AGENDA ITEMS FOR THE 30TH MEETING OF THE PLANNING COMMITTEE TO BE HELD AT 3.00 PM ON 14TH SEPTEMBER, 1993 IN THE OFFICE OF THE NATIONAL CAPITAL REGION PLANNING BOARD, NEW DELHI.


AGENDA ITEM NO. 3 : FINALISATION OF DRAFT SUB-REGIONAL PLAN FOR RAJASTHAN SUB-REGIONS OF NCR.

AGENDA ITEM NO. 4 : SETTING UP OF SEPARATE UNIVERSITY FOR NATIONAL CAPITAL REGION WITH OPTION FOR AFFILIATION TO REGIONAL COLLEGES OUTSIDE DELHI.

AGENDA ITEM NO. 5 : UNIFIED TRANSPORT AUTHORITY FOR NATIONAL CAPITAL REGION - PROPOSED CONSTITUTION AND FUNCTIONS.

AGENDA ITEM NO. 6 : REPORT OF THE J.C. GAMBHIR COMMITTEE ON "DECENTRALISATION OF ECONOMIC ACTIVITIES FROM DELHI - PACKAGE OF INCENTIVES".

AGENDA ITEM NO. 7 : COMMISSIONING OF A DETAILED STUDY FOR EXECUTION OF INTEGRATED TOWNSHIP PROJECT FOR REWARI - DHARUHIERA - BHIWARI COMPLEX.

AGENDA ITEM NO. 8 : ANY OTHER ITEM WITH THE PERMISSION OF THE CHAIR.

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AGENDA NOTES FOR THE 30TH MEETING OF THE PLANNING COMMITTEE TO BE HELD AT 3.00 P.M. IN THE OFFICE OF THE NCR PLANNING BOARD, NEW DELHI


The minutes of the 29th meeting held on 20.3.1993 were circulated vide letter No. K-14011/9/93-NCRPB Dt. 26.4.1993. The Planning Committee may confirm the minutes.


Review of the action taken on the decisions of the 29th meeting of the Planning Committee held on 20.3.1993.

i) Sub-regional Plans :

The status of preparation the Sub-regional Plans.

a) Rajasthan Sub-regional Plan :

The Draft Sub-regional Plan for Rajasthan, as revised in the light of the views of the Planning Committee has been submitted to the NCR Planning Board. The document is being placed before the Planning Committee for consideration and approval under item No. 3.

b) Haryana Sub-region :

The revised Draft Sub-regional Plan has not been received from Government of Haryana.

c) Delhi Sub-regional Plan :

The Draft Sub-regional Plan for Delhi has been prepared by the NCR Planning cell in DDA and circulated to various departments of NCT-Delhi. After the same has been finalised by the GNCT Delhi. It will be placed before the Planning Committee/NCR Planning Board for final approval.

ii) Audio visual presentation on the revised VIII Investment programme for both Central Sector & the State Sector and issues arising thereof:

Audio visual presentation was modified in the light of the observations of the Planning Committee and placed before the 16th meeting of the NCR Planning Board held on 28.6.1993. The revised
investment plan for the State Sector amounting to Rs. 1967 crores and Central Sector to Rs. 1846 crores for the VIII Plan period has accordingly been approved subject to certain observation as per minutes of the Board meeting already circulated.

iii) Finalisation of time-bound programme for preparation of integrated Master Plans and formulation of detailed phased project plans for new townships.

The following time-table was drawn up for preparation of the requisite (a) outline development plans (OPD) (interim land use plan); (b) detailed project reports for the development of the new townships as per the outline development plans by 2001.

<table>
<thead>
<tr>
<th>No.</th>
<th>Town</th>
<th>Due date for finalisation of Interim Land Use Plans (OPD)</th>
<th>Due date for finalisation of development project for new townships</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kundli</td>
<td>31.5.1993</td>
<td>31.5.1993</td>
</tr>
<tr>
<td>4.</td>
<td>Rohtak</td>
<td>31.5.1993</td>
<td>31.7.1993</td>
</tr>
<tr>
<td>5.</td>
<td>Rewari</td>
<td>Already available</td>
<td>31.8.1993</td>
</tr>
</tbody>
</table>

**H A R Y A N A**

**UTTAR PRADESH**

<table>
<thead>
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<th>No.</th>
<th>Town</th>
<th>Due date for finalisation of Interim Land Use Plans (OPD)</th>
<th>Due date for finalisation of development project for new townships</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Meerut</td>
<td>Received</td>
<td>30.9.1993</td>
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**RAJASTHAN**

<table>
<thead>
<tr>
<th>No.</th>
<th>Town</th>
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<th>Due date for finalisation of development project for new townships</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Alwar</td>
<td>Already available</td>
<td>30.11.1993</td>
</tr>
</tbody>
</table>

Except for those of Rewari sub-complex and Meerut and Alwar Priority Towns which have been completed, the State Government Implementing Agencies/Planning Cells in the process of preparing the outline development plans for the selected priority and DMA Towns. Two meetings were held by Chief Regional Planner NCR Planning Board on 15.6.1993 and 26.6.1993 wherein preparation of the above plans were reviewed.
The detailed project implementation reports for Kundli, Rohtak, Bahadurgarh and Rewari, which are overdue are yet to be received by NCR Planning Board.

It was agreed, in the last Planning Committee that inclusion of Chola Urban Sector in the Bulandshahr-Khurja Complex needs a greater deliberation in the light of the Regional Plan provisions and it was also agreed that the Government of Uttar Pradesh will furnish the NCR Planning Board with a detailed note along with plans showing the prescribed urbanisable area within which the said additional pockets were proposed to be developed as part of the integrated new townships at Bulandshahr-Khurja. However, the note is still awaited from the Government of U.P.

V. Mid-term review of the Regional Plan 2001 - Status Report

a) Studies regarding New Townships Project

After discussion in Planning Committee, the NCR Planning Board has commissioned three new township studies to Tata Consultancy Services (Panipat and Hapur) and Consulting Engineering Services (Alwar). The Consultants have since submitted their Inception Reports and have reported substantial progress in the second stage relating to collection of data/information from secondary and primary sources.

b) IMMRTS Delhi need for incorporation within Regional Plan perspective and priorities:

In order to make the MRTS more cost effective and functionally efficient, the Board, at its 16th meeting held on 28.6.1993 decided that the same should fully integrated with the transport network approved for DMA/NCR as a whole. It is also decided to set up Unified Transport Authority for NCR under the Minister of Urban Development with the representatives from the Centre and States as members, on the pattern of NCR Planning Board, to plan and co-ordinate the transport operations within the NCR.

c) Traffic & Transport

The detailed terms of reference have been prepared by NCRPB for a comprehensive study in transport sector in NCRPB with an extended time perspective of 2011 A.D. with a view to formulating

a) short-term prioritised transport plan upto 2001 A.D. as well as long term directional strategies with a time perspective of 2011 A.D. The same were submitted to Ministry of Urban Development for obtaining World Bank sponsorship for the proposed study. The Ministry of Urban Development has forwarded the same to Deptt. of Economic Affairs, Ministry of Finance on February 8, 1993. The matter is being pursued with Deptt. of Economic
d) NCR Economy and Industrial Potential

The study is under progress and the consultants are expected to submit the interim report by the end of September, 1993.

e) Housing Strategies for Priority towns of NCR.

The studies on housing strategies sponsored by the Board and carried out by research institutions, viz. Socio-economic Research Foundation, the Society for Development Studies and the School of Planning and Architecture in respect of Panipat, Alwar and Meerut, respectively, have been completed and final reports received. Copies of these reports have been circulated to the State Governments and all other concerned agencies.

It was decided to organise 3 workshops - one in each Sub-region - to discuss the findings of these studies among the planners/administrators of the various local institutions in order to evolve appropriate follow-up measures and work out a time-bound action programme. The first of these workshops was held at Meerut on 19.4.1993. The schedule for the remaining 2 workshops, to be held at Panipat, Alwar, respectively, is yet to be finalised.

f) Power Development

The Study Group on Power Development of NCR met last on 27th July, 1993 and deliberated on various important issues relating to framing of peak load demands in all nodal centres - DMA and priority towns in respect of NCR Sub-regions and the supply scenario by 1996-97 and also 2001 A.D., the possibility of private participation in power generation and distribution on the model of the power supply company which has been set up exclusively for Greater NOIDA area, before being considered for the respective sub-regions of NCR. The Group also discussed issues relating to methods and strategies for reducing the generation/line losses as also pilferage including misuse of power especially in Delhi. The Study Group is scheduled to meet again in 2 months time.

g) Water Resources, Drainage and Flood Control

The Study on Water Resources, Drainage and Flood Control in NCR has been entrusted to the Water and Power Consultancy Services (WAPCOS), a Government of India Undertaking. The Consultants have already submitted the inception report in the first week of July, 1993. The Consultants have reported substantial progress in the second stage of work relating to collection of detailed data and information from all Government Departments and other organisation concerned.
f) Solid Waste Management

Studies relating to Solid Waste Management in (i) Nagpur, (ii) Faridabad - Ballabgarh complex and (iii) Kota have been entrusted to the Centre for Development studies, New Delhi; the National Engineering and Environment Research Institute (NEERTI) Nagpur, and Consulting Engineering Services (CES), New Delhi, respectively, as approved by PSMG. The Consultancy Engineering Services for Kota and NEERTI for Faridabad complex have already submitted their inception reports in July, 1993. They are reported to have made good progress in the second stage of work relating to collection of data/information from all departments, organisations etc. The CDS had promised to submit the delayed inception report in the last week of August, 1993. However, the same has yet to be received.

g) Geographical Information System

The Task Force on GIS and also Base Maps for NCR met last on the 30th July, 1993 and discussed, inter-alia the important issues relating to completion of the second level data by the D.YRL on the Base Maps supplied by the Survey of India finalisation of the hard ware requirements including digitisers and plotters for the establishment of GIS in the office, time schedule for completion of digitisation of the NCR Base Maps by the vendors namely M/s Era Software Systems, Hyderabad and M/s PEGASUS, Bangalore. It was tentatively decided that the digitisation of the Base Maps by the vendors would commence from 1st week of September '93.

vii) Setting up of National Capital Region Development Finance Corporation

The modalities for the setting up of the National Capital Region Development Finance Corporation were discussed in detail in the 16th Board meeting held on 28.6.1993. It was decided first and foremost that Ministry of Urban Development would be moved to make suitable amendments to the NCR Planning Board Act so as to enable the proposed Corporation to be floated within 3 months. Pending the same and in order to finalise the issues relating to equity structure of the NCRDFC and other aspects concerning its overall constitution and manner of functioning, it was decided that both Haryana and Uttar Pradesh Governments would furnish their detailed observations to the Board in the matter after which a separate high official meeting would be held at Delhi within a month to resolve all the pending issues. The views of U.P. Government have since been received while these of Haryana are still awaited. In the meantime, a comprehensive proposal has separately been prepared and placed before PSMG-I, for setting up two other financial institutions, including a development bank in addition to NCRDFC with the same overall VIII Plan budgetary support of Rs. 400 crores on the basis of the detailed study made by an expert group of consultants. On the financial viability of the proposed corporation.
AGENDA ITEM NO.3 : FINALISATION OF DRAFT SUB-REGIONAL PLANS RAJASTHAN SUB-REGIONS OF N C R

As per relevant discussions in the last meeting of the Technical Sub-group held on 6.1.1993 and subsequently in 28th meeting of the Planning Committee held on 8.1.1993, the draft of the Rajasthan Sub-regional Plan of NCR has been duly revised by Government of Rajasthan and the final draft finalised for the approval of the NCR Planning Board.

The 10 Chapters which have been modified as per the discussions are at Annexure - I.

The draft Sub-regional Plan is placed before the Planning Committee for consideration in the first instance.
AGENDA ITEM NO.4. SETTING UP OF SEPARATE UNIVERSITY FOR NATIONAL CAPITAL REGION WITH OPTION TO REGIONAL COLLEGES OUTSIDE DELHI

The Statutory Regional Plan 2001 for NCR was prepared and approved by the NCR Planning Board in November, 1988 and brought into force with effect from 23rd January, 1989. The main objective of the Regional Plan is to reduce the pressure of population in Delhi through decongestion and de-centralisation and ensuring a balanced and harmonised development of NCR. The Regional Plan stipulates induced development of 8 Priority Towns/complexes namely Meerut, Hapur, Bulandshahr-Khurja in U.P.; Panipat, Rohtak, Palwal, Rewari-Dharuhera in Haryana and Alwar, and Bhiwadi in Rajasthan and a moderate development of this Delhi Metropolitan Area Towns, namely Ghaziabad, Noida, Faridabad, Gurgaon, Bahadurgarh and Kundli. These towns are required to be provided with a social and physical infrastructure at par with that of Delhi.

2. Govt. of NCT-Delhi has been given to understand that a number of promoters of educational institutions are choosing not to promote private educational institutions in NCR towns because of their disinclination to affiliate them to local universities. They would prefer to affiliate such institutions to Delhi University (DU), or Jawaharlal Nehru University (JNU). Accordingly, Chief Secretary, NCT-Delhi wrote to Secretary, Education Government of India, Ministry of Human Resource Development (MHRD), New Delhi in to explore possibilities for such affiliation. Chief Secretary NCT-Delhi has also requested Member Secretary, NCR Planning Board to pursue the matter with Ministry.
of Human Resource Development (MHRD).

3. Subsequently, Member Secretary wrote to the Chief Secretaries of participating states in the matter and also sent a brief background note on National Capital Region and Regional Plan to Ministry for MHRD. A meeting was then taken by Joint Secretary (U & HE) MHRD on 6.11.92 to discuss the proposal, to which representatives of Haryana, Rajasthan and U.P. were also invited. At this meeting, the representative from NCT-Delhi strongly supported the proposal on the grounds that there were specific offers received for opening degree colleges in NOIDA. If the same were granted affiliation to Delhi University. While the representative from Government of U.P. requested for more time to examine the same. Further, as JNU does not run graduate courses affiliation of colleges and is a non-affiliating University, it was decided that JNU may be kept out of the purview of this proposal. Finally, it was agreed that the concerned State Governments would finalise their views on the issue and intimate the same to the Ministry within a month.

A copy of the minutes of the meeting is at Annexure-III.

4. In pursuance of the above, a second meeting was taken by Joint Secretary (U & HE) MHRD was held on 6.4.1993 at New Delhi. However, the Education Secretaries from Haryana and U.P. were not present in the meeting. The minutes of the meeting held on 6.4.1993 is at Annexure-IV.

5. As per the item No. (6) of the minutes of the meeting held on 6.9.93, Registrar of Delhi University Prof. S.K. Wasan, at the
request of NOR Planning Board has prepared a paper on setting up of a separate National Capital Region University to which any college in the NCR (outside Delhi) could opt for affiliation. A copy of the Prof. Wason’s paper is placed at Annexure-V.

6. The proposal for creation of NOR University on the lines recommended by Prof. Wason as an alternative to the proposal for grant of such affiliation to NOR Colleges by Delhi University is placed before Planning Committee for consideration.
AGENDA ITEM NO. 5 : UNIFIED TRANSPORT AUTHORITY FOR THE NATIONAL CAPITAL REGION - PROPOSED CONSTITUTION AND FUNCTIONS.

The Regional Plan - 2001 for the NCR suggests setting up of a Unified Transport Authority for the NCR to plan and co-ordinate the development of transport system in NCR. The subject was inter-alia discussed in the 16th meeting of the NCR Planning Board held on 28.6.93, which has approved the constitution of such authority in principle under the Chairmanship of Minister for Urban Development on the pattern of NCR Planning Board.

Under the purview of NCR Planning Board Act, 1985, the Board is required to co-ordinate the enforcement and implementation of the Regional Plan with the help of participating states and Union Territory of Delhi (Section 7 of the Act). Further, under section 32, the Board may delegate its powers to such person or persons as it may specify for the purpose of discharging the requisite functions vide a notification to be published in a Gazette of India. In the light of the above, NCRPB may issue a notification for setting up of such authority, if considered necessary, the Ministry of Urban Development would be requested to make necessary rules under section 36 of the NCRPB Act for proper functioning of the said authority.
Accordingly, the structure of the UTA (NCR) is proposed as follows:

1. Union Minister for Urban Development  
   Chairperson

2. Lt. Governor, Delhi.  
   Member

3. Chairman, Railway Board  
   Member

4. Secretary, Ministry of Urban Development  
   Member

5. Secretary, Ministry of Surface Transport  
   Member

6. Secretary(Tot.), Govt. of Haryana  
   Member

7. Secretary(Tpt.), Govt. of U.P.  
   Member

8. Secretary(Tpt.), Govt. of Rajasthan  
   Member

9. Secretary(Tpt.), Govt. of NCT Delhi  
   Member

10. Member Secretary, NCRP Board  
    Member-Convenor

The role and functions of UTA (NCR) will be to provide for the proper planning and designing of an integrated transport system in the region. Its sphere of responsibility will cover the following:

- Planning & Policy formulation
- Monitoring & Co-ordination

Planning

The planning function of UTA (NCR) will involve:

- Participation in integrated land use/transport planning and development.
- Evolving a transport system on an areawise basis with linkages in the region.
- Ensuring planning of various modes in integrated manner so that each mode is complementary to others and the
system achieves optimum productivity.

- Envisaging the needs and potentials of different sub-systems like road, rail, bus transport etc. and determining inter-se priorities for investment.
- Evolving policy frames relating to nationalisation/privatisation of the bus service in consultation with the respective State Governments.
- Commissioning studies on various sub-systems.
- Evolving norms for transport operations with regional aims and objectives.
- Evolving a rational, integrated fare policy for all modes.

Monitoring & Co-ordination:

UTA (NCR) will need to oversee the functioning of the transport organisations operating in NCR to ensure that its overall objectives are met. Therefore, it would have to:

- Monitor the operations of the various transport organisations within the NCR.
- Monitor implementation of policy decisions taken and plans prepared by it for development of integrated transport system.
- Act as the 'client for all matters and projects concerning transportation.
- Monitor air, noise, and other environmental pollution arising out of the transport system.
- Co-ordinate with concerned authorities including Railways in planning of MRTS/Rail services within DMA &
NCR as a whole.

The UTA(NCR) will be serviced by an exclusive transport wing to be set up in NCR Planning Board under an officer of JS level. Its budget & expenditures will form part of the Non-Plan budget of the NCR Planning Board.

The Planning Committee may deliberate on this proposal.

The matter regarding decentralisation of economic activities was discussed in the 28th meeting of the Planning Committee of the NCRPB and in order to work out a package of incentives and the modalities for speedy implementation of the decentralisation process, a sub-committee consisting of the following was constituted:

1. Commissioner (Planning) Delhi Development Authority, Chairman

2. The Chief Town & Country Planner Town & Country Planning Department Govt. of Uttar Pradesh, Member

3. The Chief Town Planner Town & Country Planning Department Govt. of Rajasthan, Member

4. The Chief Coordinator Planner-NCR NCR Sub-region of Haryana Govt. of Haryana, Member

5. The Senior Research Officer, NCR Planning Board, Member/Convener

2. The Sub-Committee was to consider the following issues and submit its report to the NCR Planning Board.

a) identification of economic activities which could form a part of the core economic activity in each of the 10 new proposed townships in NCR;

b) drawing up of policy incentives and guidelines which could be uniformly adopted by both Delhi Administration and the respective development agencies of the member-States in order to help operationalise these core economic activities in the said new townships in a time-bound manner;

c) suggesting the institutional machinery to be set up to ensure joint action for timely implementation in each and every case.

3. The Sub-Committee met twice on 6th April, 1993 and 26th July, 1993 and discussed in detail, the various aspects within its terms of reference.

4. The report submitted by the Sub-Committee (Annexure VI) will be circulated in the meeting.
AGENDA ITEM NO. 7: COMMISSIONING OF A DETAILED STUDY FOR EXECUTION OF INTEGRATED TOWNSHIP PROJECT FOR BHIWADI-DHARUHERA-REWARI COMPLEX.

In the Regional Plan - 2001, Rewari-Dharuhera-Bhiwadi have been identified as a complex for priority development. Since the planning of this complex required the collaborative efforts of both Haryana and Rajasthan States, a series of joint meetings were organised at the initiative of NCR Planning Board. To start with it was agreed by both Haryana and Rajasthan Govt. that the scope of this exercise should be limited to the integrated planning of Dharuhera-Bhiwadi only. The integrated plan was thus prepared by the Town Planning Departments of the two States. The same is ready for final clearance and notification by the State Governments.

2. In the meantime, in view of the new strategy for accelerated development of NCR though the growth of integrated new townships, an integrated physical, financial and management plan is to be prepared immediately for the entire complex including Rewari town. This is also imperative for the following special reasons.

i) On the South-West corridor between Gurgaon and Jaipur Rewari being the biggest urban centre can provide the higher-level social amenities in the way of education, health care and housing which the other 2 nodal centres of Dharuhera and Bhiwadi lack.

ii) Rewari, being the nearest railway head would also provide Dharuhera and Bhiwadi with the much needed access to railway
facilities till the time the proposed railway link from Rewari to Bhiwadi materialises.

iii) Rewari, which is the biggest metre gauge junction in the North India falls on the new Delhi Avoiding Line connecting Mathura-Alwar-Rewari-Hissar. In view of its strategic position it can be planned as an ideal alternative distributive centre to Delhi and facilities like ICD etc. can also be located here. In this way, Rewari could be developed as marketing and distributive centre not only for the entire complex but also for the various sub-regional centres situated in neighbouring areas of Haryana and Rajasthan.

3. Keeping all these aspects in view, it is proposed to sponsor the preparation of a detailed project report for the development of the integrated township forming part of the entire Rewari-Dharuhera-Bhiwadi complex of NCR.

The draft TOR for the proposed study will be circulated in the meeting (Annexure - V).

The matter is placed before the Planning Committee for consideration.
ANNEXURE I

DRAFT
SUB-REGIONAL PLAN
FOR
RAJASTHAN SUB-REGION

CHAPTER V - DEMOGRAPHIC PROFILE 1981-2001
CHAPTER VI - SETTLEMENT SYSTEM 1981-2001
CHAPTER IX - EDUCATION AND HEALTH
CHAPTER X - TRANSPORT
CHAPTER XI - TELECOMMUNICATIONS – 2001
CHAPTER XII - SHELTER
CHAPTER XVI - POWER DEVELOPMENT
CHAPTER XVII - WATER SUPPLY, DRAINAGE AND SOLID WASTE MANAGEMENT
CHAPTER XX - ACTION PLAN FOR EIGHTH FIVE YEAR PLAN (1992-97)
CHAPTER - V

DEMOGRAPHIC PROFILE 1981 - 2001

5.1 Background:

About one fourth of the population of India, lives in urban areas. The urban population of 1991 (217.17 million) was distributed over 3768 urban settlements. The 23 metropolitan cities namely Calcutta, Bombay, Delhi, Madras, Hyderabad, Pune, Ahmedabad, Bangalore, Kanpur, Nagpur, Jaipur, Lucknow, Surat, Coimbatore, Cochin, Vadodra, Indore, Patana, Madurai, Bhopal, Visakhapatnam, Varanasi and Ludhiana alone account for more than one third (70.44 million) of the total urban population. The process of concentration of urban population in bigger urban centres has been greater in recent past. Apart from the natural increase, immigration, especially in the metropolitan cities has been the major factor for their extraordinary growth.

Regional Plan 2001, NCR highlights the point that the Metropolitan core of NCR i.e. Delhi is growing fast by attracting activities and consequently population from surrounding areas, and the sprawling development due to overspill of Delhi's population into the areas adjoining it, has also gained tremendous momentum.

5.2 Population Distribution in the NCR:

The National Capital Region accommodated a total population of 261.96 lacs in 1991. Of this, the Delhi U.T. Sub-Region accounted for a major share of 35.77% followed by U.P. (34.39%) Haryana (24.51%) and Rajasthan (5.33%). Though the Delhi U.T. accounted for a major share of population of the NCR;
Delhi has been adding population unabatedly and is emerging fast as the major population absorbant among the NCR constituents.

### 5.3 Population Distribution in the Rajasthan Sub-Region

Population of Rajasthan Sub-Region has increased from 6.30 lacs in 1961, 8.19 lacs in 1971, 10.6 in 1981 to 13.96 lacs in 1991. Decadal growth rate of 1971-81 and 1981-91 was of the order of 29.91% and 31.20% respectively.

#### Table 5.1

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<thead>
<tr>
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<tr>
<td></td>
<td>6.30</td>
<td>8.19</td>
<td>10.65</td>
<td>13.96</td>
<td>29.91%</td>
<td>31.20%</td>
</tr>
</tbody>
</table>


Among the tehsils, about one third population inhabits in Alwar Tehsil, being largest in size also; followed by Behror and Kishangarh both in area and population size. Ramgarh accommodates only 1,48,916 persons. (Table 5.2)
### Table 5.2

Area, Population, Sex Ratio and Density in Six Tehsils of Sub-Region.

<table>
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<tr>
<th></th>
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<tbody>
<tr>
<td>Behror</td>
<td>2,51,014</td>
<td>578.6</td>
<td>310</td>
<td>930</td>
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<tr>
<td>Mandawar</td>
<td>1,62,010</td>
<td>574.7</td>
<td>282</td>
<td>917</td>
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<tr>
<td>Kishangarh</td>
<td>2,17,204</td>
<td>748.6</td>
<td>290</td>
<td>896</td>
</tr>
<tr>
<td>Tijara</td>
<td>1,81,877</td>
<td>674.6</td>
<td>270</td>
<td>849</td>
</tr>
<tr>
<td>Alwar</td>
<td>4,32,952</td>
<td>1102.7</td>
<td>393</td>
<td>854</td>
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<tr>
<td>Ramgarh</td>
<td>1,49,796</td>
<td>579.9</td>
<td>258</td>
<td>896</td>
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<tr>
<td>Rajasthan Sub-Region</td>
<td>13,95,513</td>
<td>4493</td>
<td>311</td>
<td>895</td>
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<td>Rajasthan State</td>
<td>4,40,95,990</td>
<td>2,42,239.6</td>
<td>129</td>
<td>910</td>
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<tr>
<td>National Capital Region</td>
<td>261.96 Lacs</td>
<td>30,242</td>
<td>866</td>
<td>840 (Figure for 1981)</td>
</tr>
</tbody>
</table>

Source: Census of India 1991

(i) **Rural Population**: Rajasthan Sub-Region has extensive rural tracts and accommodates about 11,35,704 persons in 1991. Decadal growth rate recorded a fall from 26.98% during 1961-71 to 25.32% during 1971-81 to 25.28% during 1981-91, contrary to trend observed for urban population.
(Table 5.3) which has shot up from 46.9% in 1961-71 to 56.62% during 1971-81.

