - Panchkula * 01	1,396	1.58
<b>Out migration to top 10 districts of 6 states</b>	<b>69,629</b>	<b>78.85</b>
<b>Out migration to other districts of 6 states</b>	<b>11783</b>	<b>13.34</b>
<b>Out migration from Hissar to Delhi</b>	<b>6894</b>	<b>7.81</b>
<b>Total out-migration from Hissar to 6 states including Delhi</b>	<b>88306</b>	<b>100.00</b>

Source: Migration tables, Census of India 2001

###### (ii) In-migration to Hissar

Total in-migration to Hissar from rest of the country is 129056, out of which 79163 persons have migrated from top 10 districts. It is observed that 64851 persons (48.12 percent) have migrated from top six nearby districts of Haryana (Bhiwani, Jind, Fatehabad, Rohtak, Sirsa & Kaithal) as mentioned in the Table 4.7.

**Table 4.7: In-migration to Hissar from six states**

Districts	No of migrants	Percentage
District - Bhiwani 13	18,907	14.65
District - Jind 09	15,410	11.94
District - Fatehabad * 10	14,604	11.32
District - Rohtak 14	6,889	5.34
District - Sirsa 11	6,286	4.87
District - Hanumangarh * 02 of RAJASTHAN 08	5,516	4.27
District - Churu 04 of RAJASTHAN 08	3,665	2.84
District - Banda 40 of UTTAR PRADESH 09	3,073	2.38

Districts	No of migrants	Percentage
District - Kaithal 05 of HARYANA 06	2,755	2.13
Unspecified District of N.C.T. OF DELHI 07	2,058	1.59
<b>Total in-migration from top 10 districts</b>	<b>79,163</b>	<b>61.34</b>
<b>In-migration from other districts</b>	<b>49,893</b>	<b>38.66</b>
<b>Total in-migration to Hissar</b>	<b>129,056</b>	<b>100.00</b>

Source: Migration tables, Census of India 2001

#### 4.8.2 Patiala

##### (i) Out-migration from Patiala

It is revealed that 98264 persons have out migrated from Patiala to Delhi and six states, out of which 75.42 percent have migrated to top 10 districts of the identified states. On the contrary, only 3.42 percent (3363 persons) have out migrated to Delhi. The top ten districts receiving maximum migration from Patiala are its surrounding districts as mentioned in the Table 4.8. The districts receiving maximum migration are Sangrur, Ambala, Fatehgarh Sahib, Rupnagar and Ludhiana. Refer Table 4.8 & Map 4.7

**Table 4.8: Out-migration from Patiala to 6 states and Delhi**

Districts	No of migrants	Percentage
District - Sangrur 16	16,917	17.22
District - Ambala 02	11,614	11.82
District - Fatehgarh Sahib * 08	9,322	9.49
District - Rupnagar 07	9,005	9.16
District - Ludhiana 09	7,746	7.88
District - Kaithal 05	5,264	5.36
District - Kurukshetra 04	5,183	5.27
District - Panchkula * 01	4,901	4.99
District - Yamunanagar 03	2,100	2.14
District - Karnal 06	2,055	2.09
<b>Out migration to top 10 districts of 6 states</b>	<b>74107</b>	<b>75.42</b>
<b>Out migration to other districts of 6 states</b>	<b>20794</b>	<b>21.16</b>
<b>Out migration from Patiala to Delhi</b>	<b>3363</b>	<b>3.42</b>
<b>Total out-migration from Patiala to 6 states incl. Delhi</b>	<b>98264</b>	<b>100.00</b>

Source: Migration tables, Census of India 2001

##### (ii) In-migration to Patiala

Total in-migration to Patiala from rest of the country is 130869, out of which 49.26 percent (64460 migrants) have migrated from top 10 districts. It is observed that nine out of top ten districts are sending 59327 migrants (45.33 percent of total in-migrants) to Patiala as mentioned in the Table 4.9.