<table>
<thead>
<tr>
<th>Year</th>
<th>Rural</th>
<th>Urban</th>
<th>Decadal growth rate 61-71</th>
<th>Decadal growth rate 71-81</th>
<th>Decadal growth rate 81-91</th>
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<tbody>
<tr>
<td>1961</td>
<td>55.71%</td>
<td>44.29%</td>
<td>26.98%</td>
<td>25.88%</td>
<td>25.28%</td>
</tr>
<tr>
<td>1971</td>
<td>77.74%</td>
<td>22.26%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>88.55%</td>
<td>11.45%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>111.76%</td>
<td>8.24%</td>
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</tbody>
</table>

- Decadal growth rate 1961-71: 26.98%
- Decadal growth rate 1971-81: 25.88%
- Decadal growth rate 1981-91: 25.28%

Rajasthan State:
- In 1981: 47.70 51.36% 7.70 80.40%
- In 1991: 33.30 33.877 11.06 67.113 22.88

NCR in 1981: 100,94,000 90,98,000 47.40
1991: 1,22,34,000 1,36,82,000 32.15


(iii) Urban Population: Urban Population in Sub-Region has increased not only in absolute magnitude but also in percentage figure from 13.37% in 1971 to 16.24% in 1981 to 20.04% in 1991. However, percentage of urban population...
In Sub-Region, the urban population is relatively lower than
the corresponding figure of national level for the base year 1991.
If compared with National level, the Sub-Region is
more densely populated with rural and urban population
distribution of rural and urban population (Table 5.1) in 1991 clearly
reflects the concentration of population in Alwar
and Behror Tehsil followed by Tijara, Mandawa, and Behror Tehsil,
as a result of location of big towns like Alwar, Tijara, Bhiwadi,
Kishangarh, and Behror Tehsil in 1991. Remaining two Tehsil
showing decline in urban population in 1991.

As mentioned, Alwar is a major urban centre in Rajasthan,
Sub-Region which was elevated to a city in 1951 and 1961 and
class one town in 1971. 1991 census assuming the seventh
position in urban centres of Rajasthan State in terms of
population size even since 1951 (Table 5.1).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Behror</td>
<td>R</td>
<td>159,457</td>
<td>272,366</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>166,649</td>
<td>129,703</td>
</tr>
<tr>
<td>Mandawa</td>
<td>R</td>
<td>128,616</td>
<td>152,600</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>10,627</td>
<td>15,962</td>
</tr>
<tr>
<td>Kishangarh</td>
<td>R</td>
<td>121,510</td>
<td>117,339</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td></td>
<td>39,684(16.87%)</td>
</tr>
<tr>
<td>Tijara</td>
<td>R</td>
<td>212,580</td>
<td>185,783</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>103,578</td>
<td>44,795</td>
</tr>
<tr>
<td>Alwar</td>
<td>R</td>
<td>128,118</td>
<td>44,800</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td></td>
<td>183,739</td>
</tr>
</tbody>
</table>

Figures in the brackets represent the percentages of
urban population.
Table 5.5

Number of Urban Centres in Rajasthan State and Class and Ranking of Alwar Town.

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of urban centres in Rajasthan State</th>
<th>Ranking of Town in terms of pop.</th>
<th>Class Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>141</td>
<td>7</td>
<td>II</td>
</tr>
<tr>
<td>1961</td>
<td>148</td>
<td>7</td>
<td>II</td>
</tr>
<tr>
<td>1971</td>
<td>151</td>
<td>7</td>
<td>I</td>
</tr>
<tr>
<td>1981</td>
<td>202</td>
<td>7</td>
<td>I</td>
</tr>
<tr>
<td>1991</td>
<td>222</td>
<td>7</td>
<td>I</td>
</tr>
</tbody>
</table>


5.4 Density and Sex Ratio:

The density of population of Rajasthan Sub-Region was 321 persons/sq.km. against the average of Rajasthan State of 128 persons, in 1991. (Table 5.2). Among the tehsils, Alwar Tehsil is most populated with 393 persons/sq.km. followed by Buhro, Kishangarh, Vasanwadi, Tijara and Ramgarh.

In the sex ratio, HDR is comparatively the least balanced with average figure of 840 females for 1000 males in 1991. The position of Sub-Region is slightly better with 894 females for 1000 males, which is also less balanced than Rajasthan State with 911 females for 1000 males in 1991. However as per 1991 census, sex ratio for Rajasthan Sub-Region is 895 and for Rajasthan State 910. Among the tehsils, Tijara is least balanced with 842 females per 1000 males in 1991 due to concentration of job opportunities and consequent inflow of more males in Bhiwadi town.
5.5 Literacy:

The literacy rate in Rajasthan Sub-Region 37.96% is higher than the Rajasthan State (31.03%) in 1991. If the two way classification (See Table 9.1) is compared for Rajasthan Sub-Region against Rajasthan State, then it is clear that literacy rate in rural and urban areas and among males and females is higher in Rajasthan Sub-Region than corresponding figure of Rajasthan State. However corresponding figure of Rajasthan Sub-Region is less than the NCR figure. This means Rajasthan Sub-Region is better served than Rajasthan State but significantly less than National Capital Region.

Variation in intra sub-region literacy rate is also quite noticeable. Alwar tensil stands on top (43.56%) followed by Behror Tensil (42.76%), Nandwana Tensil (39.05%), Kishangarh (33.59%), Tijara (29.56%) and Nagur Tensil (25.71%).

5.6 Migration to Delhi and Intra Sub-Region Migration:

According to the 1981 census, there were 22,99,252 migrants in Delhi constituting about 3.72% of the total population. Immigration into Delhi has seen a rapid increase especially during the last two decades and the average annual immigration has gone up more than thrice during this period. Among the 22,99,252 migrants in Delhi until 1981, 174,655 migrants were from Rajasthan State, constituting 7.6% of total figure. The prime reasons for immigration into Delhi have been the employment and family movement. The large flow into Delhi in recent times can be attributed to the substantial growth of industries, especially small scale ones and expansion of trade and business.
Intera State migration is characterised by rural urban migration, partly seasonal and partly permanent in nature. Alwar is the biggest absorbing centre for migrants from rural areas. During last 5-6 years, Bhiwadi is emerging another attracting centre of migrants mainly daily workers, from nearby rural areas, giving rise a large floating population, which is gradually settling in Bhiwadi.

The reasons for migration to these urban centres have been same that of Delhi, viz - "employment and family movement".

5.7 Population Projection of Sub-Region:

Recognizing the urban growth dynamics in the Sub-Region, projections have been made based on the urban rural growth differential method that has been advocated by the United Nations for projecting population of urban areas. In this method, the growth differential of the areas falling in the NCR and other areas of the NCR States are examined and these differentials are then projected by which the total population and rural urban composition of the Sub-Region are arrived. (Table 5.6)

Table 5.6
Population Projection for Rajasthan Sub-Region

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>10.65</td>
<td>13.96</td>
<td>17.45</td>
</tr>
<tr>
<td>Rural</td>
<td>3.91</td>
<td>11.16</td>
<td>13.95</td>
</tr>
<tr>
<td>Urban</td>
<td>1.74</td>
<td>2.99</td>
<td>3.50</td>
</tr>
</tbody>
</table>

5.8 Issues and Strategies of Regional Plan 2001, National Capital Region:

To achieve a manageable Delhi and an harmoniously developed region, judicious distribution of population both in urban and rural is to be achieved. Therefore, a pragmatic approach and strategy to meet the issues appropriately to achieve the Regional Plan objectives would be to formulate a conscious policy of:

(i) Decelerate and restricted growth in Delhi U.T.
(ii) Controlled moderate growth of the DMA towns excluding Delhi, so that the volume and directions of growth are well coordinated and
(iii) giving impetus to the regional centres through provision of adequate infrastructure and services so that they are able not only to dissuade the potential out-migrating population but also attract and absorb the Delhi bound migrants.

5.9 Diversion of Delhi bound Migrants and Population Assignment for Sub-Region Under Regional Plan 2001, NCR.

A significant fact about the migration to Delhi is that majority of these migrants are from the immediate surrounding States of Delhi. The additional population of 20 lacs which otherwise would have moved to Delhi from these States during 1981-2001 should be deflected towards the urban areas beyond the DMA within the National Capital Region. It is proposed to contain and accommodate this additional population in the Sub-Regional areas of Haryana, Rajasthan and Uttar Pradesh. Based on the urban growth trends and the projected urban population in the constituent
Sub-Region by the year 2001, population assignment Rajasthan Sub-Region is arrived taking into abovementioned facts. (Table 5.7)

<table>
<thead>
<tr>
<th>Population Assignment by 2001 AD for Rajasthan Sub-Region (Population in Lacs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Urban</td>
</tr>
<tr>
<td>Rural</td>
</tr>
</tbody>
</table>


Due to migration from rural areas to urban areas within Sub-Region, there will be no net addition, as a whole, in population of rural areas.
Distribution of population among Regional Centres, Sub-Regional Centres, Service Centres and Basic Villages, although dealt in detail under Chapter of "Settlement System 1981 - 2001", will be as follows:

<table>
<thead>
<tr>
<th>Hierarchy of Settlement</th>
<th>Assigned Pop. in 2001 (Urban)</th>
<th>Projected Pop. in 2001 (Urban)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Centres</td>
<td>6.15</td>
<td>-</td>
</tr>
<tr>
<td>Sub-Regional Centres</td>
<td>2.50</td>
<td>-</td>
</tr>
<tr>
<td>Service Centres</td>
<td>-</td>
<td>0.83</td>
</tr>
<tr>
<td>Basic Villages</td>
<td>-</td>
<td>1.00</td>
</tr>
</tbody>
</table>


Balance rural population of the order of 5.83 lacs will be accommodated in remaining villages of various sizes in Sub-Region.
CHAPTER VI
SETTLEMENT SYSTEM 1901-2001

6.1 Background

Delhi has been facing unprecedented growth which has been a cause of serious concern. Concentration of economic activities and consequently population from the surrounding areas have gained tremendous momentum resulting into sprawling development due to overspill of Delhi's population into areas adjoining to it. This has warranted making improvement of selected settlements outside the metropolis at appropriate distances. Therefore the policy of restricting the growth of Delhi, allowing only a moderate growth of the DMA beyond Delhi and inducing growth rate of specially urban population in the area beyond DMA in the NCR necessitates a planned settlement pattern.

6.2 Settlement System

In the Rajasthan Sub-Region, number of villages has increased from 1088 in 1981 to 1116 in 1991 census. A close look of Table 6.1 shows that a gradual shift from small size settlement to bigger size settlement has taken place as 40% villages in 1981 were having population less than 500 against 32% in 1991. 116 villages (10.74%) shown in map were having population above 1500 as per 1981 census against 264 villages (18.25%) in 1991.

Table 6.1
Number of Villages in Different Population Range - 1981 & 1991

<table>
<thead>
<tr>
<th>Census</th>
<th>No. of Village</th>
<th>Population less than 200</th>
<th>200-499</th>
<th>500-1999</th>
<th>2000-4999</th>
<th>5000-9999</th>
<th>Above 1500</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>1988</td>
<td>125</td>
<td>318</td>
<td>573</td>
<td>65</td>
<td>7</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(11.49%)</td>
<td>(29.23%)</td>
<td>(52.67%)</td>
<td>(5.97%)</td>
<td>(0.64%)</td>
<td>(10.74%)</td>
</tr>
<tr>
<td>1991</td>
<td>1118</td>
<td>114</td>
<td>251</td>
<td>646</td>
<td>97</td>
<td>10</td>
<td>204</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10.2%)</td>
<td>(22.5%)</td>
<td>(57.8%)</td>
<td>(8.7%)</td>
<td>(0.9%)</td>
<td>(18.25%)</td>
</tr>
</tbody>
</table>

Source: Census of India, 1981
Note: Figures in brackets indicate percent of total No. of villages.
Table 6.2

Urban Density (Persons/sq.km) for Rajasthan Sub-Region NCR and Rajasthan State

<table>
<thead>
<tr>
<th>Year</th>
<th>Rajasthan Sub-Region NCR</th>
<th>Rajasthan State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>1623</td>
<td>598</td>
</tr>
<tr>
<td>1971</td>
<td>1803</td>
<td>1198</td>
</tr>
<tr>
<td>1981</td>
<td>1403</td>
<td>1603</td>
</tr>
<tr>
<td>1991</td>
<td>2087</td>
<td>2070</td>
</tr>
</tbody>
</table>


Among such large number of rural settlements, it is necessary to identify some basic villages for location of relatively higher order facilities, to serve large number of the scattered population over large area.

6.3 Urban Settlement and Population Density:

There were only three urban settlements namely Alwar (145,795) Khairsthal (15,963) and Tijara (12,199) in 1981. Subsequently Behror and Bhiwadi have been declared towns in 1991. Population of these towns as per 1991 census has been shown in Table 6.3.

Greater concentration of activities and resultant population lead to higher density in urban area. While higher densities indicate development of compact form; it may be due to physical limitation for spatial expansion too. The Rajasthan Sub-Region had relatively low densities. This indicates the scope in term of space availability within
urban areas for additional development and requirement for urban expansion. Please see Table 6.2

The trend of population growth of a town provides an insight into its latent potentials to absorb economic activities and consequent population. A study of the growth trends of the Sub-Regional urban centres indicates that the urban centres in the Sub-Region lack dynamism in growth as they lie in the shadow of a large metropolis. Economic base of these towns especially Alwar is weak to sustain their natural organic growth. This fact is borne by the census figures of 1981, which show that the decadal growth rates of these towns have not only marginally declined but also less than the national average figures.

6.4 Functional Classification of Urban Areas:

Classification of urban areas is based on functional specialization. The 1971 census had provided data on 9 categories of occupation which have been regrouped for analysis into five classes of economic activities viz industries, trade and commerce, transport and communications, services and primary activities. However the 1981 census provides data only on four categories of workers viz cultivators, agricultural labourers, household industrial workers and others which include workers engaged in manufacturing other than household industries, construction, trade and commerce, transport, storage and communications, fishing, hunting, mining and quarrying and other services. So the effective change in functional character of towns as compared to 1971 census is not discernible. Functional
Classification of Rajasthan Sub-Region towns are shown in Table 6.3.

Table 6.3
Function Classification of Towns in Rajasthan Sub-Region 1981-91

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alwar</td>
<td>I</td>
<td>2,10,146</td>
<td>2640</td>
<td>45.25</td>
<td>44.14</td>
<td>Others</td>
<td>Others</td>
</tr>
<tr>
<td>2. Bohror</td>
<td>IV</td>
<td>16,238</td>
<td>-</td>
<td>**</td>
<td>-</td>
<td>Others</td>
<td>Industries &amp; Others</td>
</tr>
<tr>
<td>3. Khairthal</td>
<td>III</td>
<td>22,741</td>
<td>1036</td>
<td>49.36</td>
<td>42.38</td>
<td>Others</td>
<td>Trade &amp; Commerce</td>
</tr>
<tr>
<td>5. Tijara</td>
<td>IV</td>
<td>15,399</td>
<td>782</td>
<td>26.23</td>
<td></td>
<td>Others</td>
<td>Primary &amp; Others</td>
</tr>
</tbody>
</table>

** Newly added town.

6.5 Issue and Strategy:

In conformance with issues and strategy incorporated in Regional Plan 2001, National Capital Region, following points emerge:

1) Towns of Rajasthan Sub-Region show lack of dynamism and diversification in their functional character.

2) Persons of rural areas of Sub-Region are attracted to migrate to nearby towns in small proportion and to Delhi in greater proportion mainly for employment and service.

Consequently following strategic points are adopted:
(i) The first strategy would be revitalise the economy of the urban centre and to integrate them in a well-knit system of settlement with some specific function to encourage an orderly development of economic activities and increase their complementarity.

(ii) Secondly, the development of small urban centres and villages would be integrated in relation to priority towns to achieve the objective of balanced development of the Region. This has been intended to be achieved by developing a four hierarchical system of settlements consisting of Regional Centre, Sub-Regional Centres, Service Centres, and Basic villages. Desirable population size of each tier of settlements as per Regional Plan 2001, NCR will be as per Table 6.4.

Table 6.4
Different Level of Settlement w.r.t. Population Size

<table>
<thead>
<tr>
<th>Level of Settlement</th>
<th>Population Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regional Plan NCR</td>
</tr>
<tr>
<td></td>
<td>Sub-Regional Plan NCR</td>
</tr>
<tr>
<td>1. Regional Centre</td>
<td>3.0 lacs and above</td>
</tr>
<tr>
<td></td>
<td>3.0 lacs &amp; above</td>
</tr>
<tr>
<td>2. Sub-Regional Centre</td>
<td>0.5 to 3 Lacs</td>
</tr>
<tr>
<td></td>
<td>0.5 to 3 lacs</td>
</tr>
<tr>
<td>3. Service Centres</td>
<td>10,000 to 50,000</td>
</tr>
<tr>
<td></td>
<td>Not more than 15,000</td>
</tr>
<tr>
<td>4. Basic Villages</td>
<td>Less than 10,000</td>
</tr>
<tr>
<td></td>
<td>Below 7000</td>
</tr>
</tbody>
</table>

Source: Regional Plan 2001, NCR and T.P.D. estimates
The main centres of utmost activity concentration in this hierarchical system are the regional centres, and
sub-regional centres. The service centres and basic villages are mutually dependent upon each other. The regional centres being self contained, would be capable enough to form an inter-dependent system independently.

(iii) Thirdly, to attract and contain the Delhi bound potential migrants, the selected regional centres would be developed on an intensified scale with conscious intervention to organize and stimulate economic activities to offer a variety in occupational structure and job opportunities. The regional centres have been identified in the Regional Plan 2001, NCR while Sub-Regional Plan has attempted to identify sub-regional centres, service centres, and basic villages.

A study on Settlement System in the Rajasthan Sub-Region: NCR

By the "Physical Research Laboratory" Ahmedabad based on computer model employed various parameters in selecting the sub-regional centres, service centres and basic villages such as revenue and development, administration, population size, sex ratio, literacy level, growth trends during 1951-81, participation ratio, and industrial work force, rate of migration, location of various facilities such as education, health, road and railway, water supply, power, marketing facilities, financial institutions and recreational facilities in relation to population size. A total of 38 indicators were employed and examined. Third and final menu was evolved by using extraneous information to overcome the limitation of computer model such as no consideration for spatial distribution, growth potential and linkages which have figured subsequently.
Although probable functions of each tier of settlements remain same as per Regional Plan 2001 NCR, population size differs on lower side for service centres and basic villages in Rajasthan Sub-Region owing to local conditions and small size of settlements as shown in Table 6.4.

(i) Regional Centres: Regional Centres have been identified from among the centres that rank in the development hierarchy, and are located beyond the DMA. The identified regional centres from Rajasthan Sub-Regional are
1. Alwar
2. Bhiwadi (part of Rewari Dharuhera and Bhiwadi complex).

The regional centres would be developed primarily to accommodate the Delhi bound potential migrants by creating employment opportunities in secondary and tertiary sectors and they would act as magnet-centres to attract economic activities.

The Regional Centres (Priority towns) thus identified and their assigned population for 2001 AD are as shown in Table 6.5

Table 6.5

<table>
<thead>
<tr>
<th>Population Assignment by 2001 AD for Regional Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>1. Alwar</td>
</tr>
<tr>
<td>2. Bhiwadi</td>
</tr>
</tbody>
</table>

Source: Regional Plan 2001, NCR
Sub-Regional Centre: The Sub-Regional Centres would serve as focal points with development and resume functions as that of Sub-divisional headquarters with corresponding facilities. In addition, they also will serve as first stage industrial centres with agricultural and marketing facilities. The Sub-Regional Centres thus identified and their assigned population for 2001 AD are as shown in Table 6.6.

Table 6.6
Population Assignment by 2001 AD for Sub-Regional Centres

<table>
<thead>
<tr>
<th>Sub-Regional Centres</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Khairthal</td>
<td>15,962</td>
</tr>
<tr>
<td>2. Tijara</td>
<td>12,199</td>
</tr>
<tr>
<td>3. Ramgarh</td>
<td>6,688</td>
</tr>
<tr>
<td>4. Behror</td>
<td>9,633</td>
</tr>
<tr>
<td>5. Shahjahanpur</td>
<td>5,149</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>69,835</strong></td>
</tr>
</tbody>
</table>

Source: Town Planning Deptt., Projections.

Service Centres: Service Centres would cater to the rural hinterland as agro-service centres in the collection and distribution of agricultural goods and services, with marketing, warehouses, and cold storages. The Service Centres thus identified and their projected population for 2001 AD are as shown in Table 6.7.
### Table 6.7
Population Assignment for 2001 AD for Service Centres

<table>
<thead>
<tr>
<th>Service Centre</th>
<th>Population</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mandawar</td>
<td>3987</td>
<td>4319</td>
<td>7800</td>
</tr>
<tr>
<td>2. Kishangarh</td>
<td>5061</td>
<td>6801</td>
<td>10500</td>
</tr>
<tr>
<td>3. Malakhera</td>
<td>6101</td>
<td>7966</td>
<td>12800</td>
</tr>
<tr>
<td>4. Tapookera</td>
<td>3271</td>
<td>4471</td>
<td>6200</td>
</tr>
<tr>
<td>5. Nagawanwa</td>
<td>5014</td>
<td>6892</td>
<td>9000</td>
</tr>
<tr>
<td>6. Kot Kasim</td>
<td>4989</td>
<td>5886</td>
<td>10000</td>
</tr>
<tr>
<td>7. Neemrana</td>
<td>2978</td>
<td>3253</td>
<td>4700</td>
</tr>
<tr>
<td>8. Mandhan</td>
<td>2606</td>
<td>3064</td>
<td>4000</td>
</tr>
<tr>
<td>9. Bardod</td>
<td>8951</td>
<td>11195</td>
<td>15500</td>
</tr>
<tr>
<td>10. Harsoli</td>
<td>5743</td>
<td>7114</td>
<td>12300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60961</strong></td>
<td><strong>92800</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Town Planning Dept. Projections.

Basic Villages: The basic villages would be developed to cater to the day-to-day needs of a cluster of villages with cooperatives for distribution of fertilizers, agricultural implements, and also for collection of agricultural goods for marketing in higher order centres. The basic villages identified and their projected population for 2001 AD are as shown in Table 6.8.
Table 6.8
Population Assignment for 2001 AD for Basic Villages

<table>
<thead>
<tr>
<th>Basic Villages</th>
<th>Population</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Guwala da</td>
<td>3135</td>
<td>4183</td>
<td>6180</td>
<td></td>
</tr>
<tr>
<td>2. Shahbad</td>
<td>3112</td>
<td>3222</td>
<td>5000</td>
<td></td>
</tr>
<tr>
<td>3. Jaiya</td>
<td>3148</td>
<td>3621</td>
<td>4800</td>
<td></td>
</tr>
<tr>
<td>4. Tatarpur</td>
<td>4270</td>
<td>5326</td>
<td>7000</td>
<td></td>
</tr>
<tr>
<td>5. Mator</td>
<td>2533</td>
<td>3294</td>
<td>4400</td>
<td></td>
</tr>
<tr>
<td>6. Jee ndoli</td>
<td>3067</td>
<td>3438</td>
<td>5300</td>
<td></td>
</tr>
<tr>
<td>7. Ajarka</td>
<td>1147</td>
<td>1363</td>
<td>4000</td>
<td></td>
</tr>
<tr>
<td>8. Gothra</td>
<td>1536</td>
<td>1992</td>
<td>2600</td>
<td></td>
</tr>
<tr>
<td>9. Isma ilpur</td>
<td>4171</td>
<td>4431</td>
<td>7300</td>
<td></td>
</tr>
<tr>
<td>10. Alwara</td>
<td>3759</td>
<td>4665</td>
<td>6500</td>
<td></td>
</tr>
<tr>
<td>11. Bahadpur (Patti Miran)</td>
<td>2902</td>
<td>3799</td>
<td>4600</td>
<td></td>
</tr>
<tr>
<td>12. Sahnoli</td>
<td>3086</td>
<td>N.A.</td>
<td>5400</td>
<td></td>
</tr>
<tr>
<td>13. Umren</td>
<td>2086</td>
<td>2704</td>
<td>3800</td>
<td></td>
</tr>
<tr>
<td>14. Akbarpur</td>
<td>2506</td>
<td>2781</td>
<td>5000</td>
<td></td>
</tr>
<tr>
<td>15. Baleta</td>
<td>3334</td>
<td>4146</td>
<td>6100</td>
<td></td>
</tr>
<tr>
<td>16. Beejwar Chauhan</td>
<td>2911</td>
<td>3471</td>
<td>5600</td>
<td></td>
</tr>
<tr>
<td>17. Gandala</td>
<td>4479</td>
<td>5125</td>
<td>9600</td>
<td></td>
</tr>
<tr>
<td>18. Jahanara Kalan</td>
<td>3222</td>
<td>3692</td>
<td>6000</td>
<td></td>
</tr>
<tr>
<td>19. Kuteena</td>
<td>2493</td>
<td>2704</td>
<td>5000</td>
<td></td>
</tr>
<tr>
<td>20. Doomroli</td>
<td>2093</td>
<td>2940</td>
<td>4600</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,08,780</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Town Planning Deptt. Projections.
Thus sum of rural population in service centres and basic villages would be $2,01,500(92,800+1,08,700)$ Although proposed facilities of various levels in hierarchy of different settlements are dealt under relevant chapters of report, Table 6.9 of "Proposed Facilities in the Hierarchy of Settlement" gives a birds eyview of these facilities to be provided by 2001.
<table>
<thead>
<tr>
<th>S.No.</th>
<th>Settlement</th>
<th>Education</th>
<th>Medical</th>
<th>Accessibility (road link)</th>
<th>Drinking Water</th>
<th>Power Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Village with pop. 500-1000 as per 1981 Census.</td>
<td>Nursery School/ Primary School</td>
<td>Sub-Centre</td>
<td>Village Road</td>
<td>2 hand pumps/wells</td>
<td>Electricity for agriculture &amp; domestic use.</td>
</tr>
<tr>
<td>2.</td>
<td>Village with pop. 1000-1500 as per 1981 Census.</td>
<td>Nursery School/ Primary School</td>
<td>Sub-Centre</td>
<td>VR/ODR</td>
<td>4 hand pumps/wells</td>
<td>- do -</td>
</tr>
<tr>
<td>3.</td>
<td>Basic Village (Below 7,000)</td>
<td>2 Middle Schools (one each for boys &amp; girls).</td>
<td>P.H.C.</td>
<td>C.D.R.</td>
<td>Hand pumps/wells</td>
<td>All Purpose piped water supply</td>
</tr>
<tr>
<td>4.</td>
<td>Service Centre (Not more than 15,000)</td>
<td>2 Higher Secondary Schools (one each for boys &amp; girls)</td>
<td>P.H.C. cum Health Centre with 10 beds for each 50,000 pop.</td>
<td>OCR/ODR</td>
<td>Hand Pumps/Wells/piped water supply</td>
<td>- do -</td>
</tr>
<tr>
<td>5.</td>
<td>Sub-Regional Centre (50,000 to 3,00,000 lacs)</td>
<td>0 College (Arts Science, Commerce &amp; Agriculture ITI)</td>
<td>Health Centre with four basic specialization for each 1 lac pop.</td>
<td>HDR/ M II</td>
<td>Piped water supply</td>
<td>- do -</td>
</tr>
<tr>
<td>6.</td>
<td>Regional Centre (3.0 Lacs &amp; above)</td>
<td>University, Engineering College, ITI Medical College, specialized Inst.</td>
<td>General Hospital</td>
<td>M II</td>
<td>- do -</td>
<td>- do -</td>
</tr>
<tr>
<td></td>
<td>1.</td>
<td>2.</td>
<td>3.</td>
<td>4.</td>
<td>5.</td>
<td>6.</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------</td>
<td>------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td>Police Force as per requirement.</td>
<td>Post Office as per requirement.</td>
<td>Post Office as per requirement.</td>
<td>Post Office as per requirement.</td>
<td>Post Office as per requirement.</td>
<td>Post Office as per requirement.</td>
</tr>
<tr>
<td></td>
<td>Police Station and office</td>
<td>Telephone Point &amp; Bank</td>
<td>Telegraph</td>
<td>Exchange</td>
<td>Automatic Exchange</td>
<td>Office</td>
</tr>
<tr>
<td></td>
<td>Police Cut Post.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 6.9 (Cont'd...)**
CHAPTER VII

ECONOMIC PROFILE 1991 – 2001

7.1 Background:

Rajasthan Sub-Region is characterised by fairly well developed rural economy besides gradually growing urban economy and represents better off area of the State. The Sub-Region's economy is heavily based on agriculture and other primary activities although significant development in industrial and commercial sectors has also taken place. Industrial centres like Alwar, Bhiwadi, Behror, etc. have been playing an important role in the overall economy of the Sub-Region. In the Rajasthan Sub-Region, maximum number of industries are related to manufacture of food items, printing, publishing, iron and steel industries and manufacture of wood products, electronics etc.

Trade and commerce forms another important component of the economic base of the Sub-Region. Commercial activities are fairly developed in Alwar, Khairthal and Behror. There are several wholesale mandies in the Sub-Region dealing in commodities like foodgrain, rapeseed, stone, vegetable, oil etc.

The employment in Government and Semi-Government services is mainly centralised at district headquarters Alwar and sub divisional headquarters Behror and Tijara.
The Rajasthan Sub-Region acts a part of vast hinterland and feeder zone for Delhi's population. The concentration of resources and investment in Delhi has been apparently instrumental in dominating the economic scene of the National Capital Region attracting majority of rural urban migrants after by passing intervening smaller towns. The total journey time from Delhi to the farthest point in the NCR is so short that no big centre of transportation and trading activity has developed in the Region. Thus the NCR rather than aiding or accelerating its own growth has supported the growth and prosperity of the Delhi metropolis. In this process a great deal of mutual dependency has also developed between Delhi and the NCR which is now sought to be harnessed to the advantage of each other.

7.2 Sub-Region's Economic Structure

The economic structure of the last two censuses clearly shows that work force has increased from 2.71 lacs in 1981 to 3.96 lacs in 1991. The participation rate has increased from 25.45% in 1981 to 28.34% in the year 1991. Table 7.1 and 7.2 reveal this fact. There is a gradual reduction in the proportion of workers in primary activities. Agricultural labourers and cultivators together formed 66.94% in 1981 which came down to 64.95% in 1991.
### Table 7.1
**Distribution of Work Force - 1981**

<table>
<thead>
<tr>
<th>Total work force (in Lacs)</th>
<th>PARTICIPATION RATE (%)</th>
<th>Proportion of Workers engaged (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cultivators (I)</td>
<td>Agricultural Labourers (II)</td>
</tr>
<tr>
<td></td>
<td>Household industries (III, IV)</td>
<td>Mfg. Processing, (VA)</td>
</tr>
<tr>
<td></td>
<td>Other workers (VB &amp; VI to IX)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.71</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25.45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.98</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30.34</td>
</tr>
</tbody>
</table>

**Source:** Compiled from census of India tables 1981

### Table 7.2
**Distribution of work force in 1991**

<table>
<thead>
<tr>
<th>Work Force (in Lacs)</th>
<th>PARTICIPATION RATE (%)</th>
<th>Proportion of work force (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary (V), (ItoIV)</td>
<td>Manufacturing (VA &amp; VB) (VI)</td>
</tr>
<tr>
<td></td>
<td>Construction (VI)</td>
<td>Commerce. (VIII)</td>
</tr>
<tr>
<td></td>
<td>Trade (XI)</td>
<td>Transport (XII)</td>
</tr>
<tr>
<td></td>
<td>Service storage &amp; Communication (VIII)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28.39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>65.95</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12.71</td>
</tr>
</tbody>
</table>

**Source:** Compiled from Census of India tables 1991

Proportion of workers engaged in manufacturing, processing, servicing and repairs in household industries was 2.72% in 1981, came down to 1.55% in 1991, while percentage of workers engaged in manufacturing, processing, servicing, repairing in other than household industries, trade and commerce, transport, storage and communication and other services increased from 30.34% in 1981 to 32.50% in 1991. All this indicates a shift in occupational structure from primary activities to tertiary sector activities.
In order to probe further into distribution of population among workers, marginal workers, and non workers in 1981, two way classification namely male & female and rural and urban is analysed, shown in table 7.3.

### Table 7.3

**Distribution of Population among Workers, Marginal Workers and Non-Workers: 1991**

<table>
<thead>
<tr>
<th>Talsil</th>
<th>WORKERS</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>No.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. BEHROR</td>
<td>R 42.57</td>
<td>12.48</td>
<td>28.00</td>
<td>1.74</td>
<td>23.67</td>
<td>12.36</td>
<td>55.68</td>
<td>63.85</td>
<td>59.64</td>
<td>U 47.62</td>
<td>3.74</td>
<td>27.90</td>
<td>0.11</td>
<td>9.55</td>
</tr>
<tr>
<td></td>
<td>T 42.92</td>
<td>11.95</td>
<td>28.00</td>
<td>1.63</td>
<td>22.82</td>
<td>11.84</td>
<td>55.45</td>
<td>65.22</td>
<td>60.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. RANDAVAR</td>
<td>R 43.73</td>
<td>7.61</td>
<td>26.46</td>
<td>1.80</td>
<td>21.73</td>
<td>11.33</td>
<td>54.47</td>
<td>70.66</td>
<td>62.21</td>
<td>U 43.73</td>
<td>7.61</td>
<td>26.46</td>
<td>1.80</td>
<td>21.73</td>
</tr>
<tr>
<td>3. KISHANGARI</td>
<td>R 44.70</td>
<td>4.53</td>
<td>25.93</td>
<td>0.70</td>
<td>25.36</td>
<td>12.36</td>
<td>54.52</td>
<td>69.71</td>
<td>61.71</td>
<td>U 44.61</td>
<td>4.39</td>
<td>25.79</td>
<td>0.25</td>
<td>4.03</td>
</tr>
<tr>
<td></td>
<td>T 44.75</td>
<td>4.83</td>
<td>25.92</td>
<td>0.65</td>
<td>23.15</td>
<td>11.20</td>
<td>54.53</td>
<td>71.97</td>
<td>62.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. TIJARA</td>
<td>R 46.90</td>
<td>2.30</td>
<td>25.94</td>
<td>1.43</td>
<td>35.71</td>
<td>17.54</td>
<td>51.67</td>
<td>69.21</td>
<td>61.99</td>
<td>U 50.20</td>
<td>5.64</td>
<td>36.83</td>
<td>0.14</td>
<td>4.37</td>
</tr>
<tr>
<td></td>
<td>T 49.99</td>
<td>2.30</td>
<td>27.70</td>
<td>1.19</td>
<td>31.03</td>
<td>14.09</td>
<td>49.81</td>
<td>66.61</td>
<td>57.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. ALWAR</td>
<td>R 47.16</td>
<td>17.02</td>
<td>33.16</td>
<td>0.83</td>
<td>15.25</td>
<td>7.55</td>
<td>51.96</td>
<td>67.73</td>
<td>59.29</td>
<td>U 46.94</td>
<td>4.66</td>
<td>27.63</td>
<td>0.13</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>T 47.05</td>
<td>11.07</td>
<td>30.48</td>
<td>0.51</td>
<td>8.11</td>
<td>4.01</td>
<td>52.43</td>
<td>60.81</td>
<td>65.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. RAMGARIH</td>
<td>R 47.79</td>
<td>0.84</td>
<td>29.39</td>
<td>0.82</td>
<td>18.24</td>
<td>9.05</td>
<td>51.40</td>
<td>72.92</td>
<td>61.56</td>
<td>U</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>T 47.79</td>
<td>0.84</td>
<td>29.39</td>
<td>0.82</td>
<td>18.24</td>
<td>9.05</td>
<td>51.40</td>
<td>72.92</td>
<td>61.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Rajasthan**

<table>
<thead>
<tr>
<th>Sub-Region</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAJASTHAN</td>
<td>R 45.35</td>
<td>9.49</td>
<td>28.35</td>
<td>1.23</td>
<td>22.92</td>
<td>11.51</td>
<td>53.42</td>
<td>67.59</td>
<td>60.14</td>
<td>SUB-REGION</td>
<td>U 46.14</td>
<td>4.68</td>
<td>28.51</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>T 45.93</td>
<td>8.56</td>
<td>28.39</td>
<td>1.00</td>
<td>18.82</td>
<td>9.36</td>
<td>53.07</td>
<td>72.62</td>
<td>62.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

- **R** = Rural
- **U** = Urban
- **T** = Total

**Source:** Census of India, 1991.
Participation rate i.e. workers in percentage is 28.39% in 1991 for Sub-Region but greatly differed among males and females and slightly differed between rural and urban areas. It was 45.93% for males and 8.56% females while 28.35% for rural areas and 28.51% for urban areas. This clearly indicates dominance of male workers both in rural and urban areas. Participation rate is slightly higher in urban areas over rural areas but this fact is contrary for females as participation rate among females in rural areas is 9.49% against 4.68% in urban areas. Participation rate was 30.48% for Alwar tehsil followed by 29.39% Ramgarh 28.00% for Behror, 27.78% for Tijara, 26.46% for Mandawar and 25.92% for Kishangarh. Above mentioned trend is true in reverse order for non-workers. Percentage of marginal workers was 9.36% in 1991 and greatly differed among males and females and between rural and urban areas. It was 18.82% for females and 1.00% for males and 11.51% in rural areas and 0.81% for urban areas. This means the marginal workers are mainly concentrated in rural areas among females and above the average in Mandawar, Kishangarh, Tijara and Behror tehsils. Activitywise distribution of work-force in 1991 shows that cultivators dominates with 55.72% figure.

Agricultural labourers account for 8.73%. Other workers are of the order of 32.17%. Cultivators account for 40.42% in Alwar tehsil and 68.05% in Ramgarh tehsil. Consequently percentage figure of other workers is highest in Alwar tehsil and lowest in Tijara tehsil.
<table>
<thead>
<tr>
<th>S3. Table</th>
<th>Activity-wise distribution of work-force - 1991</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RAJASTHAN</strong></td>
<td></td>
</tr>
<tr>
<td>6. RAMGARH</td>
<td></td>
</tr>
<tr>
<td>5. ALWAR</td>
<td></td>
</tr>
<tr>
<td>4. TULJA</td>
<td></td>
</tr>
<tr>
<td>3. KISHANGARH</td>
<td></td>
</tr>
<tr>
<td>2. MANDEWAR</td>
<td></td>
</tr>
<tr>
<td>1. BEHAR</td>
<td></td>
</tr>
</tbody>
</table>

| Source: Census of India, 1991 |
### Activity-wise Distribution of Work-Force - 1991

<table>
<thead>
<tr>
<th>S. No.</th>
<th>S. Tehsil</th>
<th>Manufacturing &amp; Processing</th>
<th>Construction</th>
<th>Trade &amp; Commerce</th>
<th>Transport &amp; Communication</th>
<th>Other Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>1.</td>
<td>DEBROR</td>
<td>R</td>
<td>4.60</td>
<td>1.42</td>
<td>3.91</td>
<td>2.45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>U</td>
<td>25.36</td>
<td>3.66</td>
<td>24.06</td>
<td>3.26</td>
</tr>
<tr>
<td></td>
<td>T</td>
<td>6.18</td>
<td>1.46</td>
<td>5.21</td>
<td>2.51</td>
<td>0.12</td>
</tr>
<tr>
<td>2.</td>
<td>NANDWAR</td>
<td>R</td>
<td>2.62</td>
<td>0.20</td>
<td>2.46</td>
<td>1.70</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>2.06</td>
<td>0.28</td>
<td>2.34</td>
<td>1.70</td>
<td>0.22</td>
</tr>
<tr>
<td>3.</td>
<td>KISHANGAN</td>
<td>R</td>
<td>2.68</td>
<td>1.06</td>
<td>3.74</td>
<td>1.39</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>14.19</td>
<td>0.64</td>
<td>13.83</td>
<td>2.78</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>T</td>
<td>3.89</td>
<td>1.02</td>
<td>4.91</td>
<td>1.54</td>
<td>0.03</td>
</tr>
<tr>
<td>4.</td>
<td>TIJARA</td>
<td>R</td>
<td>4.06</td>
<td>0.98</td>
<td>3.08</td>
<td>1.30</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>54.93</td>
<td>17.21</td>
<td>72.14</td>
<td>5.93</td>
<td>1.25</td>
</tr>
<tr>
<td></td>
<td>T</td>
<td>15.25</td>
<td>5.66</td>
<td>20.91</td>
<td>1.65</td>
<td>0.86</td>
</tr>
<tr>
<td>5.</td>
<td>ALWAR</td>
<td>R</td>
<td>6.69</td>
<td>0.47</td>
<td>7.16</td>
<td>2.45</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>22.53</td>
<td>4.18</td>
<td>26.71</td>
<td>4.21</td>
<td>1.63</td>
</tr>
<tr>
<td></td>
<td>T</td>
<td>14.42</td>
<td>2.29</td>
<td>16.71</td>
<td>3.31</td>
<td>0.70</td>
</tr>
<tr>
<td>6.</td>
<td>RANGARE</td>
<td>R</td>
<td>5.29</td>
<td>1.36</td>
<td>6.65</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>5.29</td>
<td>1.36</td>
<td>6.65</td>
<td>2.00</td>
<td>0.37</td>
</tr>
</tbody>
</table>

**Source:** Census of India, 1991
7.3 Urban Employment Structure:

The urban population formed about 16.34% of the total population in 1981 while the urban participation rate was 26.45%. In Sub-Region, urban areas were primarily administrative towns with 87.64% of the workforce in services. In 1991 there was a marginal increase in the participation ratio. It was 28.51% in 1991 against 26.45% in 1981, as shown in Table 7.5 & 7.6. However, there has not been a perceptible change in the occupational structure during 1981-91. In 1991, about 89.20% of the workforce remained engaged in "other activities" which include construction, trade and commerce, manufacturing including household industries, transport, storage and communications and other services against 91.05 in 1981.

Table 7.5
Distribution of Urban Workforce 1981

<table>
<thead>
<tr>
<th>Total Workforce (In Lacs)</th>
<th>Participation Rate (%)</th>
<th>Workforce in (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cultivation</td>
<td>Agricultural</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.46</td>
<td>26.45</td>
<td>7.66</td>
</tr>
</tbody>
</table>

Source: Census of India, 1981
Table 7.6

Distribution of Urban Workforce 1991

<table>
<thead>
<tr>
<th>Total participation (In Lacs)</th>
<th>Proportion of Workers in (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary</td>
</tr>
<tr>
<td>0.80</td>
<td>28.51</td>
</tr>
</tbody>
</table>

Source: Census of India, 1971

7.4 Future Occupational Structure:

The basic character of the Sub-Region economy would become more diversified in future. The fact that 42.2% of the population would be living in urban areas by 2001, entailing the creation of more jobs in non-agricultural occupations than at present. For this purpose, there should not only be creation of additional economic activities in Regional Centres namely Alwar and Bhiwadi and Sub-Regional Centres, namely Khairthal, Tijara, Ramgarh, Behror and Shahjahanpur but also development of agro-based industries in the service centres and basic villages in order to support urbanisation and to stabilize the rural economy. Alwar Bhiwadi and Shahjahanpur would have strong industrial content. In the wake of intensified employment opportunities, the participation rate in the Sub-Region is likely to be around 30% by 2001 as against 25.45% in 1981. The urban participation rate is expected to increase 30% - 33% as against 26.45% in 1981.
Regional Plan 2001 provides a four tier hierarchical system of settlements consisting of Regional Centres, Sub-Regional Centres, Service Centres and Basic villages with functionally specialized organized structure. Consequently there are two Regional Centres, namely Alwar and Bhiwadi, five Sub-Regional Centres namely Khairthal, Tijara, Ramgarh, Behror and Shahjahanpur, ten service centres namely Mandawar, Kishangarh, Malakhera, Tapookera, Nauganwa, Kotkasim, Neemrana, Mandhan, Bardod and Harsoli and Twenty Basic Villages.

In the context of the policy of deflecting urban population from Delhi to the Regional towns beyond the DMA, it is proposed to develop such activities that are appropriate to the location of Regional towns, having due regard to their potential and the growth process that has already set in. It is expected that with positive incentives, such activities shall continue to thrive to provide greater employment opportunities. In view of the fact that the manufacturing activities have greater multiplier effect on the expansion of employment opportunities than employment in other sectors. Past trend, the assigned population sizes, projected population sizes, their participation rates, and likely occupation structure have been taken into account to arrive at the workforce. For each town, all India average proportions of workers in towns of similar size and character have been taken into consideration for the purpose of assignment of workforce in Alwar and Bhiwadi by 2001 is shown in Table 7.7.
Table 7.7


<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name</th>
<th>Participation Ratio 2001</th>
<th>Primary Industry</th>
<th>Construction &amp; Development</th>
<th>Trade &amp; Services</th>
<th>Transport &amp; Storage</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Alwar</td>
<td>30</td>
<td>5</td>
<td>30</td>
<td>4</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>Bhiwadi</td>
<td>30</td>
<td>5</td>
<td>50</td>
<td>4</td>
<td>16</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Regional Plan 2001, NCR

Occupational structure in Sub-Regional Centres and service centres by 2001 has been worked out on similar lines as adopted for Regional Centres. The table 7.8 depicts this for Sub-Regional Centres and table 7.9 for service centres.

Table 7.8

Occupational Structure in Sub-Regional Centres by 2001.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name</th>
<th>Participation Ratio (Ratio)</th>
<th>Primary Industry</th>
<th>Construction &amp; Development</th>
<th>Trade &amp; Services</th>
<th>Transport &amp; Storage</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Khairthal</td>
<td>33</td>
<td>10</td>
<td>31</td>
<td>4</td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>Tijara</td>
<td>33</td>
<td>10</td>
<td>25</td>
<td>4</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>Ramgarh</td>
<td>32</td>
<td>18</td>
<td>20</td>
<td>4</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Behror</td>
<td>35</td>
<td>3</td>
<td>40</td>
<td>4</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Shahjahanpur</td>
<td>40</td>
<td>10</td>
<td>45</td>
<td>5</td>
<td>18</td>
<td>8</td>
</tr>
</tbody>
</table>

(Source: Town Planning Deptt. estimates)
Table 7.9
Occupational Structure in Service Centres by 2001

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mandawar</td>
<td>32</td>
<td>35</td>
<td>10</td>
<td>5</td>
<td>25</td>
<td>8</td>
<td>17</td>
<td>Agro-service centre cum collection depot.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Kishangarh</td>
<td>33</td>
<td>25</td>
<td>17</td>
<td>5</td>
<td>25</td>
<td>10</td>
<td>18</td>
<td>Mandi cum agro service centre.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Malakhera</td>
<td>33</td>
<td>40</td>
<td>15</td>
<td>5</td>
<td>18</td>
<td>8</td>
<td>14</td>
<td>Agro service centre.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Tapookera</td>
<td>32</td>
<td>28</td>
<td>25</td>
<td>4</td>
<td>20</td>
<td>8</td>
<td>15</td>
<td>Agro service &amp; Industrial cum collection depot.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Naunganwa</td>
<td>33</td>
<td>40</td>
<td>15</td>
<td>4</td>
<td>16</td>
<td>8</td>
<td>15</td>
<td>Agro Service Centre.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Kotkasim</td>
<td>32</td>
<td>40</td>
<td>15</td>
<td>4</td>
<td>18</td>
<td>8</td>
<td>15</td>
<td>- do -</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Neemrana</td>
<td>33</td>
<td>20</td>
<td>25</td>
<td>4</td>
<td>20</td>
<td>10</td>
<td>21</td>
<td>Industrial cum Agro Service Centre.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Mandhan</td>
<td>32</td>
<td>30</td>
<td>15</td>
<td>4</td>
<td>20</td>
<td>10</td>
<td>21</td>
<td>Agro-Service Centre.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Bardod</td>
<td>32</td>
<td>30</td>
<td>20</td>
<td>4</td>
<td>15</td>
<td>15</td>
<td>16</td>
<td>Collection and distribution centre with storage facilities.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Harsoli</td>
<td>32</td>
<td>50</td>
<td>5</td>
<td>5</td>
<td>15</td>
<td>10</td>
<td>15</td>
<td>Agro Service Centre</td>
<td></td>
</tr>
</tbody>
</table>

Source: Town Planning Department estimates.
Agro service centre would have provision for small and medium agro based industries, like dal mills, flour mills, oil crushers etc., agricultural implements, food canning and preservation industries etc. Collection depots would have warehouses & godowns, for seeds and grains, wholesale market for timber, steel and building materials etc. Transport node would have mini truck stand with servicing and repairing shop facilities along with night shelters, parking spaces, petrol pumps, small hotels, restaurants, dhabbas etc.
(A) **Government and Public Sector Offices**

In Rajasthan Sub-Region, Alwar is district headquarters while Behror and Tijara are sub-divisional headquarters and Mandawar, Kishangarh and Ramgarh are tehsil headquarters.

Being the capital of erstwhile princely State of Alwar and subsequently the centre of District Administration, expansion of Government activities and related functions have played a significant role in the growth of Alwar city. The entire activity of the Government offices is centred near the city palace from the days, the town was built. Some Government offices are however housed in rented buildings. The area which is gradually assuming such a character is the Nagli Circle where a few offices are in rented residential buildings.

Behror is the Sub-Divisional headquarters since 1949. Its remote location from the District headquarters Alwar, at the junction of State Highway and N.H.8. has made the Government activities and related functions more significant. At present, about 80% of Government offices are located in rented buildings at congested locations. Tehsil headquarters are only defined office complex. In Bhiwadi, there are many offices namely RIICO, PHED, Banks etc. along Rewari-Palwal road.

(B) **Wholesale Trade and Commerce**

In Alwar, most of the business transactions both wholesale and retail take place in Sarafa Bazar, Bazaza Bazar, Hope Circus, Ghanta Ghar, Kedal Ganj, and Ramganj areas. In
Sarafa Bazar special transactions connected with bullion take place. Bazaza Bazar deals mostly in cloth, whereas in Kedal Ganj wholesale grain trading is conducted. The remaining bazars are of general merchandise. These bazars are inter-linked with each other by array of linear shops of nearly one property depth, along the roads. Besides, these three areas; the other organised commercial area is the Tej Mandi which was built in fifties for the purpose of shifting the Grain Mandi from Kedal Ganj, which is still functioning in Kedal Ganj and Tej Mandi is now functioning in as a general merchandise shopping centre and automobile market. A new wholesale grain market has been constructed east of the railway line along Delhi road. The new grain market has started functioning and it is proposed to shift the merchants from Kedal Ganj, which in turn will be used as a retail shopping centre. The vegetable market is presently functioning near Ghanta Ghar. The location of wholesale activities like grain market (Kedal Ganj), stone market (Naru Marg) and the vegetable market create traffic problems.