**Table 4.9: In-migration to Patiala from 6 states and Delhi**

Districts	No of migrants	Percentage
District - Sangrur 16 of PUNJAB 03	16,839	12.87
District - Ambala 02 of HARYANA 06	11,297	8.63
District - Ludhiana 09 of PUNJAB 03	6,452	4.93
District - Rupnagar 07 of PUNJAB 03	5,624	4.30
District - Fatehgarh Sahib * 08 of PUNJAB 03	5,476	4.18
District - Chandigarh 01 of CHANDIGARH 04	5,133	3.92
District - Kurukshetra 04 of HARYANA 06	4,419	3.38
District - Kaithal 05 of HARYANA 06	4,113	3.14

Districts	No of migrants	Percentage
District - Panchkula * 01 of HARYANA 06	2,936	2.24
District - Karnal 06 of HARYANA 06	2,171	1.66
<b>In migration from top 10 districts</b>	<b>64,460</b>	<b>49.26</b>
<b>In-migrations from other districts</b>	<b>66,409</b>	<b>50.74</b>
<b>Total in migration to Patiala</b>	<b>130,869</b>	<b>100.00</b>

Source: Migration tables, Census of India 2001

### 4.8.3 Bareilly

#### (i) Out-migration from Bareilly

It is revealed that 117814 persons have out migrated from Bareilly to Delhi and six states, out of which 60.45 percent have migrated to top 10 districts of the identified states. On the contrary, only 14.58 percent (17180 persons) persons have out migrated to Delhi. The top ten districts receiving maximum migration from Bareilly are its surrounding districts as mentioned in the Table 4.10. The districts receiving maximum migration next to Delhi are Budaun, Pilibhit, Udham Singh Nagar and Rampur.

**Table 4.10: Out-migration from Bareilly to 6 states and Delhi**

Districts	No of migrants	Percentage
District - Budaun 19	16,903	14.35
District - Pilibhit 21	11,380	9.66
District - Udham Singh Nagar * 12	11,263	9.56
District - Rampur 05	9,697	8.23
District - Shahjahanpur 22	5,647	4.79
District - Moradabad 04	5,341	4.53
District - Nainital 11	4,810	4.08
District - Ghaziabad 09	2,808	2.38
District - Lucknow 27	1,973	1.67
District - Hardwar 13	1,392	1.18
<b>Out migration to top 10 districts of 6 states</b>	<b>71,214</b>	<b>60.45</b>
<b>Out migration from Bareilly to Delhi</b>	<b>17180</b>	<b>14.58</b>
<b>Total out-migration from Bareilly to 6 states including Delhi</b>	<b>117,814</b>	<b>100.00</b>

Source: Migration tables, Census of India 2001

#### (ii) In-migration to Bareilly

Total in-migration to Bareilly from rest of the country is 86352, out of which 62.30 percent (53793 migrants) have migrated from top 10 districts. It is observed that 49109 persons (56.87 percent) have migrated from top six nearby districts of Uttar Pradesh (Budaun, Pilibhit, Shahjahanpur, Rampur, Moradabad & Udham Singh Nagar). Refer Table 4.11

**Table 4.11: In-migration to Bareilly from 6 states**

Districts	No of migrants	Percentage
District - Budaun 19	13,295	15.40
District - Pilibhit 21	12,174	14.10
District - Shahjahanpur 22	9,282	10.75
District - Rampur 05	8,268	9.57
District - Moradabad 04	3,436	3.98

District - Udham Singh Nagar * 12	2,654	3.07
District - Nainital 11	1,549	1.79
District - Etah 17	1,178	1.36
District - Lucknow 27	1,014	1.17
District - Hardoi 25	943	1.09
<b>Total in-migration from top 10 districts</b>	<b>53,793</b>	<b>62.30</b>
<b>In-migration from other districts</b>	<b>32,559</b>	<b>37.70</b>
<b>Total in-migration to Bareilly</b>	<b>86,352</b>	<b>100.00</b>