In Behror, commercial activities of the town is not concentrated at a particular place. There are three main commercial areas; namely old settlement commercial area known as chandni chowk, (ii) commercial area near bus stand (iii) commercial area at Narnaul Kund road junction. Most of the commercial activities are being carried out in old town. General business in Auto Spares, Building Materials etc. are located at Narnaul Kund road junction. Commercial area at Bus stand mainly deals in general retail trading and catering services. Due to the N.H.8, a number of Auto
Repair Shops, Restaurants, Hotels etc. have come up along N.H. 8 and S.H. No. 14. Facilities such as warehousing and godowns are completely lacking in Behror town.

7.6 Role of Informal Sector in Sub-Region's Economy:

There are certain economic activities which are generally over-looked in the planning exercise as these do not fall in the category of organised or well-defined sector of economy. Consequently, the needs of such activities generally fall outside the purview of the normal planning and investment exercises. This unanticipated demand results in additional pressure on the existing infrastructure and services thereby deteriorating them.

These activities collectively known as "informal sector" are present in all towns in some form or the other. They range from production of engineering goods, electronic and electrical goods, transport and various other industrial activities to retail and wholesale trading activities, servicing of various equipments, domestic services etc. These activities are further characterized by some salient features viz. small scale of operations, reliance on indigenous resources, low level of skill requirements, low level of income, labour intensive technology, non-availability of adequate infrastructural facilities etc.

A study of informal sector in the NCR conducted through the Society for Development Studies, New Delhi for the NCR Planning Board has taken into consideration the informal sector activities in the Alwar town. The study, while emphasizing the dynamic role of the informal sector in the development process has recommended that a phased programme for the development of informal sector activities should be
prepared. The study has also emphasized the need for accessibility to institutional finance, skill upgradation programmes for the workers engaged in such activities and better organisation of the informal sector entrepreneurship.

In the Alwar and Bhiwadi, where induced development has been envisaged by developing economic activities intensively, along with the development of organised sector of economy, the growth of informal sector would be carefully nurtured. This would then play the role of a vibrant component of the urban economy and provide gainful employment to the potential migrants to urban areas. Since in the past, no efforts have been made with regard to provision of adequate infrastructure facilities for these activities in an organised way, the economic activities are being carried out in substandard conditions in congested areas of the towns, the lanes and by lanes. An improvement in the working conditions by suitably locating them with provision of appropriate infrastructure and improvement in the technology will enhance the prospects of these activities and generate more employment.

7.7 Policies and proposals under Regional Plan 2001 NCR:

(A) Government and Public Sector Offices:

1. Strict control within Union Territory of Delhi.

With regard to Government Offices, the present policy and mechanism for screening the location of new Government Offices and expansion of existing Government Offices should be continued. The main criterion for the location of offices in the Delhi should be that they perform ministerial
functions, protocol functions, or liaison functions which by their nature, cannot be performed anywhere else except in Delhi. The existing offices which donot perform any of the above functions should be identified and shifted from Delhi. In the case of public sector offices, there is an urgent need to scrutinize the list of existing office and allow them to retain only very small establishments to cater for ministerial and liaison functions. The rest of the establishments should be shifted out of Delhi. The accommodation which may thus become available could be used to cater to the needs of the essential growth of General Government Offices.

A study of the decisions taken by the Committee setup to scrutinise requests for fresh locations in Delhi shows that in 17 out of 27 cases, the offices have been located in Delhi itself.

II. Control outside Delhi but within the DMA.

A similar control on the opening of new Central Government and public sector offices in DMA towns should be exercised. Relocation or expansion of Government offices which have ministerial, protocol or liaison functions which make it incumbent upon them to be located in Delhi alone should be allowed to be located in the DMA towns. In so far as public sector undertakings are concerned, the restrictions on their opening new offices, on expanding the existing ones should apply equally to the DMA also. Rest of them have to be out to the priority towns to be developed in the NCR or in the Counter-magnet areas identified by the Board.
III. Incentives outside DMA but within NCR.

The Central Government offices which are considered for being shifted from Delhi and the DMA towns should be located in other towns of the NCR and incentives in the form of CCA, HRA etc. as given to employes who may be affected by this shifting for a limited period. Other incentives like providing government accommodation, allowances for study of their children also be given. For locating the new Central Government and Public Sector Offices in the DMA and/or the priority towns, alternative sites should be identified and developed by the development agencies in consultation with the Board’s secretariat.

(B) Wholesale Trade and Commerce:

(I) Decentralization of Wholesale Trade and Commerce in Delhi.

There should not be any special advantage in terms of preferential treatment or lower taxes by way of incentives to wholesale trade in Delhi vis-a-vis the adjoining states. Those wholesale trades which are hazardous in nature such as plastic and PVC Goods, Chemical, Timber, Foodgrains, Iron and Steel and Building Material and require extensive space may be decentralised by developing suitable additional locations outside Delhi.

(II) Development outside Delhi within DMA.

There are certain wholesale trades and storages in Delhi which are hazardous because of their location in congested areas and also due to bulk handling activities relating to plastic and PVC Goods, Chemical, Timber, Foodgrains, Iron &
Steels and Building Materials. These wholesale trades in addition to new trades and related activities should be encouraged to be developed in the DMA towns.

The possibility of developing modern super markets should be explored in DMA.

(III) Development outside DMA within NCR.

Incentives, concessions and infrastructure should be made available in the regional towns to encourage and accelerate the growth of trade.

7.8 Policies and Programmes of Sub-Regional Plan 2001:

Economy of Sub-Region would undergo a transformation as urbanization would increase from 16.34% in 1981 to 42.2% by 2001. Although agriculture would continue to be kingpin of Sub-Region's economy, share of secondary and tertiary sectors would increase substantially in view of induced development of these sectors. Sub-Region would be better served with transport network and other infrastructural facilities. Further in the light of incentives and concessions afforded under Regional Plan 2001 NCR, Government and Public Sector Offices and wholesale trade and commerce would get a big boost in Regional towns Alwar and Bhiwadi and Sub-Regional towns Khairthal, Tijara, Ramgarh, Behor and Shahjahanpur. For attracting these activities to Regional and Sub-Regional centres of Sub-Region, areas have been earmarked for these activities in the master plans/draft master plans/developmental plans of these towns. Incentives such as developed plots with all infrastructural facilities are proposed to be provided to entrepreneurs.
(A) Government and Public Sector Offices

Taking cognizance of the existing conditions and problems involved in expansion of the Government and public sector offices in Alwar, due care has been taken while earmarking new areas for these purposes. The new Government and public sector offices are therefore proposed to be located in organised complexes with adequate land nearby for housing and other community facilities. It is not possible to accommodate even the present office workers within existing Collectorate Complex as it is housed in an old building situated in a thickly populated area having several limitations to it. Besides, some land would also be required for Central Government and Public Sector Offices which are likely to be shifted to Alwar town from Delhi as proposed under Regional Plan 2001 NCR. Land for new office areas have been earmarked to achieve a rational distribution of population and work centres. This would reduce the average distance of journey to work. It is therefore proposed to develop new office complexes namely Moti Doongri Office Complex, Daudhpur office complex, Phool Bagh Complex and Collectorate Complex.

In Bhiwadi, adequate area has been earmarked along Rewari-Sohna road for Government and public sector offices which are likely to come up under 'Integrated Development Plan for Dharuhera Bhiwadi 2001. In Behror, a site measuring about 14 acres has been earmarked on N.H.8 near fort areas. Sufficient land area would also be earmarked for Government and Public Sector offices in Master Plans of other Sub-Regional Centres.
(B) Wholesale Trade and Commerce:

In Regional Centre Alwar, it is proposed to shift the existing Grain Mandi (Kedal Ganj), and vegetable market to their new locations outside and develop these pockets as retail shopping centres as extension of the central Business District. It is proposed to convert Bazara Bazar, Hope Circus and Ghantaghar Bazar as pedestrian Malls. In order to decentralize adequately the commercial activities, three District Centres namely Sonawa District Centre (15 Acres), Mungaska District Centre (17 Acres) and MIA District Centre (33 Acres) have been envisaged in the Master Plan each forming the nucleus of commercial activity of the planning district concerned. A district centre shall have retail shops, small wholesale markets, commercial offices, hotels, cinemas, service industries, workshops, service stations etc. Looking to the future economic development of the town, the wholesale activities are taken outside in the organised areas along the major roads. The Rajasthan Agricultural Marketing Board is already constructing a new Grain Mandi along Delhi road in the east. The fruit and vegetable market as well as building material and stone market are also proposed to be shifted in the east. The following sites have been proposed for various wholesale markets:

(i) Grain Market (on Delhi Road) 85 Acres
(ii) Fruit & Vegetable Market 15 Acres
   (on Delhi Road)
(iii) Building materials (on Delhi Road) 15 Acres
Warehousing and godowns are proposed to be developed near old Industrial area (90 acres) and VIA (110 acres).

Under the "Study of wholesale Distributive Trade in the NCR" conducted by operation Reserch Group, Baroda in respect of commodities namely (a) textile (b) autoparts & machinery (c) fruits and vegetable (d) Hardware & building materials (e) foodgrains (f) iron & steels (g) timber (h) fuel & oil (petrochemicals); if stress is laid on balanced regional development ; the Alwar and Bhiwadi should be alternative locations for textile and readymade garments, autoparts, besides suggested location for building materials. Manufacturing of textile and autoparts are not too location specific because both activities come under "Foot loose Industry". Further Alwar affords the availability of cheap skill and non skill labour, land and various incentives.

In view of Behror's nodal location and industrial prospects, the business and commercial activities shall continue to expand. The main commercial area of town is located within the old settlement. It is proposed that wholesale trade in coal, timber, firewood yards etc. dealing in bulk materials shall be shifted from this area and it shall function as a retail trading centre. Four commercial areas have been proposed at following locations:
(i) At the Junction of S.H. No.14 & N.H. 8

(ii) Narnaul-Karnal road junction

(iii) Vikram Talkies

(iv) On Tehsil road in the west

4.5 Acres

3.00 Acre

2.62 Acres

2.52 Acres

Areas are earmarked for grain mandi, fruit and vegetable market, building materials, and ware-housing and godowns on south-west of industrial area.

IN Bhiwadi town, large area has been earmarked along proposed bye-pass in both east and west and district centre with area reserved for future commercial use in the south of existing industrial area and west of proposed industrial expansion.
The proposed system involves the use of advanced communication technologies and algorithms to optimize information flow and enhance decision-making processes. This integration of cutting-edge technologies aims to streamline operations and improve efficiency. The system is designed to adapt to various scenarios, ensuring robust performance under diverse conditions.

Key features include:

- Advanced data analytics for real-time decision support
- Enhanced security measures to protect sensitive information
- Scalable infrastructure to support growth and expansion
- Integration with existing systems for seamless operations

The system has undergone rigorous testing and validation to ensure reliability and effectiveness. Further refinements are underway to address emerging challenges and enhance user experience. The implementation strategy is centered around a phased approach, allowing for gradual integration and minimizing disruption to ongoing operations.

In conclusion, the proposed system represents a significant step forward in the field of information management. Its adoption has the potential to revolutionize the way organizations operate, providing a competitive edge in an increasingly connected world.
CHAPTER IX

EDUCATION AND HEALTH

9.1 Background:

Availability of well developed social infrastructural facilities represents a key force in the developmental process and acts as a major influencing factor in fostering wide ranging socio-economic activities in any area. Therefore the equitable distribution of educational and medical facilities at convenient locations in the Sub-Region, especially those which serve the primary needs, is far more important than the location of any other facility.

9.2 Evaluation of the Existing Facilities:

(a) Education Facilities:
According to the 1981 census, the literacy rate in the NCR (43.94%) is higher than the all India literacy rate (36.23%). The same is applicable of Rajasthan Sub-Region viz-a-viz of Rajasthan State in 1981 and 1991 as revealed by table No. 9.1. The literacy rate in Rajasthan Sub-Region 37.03% is higher than the Rajasthan State (31.03%).

If the two way classification of table is compared for Rajasthan Sub-Region against Rajasthan State, then it is clear that literacy rate in rural and urban areas and among males and females is higher in Rajasthan Sub-Region than corresponding figure of Rajasthan Sub-Region. However corresponding figure of Rajasthan Sub-Region is less than the NCR figure. This means Rajasthan Sub-Region is better served than Rajasthan State but significantly less than National Capital Region. Variation in intra-sub region, literacy rate is also quite noticeable. Alwar tehsil stands on top
(43.56%) followed by Behror tehsil (42.79%), Mandawar tehsil (38.05%), Kishangarh (36.59%), Ramgarh (29.56%) and Tijara tehsil (25.71%) (Table - 9.1).

When evaluated from the point of availability of education facilities in the rural areas on the basis of two indicators viz proportion of villages having one or more of the educational facilities and proportion of rural population served by educational facilities, Behror tehsil is better served with education facilities with 91% of villages having one or more of the educational facilities and 98.32% of the rural population having been served by educational facilities. Mandawar tehsil follows and Tijara tehsil is the least served with educational facilities. These figures for Rajasthan Sub-Region are 69.66% with reference to villages having one or more of the educational facilities and 89.9% with reference to rural population served by educational facilities (Table 9.2). As regards the Rajasthan Sub-Region Alwar town is the main centre of education activities. It has a number of colleges which mainly cater to the local students and to some extent those from nearby areas.
<table>
<thead>
<tr>
<th>Area</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rajasthan State</td>
<td>31.03</td>
<td>44.22</td>
<td>16.59</td>
</tr>
<tr>
<td>Rural</td>
<td>24.20</td>
<td>38.01</td>
<td>9.23</td>
</tr>
<tr>
<td>Urban</td>
<td>54.07</td>
<td>64.71</td>
<td>41.99</td>
</tr>
<tr>
<td>Rajasthan Sub-Region</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>37.96</td>
<td>51.86</td>
<td>22.24</td>
</tr>
<tr>
<td>R</td>
<td>32.33</td>
<td>46.97</td>
<td>16.07</td>
</tr>
<tr>
<td>U</td>
<td>60.40</td>
<td>70.55</td>
<td>48.06</td>
</tr>
<tr>
<td>Behror Tehsil</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>42.79</td>
<td>59.16</td>
<td>25.20</td>
</tr>
<tr>
<td>R</td>
<td>41.88</td>
<td>58.48</td>
<td>24.19</td>
</tr>
<tr>
<td>U</td>
<td>56.04</td>
<td>68.36</td>
<td>40.94</td>
</tr>
<tr>
<td>Mandawar Tehsil</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>38.05</td>
<td>54.63</td>
<td>19.96</td>
</tr>
<tr>
<td>R</td>
<td>38.05</td>
<td>54.63</td>
<td>19.96</td>
</tr>
<tr>
<td>U</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kishangarh Tehsil</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>36.59</td>
<td>50.90</td>
<td>20.62</td>
</tr>
<tr>
<td>R</td>
<td>34.22</td>
<td>48.93</td>
<td>17.84</td>
</tr>
<tr>
<td>U</td>
<td>56.87</td>
<td>67.61</td>
<td>17.84</td>
</tr>
<tr>
<td>Tijare Tehsil</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>29.56</td>
<td>42.93</td>
<td>13.81</td>
</tr>
<tr>
<td>R</td>
<td>25.15</td>
<td>37.98</td>
<td>10.68</td>
</tr>
<tr>
<td>U</td>
<td>51.25</td>
<td>64.68</td>
<td>31.65</td>
</tr>
<tr>
<td>Alwar Tehsil</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>43.56</td>
<td>55.43</td>
<td>29.67</td>
</tr>
<tr>
<td>R</td>
<td>25.75</td>
<td>39.59</td>
<td>9.79</td>
</tr>
<tr>
<td>U</td>
<td>62.45</td>
<td>71.97</td>
<td>51.11</td>
</tr>
<tr>
<td>Ramgarh Tehsil</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>25.71</td>
<td>38.82</td>
<td>11.06</td>
</tr>
<tr>
<td>R</td>
<td>25.71</td>
<td>38.82</td>
<td>11.06</td>
</tr>
<tr>
<td>U</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Census of India - 1991
### Table 9.2

**Educational Facilities in Rural Areas of NCR**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Tehsil.</th>
<th>Proportion of Villages having one or more of the facilities.</th>
<th>Proportion of Rural population served by educational facilities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Behror</td>
<td>91.01</td>
<td>98.32</td>
</tr>
<tr>
<td>2.</td>
<td>Mandawar</td>
<td>86.67</td>
<td>95.34</td>
</tr>
<tr>
<td>3.</td>
<td>Kishangarh</td>
<td>64.19</td>
<td>85.89</td>
</tr>
<tr>
<td>4.</td>
<td>Tijara</td>
<td>54.31</td>
<td>81.16</td>
</tr>
<tr>
<td>5.</td>
<td>Alwar</td>
<td>68.82</td>
<td>82.79</td>
</tr>
<tr>
<td>6.</td>
<td>Ramgarh</td>
<td>69.48</td>
<td>96.04</td>
</tr>
<tr>
<td></td>
<td><strong>Rajasthan Sub-Region</strong></td>
<td><strong>69.66</strong></td>
<td><strong>89.90</strong></td>
</tr>
<tr>
<td></td>
<td><strong>NCR</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Census of India - 1981

(b) **Medical Facilities:**

The evaluation of availability of medical facilities in Alwar town in terms number of beds per thousand population (1981) reveals that there are 2.59 beds per thousand population which compared favourably with other NCR towns. As regards availability of medical facilities in the rural areas, the Table No. 9.3 depicts the position. In terms of medical facilities, Behror is again better served followed by Mandawar tehsil. Tijara tehsil is the least served.
Table 9.3

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Tehsil</th>
<th>Proportion of villages having medical facilities</th>
<th>Proportion of rural population served</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Behror</td>
<td>30.16</td>
<td>51.22</td>
</tr>
<tr>
<td>2</td>
<td>Mandawar</td>
<td>22.33</td>
<td>56.71</td>
</tr>
<tr>
<td>3</td>
<td>Kishangarh</td>
<td>11.63</td>
<td>33.73</td>
</tr>
<tr>
<td>4</td>
<td>Tijara</td>
<td>11.17</td>
<td>25.58</td>
</tr>
<tr>
<td>5</td>
<td>Alwar</td>
<td>18.09</td>
<td>33.33</td>
</tr>
<tr>
<td>6</td>
<td>Ramgarh</td>
<td>15.58</td>
<td>37.06</td>
</tr>
<tr>
<td></td>
<td>Rajasthan, Sub-Region</td>
<td>18.47</td>
<td>39.61</td>
</tr>
</tbody>
</table>

Source: Census of India - 1981

An assessment of the availability of education and health facilities in the region indicates that the level of these facilities in terms of accessibility and equitable distribution is far from satisfactory.

9.3 Strategy for Development

With the progress in economic development and the rise in living standards, provision of adequate social infrastructure at various levels assumes added importance. The availability of job opportunities attracts the unemployed or the person who wants to have a better job whereas availability of better social infrastructure viz-medical and educational facilities, to some extent is responsible for family movement.
In order to have a balanced development of the region, provision of adequate level of social infrastructural facilities within a reasonable accessible distance will have to be made. The Regional Centres (Priority towns), which have been proposed in the plan for the induced development are likely to attract larger section of the Delhi bound migrants and would be the main centre of attraction for the sub-regional population as regards availability of higher order educational and medical facilities. The other regional centre proposed in the plan does not at present have adequate medical and educational facilities, which can cater to the needs of the population living in their hinterlands. The facilities at these centres will have to be improved not only in terms of quantity but also quality. The improvement of these facilities in the towns will make them self contained. The distribution of the educational and medical facilities in the lower order settlements viz-sub-regional centres, service centres and basic villages on equitable basis in the Region will help remove the Sub-Regional imbalances in the Region.

Proposals : Regional Plan 2001 NCR has stipulated certain norms for education and health facilities to be provided by 2001. These are as follows :
### Table - 9.4

**Norms for Education & Health under Regional Plan 2001 NCR**

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Rural</strong></td>
</tr>
<tr>
<td><strong>A : Education</strong></td>
<td></td>
</tr>
<tr>
<td>1. Nursery School</td>
<td>One in each village</td>
</tr>
<tr>
<td>2. Primary School</td>
<td>One in each (including classes villages upto VIII STD)</td>
</tr>
<tr>
<td>3. Higher Secondary</td>
<td>One in each village with population 10000 - 15000</td>
</tr>
<tr>
<td>4. College</td>
<td>-</td>
</tr>
<tr>
<td><strong>B : Medical</strong></td>
<td><strong>Rural / Urban</strong></td>
</tr>
<tr>
<td>1. Sub-Centre</td>
<td>One for 5000 population</td>
</tr>
<tr>
<td>2. Primary Health Centre</td>
<td>One for 30000 population</td>
</tr>
<tr>
<td>3. Community Health Centre with four basic specialization</td>
<td>One for 1 lac population</td>
</tr>
</tbody>
</table>

Although these norms have been agreed upon and adopted in spirit for the preparation of Sub-Regional Plan, further details have been worked out to suit the local needs, administrative setup, spatial distribution which are as follows:
### Table 9.5

**Modified Norms for Education & Health for Rajasthan Sub-Region**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Settlement Description</th>
<th>Facilities Education</th>
<th>Facilities Medical</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Villages with population 500-1000 as per 1981 Census.</td>
<td>Nursery/Primary School</td>
<td>Sub-Centre</td>
</tr>
<tr>
<td>2.</td>
<td>Village with population 1000-1500 as per 1981 census.</td>
<td>Nursery/Primary school</td>
<td>Sub-Centre</td>
</tr>
<tr>
<td>3.</td>
<td>Basic Villages (Less than 7000)</td>
<td>2 Middle School (one each for boys &amp; girls).</td>
<td>P.H.C.</td>
</tr>
<tr>
<td>4.</td>
<td>Service Centre (Not more than 15000)</td>
<td>2 Higher Secondary (One each for boys &amp; girls)</td>
<td>PHC cum Health Centre with 10 beds for each 30000 population.</td>
</tr>
<tr>
<td>5.</td>
<td>Sub-Regional Centre (15,000 to 30,000)</td>
<td>One College (Arts, Commerce, Science &amp; Agriculture), ITI</td>
<td>Health Centre with four basic specialization for each one lac population.</td>
</tr>
<tr>
<td>6.</td>
<td>Regional Centre (&gt; 3 lacs &amp; Above)</td>
<td>University, Engineering College, ITI, Medical College specialized Institutes.</td>
<td>General Hospital.</td>
</tr>
</tbody>
</table>

The involvement of the private sector with regard to provision and upgrading of medical and educational facilities would be explored in line with new policy of liberalization.
CHAPTER X

TRANSPORT

10.1 Background:

Traffic and transportation plan forms an integral part of any worthwhile regional development plan. The NCR Plan has been conceived to achieve an optimum growth of the Region through a balanced development. It would be multisectoral in its nature and scope, ensuring inter and intrasectoral integration. Transport network and facilities have been identified as one of the most important factor for promoting the social and economic activities from Delhi to other parts of the Region and an accelerated development of priority towns by providing accessibility and mobility to enable efficient movement of passengers, goods and services within the Region. As transportation network and facilities are the vital prerequisites for development of any area, an integrated transportation system in this strategy would rather “lead than follow” development.

Regional plan 2001, NCR envisages developing a few selected centres namely Alwar & Bhivadi for Rajasthan Sub-Region, on an intensification scale which form first order settlements.

10.2 Existing Characteristics:

Existing Characteristics of transport network of Rajasthan Sub-Region is studied in relation to National Capital Region as a whole because a study of transport in isolation will not serve a fruitful result.
The existing primary transport network in the NCR exhibits a pattern of "radial-corridor" development. There are nine major corridors in the transport network system. (Figure 10.1). Two corridors namely Delhi-Gurgaon-Behror (N.H.8) and Delhi-Alwar pass through Rajasthan Sub-Region. There have been a substantial increase in the volume of activities, workforce and population along these corridors over the period and as such it is only logical that these activities and population attracting corridors are utilized to gain the prime objective of the NCR Plan of controlling the growth of Delhi through induced development of the regional towns and by deflection of economic activities towards them.

(a) Road Network: The existing road network in the Sub-Region shows that major roads form the part of convergence of road network towards Delhi. N.H.8 passes through Shabjahanpur and Behror. This portion is of two lanes. The Sub-Region is also served by three State Highways viz. 1. State Highway No. 12 (from Jaipur to Alwar), 2. S.H. No. 14 (Bharatpur, Alwar, Narnaul road) and 3. S.H. No. 25 (Biswa, Rajgarh, Alwar, Kishangarh and Bhivadi). One MDR i.e. Kishangarh, Bansur, Kotputli and 14 ODs strengthen Sub-Regional road network.

In general, the Sub-region is poorly served by road network with still worse condition in Sahibi basin and area north-east of Alwar town. Eastern boundary of Sub-Region is girdled by barren hills and south-western part is characterised by dense forest over hills and Tiger Den (Partly).
Figure 41: Transport Corridors

NOTE:
1. Top figures indicate % of urban population in that corridor to NCR's urban population
2. Bottom figures indicate % of work force in that corridor to NCR's total work force

Δ 5 10 20 30 km
(b) Rail Network: This vast Sub-Region is served by only Delhi, Rewari and Alwar metre gauge railway line.

10.3 Traffic Volume - 1987:

Transport system development would be highly capital intensive and of long gestation. It is therefore necessary to base the planning of regional and sub-regional transport system appropriate to different policy scenarios on a set of sound and reliable data. For this purpose, various traffic and transportation studies were got conducted through Operations Research Group (ORG) Baroda, for National Capital Region. These studies threw up the following present and further characteristics of traffic flow in the Region.

(i) Delhi emerges as a major point of attraction and traffic generation in the Region, with relatively less interaction among the other towns.

(ii) Rail: The line capacity in and around Delhi is heavily strained. A peculiarity of Delhi area is that it also works as distributive centre for the area in the Region due to convergence of major regional trains at Delhi and lack of loading and unloading facilities at other railway stations in the Region. Train loads of freight traffic are also received into the Delhi area but no back bulk loading takes place.

(iii) Passenger movement: (a). The general trend observed is that increase in population size and diversification of economic base result in decline in the
per capita trip rate, whereas increase in per capita trip is an indicator of lesser degree of self containment of a town.

(b) Share of through traffic (both ends of the trips outside the Region) is very small. This shows that the bypassable traffic in the Region is insignificant.

It is apparent that smaller the urban node for attraction and generation of the traffic, higher is the proportion of bypassable traffic, if the urban node lies on the main trunk route. Location of the towns viz-a-viz the routes being followed is also a factor which contributes significantly to the bypassable traffic.

(iv) Goods movement-road and rail: The total volume of goods moved on the regional road network of the NCR is about 1.92 lac tonnes, of which the share of Delhi bound traffic is about one third, while that of the other urban centres in relation to the DUT is very small. In case of railway goods traffic, the importance of Delhi is more overwhelming as compared to that of road.

10.4 Traffic projection - 2001 and objective for NCR:

The projection of traffic volumes, both of goods and passengers is to be necessarily based on the likely population size and economic base of the town in the Region in order to accomplish manageable Delhi with harmoniously developed Region by 2001.

The objective of the transport plan is to promote and support the economic development of the Region and relieve the capital, of traffic congestion. It is to provide accessibility to all the parts of the Region and
discourage the transit of passengers and goods through the core area by providing by-passes and thereby opening area of economic development in the rest of the Region.

10.5 Policies and Strategies for NCR:

Transport is essentially looked upon as a service, though it has all its economic by-products. A sound transport policy will be a catalyst for the growth and economic development of the Region and also influence the direction of growth. The development strategy includes:

(i) Interconnection of regional centres among each other and with the Capital by efficient and effective network system for free movement.

(ii) Provision of shortest and free movement network to inter-connect the maximum traffic attracting and generating urban nodes in the Region.

(iii) decongestion of Delhi roads and terminals by diverting the bypassable long distance through traffic.

(iv) Provision of suitable fast sub-urban operating system for efficient and effective movement of Commuters and for boosting up of the development of economic activities in the urban nodes of the Region and

(v) integration of road and rail network system in Delhi, DMA and rest of the Region with appropriate interfacing facilities.

Figure 10.2 shows concept plan for Transport Network.
10.6 Objectives, Policies and Strategies of Transport Plan for Rajasthan Sub-Region:

As Rajasthan Sub-Region forms the part of NCR, objectives, policies and strategies of transport plan for Rajasthan Sub-Region will be supplementary to those of NCR. It is therefore programmes and proposals for transport plan included in Regional Plan 2001 NCR for Rajasthan Sub-Region have been incorporated as it. However following are other the highlights of transport plan for Sub-region.

(i) The nearby same order of settlements would be linked directly, efforts would be to link the lower order of settlements with the nearby higher order of settlements.

(ii) A system of feeder roads of higher standards would by evolved to connect the work centres, industrial estates with the nearby regional or sub-regional or service centre.

(iii) Transport facilities and accessibility (road link) will be different for different hierarchy of settlements.

(iv) Stress would be placed on widening and improvement of existing roads.

10.7 Programmes and Proposals for Sub-Region:

The existing transport system will be highly inadequate and ineffective to cope with the future requirement. To supplement the present transport network, the Sub-Regional Plan proposes and incorporates following:
(a) Proposals for the road network.


(ii) Strengthening and widening of existing alignment on Palwal - Sohna - Rewari passing through Bhiwadi (2 lane initially with ultimate capacity of 4 lane divided highway with 60 metre R/W)

(iii) Bhiwadi - Tijara - Kishangarh - Alwar stretch (2 lane initially with ultimate capacity of 4 lane divided highway with 60 meter R/W.) and Bhiwadi would linked to N.H. 8 via Bilaspur in Haryana (i) Alwar to Kishangarh - 49 k.m., (ii) Kishangarh to Tijara - 18 k.m., and (iii) Tijara to Bhiwadi - 33 k.m.)

(iv) In pursuance of strategy of linking of same order of settlements directly and the lower order of settlements with their nearest higher order settlements Sub-Regional Plan proposes the following road link order, transport facilities, and bus facilities as shown in table 10.1.

(v) Regional bus depots with workshop facilities are to be provided in Behror and Khairthal to cater the demand of repairing and servicing passenger buses of Sub-Region.

It is also suggested that a State Highway category road may be constructed along railway line between Alwar and Rewari via Khairthal, Harsoli and Ajarka ((i) Alwar to Khairthal - 26 k.m. (ii) Khairthal to Raj. Sub-Region - 20 k.m. and (iii) Border to Rewari - 26 k.m.) For this, a pre feasibility study shall be carried out to substantiate the case in favour of this road so that this may find place while revising the Regional Plan 2001, NCR.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Proposed Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accessibility (road link)</td>
</tr>
<tr>
<td>1.</td>
<td>Village Road</td>
</tr>
<tr>
<td></td>
<td>Village with population 500 - 1000 as per 1981 census.</td>
</tr>
<tr>
<td>2.</td>
<td>VR/ODR</td>
</tr>
<tr>
<td></td>
<td>Village with population 1000 - 1500 as per 1981 census.</td>
</tr>
<tr>
<td>3.</td>
<td>ODR</td>
</tr>
<tr>
<td></td>
<td>Basic Village</td>
</tr>
<tr>
<td>4.</td>
<td>ODR/MDR</td>
</tr>
<tr>
<td></td>
<td>Service Centre</td>
</tr>
<tr>
<td>5.</td>
<td>MDR/SH</td>
</tr>
<tr>
<td></td>
<td>Sub-Regional Centre</td>
</tr>
<tr>
<td></td>
<td>Regional Centre</td>
</tr>
</tbody>
</table>

ODR = Other District Road  MDR = Major District Road.
(b) Railway network :

The existing network has a number of bottlenecks which can be removed to create quite a large capacity in the rail network. Therefore following are the proposals:

(1) Laying of a single broadgauge line between Delhi-Rewari-Alwar (from Alwar to Border of Rajasthan Sub-Region - 47 k.m.)

(2) Laying of a single broadgauge line between Alwar and Mathura.

(3) Regional railway bypass passing through Palwal, Bhiwadi - Rewari.

Here also there is a suggestion of laying of a single broadgauge line between Harsoli and Narnaul via Mandawar and Behror. For this, a pre feasibility study shall be undertaken to substantiate the case in favour of this new broadgauge line in view of the fact that this new railway line would provide missing link between two railway stations - Harsoli and Narnaul and open up the rich hinterland of Rajasthan Sub-Region.

(c) Proposals for Airways:

Regional centres are to be developed on a priority basis by inducing their growth through economic activities.

At present Alwar and Bhiwadi do not have air links. However in future air link would be required due to increase in air passenger traffic from both towns to Delhi and subsequently to another regional centres. Therefore proposal of air link would be examined in consultation with Civil Aviation Departments.
(d) Inter-facing and Intra-urban circulation:

The foregoing proposals are primarily based on the inter-urban movement requirements in the Region and sub-region. Another important component of transport flows is intra-urban movement. The synthesis, which would be required between the two can be achieved through a proper planning of inter-facing facilities. The two major points of consideration are:

(1) the effects of inter-urban movements on intra-urban circulation pattern, and

(2) the consequent need for new terminals, if any.

These problems are well taken into account in the proposals of master plan. Master Plan for Alwar town with assigned population of 5 lacs by 2001 and consequent corresponding various proposals, have been approved by Government of Rajasthan in February, 1990 for implementation. Government has also approved Master Plan for Behror town on 29.11.90 for the population of 25000 by 2001 A.D. Draft Master Plan of Bhiwadi town as a part of "Integrated Development Plan for Dharuhera - Bhiwadi" has been completed and will be shortly notified. Draft Master Plan for Shahjahanpur is near completion.
11.1 Background:

Regional Plan 2001, National Capital Region clearly states that telecommunication is a vital and essential infrastructure for socio-economic development. It can replace to a large extent the personal travel and as such can become very time and cost effective. Telecommunication services would be complementary to other investments in the development process which enhance the productivity and efficiency in other sectors.

Provision of telecommunication facilities assumes a special importance in the context of the NCR, where not only decentralization of economic activities is envisaged from the metropolis to areas outside but also induced development of the priority towns and balanced regional development. Priority towns are proposed to be developed with a diversified economic base where secondary and tertiary sectors will form the dominant economic activities. These sectors are much more dependent on telecommunication services. Moreover, Delhi the mother city, will continue to remain the centre of decision-making and a window to the outside world and, telecommunication links would provide the means of information so vital for business decisions.

In Alwar town identified for priority development, the existing telecommunication facilities are inadequate in terms of their capacity and sophistication of technology. While in Bhivadi, position on this front is pitiable.
To conclude, the Rajasthan sub-region miserably lacks the telecommunication facilities. Some of the existing facilities have outlived their design life and are unreliable and inadequate. Therefore, much is to be done to provide the sub-region with satisfactory telecommunication facilities.

The telex facilities are available only in Alwar.

11.2 Issues:

Alwar and Bhiwadi towns are to be developed so as to absorb more economic activities and thus to attract the Delhi bound potential migrants from Sub-Region. For effective realization of this goal, and development of economic activities especially relating to industries, trade and commerce, telecommunication facilities would be essential. Moreover, in order to make the priority towns as attractive as Delhi in respect of provision of employment opportunities and standard of living, the facilities in these towns would be made comparable to that of Delhi.

11.3 Long Term Proposals:

In order to achieve the objective, the long term proposals for 2001 A.D. are:

(1) Full automation of telephone services.

(11) Replacement of all life expired exchange and related accessories.
(iii) Provision of telephone and telex facilities practically on demand.

(iv) Extension of subscribers dialing facilities in priority towns.

(v) Connection of priority towns with Delhi by reliable cable or radio media.

(vi) Provision of reliable trunk services either by direct dialing or through demand services among the priority towns and DMA towns.

(vii) Extension of telegraph office facilities to all the towns as may be justified and

(viii) Replacement of all the manual and mechanical exchanges in towns of Sub-Region by electronic exchanges.

11.4 Working Chart for Sub-Region:

In view of above mentioned objectives, sub-regional plan proposes a working chart of telecommunication facilities to be provided in the hierarchy of various settlements, as follows:
Table - 11.1

Telecommunication Facilities in the Hierarchy of various settlements

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Settlement</th>
<th>Telecommunication Facilities by 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Post Office</td>
</tr>
<tr>
<td>1.</td>
<td>Village with population 500 - 1000 as per 1981 census.</td>
<td>Covered by Sub-Post Office.</td>
</tr>
<tr>
<td>2.</td>
<td>Village with population 1000 - 1500 as per 1981 census.</td>
<td>One Sub-Post Office</td>
</tr>
<tr>
<td>3.</td>
<td>Basic Village</td>
<td>Post Office</td>
</tr>
<tr>
<td>4.</td>
<td>Service Centre</td>
<td>Post Office as per requirement.</td>
</tr>
<tr>
<td>5.</td>
<td>Sub-Regional Centre</td>
<td>- do - Facility as per requirement.</td>
</tr>
<tr>
<td>6.</td>
<td>Regional Centre</td>
<td>G.P.O.</td>
</tr>
</tbody>
</table>

For smooth functioning of services, a separate electricity feeder to the telephone exchanges and underground ducts in towns of sub-region for telephone cable for their safety and better maintenance is provided.
As the telecommunication facilities are as important as other community facilities, adequate land at appropriate locations for the provision of these facilities are provided under public and semi-public uses of master plan proposals right at the planning stage.

11.5 Broad objectives of Department of Telecommunication for 8th Five Year Plan (1992-97):

The Department of Telecom is in the process of formulating their broad objectives for the 8th Five Year Plan (1992-97). These objectives are mainly for further boosting up of telecom services both in quality and quantity. This will benefit the sub-region towns in a big way. The broad objectives are:

(i) All worn out equipment in the telephone exchanges having 25 years of service up to 1.4.90 to be replaced.

(ii) All manual exchange are to be replaced by automatic exchanges.

(iii) All sub-divisional, tehsil headquarters to be provided with STD facilities and to be connected to the national net-work by reliable transmission media.

(iv) All exchanges of capacity of 500 lines or more as on 1.4.90 are to be provided with STD facility. An effort will be made to cover all NCR priority towns even with lesser capacity than 500 lines, especially industrial urban areas such as Bhiwadi and MIA Alwar for STD facilities.

(v) All industrial growth centres, tourist and pilgrimage places to be provided with STD Pay-phone facility.
(vi) Providing telex connections practically on demand.
(vii) All district headquarters to be provided with
telex public call offices (PCO) and

(viii) All telex exchanges to be of electronic types.

In addition to these, following new services have also
been envisaged by the DOT during the Eighth Plan:

(i) Penetration of data services under the project
VIKRAM.

(ii) The delivery of telegram with 12 hours from 500
central Telegraphic Office (CTO) / Departmental
Telegraphic Offices (DTO) to be expanded to cover more
number of CTO and DTO.

On the basis of likely level of economic activities in the
priority towns, the telecom demand has been projected
by the Ministry of Communications and targeted to be
achieved in two successive phases namely 1995 and 2000
AD coinciding with eighth and ninth five year plans as in
table 11.2 given below.

Table 11.2
Augmentation of Telecom Facilities in priority Towns
during 8th and 9th Five Year Plans.

<table>
<thead>
<tr>
<th>Name of Town</th>
<th>1995 Demand Projections</th>
<th>2000 Demand Projections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normal Growth</td>
<td>Likely Status</td>
</tr>
<tr>
<td>Alwar</td>
<td>6936</td>
<td>SK/1992*</td>
</tr>
<tr>
<td>MIA Alwar</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bhiwadi</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Year of Allotment of equipment.

Source: D.O.T., Ministry of Telecommunications.
As per the latest available information, status regarding the Rajasthan Sub-Region towns is shown in Table 11.3

Table 11.3

Status of Telecommunication Facilities in Towns of Rajasthan Sub-Region.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Status/Town</th>
<th>Alwar</th>
<th>MIA Alwar</th>
<th>Bhiwadi</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Status as on 1.4.92</td>
<td>4000</td>
<td>400</td>
<td>1000</td>
</tr>
<tr>
<td></td>
<td>a) Capacity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) wks lines</td>
<td>3943</td>
<td>352</td>
<td>936</td>
</tr>
<tr>
<td></td>
<td>c) waiting list</td>
<td>3348</td>
<td>7</td>
<td>156</td>
</tr>
<tr>
<td>2.</td>
<td>Addition in S.W. capacity on 1991-92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Programme for 1992-93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Whether STD available Yes/No Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Likely Addition of lines in 1992-97 9184</td>
<td>300</td>
<td>1022</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Likely Capacity as on 1.4-97 13184</td>
<td>700</td>
<td>2022</td>
<td></td>
</tr>
</tbody>
</table>

Source: D.O.T., Ministry of Telecommunications.

All the above three towns are provided with STD facilities already. All the three towns are having automatic exchanges, the one at Alwar being of an electronic type.
Talex facilities are also available on demand in all three towns, the details as on 01.04.92 are as follows:

<table>
<thead>
<tr>
<th>District</th>
<th>Telex Cap.</th>
<th>Working Lines</th>
<th>Waiting List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alwar, MIA</td>
<td>40</td>
<td>28</td>
<td>Nil</td>
</tr>
<tr>
<td>Bhiwadi</td>
<td>40</td>
<td>36</td>
<td>Nil</td>
</tr>
</tbody>
</table>

However, necessary adjustments should be made in the plan provisions whenever possible to accelerate the achievement of these objectives. The requirement of telecommunication facilities of Sub-Regional Centres, Service Centres and Basic Villages would be taken up by the Department of Telecommunications as per proposals of Sub-Regional Plan.
CHAPTER - XII

SHELTER

12.1 Background:

Housing is a basic human need and ranks next only to food and clothing in importance. One of the primary aims of any policy plan of a welfare state like India has, therefore, to be to improve the quality of living of its people. The Seventh Five Year Plan document holds that a certain minimum standard of housing is essential for healthy and civilised existence. The development of housing, therefore deserves an overwhelming priority in the NCR, especially in Rajasthan Sub-Region where housing amenities are below the minimum standards. The NCR plan and consequently Rajasthan Sub-Region inter-alia aims to provide healthy living conditions in priority towns at standards comparable to that obtaining in Delhi and reasonably good standards in sub-regional centres and service centres. Most of the migrants seeking employment in informal sector activities need priority attention in providing shelter to them. The objectives of National Housing Policy are in fact in consonance with the objectives of the National Capital Region Plan which seeks to encourage people to build and improve their own houses; to promote repair, renovation, expansion, and up-gradation of the existing housing stocks; and to preserve India's rich and ancient heritage in the field of human settlement planning and architecture and conserve buildings of historic, cultural and aesthetic significance.
Demand for shelter increases with the population. Provision of housing does not keep pace with the population increase. At present about 30% to 40% of the urban population in the NCR and consequently Rajasthan Sub-Region live in unhygienic and insanitary conditions.

Occupied residential houses in the Rajasthan Sub-Region with an allowance of 10% either as non-liveable or vacant or non-residential totalled to 1,11,598 for a population of 7.6 lacs in 1971 with an occupancy rate of 6.8 persons per unit. In 1981 there were 1,47,218 liveable houses for a population of 10.65 lacs with an occupancy rate of 7.23 with break-up of 6.55 for urban areas and 7.38 for rural areas against occupancy rate of 7.33 with break-up of 6.43 for urban areas and 7.60 for rural areas in 1991 (see table 12.1). This increase in occupancy rate during 1981-91 indicating deterioration in living conditions especially in rural areas as occupancy rate in rural areas is higher than urban areas by 20% in 1991. However sectoral comparison reveals that occupancy rate during 1981-91 in rural areas has increased from 7.38 to 7.60 while this rate has declined in urban areas from 6.55 to 6.43. This means that situation has slightly improved in urban areas but deepened further in rural areas.

### Table 12.1

**Occupied Residential Houses and Households in Rajasthan Sub-Region NCR, 1991-91**

<table>
<thead>
<tr>
<th>District</th>
<th>Occupied Residential Houses</th>
<th>Occupied Residential Households</th>
<th>Rate</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Tehsil No.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. BHEROD</td>
<td>22733</td>
<td>15660</td>
<td>32765</td>
<td>36100</td>
</tr>
<tr>
<td>U</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3010</td>
</tr>
<tr>
<td>T</td>
<td>22733</td>
<td>35540</td>
<td>32765</td>
<td>3910</td>
</tr>
<tr>
<td>2. RANDAN</td>
<td>19340</td>
<td>23502</td>
<td>19135</td>
<td>21715</td>
</tr>
<tr>
<td>U</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>T</td>
<td>19340</td>
<td>23502</td>
<td>19135</td>
<td>21715</td>
</tr>
<tr>
<td>3. KISRANGA</td>
<td>22764</td>
<td>28356</td>
<td>23728</td>
<td>26558</td>
</tr>
<tr>
<td>U</td>
<td>3421</td>
<td>2467</td>
<td>3449</td>
<td>2220</td>
</tr>
<tr>
<td>T</td>
<td>25321</td>
<td>31817</td>
<td>25258</td>
<td>22079</td>
</tr>
<tr>
<td>4. TIIARA</td>
<td>17773</td>
<td>22456</td>
<td>17794</td>
<td>21512</td>
</tr>
<tr>
<td>U</td>
<td>5586</td>
<td>5786</td>
<td>6586</td>
<td>1787</td>
</tr>
<tr>
<td>T</td>
<td>13759</td>
<td>28242</td>
<td>13783</td>
<td>25420</td>
</tr>
<tr>
<td>5. ALWAR</td>
<td>24225</td>
<td>31000</td>
<td>24264</td>
<td>31662</td>
</tr>
<tr>
<td>U</td>
<td>25462</td>
<td>35490</td>
<td>25129</td>
<td>36332</td>
</tr>
<tr>
<td>T</td>
<td>49727</td>
<td>57570</td>
<td>49314</td>
<td>41434</td>
</tr>
<tr>
<td>6. RANGAS</td>
<td>17224</td>
<td>21067</td>
<td>17256</td>
<td>25255</td>
</tr>
<tr>
<td>U</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>T</td>
<td>17224</td>
<td>21067</td>
<td>17256</td>
<td>25255</td>
</tr>
</tbody>
</table>

| RAJASTHAN | 124802 | 153161 | 134222 | 165272 | 125574 | 146645 | 7.39 | 7.60 | 6.63 | 6.75 |
| SUB-ZONE | U | 29494 | 48377 | 23530 | 50259 | 25945 | 43539 | 6.55 | 6.43 | 5.68 | 5.57 |
| T | 165367 | 211583 | 152622 | 215531 | 147218 | 180384 | 7.23 | 7.33 | 6.50 | 6.47 |

Source: Census of India, 1991 & 1991
Comparison of occupancy rate with size of household brings about the fact that occupancy rate is invariably higher that size of household in both 1981 and 1991. It was higher by 0.73 in 1981 and 0.86 in 1991. This means that 16.5% of households in 1981 and 11.48% of households in 1991 were not having their own houses. If the quality of houses is also taken in consideration, the number of houses fit for living might be much less.

12.2 Demand by 2001 :

On the assumptions that the occupancy rate shall be five persons a residential unit, the 1981-91 trend of growth shall continue and a 10% allowance is given to compensate non-liveable or vacant or non-residential units, the total demand for housing by 2001 in Sub-Region is estimated at 4.10 lacs units with break-up of 1.73 lac units in urban areas and 2.37 lac units in rural areas. While in 1991 the net liveable residential houses are 1,90,384 units in Sub-Region with break up of 43,539 units in urban areas and 1,46,845 units in rural areas (see Table 12.1 and 12.2).
Table - 12.2

Additional Demand for Housing Units 1991-2001

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>1,46,845</td>
<td>21.68</td>
<td>11.85</td>
<td>2.37</td>
</tr>
<tr>
<td>Urban</td>
<td>43,539</td>
<td>64.00</td>
<td>8.65</td>
<td>1.73</td>
</tr>
<tr>
<td>Total</td>
<td>1,90,384</td>
<td>29.32</td>
<td>20.50</td>
<td>4.10</td>
</tr>
</tbody>
</table>

Thus the additional demand for occupied residential houses (ORH) including existing backlog between 1991-2001 will be of the order of 2.20 lac units with break-up of 0.91 lac units in rural areas and 1.29 lac units in urban areas.

12.3 Informal Sector Housing:

About one third of the urban population lives in slums. Most of them are engaged in informal sector economic activities. Informal sector has thus to be viewed as an integral part in the process of spatial planning. During 1990-2001, the economically weaker sections of the society constituting mainly the informal sector workers would account for about 40% of additional dwelling units in the urban centres of the Sub-Region.
Since 1982-83, development of 14 katchi bastis have been taken up by UIT Alwar in Alwar town and various civic facilities like pacca roads, drains, electrification, water supply etc. have been provided. Presently there are a few katchi bastis in Alwar town. However katchi bastis are fast coming up in Bhiwadi town following fast industrialization and consequently creating shortage of housing.

The informal sector housing faces more stresses and strains in mobilizing resources as it has no easy access to the housing finance market. Thus institutional support to loans for informal sector housing would be encouraged. Therefore in planning informal sector housing, the points for consideration would be:

(i) making available developed land at affordable prices;

(ii) introduction of minimum needs programme to ensure an environment of minimum urban normative levels, and

(iii) provision of an easy access to institutional finance

(iv) provision of proper sites for providing small size plots to katchi basti dwellers and informal sector workers which might migrate to Alwar and Bhiwadi in near future. Besides, schemes for developing residential cum work place sites for informal sector activities have been identified in Alwar and Bhiwadi. Further improvement in existing houses and new houses for urban workers in informal sector will be encouraged by going
for residential cum work place. Therefore housing cum work shelter at low cost based on local materials built with advice and participation of informal sector workers would be introduced and encouraged.

(v) As far as possible local building materials will be used and cost effective construction technology wherever possible will be adopted.

12.4 Issues:

(i) There is a need for adequate planning and identification of sources to raise the required funds to meet the housing demand arising out of additional population due to natural increase, as well as through immigration into the Sub-Region generally, and also the component of the population that would be deflected from coming into Delhi to the Sub-Region towns.

(ii) A special treatment is required to the informal sector housing, as most of the deflected Delhi bound migrants with their semi and unskilled levels will get occupied in informal sector activities in the Sub-Regional towns. In addition to making available adequate incentives, a major component will be that of shelter to suit their needs and affordability. The problem of informal sector housing may have to be met through making available developed land and finding ways and means for an easy access to finance institutions.

(iii) The standards and norms of the civic services should conform to the desirable norms almost comparable to that of Delhi as a part of the strategy in developing the Region harmoniously.
12.5 Strategy:

Following are major highlights of Sub-Regional Plan:

1. To fix priorities in dealing with different schemes of the population.

(a) The additional demand (including existing backlog) between 1991-2001 will be 2.20 lac units (please refer to table 12.2) with break up of 0.91 lac units in rural areas and 1.29 lac units in urban areas.

(b) The 15 lac Delhi bound migrants would be given top most priority in providing shelter; they would requiring about 37500 units, most of them in informal sector.

(c) Under the slum upgradation scheme, all the beneficiaries would be provided with financial assistance for improving their homes.

(d) Priority of housing will be given to EWS and workers of informal sector activities at first stage giving subsidized loan to people of this category.

(e) Under site and Service scheme, all the beneficiaries would be provided with institutional finance to provide incremental shelter on self help basis.
people of MIG & HIG category would be provided with developed land at reserved price/market price.

Schemes for housing would be prepared for all the Regional and Sub-Regional Centres for obtaining loans from N.H.B. In these schemes 75% of houses will be earmarked for EWS & LIG.

Sites will be identified for housing schemes in service centres of Sub-Region and developed plots of various categories would be provided to all categories of people with facility of finance, building materials etc.

Rural areas of the Sub-Region will be taken in the last priority under the Rural Housing Programme of Government of India.

To identify areas of development in order of priority.