Source: Migration tables, Census of India 2001

#### 4.8.4 Kota

##### (i) Out-migration from Kota

It is revealed that out migrated from Kota to Delhi and six states is lower than in-migration to Kota from rest of the country i.e. 53867 out-migration and 107511 in-migration. Out of the total out-migration to Delhi and six states, 79.49 percent have migrated to top 10 districts of Rajasthan. On the contrary, only 4.09 percent (2202 persons) have out migrated to Delhi. The top ten districts receiving maximum migration from Kota are its surrounding districts as mentioned in the Table 4.12. The districts receiving maximum migration are Baran, Bundi, Jhalawar, and Jaipur.

**Table 4.12: Out-migration from Kota to 6 states and Delhi**

Districts	No of migrants	Percentage
District - Baran * 31	10,976	20.38
District - Bundi 23	10,057	18.67
District - Jhalawar 32	7,478	13.88
District - Jaipur 12	4,478	8.31
District - Chittaurgarh 29	3,043	5.65
District - Sawai Madhopur 10	1,921	3.57
District - Bhilwara 24	1,827	3.39
District - Ajmer 21	1,528	2.84
District - Udaipur 26	1,098	2.04
District - Jodhpur 15	415	0.77
<b>Out migration to top 10 districts of 6 states</b>	<b>42821</b>	<b>79.49</b>
<b>Out migration from Kota to Delhi</b>	<b>2202</b>	<b>4.09</b>
<b>Total out-migration from Kota to 6 states including Delhi</b>	<b>53867</b>	<b>100</b>
<b>Total in-migration to Kota from rest of the country</b>	<b>107511</b>	

Source: Migration tables, Census of India 2001

##### (ii) In-migration to Kota

Total in-migration to Kota from rest of the country is 107511, out of which 59.62 percent (64094 migrants) have migrated from top 10 districts. It is observed that 40100 persons (37.29 percent) have migrated from top three nearby districts of Rajasthan (Baran, Jhalawar & Bundi). Refer Table 4.13

**Table 4.13: In-migration to Kota from 6 states**

Districts	No of migrants	Percentage
District - Baran * 31 of RAJASTHAN 08	15,494	14.41
District - Jhalawar 32 of RAJASTHAN 08	14,560	13.54
District - Bundi 23 of RAJASTHAN 08	10,046	9.34
District - Jhabua 24 of MADHYA PRADESH 23	6,067	5.64
District - Sawai Madhopur 10 of RAJASTHAN 08	5,046	4.69
District - Mandsaur 19 of MADHYA PRADESH 23	3,002	2.79
District - Jaipur 12 of RAJASTHAN 08	2,913	2.71
District - Ajmer 21 of RAJASTHAN 08	2,885	2.68
District - Sheopur * 01 of MADHYA PRADESH 23	2,128	1.98
District - Tonk 22 of RAJASTHAN 08	1,953	1.82
<b>In migration from top 10 districts</b>	<b>64,094</b>	<b>59.62</b>
<b>In-migrations from other districts</b>	<b>43,417</b>	<b>40.38</b>
<b>Total in migration to Kota</b>	<b>107,511</b>	<b>100.00</b>

Source: Migration tables, Census of India 2001

#### 4.8.5 Gwalior

##### (i) Out-migration from Gwalior

It is revealed that 63544 persons have out migrated from Gwalior to Delhi and six states out of which 58.58 percent have migrated to top 10 districts of the identified states mainly in Madhya Pradesh and nearby districts of Uttar Pradesh i.e. Jhansi and Agra. On the contrary, only 7.38 percent (4692 persons) have out migrated to Delhi. The top ten districts receiving maximum migration from Gwalior are its surrounding districts as mentioned in the Table 4.14. The districts receiving maximum migration are Morena, Shivpuri, Bhind, Bhopal and Datia.