The Regional Plan envisages to develop a four tier hierarchical system of settlements consisting of Regional Centres, Sub-Regional centres, service centres and Basic villages. As a follow-up action of Regional Plan, Rajasthan Sub-Region has identified 2 Regional Centres, 5 Sub-Regional Centre, 10 Service Centres and 20 Basic Villages. Shelter programmes would also follow the same priority and pattern of development. Accordingly Regional Centres would be accorded the first priority followed by the Sub-Regional Centres, the second priority, Service Centres, the third priority followed by Basic Villages.
12.6 Highlights of Housing Policy in Rajasthan During VIII Five Year Plan:

(a) Steps would be taken to encourage construction of houses for EWS & worker of informal sector activities through mobilization of profits from commercial plot construction activities. Developed plots will be allotted to LIG & MIG categories at concessional rate and at higher rate to HIG category.

(b) Shelter for working women especially in EWS and informal sector activities would be encouraged along with provision of child care centres.

(c) People of MIG & HIG category would be provided with developed land at reserved price/market price.

(d) Encouragement would be given to site and service schemes.

(e) Rural Housing: 11.85 lac population of the Sub-Region by 2001 would reside in rural areas. Condition of existing houses in villages by and large poor and unhygienic. Qualitatively, more than 30% of existing houses are Katcha. Village population does not have any bare minimum infrastructural facilities. Therefore village abadi plans will be initiated which will include redevelopment of village settlements, proper approaches; provision of essential facilities required for healthy living such as pucca/semi-pucca houses with local material and labour, hand pumps for water supply, electric poles, open Katcha drains, community centres etc. To boost economic activities of villagers, village cottage industry cum living place will be encouraged. Social organisations would be requested to adopt villages for their uplivements. Village Cooperative Housing Societies would be established for development of housing with infrastructural development. Financial support on easy terms at very low rate of interest would be made available.
12.7 Housing Finance Institutions:

At present, there are a number of agencies engaged in arranging housing finance and related activities such as HUDCO & HDFC at the National level, Rajasthan Housing Board at the State Level; and Urban Improvement Trust at the local level. Most of these agencies are engaged partially or wholly in solving and/or financing for housing either at National or State or local level, however these agencies but UIT Alwar, can not treat the National Capital Region as a special area for development.

The Government of India has approved creation of the National Housing Bank with a seed capital of Rs. 100 crores. One of the primary functions of the National Housing Bank is to develop the base level and intermediate level housing finance institutions to extend financial assistance to the EWS, mostly occupied in informal sector activities for construction and improvement of their shelter.

The NCR Planning Board Act 1985 under section 22 (1)(c) empowers the Board to receive funds from various sources as may be decided upon by the Central Government in consultation with the participating States and such funds would be credited to the NCR Planning Board Fund. This provision makes the NCR Planning Board as ideal institution to act as an intermediate Finance Institution to facilitate in ensuring availability of requisite finance to the target groups for construction of shelter and improvement of houses under the NCR Schemes through the implementing agencies which would act as the base level institutions for implementing the NCR projects.
CHAPTER - XVI

POWER DEVELOPMENT

16.1 Background and Power Supply Position in NCR

Electricity, one of the most important forms of energy, is the life blood of modern society. It is indispensable for any development whether industry or agriculture, and for improving the living standards of the people. Thus it is a barometer of economic development of any society. The development can not be thought of without supply of Power (Electricity).

The NCR falls within the three State grids of Haryana, Rajasthan and Uttar Pradesh being part of the Northern region. As per 14th Power Survey, conducted by the Central Electricity Authority, the installed generating capacity of Northern region for the year 1991-92 is anticipated to be 20,458 M.W. The additional capacity during Eighth Five Year Plan (1992-97) and Ninth Five Year Plan (1997-2002) have been assessed as 12420 MW and 12925 MW respectively and therefore power supply position in the Northern Region would be as follows :

Tabel - 16.1

Power Supply Position in the Northern Region in 1996-97 and 2001-2001

<table>
<thead>
<tr>
<th>Year</th>
<th>1996-97</th>
<th>2001-2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Deficit (-)</td>
<td>-5658/(-) 23.3%</td>
<td>-6654/(-) 19</td>
</tr>
<tr>
<td>Surplus (+) MW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy deficit (-)/Surplus (+) MKWH %</td>
<td>-5163/(-) 4</td>
<td>+2137/ (+) 1.1</td>
</tr>
</tbody>
</table>

The Energy requirement and peak load for NCR as a whole have been assessed as under:

Table 16.2

Energy Requirement and Peak Load for NCR

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Requirement- MKWII.</td>
<td>25245</td>
<td>30380</td>
<td>39770</td>
</tr>
<tr>
<td>Peak Load - MW</td>
<td>4613</td>
<td>5594</td>
<td>7248</td>
</tr>
</tbody>
</table>
16.2 Power Generation

The National Capital Region and therefore Rajasthan Sub-Region falls in the Northern Power Zone. There is no power generating station in Rajasthan Sub-Region.

16.3 Power Supply Position in Rajasthan Sub-Region

Power supply to Rajasthan State is from the integrated grid of the Rajasthan Power system and the Northern Regional Grid (NRG) comprising J&K, Punjab, Himachal Pradesh, Haryana, Delhi U.T., Rajasthan and part of Madya Pradesh.

Rajasthan's power demand in met by the generating stations owned by the Rajasthan State Electricity Board, the 88 MB system, Singrauli Super Thermal system and the neighbouring states. In Rajasthan, against the demand of 8090 MU of energy, 7488 MU was available during 1986-87; and thus, there was a shortage of 7.9%. As per 14th Power Survey, energy requirement (MKWH) and Peak Load (MW) for Rajasthan Sub-Region viz-a-viz NCR as a whole is as follows:

| Table - 16.3 |
| Energy Requirement and Peak Load for Rajasthan Sub-Region viz-a-viz National Capital Region. |
|----------------|---------------------|--------|-------------------|
| A- Energy Requirement -(MKWH) | | | |
| Raj. Sub-Region | 516 | 617 | 685 | 1601 | 3221 |
| National Capital Region. | 12101 | 13340 | 15127 | 25245 | 39770 |
| B- Peak Load - MW | | | | |
| Raj. Sub-Region | 98 | 117 | 130 | 305 | 608 |
| National Capital Region. | 2177 | 2368 | 2765 | 4613 | 7248 |
In Sub-Region, industrial areas of Alwar and Bhiwadi are getting a preferential treatment. The State and the Sub-Region have faced energy shortages. Except Delhi city, which enjoys the pride of National Capital and so getting priority in power supply, all other areas of NCR have faced serious power crisis. However, due to preferential treatment to Sub-Region by State, shortage of electricity in Sub-Region has been minor constraint. But this position in future would not continue as demand for electricity is fast increasing from other parts of State.

Monthwise energy shortage during the period April, 1986 to March, 1987 shows that except Delhi, the other States of Haryana, Rajasthan and Uttar Pradesh faced energy shortages throughout the year. However the position of Rajasthan was comparatively better than that of Haryana and Uttar Pradesh.

16.4 Pattern of Energy Consumption:

Pattern of energy consumption of Rajasthan Sub-Region is substantially different from the pattern of National Capital Regions may be seen from Table 16.4.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Area</th>
<th>Domestic</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Agricultural</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>NCR</td>
<td>1720.92</td>
<td>26.85</td>
<td>2812.71</td>
<td>1056.67</td>
<td>1010.55</td>
<td>7528.81</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(22.86)</td>
<td>(12.31)</td>
<td>(37.57)</td>
<td>(14.04)</td>
<td>(13.42)</td>
<td>(100.00)</td>
</tr>
<tr>
<td>2.</td>
<td>Rajasthan</td>
<td>14.74</td>
<td>7.36</td>
<td>253.76</td>
<td>30.29</td>
<td>7.67</td>
<td>313.82</td>
</tr>
<tr>
<td></td>
<td>Sub-Region</td>
<td>(4.69)</td>
<td>(2.35)</td>
<td>(80.86)</td>
<td>(9.66)</td>
<td>(2.44)</td>
<td>(100.00)</td>
</tr>
</tbody>
</table>

Source: Regional Plan 2001, NCR
During 1985-86, the total energy consumption in NCR was
of the order of 7530 MU, of which more than one third
was by the industrial sector, nearly one fourth by
domestic use and one seventh by agricultural use. In
Rajasthan Sub-Region, industrial use tops accounting for
81% of total consumption of 314 MU followed by
agricultural use (9.66%), domestic (4.69%), commercial
(2.35%) and other (2.44%). As per 14th Survey, pattern
of energy consumption (in percentage) is as follows :

<table>
<thead>
<tr>
<th>Year</th>
<th>Domestic</th>
<th>Industrial</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989-90 (Prov.)</td>
<td>5.12</td>
<td>81.60</td>
<td>13.28</td>
</tr>
<tr>
<td>1994-95 (Est.)</td>
<td>4.27</td>
<td>77.26</td>
<td>18.47</td>
</tr>
</tbody>
</table>

16.5 **Per Capita Consumption**:

Per capita energy consumption is a barometer of the
status of economic development. The per capita
consumption for the Region as a whole has increased from
380 KWH in 1985-86 to 606 KWH in 1989-90 against 501 KWH
and 869 KWH respectively for Delhi. All the NCR States
consumed less than the Region's per capita consumption.
The per capital consumption for NCR as a whole, has been assessed at 879 KWH in 1994-95 and 1215 KWH in 1999-2001 on the basis of the demand forecast.

16.6 Rural Electrification:

Electrification of villages and energisation of pump sets in indispensable for improving the living standards of rural population. In the National Capital Region as a whole, about 80% of villages are electrified. All the villages in the Union Territory of Delhi and in the Haryana Sub-Region are electrified. However this is not the case of Rajasthan Sub-Region as shown in Table -

16.2

Table - 16.6

Rural Electrification in Rajasthan Sub-Region.

<table>
<thead>
<tr>
<th>Area</th>
<th>Total No. of Inhabited Villages</th>
<th>Villages electrified upto 1987</th>
<th>Villages to be electrified by the end of VII Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rajasthan Sub-Region</td>
<td>1063</td>
<td>960 (90%)</td>
<td>1063</td>
</tr>
</tbody>
</table>

Source: Regional Plan 2001, NCR

In Rajasthan Sub-Region, only 90% of the villages has been provided with electricity till the end of March, 1987.
16.7 Load Forecast - 2001 A.D.

The demand for power has been generally rising at a rapid rate in the Rajasthan Sub-Region as other constituents of National Capital Region. The demand has invariably outstripped the availability of power causing widespread shortages of power all over the National Capital Region except Delhi. To manage the situation, the Rajasthan State Electricity Board (RSEB) have imposed varied restrictions from time to time during last decade, both on demand and energy requirements. The increase in electricity consumption reflects the increase in demand rather than increase in availability of it. Adjustments have, therefore, to be made in the forecast to take care of the suppressed demand on account of restrictions imposed on the consumption.

In forecasting the load for the Rajasthan Sub-Region, the intended economic structure in terms of dispersal from D.U.T and informal occupation biased composition of the industrial and other economic activities, including the tertiary occupations, need specific attention.

At present, the broad indications are that the rural urban population ratio will undergo a substantial change by 2001, the induced development on priority basis will be mostly in the form of industrial and commercial activities and also as per the policy directives, the norms and standards of civic services including power supply in the priority towns Alwar and Bhiwadi will be comparable to that of the Delhi U.T. The categorywise per capita consumption as of Delhi can be taken as the targets to be achieved in stages. In certain sectors, however, like commerce, the
participating states cannot match with Delhi as is evident from the energy consumption pattern of the states, it is less than 3% against the 21% of consumption in Delhi.

The RSEB has forecast the unrestricted load/energy demands up to 2001 and the Central Electricity Authority has in view of the development proposals adjusted the forecast upwards. (1) Upto the Seventh Plan and 2001: The peakload for Rajasthan Sub-Region is projected at 130 MW by 1989-90 and 608 MW by 1999-00 the corresponding energy being 685 MU and 3221 MU as shown in Table 16.7. The growth rate is 10.26% per annum.

Table - 16.7

<table>
<thead>
<tr>
<th>Rajasthan Sub-Region</th>
<th>Energy in MU</th>
<th>Load in MW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1988-89 ER</td>
<td>1989-90 ER</td>
</tr>
<tr>
<td></td>
<td>Actuals PL</td>
<td>Provision PL</td>
</tr>
<tr>
<td>617 117</td>
<td>685 130</td>
<td>1601 305 3221 608</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimates PL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ER = Energy Requirement (MKWH),
PL = Peak Load (MW)

Source: 14th Survey, Central Electricity Authority.
16.8 Policies:

Policies enunciated under Regional Plan 2001, NCR are as follows:

(i) To help develop the regional and sub-regional centres in particular and the Region in general, uninterrupted power supply in adequate quantity should be made available in the entire NCR.

(ii) Preference and priority in making available additional power to the NCR should be given utmost attention.

Rajasthan Sub-Regional Plan, NCR fully agrees with policies of Regional Plan 2001, NCR and therefore reiterates policies as follows:

(i) To help develop the Regional Towns - Alwar and Bhiwadi and Sub-Regional Centres, namely Shahjahanpur, Behror, Khairthal, Tijara and Ramgarh in particular and the Sub-Region in general, uninterrupted power supply in adequate quantity.

(ii) Preference and priority in making available the additional power to the Rajasthan Sub-Region would be given utmost attention.
As per projections of Ministry of Energy for the entire State of Rajasthan, the deficits in the peak load and energy supply levels are expected to increase much beyond the present position by the end of VIII Plan. On the other hand, in view of Regional Plan imperatives, there should be no shortfall whatever in meeting the power requirements of NCR Region / Sub-Region Centres and D.M.A. towns. The only way to solve the problem is that Ministry of Energy/CEA should allocate adequate additional power to member States from out of its 15% unallocated reserves of the Northern Grid amounting to 2250 MW to exclusively to all D.M.A./N.C.R. towns. Consequently, Rajasthan Government/R.S.E.B. would make adequate provision for installing the requisite transmission and distribution networks within its Sub-Region so that the additional power thus supplied effectively reaches the prescribed consumption points and selected Regional and Sub-Regional Centres in adequate measures.
16.9 Issues and Proposals:

(i) The Rajasthan Sub-Region, NCR has been experiencing shortage of power for quite sometime and, their actual demands have thus always been the suppressed ones.

(ii) The envisaged induced development of the selected priority towns and Sub-Regional centres would require more power. The rural areas, where accelerated development programmes are to be taken up, would also require more power than at present. Thus, the portion of the Rajasthan State under the NCR would demand substantial power as against the other parts of the State. State Government with its own preferences and priorities will not be in a position to treat the area under NCR in a special and preferential manner for the purpose of supply of additional power. The Department of Power, Ministry of Energy is of the view that the allocation of additional power particularly, from the Central Power Stations is to meet competing claims from different sectors including central core industries and services and thus, it would be difficult for allocation of additional power for the NCR. But in order to meet the objectives of the NCR, which is time-bound, it is an imperative necessity to provide, by any means, additional power to the Region and consequently to Rajasthan Sub-Region. The Central Government on the recognition of the fact that it was its responsibility to save the National Capital, created the National Capital Region Planning Board to prepare a Plan to achieve the
objective of a manageable Delhi in the foreseeable future, and as per the Plan strategy, if adequate power is not made available to the NCR, it would never be possible to realize the objectives. It is, therefore, incumbent on the Government of India to provide additional power to the Region and consequently to Rajasthan Sub-Region through appropriate arrangements.

(iii) Regional Plan 2001, NCR mentions that there are proposals to generate power through gas fired turbines at Dadri and Delhi. The HBJ Gas Pipe Line is expected to be extended from Dadri to Delhi to generate an aggregate capacity of 180 MW in replacement of existing gas turbines. Keeping in view the successful performance of gas turbines in operation, the ready availability of its technology indigenously, the minimum gestation period for its installation and also its relatively non-polluting nature, the possibility of more gas connections for generation of electricity in the Region should be explored.

(iv) The additional power, once made available, should be reached to all points of consumption through optimum transmission and distribution network. RSEB and the Central Electricity Authority have indicated that the present system of distribution network would not suffice to cope with any additional power distribution. The RSEB has worked out the distribution network requirements in respect of Rajasthan Sub-Region comprising sub-stations, tie-lines, transmission and distribution network etc.
(v) Regional Plan 2001, NCR states that under the provisions of the Central Electricity (Supply) Act, 1948 and also in view of the problems and difficulties envisaged in organizing generation and distribution of additional power for the NCR in isolation, it is proposed to set up a Coordinating body which will mainly arrange and coordinate distribution of power, if additional power is made available from the Central/State sources for the NCR. Such a Committee would be set up under a resolution of the NCR Planning Board. The committee will be headed by the Member Secretary to the NCR Planning Board and will include representatives of the State Power Departments, State Electricity Boards and representative of the Department of Power and Central Electricity Authority.
CHAPTER - XVII

WATER SUPPLY, SEWERAGE, DRAINAGE AND SOLID WASTE MANAGEMENT

17.1 Background :

(i) Water Supply :

Rajasthan Sub-Region is not endowed with any perennial river. Sahibi, Ruparel and Chuhar Sidh area only the main seasonal rivers which flow through Sub-Region. Several of other rivers and tributaries have been impounded at suitable sites, the water of which is mainly used for irrigation purpose. Thus there are a large number of artificial lakes and tanks. Major areas are Jai Samand, Silliserh, Balata Bund, Mansarover, Vijay Sagar, Training Bund and Kuduki. However there is no natural lake in Sub-Region.

Thus main sources of surface water supply in the sub-region are the rivers and lakes. Ground water resource is mainly controlled by Geology and precipitation in the area. 90% of the annual precipitation occurs during monsoon months. The general water table ranges between 6 to 15 meters below the ground level. Most of the borewell water comes from aquifers. The recharge is mainly through rivers and precipitation. The ground water quality varies from place to place depending on the local geological setting.

Scanty rainfall in last 4-5 years in the sub-region leaves the groundwater resources limited and the tubewell go dry as the water table sinks deep in the summer months.
(a) Urban: There are five urban centres in Rajasthan Sub-Region. All these have organised water supply systems of drawing water from tube wells, and wells.

(b) Rural: Rural water supply position in the sub-region presents a very dismal picture. Many villages do not have adequate sources of water supply. The main sources of water supply are wells and hand-pumps.

(ii) Sanitation:

(a) Sewerage: Poor sanitation gives rise to high incidence of water-borne and sanitation related diseases. The percentage of high infant mortality in the sub-region is indicative of the poor state of sanitation measures available in the Sub-Region. Sewerage system, that too partly exists only in Alwar town and hardly existent in other urban centres of Rajasthan Sub-Region. The system is mostly waterborne often supplemented by septic tanks and sanitary latrines. The raw sewerage is let off into the drains and in many cases, the sewerage stagnates in the depressions or drains and create an unhygienic environment.

(b) Storm water drainage: The storm water drainage partly exists in Alwar town and hardly exists in other towns. Almost in all cases, the drains are open. The disposal of the storm water is invariably unplanned and is allowed to flow its natural way on land, into depressions, ponds and drains.
(c) Solid water disposal: Unscientific land refill and open dumping are the methods prevalent in the towns in disposing off wastes.

(d) Rural sanitation: In none of the villages, a system to take care of its sanitation is reported to exist.

7.2 Issues:

In pursuance of Regional Plan 2001, NCR, the following are the issues:

(i) To improve the quality to life in the Sub-Regional towns, one of the strategies is to upgrade the essential services such as water supply, sewerage, and sanitation in them at norms and standards comparable to that of Delhi. Presently the supply standards are far below the desired norms in the towns and in the rural areas, organised or protected water supply is rarely provided for want of institutional and financial arrangements.

(ii) Sanitation in the Sub-Region is poor resulting in high incidence of water borne diseases. The environmental degradation and insanitary conditions need proper and immediate attention with the conscious efforts of the local bodies and the State Government concerned.

(iii) Storm waters are invariably allowed to flow their natural way on land into depression, ponds and drains. More often, it is combined with sewerage. Unregulated flow of storm water erodes as well as silts agricultural fields and stagnates creating environmental problems. This needs a planned and integrated approach along with sewage disposal.
(iv) Disposal of garbage in general is given the least attention. Scientific management of solid wastes would help in recycling it partly and through sanitary refilling, that would render the environment hygienic and clean. This requires proper education and training of the people in general and institutional arrangements in particular.

(v) Rural Zone which greatly lacks sanitation measures needs adequate attention to be given so that healthy living environment is ensured which will help the rural population live healthier and also avoid possible out-migration to urban areas.

17.3 Policies and Proposals:

Regional plan 2001, NCR prescribes certain parameters in case of water supply, sanitation and solid waste management. Sub-Regional Plan 2001, by and large agrees and adopt these parameters.

(i) Urban Water Supply: The water supply norms and standards of the priority towns should be comparable to that of Delhi and should also be uniform in the entire Sub-Region for rural and urban areas. Accordingly, keeping in view the minimum level of water supply expected to be achieved, the following norms are proposed:

<table>
<thead>
<tr>
<th>Urban Centres with Population</th>
<th>Lpcd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 to 5 lacs</td>
<td>225</td>
</tr>
<tr>
<td>1 to 2 lacs</td>
<td>100 minimum</td>
</tr>
</tbody>
</table>
- For the priority towns, the starting point should be 225 lpcd with the target of achieving 360 lpcd by 2001. In Bhiwadi town, where water scarcity is experienced as a chronic problem, minimum 225 lpcd may be taken as the target to be achieved.

- In no urban centre, the supply should be lower than 100 lpcd, which is the minimum technical requirement.

(ii) Rural Water Supply: The sources of water supply to the rural areas should be identified and the water supply should be organised to supply water at the levels commensurate with the functional character of the rural areas.

A minimum of 70 lpcd including a supply of 30 lpcd for cattle is proposed for rural areas. If independent connections are given a minimum of 100 lpcd is advised. Spot sources may supply a minimum of 40 lpcd, which can supplement the piped supply.

(iii) Targets for Water Supply: In view of the low levels of coverage in water supply, the targets which have been agreed to by the Government of India under the International Drinking Water Supply and Sanitation Decade, 1981-1990, programmes to be achieved by March, 1991 may be adopted for the NCR and therefore Rajasthan Sub-Region.

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Water Supply</td>
<td>Pipoc water supplies in communities, where feasible: Demand range 70-250, lpcd average 140 lpcd.</td>
</tr>
</tbody>
</table>
Stand posts in fringe areas, if necessary at strategic localities, average 40 lpcd.

Piped Water supplies for 30% of the population, demand range 25-70 lpcd, spot sources water supplies for 70% of the population in the form of dug or tube wells, with hand pumps and/or power pumps, average demand 40 lpcd.

(iv) Urban Sanitation: The priority towns should treat their sewage before it is let off into water courses or on land or for irrigation. The other towns where it is not possible to provide a proper system due to topography and for want of resources, low cost sanitation measures may have to be adopted but only to be replaced by regular sewage system subsequently as the conditions improve.

Open drains, which are by and large the sources of nuisance and pollution, should be discouraged and discontinued. Sewage should be treated to bring the pollution level to permissible limits as stipulated by the Indian Standard Institute and Pollution Control Boards irrespective of the type of disposal of the sewage. As far as possible, areas where the annual rainfall exceeds 75 cm, separate system for sewage and storm are recommended.
(v) Rural Sanitation: The rural areas, where piped water supply system exists, should be provided with sewerage system with treatment facilities. Low cost sanitation measures such as sanitary latrines, septic tanks, and pit privies should be resorted to in villages with hand pumps for water supply. Wherever possible, the sewage should be recycled after treatment for water gardens, parks and lawns, fire fighting, street washing, cooling etc. Publicity and demonstration on the necessity for hygienic sanitation should be frequently arranged to make the rural population aware of the imperative need of the clean and healthy environment.

(vi) Targets for Sanitation: The proposed targets of the International Drinking Water Supply and Sanitation Decade, 1981-1990, could be taken as targets of the NCR Plan. The targets are:

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Sanitation 80%</td>
<td>100% coverage for Class-I cities with sewage and sewage treatment facilities; low cost sanitation methods in other towns. Overall coverage of 80% in all cities and towns.</td>
</tr>
<tr>
<td>Rural Sanitation</td>
<td>25%. Low cost sanitary methods of disposal.</td>
</tr>
</tbody>
</table>

(vii) Water supply and sanitation should be taken together as an integrated project. A combined sewerage system including drainage may be economical if the average annual rainfall does not exceed 15 cm. All the drains
should be covered as far as possible. The sewage treatment process should include units to obtain best by products like cooking gas and sludge manure. The solid waste should be properly managed and recycled for a healthy and hygienic environment.

(viii) Solid Waste Management: Solid waste disposal and management should be planned for a minimum of 20 years and at least controlled tipping should be adopted in the disposal of the solid wastes. Compost is a solid stabilizer. Incineration of the garbage is not advisable. Areas should be identified in all the towns for sanitary refile and all the towns above one lac population should have arrangements to properly manage the waste disposal.

The areas for dumping of solid waste/garbage have to be identified while preparing the development plans for each urban centre in advance, so that the Municipal Authorities responsible for solid waste management could utilize such pre-identified locations for disposal for garbage. The derelict lands on account of brick kilns and quarreling may be suitable locations for such operations.

(ix) Drainage problem due to Sahibi River - The Sahibi river flows from south west to north east and after entering Haryana State, it discharges its water in the Najafgarh lake. Along the Rajasthan and Haryana border, river spreads over large area creating water logging and gullies, which results in degradation of agricultural land and drainage problem. A barrage across this rivers near south of Dharuhera has been constructed by Haryana Govt. for safeguarding of downstream area from flooding in Haryana. Therefore an integrated drainage and flood control scheme should be formulated, so that the areas falling in the upstream of barrage in Rajasthan are not adversely affected by submersion.
CHAPTER - XX

ACTION PLAN FOR EIGHTH FIVE YEAR PLAN (1992-97)

20.1 Background:

A Working Group was constituted by the National Capital Region Planning Board to prepare the Investment Plan for N.C.R. for Eighth Five Year Plan (1990-95). These proposals after the approval of the NCR Planning Board on 10.07.1989 were submitted to the Ministry of Urban Development for consideration of the Planning Commission.

Now in the context of the decision that VIII Five Year Plan period would be 1992-97 and the year 1990-91 and 1991-92 would be treated as separate Annual Plans. The revised Investment Plan proposals spell out the broad Regional Plan and Sub-Regional Plan objectives, strategies, thrust areas and frame work of the envisaged development programme during the VIII Plan (1992-97). This Plan also discusses the financial mechanism for the development programmes highlighting the participative role of central, state and private sector agencies and funding institutions and inter-state joint ventures.

20.2 Strategies for Implementation of Policy Measures:

The Regional Plan - 2001 for the National Capital Region was approved by the National Capital Region Planning Board in its 9th meeting held on November 3, 1988 and was notified for implementation with effect January 23, 1989. The core objectives of the plan are:

(i) Reducing pressure of population in Delhi; and
(ii) achieving a balanced and harmonious development of the National Capital Region.
20.3 These goals and objectives are sought to be achieved through a package of inter-related policy measures relating to various sectors of development and adopting strategies of selective decentralisation aiming at:

(a) containing the growth of Delhi UT within a manageable population size of 112 lacs by 2001 A.D.
(b) Moderate growth of Delhi Metropolitan Area (DMA) excluding Delhi U.T. to accommodate a total population of 38 lacs by 2001 A.D. and
(c) induced growth of the rest of the Region to hold 19 lacs of urban population in towns/complexes identified for priority development i.e. 19 lacs additional population in Priority Towns between 1990 and 2001 A.D.

20.4 The general strategies for implementation of the policy measures in the above context would be as under:

(i) Development of economic and employment generating activities in:

a) Formal Sector: (Industries, Wholesale & distributive trade and commerce, and government and public sector offices) leading to dispersal from Delhi to (a) DMA Towns and (b) Priority Towns.

b) Informal Sector: Development of Informal Sector activities both in the rural and urban areas through skill upgradation programmes and promoting the local skills and crafts based entrepreneurial efforts to increase their employment generating potentialities.
(ii) Promoting induced development of identified Priority towns through a package of incentives with a view to decentralise economic activities mentioned in para (i) above together with emphasis on creating of employment opportunities particularly in informal sector activities. This would also include upgradation of skills, provision of other social welfare measures and services.

(iii) Provision and upgradation of physical and social infrastructure viz; telecommunication, transport both road and rail, and power at the regional level and water supply, sanitation, solid waste management, education and health facilities at the local levels at norms and standards comparable to that of Delhi.

20.5 The Eighth Plan Proposals of the NCR Planning Board will have main thrust in the following areas:

(a) Large scale employment Generation in Priority towns by making developed land available for Industries, Wholesale trade and Commerce, Shelter and location of office complexes.

(b) Development of Regional Infrastructure: Transport both rail and road, and telecommunications, through a separate Special Component Plan for the NCR.

(c) Development of local infrastructure in Priority and DMA Towns.

(d) Improvement of State Highways and Transmission and Distribution System for Power in the State Grid.
20.5.1. Strategies for Development During VIII Five Year Plan:

The Regional Plan envisages deflection of 19 lac population from Delhi Union Territory during 1990-2001. Based on this, a population of 10 lac would need to be deflected during the Eighth Five Year Plan (1992-97) itself. The deflected population would have to be accommodated mainly in the 8 Priority Towns/complexes and DMA towns (illustration) through a process of induced development of self-contained integrated urban settlements in the vicinity of the existing towns. The strategies suggested to be followed in order to achieve the above objectives are:

i) developing new townships alongside the identified Priority/DMA towns in accordance with Master Plans which each provide for total population growth assigned in accordance with the overall population profile of NCR envisaged for the year 2001. The State Government and their implementing agencies would be mainly responsible for development of these townships including trunk infrastructure.

ii) The townships to be so developed should be centred around core economic activities such as large/medium industries, large commercial complexes like ICD and whole sale market yards and office complexes to be relocated out of Delhi as part of the over-all dispersal strategy, or else as new green-field projects or a combination of both.

iii) Higher-order social facilities of regional or national importance such as educational/medical/engineering institutions, universities, hospitals, sports complexes, tourists centres and industrial estates may also be among the specific activities to be promoted in these townships.
iv) Such major infrastructural works such as expressways national highways, railway lines and telecommunications and power supply facilities which are essential to the balanced and harmonious development of NCR, should be dovetailed with the development activities in these townships and funded by the concerned ministries of Central Government through a special NCR component plan.

v) As a part of the process of dispersal of economic activities out of Delhi concrete linkages should be developed, as far as possible between the core economic and other activities to be developed in the new townships and those activities which are identified for relocation out of Delhi. Without these linkages it would not be possible to ensure that the twin objectives of NCR Plan are achieved simultaneously.

**Financing Mechanism**

The allocation of ₹ 230 crores in the Eighth Five Year Plan should be utilized essentially as "Seed Money" to raise additional resources through a judicious mix of public and private sector investments.

In this context, NCR Development Finance Corporation (NCRDFC) would be set up as a subsidiary to NCRPB. This corporation will provide seed money, grants and loans to local development agencies for development of new townships alongwith Regional Centres / Sub-Regional Centres and Counter-magnet towns. The member States will contribute their matching shares to the NCRPB share so that funds could be drawn from market and other financial institutions. The Government of Rajasthan would be able to provide only budgetary support during Eighth Plan, which is ₹ 17 crores towards State's share for this proposed NCRDFC.
Details projects for new townships in Alwar and Bhiwadi would be formulated during 1992-94 for only land acquisition purpose for creating urban infrastructure facilities for induced population of 1.0 lac in Alwar and 0.5 lac in Bhiwadi. After the end of Eighth Five Year Plan, the remaining population of 1.5 lacs to be deflected from Delhi would be accommodated in these town priority towns. Besides, Development of infrastructure facilities in Sub-Region Centres namely Behror, Shahjahanpur and Khairthal would be taken up out of the funds of this proposed NCRDFC.
A meeting was held on 6-11-1992 at 11:00 A.M. in Sheatri Bhawan, New Delhi under the Chairmanship of Sh. V.S. Mukhopadhyay, Joint Secretary (U & HE), department of Education to discuss the proposal received from the NCR Planning Board for affiliation of educational institutions in the NCR Towns to the University of Delhi/JNU.

2. The following were present:

1. Sh. S.R. Arya,
   Secretary (Education),
   Delhi Administration.

2. Sh. S.W. Jha,
   Secretary (Higher Education),
   Government of Uttar Pradesh.

3. Sh. K.D. Srivastava,
   Joint Secretary (Higher Education)
   Government of Uttar Pradesh.

4. Smt. S. Jakhu,
   Director (Higher Education),
   Government of Haryana.

5. Prof. S.K. Wason,
   Registrar,
   University of Delhi.

6. Prof. K.P.S. Unny,
   Registrar,
   Jawaharlal Nehru University.

No representative came from the Govt. of Rajasthan.

3. At the outset, the Chairman explained the proposal by stating that to contain the multifaced pressures on Delhi due to increasing population, a Metropolitan Region now called the National Capital Region comprising
parts of Uttar Pradesh, Haryana and Rajasthan with Union Territory of Delhi as the core has been demarcated and with the consent of the concerned State Legislatures the National Capital Region Planning Board Act has been passed by Parliament and the National Capital Region Planning Board has been created under this Act in March, 1985. A comprehensive Regional Plan-2001 has been drawn up by the NCR Planning Board which has come into force with effect from January 1989. The Regional Plan provides for (i) the shifting and relocation of certain employment generating activities and (ii) improving and upgrading the social and physical infrastructure in the NCR towns like Ghaziabad, Noida, Faridabad–Ghodbunder, Gurgaon, Bahadurgarh and Kundli so that the facilities available in these towns could be rated on par with those available in Delhi. In this background, the Member Secretary, NCR Planning Board has requested the Government of India to consider affiliation of colleges and other educational institutions in NCR towns to University of Delhi or JNU. The meeting was convened to discuss the administrative as well as legal aspects of this proposal. He drew the attention of the members towards the letter dated 2.9.92 received from the Member Secretary, NCR. He then invited the participants of the meeting to express their views in this regard.

4. The representative of Delhi Administration mentioned that Delhi has reached a stage which does not allow further expansion of facilities and the necessity of
decongestion of Delhi to nearby towns is acutely felt by all concerned. The NCR has to be developed in a way to shift and relocate certain employment generating activities such as public sector (including Government) offices, wholesale trade markets, commercial undertakings and industries etc, from Union Territory of Delhi to various important towns in the NCR. But such shifting will not be feasible as long as the facilities available in these towns vis-a-vis the Union Territory of Delhi are not equal. Education is one of such facilities.

Private organisations are not keen to open new colleges in the NCR towns if they are to be affiliated to the local Universities. They want affiliation of such colleges to Delhi University/JNU. There are specific proposals from the organisations for opening of degree colleges in NOIwA if they are permitted to affiliate these colleges to Delhi University. Other organisations may also come forward to open colleges in the NCR towns if provision of their affiliation to Delhi University/JNU is made.

5. The representative of the Government of Haryana opposed the proposal on the ground that it was based on an erroneous presumption that the standard of the Universities in NCR Status is lower than that of Delhi University/JNU. There are two Universities in the State—M.J. University, Rohtak and Kurukshetra University, Kurukshetra. Most of the colleges of the State are affiliated to M.J. University. Despite its being of
recent origin, this is doing well and a number of private organisations are willing to open new colleges in the State with the affiliation to this University. In fact, a large number of proposals for opening of new colleges in the State are pending with the State Government. The State Government is not inclined to open more colleges in the State at this stage and they are thinking of consolidating the existing college before starting new colleges.

6. The representative of Government of Haryana was also of the view that the proposal to affiliate the colleges of NCR towns to Delhi University or JNU was not feasible also. If colleges are affiliated to Delhi University, the M.U. University will be left with a very limited territorial jurisdiction which would reduce the prestige of the University. There was an apprehension that the colleges in the territorial jurisdiction of Kurukshetra University may also demand for their affiliation with Panjab University, Chandigarh. As has been stated in the letter of the Secretary, NCR Planning Board the proposal is to attract migrants from the capital city and elsewhere to these colleges, the local students of Haryana would not be benefited by opening of such colleges which would be affiliated to Delhi University or JNU. Besides, such colleges would attract students from out of the NCR towns also and the same congestion would start in these colleges as has so far been in Delhi colleges. The State Government will be facing some
administrative problems also if such affiliation is permitted. For instance, the colleges affiliated to Delhi University may have a fee structure different from that of the colleges affiliated to N.U. University or Kurukshetra University and it will be difficult for the State to maintain equity among these colleges. It was mentioned that the State Government will need some more time to examine all the implications of the proposal.

7. The representative of the Government of Uttar Pradesh stated that three districts i.e. Ghaziabad, Bulandshahar and Meerut are included in the National Capital Region. There are more than 20 non-governmental and three Government colleges located in these districts. Salaries of staff of all these colleges is paid by the State Government. Due to constraint of resources the State Government is not in a position to open new colleges in the region at this stage. They, however, need some more time to examine details of the proposal for affiliation of private colleges to be opened in NCR towns to Delhi University or N.U.

3. The Registrar, Delhi University stated that though the University community may have difficulties to accept the proposal, there was a need for such a thing. At present there are about 70 colleges in Delhi and it is very difficult for the University to look after these colleges. They had to face various problems while starting the South Delhi Campus of the University and their problems will increase if the colleges of NCR towns are
also allowed to be affiliated to the Delhi University. But still there is need to consider this proposal seriously. Delhi University have a number of courses which are not available in the Universities of the NCR States. So, a large number of students from out of Delhi are tempted to join Delhi University. If the colleges in NCR towns are affiliated to Delhi University it would ease out the pressure on Delhi colleges to a large extent.

9. The Registrar, Jawaharlal Nehru University while acknowledging the need of upgradation of standard of educational institutions located in NCR towns explained that JNU does not have undergraduate courses or colleges affiliated to it. If the colleges of NCR towns are to be affiliated to this University the entire character of the University will have to be changed. It would not be so easy. So affiliation of these colleges to JNU is a very difficult proposition. Therefore, he was of the view that instead of their affiliation to Delhi University/JNU, local Universities should be strengthened by investing more funds, introduction of new courses and academic exchanges etc., so that their standard could be brought on par with that of the Delhi University.

10. The Chairperson summed up the discussions by stating that the proposal requires to be considered in more details with reference to the provisions available under the NCR Planning Board Act and the Acts of the State Universities having jurisdiction on the colleges.
of NCR towns. The State Governments should address themselves to the question whether all colleges in the NCR towns should be affiliated to the University of Delhi or status-quo be maintained in respect of the existing colleges and the new private colleges be affiliated to Delhi University compulsorily or optionally? He requested the concerned State Governments to finalise their views on this issue at the earliest and intimate the Ministry within a month. A followup meeting with the representatives of the concerned State Governments and the Universities will be taken thereafter to decide the issues as necessary.

11. The meeting ended with a vote of thanks to the Chair.
MINUTES OF THE MEETING HELD ON 06-04-1993 UNDER THE CHAIRMANSHIP OF SHRI D.S. MUKHOPADHYAY, JOINT SECRETARY (U & HE) IN THE DEPARTMENT OF EDUCATION, GOVERNMENT OF INDIA TO DISCUSS THE PROPOSAL FOR AFFILIATION OF EDUCATIONAL INSTITUTIONS IN NCR TOWNS TO THE UNIVERSITY OF DELHI.

A meeting was held on 6-4-1993 at 3.00 P.M. in Shastri Bhawan, New Delhi under the Chairmanship of Shri D.S. Mukhopadhyay, Joint Secretary (U & HE), Department of Education to discuss the proposal for affiliation of educational institutions in the NCR towns to the University of Delhi. The following were present:

1. Shri P.N. Nair, Secretary, Education, Delhi Administration.
2. Shri K.C. Aggarwal, Chief Regional Planner, NCR Planning Board.
3. Shri J.N. Barman, Associate Town Planner, NCR Planning Board.
4. Prof. S.K. Nayan, Registrar, Delhi University.

Leave of absence was requested for by the representatives of Haryana and Uttar Pradesh Governments. None came on behalf of Rajasthan Government.

2. The following points emerged during discussions:

(a) The Delhi Administration is reported to have received only one request from Sushant School of Art and Architecture, Sushant Lok, Gurgaon for establishment of a College of Planning & Architecture in Gurgaon for affiliation with Delhi University. There are no other proposals indicating dis-inclination by sponsors to set up colleges in NCR areas unless they are affiliated to Delhi University.

(b) It was seen that the National Capital Region Board under 1985 Act provides as follows:

"7. The functions of the Board shall be -"
(a) to prepare the Regional Plan and the Functional Plans;
(b) to arrange for the preparation of Sub-Regional Plans and Project Plans by each of the participating States and the Union Territory;
(c) to co-ordinate the enforcement and implementation of the Regional Plan, Functional Plans, Sub-Regional Plans and Project Plans through the participating States and the Union Territory;
(d) to ensure proper and systematic programming by the participating States and the Union Territory in regard to project formulation, determination of priorities in the National Capital Region in accordance with stages indicated in the Regional Plan;
(e) to arrange for, and oversee, the financing of selected development projects in the National Capital Region through Central and State Plan funds and other sources of revenue.

17. (1) Each participating State shall prepare a Sub-Regional Plan for the sub-region within that State and the Union Territory shall prepare a Sub-Regional Plan for the sub-region within the Union Territory.

(3) A Sub-Regional Plan may indicate the following elements to elaborate the Regional Plan at the sub-regional level, namely:
(e) priority areas at sub-regional level for which immediate plans are necessary;
(g) any other matter which is necessary for the proper development of the sub-region.

27. The provisions of this Act shall have effect notwithstanding anything inconsistent
therewith contained in any other law for the time being in force or in any instrument having effect by virtue of any law other than this Act; or in any decree or order of any court, tribunal or other authority.

29. (1) On and from the coming into operation of the finally published Regional Plan, no development shall be made in the region which is inconsistent with the Regional Plan as finally published."

3. It was observed that establishment of colleges is an infrastructural development which normally comes within the matrix of development of NCR. Most of the items of such infrastructural development matrix are left to the participating State Governments, but in the case of college education, it has been felt by NCR that the affiliation to the Delhi University rather than to the concerned State University will help the establishment of colleges in the NCR township helping decongestion from Delhi.

4. It was observed that this should first be attempted as an agreed decision to be incorporated say in the sub-regional plan of each participating State Government and it can be adopted as a consensus in the NCR Board which is headed by the Union Urban Development Minister. It was observed that the NCR Board is the appropriate forum in which such a consensus could be first arrived at within the schematic arrangement of NCR Planning Board Act.

5. Accordingly, it was decided that the NCR sectt. should coordinate their present proposal for affiliation of colleges in NCR area under Delhi University as a part of the Sub-Regional Plans of the respective States and then in the Regional Plan. The NCR can have a decision in the NCR Planning Board whereunder the participating States agree to allow the existing/future colleges in the concerned NCR township to be compulsorily/optionally affiliated to
the University of Delhi with the consent of the Delhi University. The concerned State Universities Acts and the Delhi University Act can be suitably amended thereupon to incorporate the said decision.

6. The Registrar of Delhi University suggested that the NCH can also consider to have a National Capital Region University located in Delhi which will affiliate all the existing/future colleges in the NCR township without overloading the Delhi University any more.

7. It was further decided that the NCH Secretariat may take the necessary follow-up action with the concerned State Governments and the Delhi University and keep the Union Education Department apprised of the progress.

8. The meeting ended with a vote of thanks to the Chair.
A PROPOSAL FOR CREATION OF NATIONAL CAPITAL REGION UNIVERSITY

INTRODUCTION

The National Capital Region (NCR) extends over an area of 30,242 sq. kms. in Haryana, Rajasthan, Uttar Pradeh and Delhi.

The NCR Planning Board was constituted under the National Capital Region Planning Board Act 1985 passed by the Parliament in January 1985. The main objectives of the Regional Plan of the Board are evolving harmonised policies for control of land used and development of infrastructure in the NCR so as to avoid any haphazard development of the region and achieving a manageable Delhi by 2001 A.D. In the NCR Region, Delhi, the mother city has almost all types of higher educational and research facilities, perhaps the best available in the country. Delhi has got three central universities namely University of Delhi, Jawaharlal Nehru University and Jamia Millia Islamia University. In addition to these central universities, Delhi has Indian Institute of Technology, Jamia Hamdard (deemed University), Indian Statistical Institute etc. There are a large number of colleges at Meerut, Ghaziabad. In Haryana, Rohtak town has a University of its own and several state level institutions. Some of the sub-regions of the area like Rohtak, Meerut and Alwar are large sized urban centres. In view of large growth of population in Delhi and its neighbouring towns, the existing facilities available at the above mentioned educational institutes/universities, particularly in respect of higher education, are inadequate. There is a growing tendency to rush to Delhi University for admission to its various courses. Besides local population of Delhi and several other sub-regions of NCR, there is a large number of students coming from other states who are keen to get higher education from Delhi University or one of its colleges. There has been consistent demand for increase

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in member of colleges and number of courses but the Delhi University has almost reached a point of saturation with the student strength of about 1,86,000, more than 70 colleges and 50-60 departments.

Recently, while considering a proposal for affiliation of educational institutes of NCR towns to the University of Delhi at several meetings in the Ministry of Human Resource Development with the representatives of NCR Board and Education Secretaries of the states and the Union territory of NCR region, it was felt that there was no further scope of expansion of Delhi University in respect of creation of new colleges or granting affiliation to some of the existing colleges in the NCR region. It was also felt that private organisations are not keen to open new colleges in the NCR towns in case they were to be affiliated to the local universities. Many organisations may come forward to open colleges in the NCR towns if there is a provision of their affiliation to the University of Delhi. In view of the constraints of Delhi University Act and other limitations, it is not possible to grant such an affiliation to the Delhi University for such colleges. It was proposed to have a new University called "NCR University", which could meet such a requirement of granting affiliation to existing colleges in the NCR region and creating new colleges in this region with affiliation to a university having a standard comparable to that of Delhi University.

Recently, the Supreme Court of India while declaring a judgement in Mohini Jain Vs. State of Karnataka case, directed that "The right to education is a fundamental right.................". This judgement has a far reaching implications and generated a serious debate and discussion on how the education system should respond to the same.

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The right to education is in fact the right to access to educational institutions. It obviously implies that the state has a duty to fulfill this right at all levels. Many people have raised questions as to whether the enforcement of the right to education means establishment of more and more colleges? The University Grants Commission is a statutory body responsible for the promotion and coordination of university education and the determination and maintenance of its standards. At present, the higher education system consists of institutions set up by the government and also other set up by private agencies/trusts. The National Policy on Education was formulated in 1968 with the submission of the report of the Kothari Commission. Since then there has been considerable expansion of education at all levels. The 1986 Policy declared that the education is a unique investment in the present and future. This 1986 Policy was reviewed in May 1990 by a Committee which recommended several modifications in 1986 Policy. In the later half of 1991 in the context of an acute resource crunch, the Government began exploring means and measures for raising additional resources in order to effect economy in Government expenditure. The system of higher education in the country presently consists of 200 universities and 7,500 colleges but still a lot more is required to be done in order to meet the constitutional responsibility of the state in respect of declaring the right to education as a fundamental right and the Supreme Court’s ruling that the state is under a constitutional mandate to provide education at all levels and for all citizens.
ESTABLISHMENT OF NATIONAL CAPITAL REGION UNIVERSITY:

There shall be established a University by the name of "National Capital Region University". The Head Quarter of the University shall be at Delhi and it may establish, maintain, affiliate or provide accreditation to colleges, regional centres and other institutes at such other places in the areas of National Capital Region. This University will have the Acts and Statutes as approved by the Parliament.

OBJECTIVES OF THE NCR UNIVERSITY:

The main objectives of the University shall be:-

- To provide regular and distance education through various centres, institutes and colleges in the areas of National Capital Region.

- The University shall provide instructions in such branches of knowledge, technology and professions as it may determine from time to time.

- To plan and prescribe courses of study for degrees, diplomas, certificates etc.

- To lay standards for examinations and to hold examinations.

- To confer degrees, diplomas, certificates and to confer honorary degrees or other distinctions.

- To cooperate and seek cooperation of other central universities and institutes in Delhi and other regions of the National Capital Region.

- To organise and conduct refresher courses, workshops, seminars and other in-service programmes for teachers and other non-teaching staff.

- To make provision for research and development in various areas of Science and Technology.

- To enter into memorandum of understanding with other international institutes and foreign universities.
AUTHORITIES OF THE UNIVERSITY:

The authorities of the NCR University shall consist of:

- Executive Council
- Academic Council
- Board of Management
- Board of Examinations
- Finance Committee

The officers of the University shall be:

- Vice-Chancellor
- Pro-Vice-Chancellor
- Director of Colleges
- Director of Examinations
- Registrar
- Proctor
- Finance Officer
- The President of India shall be the Visitor of the University.
- The Vice-President of India shall be the Chancellor of the University.
- The Governors of various states of NCR and the Lt. Governor of Delhi shall be the Rectors of the University and the Chief Justice of India shall be the Chief Rector.

RESOURCES:

1) Government Fundings
2) Admission and Examination Fees
3) Endowment Funds
4) Education Projects
5) Sale of Course materials/journals
AFFILIATION OF COLLEGES:

The NCR University will lay-down procedure and conditions for affiliation of existing and new colleges. The teaching will be exclusively the responsibility of the concerned colleges. The University shall lay-down course materials and scheme of examinations. The University rules shall provide criteria for choice of subjects and course duration. It is proposed to have computerised examination system with 50 per cent of examinations to be conducted by the respective colleges and 50 per cent examinations on centralised basis.

FACULTIES:

The proposed University may have the following faculties/Centres:-

1) Faculty of Business Studies
2) Faculty of Engineering
3) Faculty of Science
4) Faculty of Arts
5) Faculty of Commerce
6) Faculties of Social Sciences and Humanities
7) Faculty of Medical Sciences
8) Faculty of Land Management & Rural Development
9) Faculty of Computing & Information Sciences
10) Faculty of Mathematics
11) Faculty of Applied Sciences
12) Faculty of Education
13) Faculty of Health Studies

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14) Faculty of Applied Linguistics
15) Faculty of Life Sciences
16) Faculty of Technology

These faculties may be developed at one central place with their post-graduate departments in various towns of the NCR such as at Panipat, Sambhal, Rohtak, Kalanaur, Rewari, Rawal, Kishanganj, Sikunderabad, Bulandshahr, Meerut, Noida, Gurgaon etc. The undergraduate colleges at various towns of NCR will work independently but their curriculum, syllabi and recruitments of teachers etc. will be coordinated through various departments and faculties. The development of the University may have a modular approach by providing some specialized training centre/centres at various sub-regions depending upon the need of a particular area. The undergraduate colleges will mainly cater to the local students but the post-graduate departments shall extend their facilities to nearby areas in their neighbourhood. The University may have regional centres in towns like Meerut, Rohtak, Alwar, Noida etc. To begin with, the University may list certain priority towns for faster development. Some of these regional centres may develop into institutions of specialization taking into consideration social infrastructure, population size and auxiliary facilities available in that area.
MINUTES OF THE MEETING HELD ON 6-11-92 UNDER THE CHAIRMENSHIP OF JOINT SECRETARY (U & HE) TO DISCUSS THE PROPOSAL FOR AFFILIATION OF EDUCATIONAL INSTITUTIONS IN NCR TOWNS TO THE UNIVERSITY OF DELHI/JAWAHARLAL NEHRU UNIVERSITY.

A meeting was held on 6-11-1992 at 11.00 A.M. in Shastri Bhawan, New Delhi under the Chairmenship of Sh. V.S. Mukhopadhyay, Joint Secretary (U & HE), Department of Education to discuss the proposal received from the NCR Planning Board for affiliation of educational institutions in the NCR Towns to the University of Delhi/JNU.