**Table 4.14: Out-migration from Gwalior to 6 states and Delhi**

Districts	No of migrants	Percentage
District - Morena 02	6,876	10.82
District - Shivpuri 06	6,874	10.82
District - Bhind 03	5,717	9.00
District - Bhopal 32	4,861	7.65
District - Datia 05	4,841	7.62
District - Indore 26	2,607	4.10
District - Jhansi 36	1,861	2.93
District - Guna 07	1,746	2.75
District - Sheopur * 01	1,037	1.63
District - Agra 15	807	1.27
<b>Out migration to top 10 districts of 6 states</b>	<b>37227</b>	<b>58.58</b>
<b>Out migration from Gwalior to Delhi</b>	<b>4692</b>	<b>7.38</b>
<b>Total out-migration from Gwalior to 6 states including Delhi</b>	<b>63544</b>	<b>100</b>

Source: Migration tables, Census of India 2001

**(ii) In-migration to Gwalior**

Total in-migration to Gwalior from rest of the country is 113587, out of which 56.39 percent (64047 migrants) have migrated from top 10 districts. It is observed that 55148 persons (48.55 percent) have migrated from top six nearby districts of Madhya Pradesh (Bhind, Morena, Shivpuri, Datia, Bhopal of MP & Jhansi of UP) as mentioned in the Table 4.15.

**Table 4.15: Out-migration to Gwalior from 6 states**

Districts	No of migrants	Percentage
District - Bhind 03 of MADHYA PRADESH 23	19,936	17.55
District - Morena 02 of MADHYA PRADESH 23	13,519	11.90
District - Shivpuri 06 of MADHYA PRADESH 23	7,670	6.75
District - Datia 05 of MADHYA PRADESH 23	6,978	6.14
District - Jhansi 36 of UTTAR PRADESH 09	5,209	4.59
District - Agra 15 of UTTAR PRADESH 09	2,825	2.49
District - Etawah 31 of UTTAR PRADESH 09	2,261	1.99
District - Jalaun 35 of UTTAR PRADESH 09	2,059	1.81
District - Bhopal 32 of MADHYA PRADESH 23	1,836	1.62
District - Chhatarpur 09 of MADHYA PRADESH 23	1,754	1.54
<b>In migration from top 10 districts</b>	<b>64,047</b>	<b>56.39</b>
<b>In-migrations from other districts</b>	<b>49,540</b>	<b>43.61</b>
<b>Total in migration to Gwalior</b>	<b>113587</b>	<b>100.00</b>

Source: Migration tables, Census of India 2001

#### 4.8.6 Conclusion

As per NCR Pan 2001, five Counter Magnet Areas were selected i.e. Bareilly, Gwalior, Hissar, Kota & Patiala. Twelve land development and infrastructure development projects have been implemented in these CMA's during the last about 15 years. The development activity in these towns on the initiative of NCRPB, has affected/influenced the development pattern and it seems has helped in accelerated/induced population growth. In all the CMA's decadal population growth rate has increased from 1981-91 to 1991-2001. As per Census 2001, in all the CMA's, the net migration is positive i.e. in-migration is higher than out-migration except in case of Bareilly. Similarly workers participation rate in all the Counter Magnet Areas has increased. In general, their regional connectivity has improved. Individually Hissar has improved water supply and sewerage, Patiala besides water supply and sewerage have got one integrated township in process, Bareilly has got two residential development schemes besides transport nagar, Kota developed integrated township and Gwalior developed a new town under SADA development scheme.

Through an influence zone study on migration to Delhi and rest of NCR, it is observed that 3 out of 5 CMA's are located in the regions from where there is very low level of migration, these CMA's are Kota, Gwalior and Patiala. Migration from these districts including their influence zone of 100-120 kms, total migration in absolute figures varies from 3592 (Kota) to 18480 (Patiala). In the remaining two CMA's, it is 154460 in case of Bareilly and 118858 in case of Hissar. Refer Table 5.23 in Chapter 5