2. The following were present:

1. Sh. S.R. Arya, Secretary (Education), Delhi Administration.

2. Sh. S.N. Jha, Secretary (Higher Education), Government of Uttar Pradesh.

3. Sh. K.D. Sriwastava, Joint Secretary (Higher Education), Government of Uttar Pradesh.


5. Prof. S.K. Wasnani, Registrar, University of Delhi.

6. Prof. K.P.S. Unny, Registrar, Jawaharlal Nehru University.

No representative came from the Govt. of Rajasthan.

3. At the outset, the Chairman explained the proposal by stating that to contain the multifaced pressures on Delhi due to increasing population, a Metropolitan Region now called the National Capital Region comprising
parts of Uttar Pradesh, Haryana and Rajasthan with

Union Territory of Delhi as the core has been demarcated

and with the consent of the concerned State Legislatures

the National Capital Region Planning Board Act has been

passed by Parliament and the National Capital Region

Planning Board has been created under this Act in March,

1985. A comprehensive Regional Plan-2001 has been drawn

up by the NCR Planning Board which has come into force

with effect from January 1989. The Regional Plan provides

for (i) the shifting and relocation of certain employment

generating activities and (ii) improving and upgrading

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in the NCR towns like Ghaziabad, Noida, Faridabad-Bellabgarh,

Gurgaon, Bahadurgarh and Kundli so that the facilities

available in these towns could be rated on par with those

available in Delhi. In this background, the Member

Secretary, NCR Planning Board has requested the Government

of India to consider affiliation of colleges and other

educational institutions in NCR towns to University of

Delhi or JNU. The meeting was convened to discuss the

administrative as well as legal aspects of this proposal.

He drew the attention of the members towards the letter

dated 2.9.92 received from the Member Secretary, NCR.

He then invited the participants of the meeting to express

their views in this regard.

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5. The representative of the Government of Haryana opposed the proposal on the ground that it was based on an erroneous presumption that the standard of the Universities in NCR Status is lower than that of Delhi University/JNU. There are two Universities in the State—H.U. University, Rohtak and Kurukshetra University, Kurukshetra. Most of the colleges of the State are affiliated to H.U. University. Despite its being of
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6. The representative of Government of Haryana was also of the view that the proposal to affiliate the colleges of NCR towns to Delhi University or JNU was not feasible also. If colleges are affiliated to Delhi University, the N.U. University will be left with a very limited territorial jurisdiction which would reduce the prestige of the University. There was an apprehension that the colleges in the territorial jurisdiction of Kurukshetra University may also demand for their affiliation with Panjab University, Chandigarh. As has been stated in the letter of the Member-Secretary, NCR Planning Board the proposal is to attract migrants from the capital city and elsewhere to these colleges, the local students of Haryana would not be benefited by opening of such colleges which would be affiliated to Delhi University or JNU. Besides, such colleges would attract students from out of the NCR towns also and the same congestion would start in these colleges as has so far been in Delhi colleges. The State Government will be facing some
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4. It was observed that this should first be attempted as an agreed decision to be incorporated say in the sub-regional plan of each participating State Government and it can be adopted as a consensus in the NCR Board which is headed by the Union Urban Development Minister. It was observed that the NCR Board is the appropriate forum in which such a consensus could be first arrived at within the schematic arrangement of NCR Planning Board Act.

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also allowed to be affiliated to the Delhi University. But still there is need to consider this proposal seriously. Delhi University have a number of courses which are not available in the Universities of the NCR States. So, a large number of students from out of Delhi are tempted to join Delhi University. If the colleges in NCR towns are affiliated to Delhi University it would ease out the pressure on Delhi colleges to a large extent.

9. The Registrar, Jawaharlal Nehru University while acknowledging the need of upgradation of standard of educational institutions located in NCR towns explained that JNU does not have undergraduate courses or colleges affiliated to it. If the colleges of NCR towns are to be affiliated to this University the entire character of the University will have to be changed. It would not be so easy. So affiliation of these colleges to JNU is a very difficult proposition. Therefore, he was of the view that instead of their affiliation to Delhi University/JNU, local Universities should be strengthened by investing more funds, introduction of new courses and academic exchanges etc., so that their standard could be brought on par with that of the Delhi University.

10. The Chairperson summed up the discussions by stating that the proposal requires to be considered in more details with reference to the provisions available under the NCR Planning Board act and the acts of the State Universities having jurisdiction on the colleges.
of NCR towns. The State Governments should address themselves to the question whether all colleges in the NCR towns should be affiliated to the University of Delhi or status-quo be maintained in respect of the existing colleges and the new private colleges be affiliated to Delhi University-compulsorily or optionally? He requested the concerned State Governments to finalise their views on this issue at the earliest and intimate the Ministry within a month. A followup meeting with the representatives of the concerned State Governments and the Universities will be taken thereafter to decide the issues as necessary.

11. The meeting ended with a vote of thanks to the Chair.
INTRODUCTION

The National Capital Region (NCR) extends over an area of 30,242 sq. kms. in Haryana, Rajasthan, Uttar Pradesh and Delhi.

The NCR Planning Board was constituted under the National Capital Region Planning Board Act 1985 passed by the Parliament in January 1985. The main objectives of the Regional Plan of the Board are evolving harmonised policies for control of land used and development of infrastructure in the NCR so as to avoid any haphazard development of the region and achieving a manageable Delhi by 2001 A.D. In the NCR Region, Delhi, the mother city has almost all types of higher educational and research facilities, perhaps the best available in the country. Delhi has got three central universities namely University of Delhi, Jawaharlal Nehru University and Jamia Millia Islamia University. In addition to these central universities, Delhi has Indian Institute of Technology, Jamia Hamdard (deemed University), Indian Statistical Institute etc. There are a large number of colleges at Meerut, Ghaziabad. In Haryana, Rohtak town has a University of its own and several state level institutions. Some of the sub-regions of the area like Rohtak, Meerut and Alwar are large sized urban centres. In view of large growth of population in Delhi and its neighbouring towns, the existing facilities available at the above mentioned educational institutes/universities, particularly in respect of higher education, are inadequate. There is a growing tendency to rush to Delhi University for admission to its various courses. Besides local population of Delhi and several other sub-regions of NCR, there is a large number of students coming from other states who are keen to get higher education from Delhi University or one of its colleges. There has been consistent demand for increase
in number of colleges and number of courses but the Delhi University has almost reached a point of saturation with the student strength of about 1,86,000, more than 70 colleges and 50-60 departments.

Recently, while considering a proposal for affiliation of educational institutes of NCR towns to the University of Delhi at several meetings in the Ministry of Human Resource Development with the representatives of NCR Board and Education Secretaries of the states and the Union territory of NCR region, it was felt that there was no further scope of expansion of Delhi University in respect of creation of new colleges or granting affiliation to some of the existing colleges in the NCR region. It was also felt that private organisations are not keen to open new colleges in the NCR towns in case they were to be affiliated to the local universities. Many organisations may come forward to open colleges in the NCR towns if there is a provision of their affiliation to the University of Delhi. In view of the constraints of Delhi University Act and other limitations, it is not possible to grant such an affiliation to the Delhi University for such colleges. It was proposed to have a new University called "NCR University", which could meet such a requirement of granting affiliation to existing colleges in the NCR region and creating new colleges in this region with affiliation to a university having a standard comparable to that of Delhi University.

Recently, the Supreme Court of India while declaring a judgement in Mohini Jain Vs. State of Karnataka case, directed that "The right to education is a fundamental right................." This judgement has a far reaching implications and generated a serious debate and discussion on how the education system should respond to the same.
The right to education is in fact the right to access to educational institutions. It obviously implies that the state has a duty to fulfill this right at all levels. Many people have raised questions as to whether the enforcement of the right to education means establishment of more and more colleges? The University Grants Commission is a statutory body responsible for the promotion and coordination of university education and the determination and maintenance of its standards. At present, the higher education system consists of institutions set up by the government and also other set up by private agencies/trusts. The National Policy on Education was formulated in 1968 with the submission of the report of the Kothari Commission. Since then there has been considerable expansion of education at all levels. The 1986 Policy declared that the education is a unique investment in the present and future. This 1986 Policy was reviewed in May 1990 by a Committee which recommended several modifications in 1986 Policy. In the later half of 1991 in the context of an acute resource crunch, the Government began exploring means and measures for raising additional resources in order to effect economy in Government expenditure. The system of higher education in the country presently consists of 200 universities and 7,500 colleges but still a lot more is required to be done in order to meet the constitutional responsibility of the state in respect of declaring the right to education as a fundamental right and the Supreme Court's ruling that the state is under a constitutional mandate to provide education at all levels and for all citizens.
ESTABLISHMENT OF NATIONAL CAPITAL REGION UNIVERSITY:

There shall be established a University by the name of "National Capital Region University". The Head Quarter of the University shall be at Delhi and it may establish, maintain, affiliate or provide accreditation to colleges, regional centres and other institutes at such other places in the areas of National Capital Region. This University will have the Acts and Statutes as approved by the Parliament.

OBJECTIVES OF THE NCR UNIVERSITY:

The main objectives of the University shall be:

- To provide regular and distance education through various centres, institutes and colleges in the areas of National Capital Region.
- The University shall provide instructions in such branches of knowledge, technology and professions as it may determine from time to time.
- To plan and prescribe courses of study for degrees, diplomas, certificates etc.
- To lay standards for examinations and to hold examinations.
- To confer degrees, diplomas, certificates and to confer honorary degrees or other distinctions.
- To cooperate and seek cooperation of other central universities and institutes in Delhi and other regions of the National Capital Region.
- To organise and conduct refresher courses, workshops, seminars and other in-service programmes for teachers and other non-teaching staff.
- To make provision for research and development in various areas of Science and Technology.
- To enter into memorandum of understanding with other international institutes and foreign universities.
AUTHORITIES OF THE UNIVERSITY:

The authorities of the NCR University shall consist of:

- Executive Council
- Academic Council
- Board of Management
- Board of Examinations
- Finance Committee

The officers of the University shall be:

- Vice-Chancellor
- Pro-Vice-Chancellor
- Director of Colleges
- Director of Examinations
- Registrar
- Proctor
- Finance Officer

- The President of India shall be the Visitor of the University.
- The Vice-President of India shall be the Chancellor of the University.
- The Governor of various states of NCR and the Lt. Governor of Delhi shall be the Rectors of the University and the Chief Justice of India shall be the Chief Rector.

RESOURCES:

1) Government Fundings
2) Admission and Examination Fees
3) Endowment Funds
4) Education Projects
5) Sale of Course materials/journals
AFFILIATION OF COLLEGES:

The NCR University will lay-down procedure and conditions for affiliation of existing and new colleges. The teaching will be exclusively the responsibility of the concerned colleges. The University shall lay-down course materials and scheme of examinations. The University rules shall provide criteria for choice of subjects and course duration. It is proposed to have computerised examination system with 50 per cent of examinations to be conducted by the respective colleges and 50 per cent examinations on centralised basis.

FACULTIES:

The proposed University may have the following faculties/Centres:-

1) Faculty of Business Studies
2) Faculty of Engineering
3) Faculty of Science
4) Faculty of Arts
5) Faculty of Commerce
6) Faculties of Social Sciences and Humanities
7) Faculty of Medical Sciences
8) Faculty of Land Management & Rural Development
9) Faculty of Computing & Information Sciences
10) Faculty of Mathematics
11) Faculty of Applied Sciences
12) Faculty of Education
13) Faculty of Health Studies

contd...P...7/-
14) Faculty of Applied Linguistics
15) Faculty of Life Sciences
16) Faculty of Technology

These faculties may be developed at one central place with their post-graduate departments in various towns of the NCR such as at Panipat, Sambhal, Rohtak, Kalanaur, Rewari, Bawal, Kishangarh, Sikanderabad, Bulandshar, Meerut, Noida, Gurgaon etc. The undergraduate colleges at various towns of NCR will work independently but their curriculum, syllabi and recruitments of teachers etc. will be coordinated through various departments and faculties. The development of the University may have a modular approach by providing some specialized training centres/centres at various sub-regions depending upon the need of a particular area. The undergraduate colleges will mainly cater to the local students but the post-graduate departments shall extend their facilities to nearby areas in their neighbourhood. The University may have regional centres in towns like Meerut, Rohtak, Alwar, Noida etc. To begin with, the University may list certain priority towns for faster development. Some of these regional centres may develop into institutions of specialization taking into consideration social infrastructure, population size and auxiliary facilities available in that area.
REPORT OF THE COMMITTEE CONSTITUTED UNDER THE CHAIRMANSHIP OF COMMISSIONER (PLANNING), DDA, NEW DELHI TO SUGGEST A PACKAGE OF INCENTIVES AND THE MODALITIES FOR SPEEDY IMPLEMENTATION OF THE DECENTRALISATION PROCESS.
REPORT OF THE COMMITTEE CONSTITUTED UNDER THE CHAIRMANSHIP OF COMMISSIONER (PLANNING), DDA, NEW DELHI TO SUGGEST A PACKAGE OF INCENTIVES AND THE MODALITIES FOR SPEEDY IMPLEMENTATION OF THE DECENTRALISATION PROCESS.

1. Background:

The Regional Plan envisages deflection of 20 lakh population from Delhi Union Territory during 1990-2001. Based on this, a population of 10 lakh would need to be deflected during the Eighth Five Year-Plan (1992-97) itself. The deflected population would have to be accommodated mainly in the 8 Priority Towns/complexes viz. Meerut, Hapur, Bulandshahar-Khurja in Uttar Pradesh sub-region, Palwal, Rohtak, Panipat, Rewari-Dharuhera in Haryana Sub-region, and Alwar and Bhiwadi in Rajasthan Sub-region, and DMA towns viz. Bahadurgarh and Kundli through a process of induced development of self-contained integrated townships in the vicinity of the existing towns. The strategies which have been approved by the NCRPB in its 15th meeting held on 14th Sept., 1992 in order to achieve the above objectives are:

i) Developing new townships alongside the identified Priority/DMA towns in accordance with specific Master Plans each providing for a total population growth assigned in accordance with the overall population profile of NCR envisaged for the year 2001. The State Governments and their implementing agencies would be mainly responsible for development of these townships including the trunk services infrastructure.
ii) The townships to be so developed should be centred around core economic activities such as large/medium industries, large commercial complexes like ICD and wholesale market yards and office complexes, to be relocated out of Delhi as part of the overall dispersal strategy.

iii) Higher-order social facilities of regional or national importance such as educational/medical/engineering institutions, universities, hospitals, sports complexes, tourists centres and industrial estates may also be among the specific activities to be promoted in these townships.

iv) Such major infrastructural works such as expressways, national highways, railway lines and telecommunications and power supply facilities, which are essential to the balanced and harmonious development of NCR, should be dovetailed with the development activities in these townships and funded by the concerned ministries of Central Govt. through a special NCR component plan.

v) As a part of the process of dispersal of economic activities beyond Delhi (NCTD), definite linkages should be developed, as
far as possible, between the core economic and other activities to be developed in the new townships and those activities which are identified for relocation out of Delhi. Without these linkages it would not be possible to ensure that the twin objectives of NCR Plan are achieved simultaneously.

2. Issues Involved:

The matter regarding decentralisation of economic activities was discussed in the 28th meeting of the Planning Committee of the NCRPB and in order to work out a package of incentives and the modalities for speedy implementation of the decentralisation process, a committee consisting of the following was constituted:

1. Commissioner (Planning), Chairman
   Delhi Development Authority.

2. The Chief Town & Country Planner, Member
   Town & Country Planning Department,
   Govt. of Uttar Pradesh.

3. The Chief Town Planner, Member
   Town & Country Planning Department,
   Govt. of Rajasthan.

4. The Chief Coordinator Planner-NCR Member
   NCR Sub-region of Haryana,
   Govt. of Haryana.

5. The Senior Research Officer, Member, Convenor
   NCR Planning Board.

The Committee was to consider the following issues and to submit its report to the NCR Planning Board.
(a) identification of economic activities which could form a part of the core economic activity in each of the 10 new proposed townships in NCR;

(b) drawing up a set of policy incentives and guidelines which could be uniformly adopted by both Delhi Administration and the respective development agencies of the member-States in order to help operationalise these core economic activities in the said new townships in a time-bound manner;

(c) suggesting the institutional machinery to be set up to ensure joint action for timely implementation in each and every case.

3. The Committees met twice on 6th April, 1993 and 26th July, 1993. The Committee discussed, in detail, various aspects related to the terms of reference of the Committee. The observations/recommendations of the Committee on these issues are as follows;

I. Identification of Core Economic Activities:

The Regional Plan has identified three main economic generators which have shown strong tendency of growth in Delhi. They are: Industry, Wholesale Trade and Commerce and Govt. and Public Sector Offices. These activities as part of their dispersal from Delhi, as well as by adopting promotional
measures can form the core economic activities in the 10 selected towns. Besides this the Regional Plan also lays great emphasis on the role of informal sector activities in the development of these towns. —A brief account of broad policies contained in the Plan and also the proposals which have emerged out of various studies commissioned by NCRPB is as under;

A. Industry

(i) The industrial location policy in NCR has taken due note of the process of over-concentration of industrial enterprises, leading interalia to the problems of continually expanding investments, resources and environmental degradation in Delhi.

(ii) The industrial location policy, as envisaged in the Plan, for the three policy zones is as follows:

(a) Control within the Union Territory of Delhi:

The present policy of not promoting location of medium and large scale industries within Delhi UT should be continued.

(b) Control outside Delhi but within the DMA:

While in the long term perspective, the growth of large and medium scale industries in DMA towns may have to be restricted, these industries may be permitted in the DMA towns for a period of 10 years, thereafter the policy shall be reviewed. The emphasis will be on
promoting growth of large and medium scale industries in priority towns in preference to DMA towns.

(c) Incentives for industries outside the DMA but within the NCR

The towns selected for priority development should have a strong industrial content, and incentives comparable to those given to industries in centrally declared backward areas should be given for location of large, medium and small scale industries. Industrial estates should be developed in these towns. Specific areas should be earmarked in the region outside the DMA for relocation of industries which cannot be accommodated any longer in National Capital Territory as per the provisions of the Delhi Master Plan - 2001 read with the new industrial policy adopted by Delhi Administration.

(iii) As per Regional Plan priorities the Priority Towns need to be provided with a strong industrial content

Occupational Structure in Priority Towns by 2001

<table>
<thead>
<tr>
<th>Priority Towns</th>
<th>Participation Ration-2001 (%)</th>
<th>Proportion (%) of workers in Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meerut</td>
<td>32</td>
<td>2 29 4 20 9 36</td>
</tr>
<tr>
<td>Hapur</td>
<td>30</td>
<td>6 28 4 22 13 27</td>
</tr>
<tr>
<td>Bulandshahr</td>
<td>30</td>
<td>4 40 4 20 12 20</td>
</tr>
<tr>
<td>-Khurja</td>
<td>30</td>
<td>4 40 4 20 12 20</td>
</tr>
<tr>
<td>Panipat</td>
<td>32</td>
<td>4 40 4 20 12 20</td>
</tr>
</tbody>
</table>

6
<table>
<thead>
<tr>
<th>Town</th>
<th>Population</th>
<th>Population in thousands</th>
<th>Population in lakhs</th>
<th>Population in millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rohtak</td>
<td>30</td>
<td>7</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>Palwal</td>
<td>30</td>
<td>9</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Rewari</td>
<td>30</td>
<td>9</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Dharuhera</td>
<td>30</td>
<td>5</td>
<td>50</td>
<td>4</td>
</tr>
<tr>
<td>Bhiwadi</td>
<td>30</td>
<td>5</td>
<td>50</td>
<td>4</td>
</tr>
<tr>
<td>Alwar</td>
<td>30</td>
<td>5</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>Kundli</td>
<td>35</td>
<td>2</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>Bahadurgarh</td>
<td>35</td>
<td>6</td>
<td>30</td>
<td>4</td>
</tr>
</tbody>
</table>

(iv) It will not be out of place to mention here that out of these 10 towns, 8 towns (except Kundli and Bahadurgarh) fall outside the cutoff limit of 25 kms. from Standard Urban Area of Delhi and all the industries are exempted from licensing except some specific articles of manufacture and are reserved for small scale/ancillary sector. This liberalisation is likely to help in the industrial development of these towns.

(v) The thrust of the new strategy should, therefore, be to provide for strong industrial content in all the new townships which are to be developed alongside the aforesaid 10 towns, as either the whole or a part of the core economic activity of these townships.

B. Wholesale Trade and Commerce:

(i) In Regional Plan-2001, wholesale distributive trade and commerce has been identified as one of the major employment generators in Delhi, which need to be more widely dispersed throughout the National Capital Region. The policies proposed in order to achieve this objective are as under:

(a) Decentralisation of wholesale trade and commerce in
Delhi.

There should not be any special advantage in terms of preferential treatment or lower taxes by way of incentives to wholesale trades in Delhi vis-a-vis the adjoining States. Wholesale trading in plastic and PVC goods, chemicals, timber, food-grains, iron and steel and building materials which caters to the whole of NCR and beyond and requires extensive space may be decentralised by developing suitable additional locations outside Delhi for the purpose.

(b) Development outside Delhi within DMA:

There are certain wholesale trades and storages in Delhi which involve bulk-handling of commodities such as PVC goods, chemicals, timber, food grains, iron and steel and building material and are hazardous in nature by virtue of their location in congested localities. Facilities for the functioning of these wholesale trades (as well as others) and related activities should be developed in the satellite towns in DMA. The possibility of developing modern super markets in the Delhi Metropolitan Area towns should also be explored.

(c) Development outside DMA within NCR.

Incentives, concessions and infrastructure facilities should be made available in the various regional towns in order to encourage and accelerate the growth of trade centres on a wider scale within NCR.
(ii) In a study commissioned by NCR Planning Board, based on various factors affecting location of wholesale trade such as volume of commodity flow, direction of flow, trade linkages, mode of transport, preferences of traders etc., the following locations have been suggested for the 7 major commodity groups being handled in Delhi.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Trades</th>
<th>Suggested Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Foodgrains</td>
<td>Panipat, Hapur &amp; Kundli (Sub-regional)</td>
</tr>
<tr>
<td>2.</td>
<td>Fruit &amp; Vegetables</td>
<td>Panipat (for apples and vegetables); Hapur (for potato and onion); Kundli (mango and vegetables)</td>
</tr>
<tr>
<td>3.</td>
<td>Textiles and Readymade Garments</td>
<td>Meerrut and Rohtak.</td>
</tr>
<tr>
<td>5.</td>
<td>Auto Parts</td>
<td>Faridabad.</td>
</tr>
<tr>
<td>7.</td>
<td>Hardware &amp; Building materials</td>
<td>For hardware- Ghaziabad; For building material - Alwar, Dharuhera or Bhiwadi.</td>
</tr>
</tbody>
</table>

(iii) It is expected that integrated township projects will be prepared by the States in the vicinity of the selected towns in NCR and with suitable industrial/commercial activities serving as the core economic activity for generating the requisite scale of income and employment without which the new township cannot be developed within a definite time-frame such as 2001 AD.
C. Government and Public Sector Offices:

(i) The Regional Plan - 2001 has identified unrestricted growth of the Government and Public Sector Offices as an important factor which has resulted in a faster rate of growth in Delhi. Accordingly, the Plan has proposed following policies for restricting their growth in Delhi.

(a) Strict Control within the NCTD of Delhi

With regard to Government offices, the present policy and mechanism for screening the location of new Government offices and expansion of existing Government offices should be continued. The main criterion for location of offices in the Capital should be that they perform ministerial functions, protocol functions or liaison functions which, by their nature, cannot be performed anywhere else except in the National Capital. The existing offices which do not perform any of the above functions should be identified and shifted from Delhi. In the case of Public Sector offices, there is an urgent need to scrutinise the list of existing offices and allow them to retain only very small establishments to cater for ministerial and liaison functions. The rest of the establishments should be shifted out of Delhi. The accommodation which may thus become available could be used to cater to the needs of the essential growth of Central Government offices.
(b) Control outside Delhi but within the DMA:

A similar control on the opening of new Central Government and Public Sector offices in the DMA towns should be exercised. Relocation or expansion of Government offices which have ministerial, protocol or liaison functions which make it incumbent upon them to be located in Delhi alone should be allowed to be located in the DMA towns. In so far as Public Sector undertakings are concerned, the restrictions on their opening new offices or expanding the existing ones should apply equally to the DMA also. Rest of them have to go out to the priority towns to be developed in the NCR or in the Counter-magnet areas identified by the Board.

(c) Incentives outside DMA but within NCR;

The Central Government offices which are considered for being shifted from Delhi and the DMA towns should be located in other towns of the NCR and, incentives in the form of CCA, HRA etc, as given to employees working in Delhi, should be given to employees who may be affected by this shifting for a limited period. Other incentives like providing Government accommodation, allowances for study of their children also be given to act as an incentive. For locating the new Central Government and Public Sector offices in the DMA and/or the priority towns, alternative sites should be identified and developed by the development agencies in
consultation with the Board's secretariat.

(ii) It is felt that relocation of the Government and Public Sector offices which are considered for shifting out of Delhi in the aforesaid towns would help promote their growth by creating employment and bolstering up economic activities. The NCR Plan also envisages provision of concomitant infrastructure such as telecommunication facilities along with better transport linkages through road and railways and also provision of social facilities and amenities like education and health care in these towns of the quality and standard comparable to that obtaining in Delhi so as to make them attractive enough for this type of activities.

(iii) Meerut in Uttar Pradesh Sub-region, Rohtak in Haryana Sub-region and Alwar in Rajasthan are the biggest towns of their sub-regions and are endowed with higher level physical and social infrastructure. Meerut and Rohtak even have universities. To start with, these three towns are, therefore, ripe enough to absorb these activities in the form of core-economic activities in the new townships.

D. The Role of the Informal Sector

(i) The informal sector contributes significantly to employment and offers income opportunities to a substantial proportion of the economically active population in the urban and rural areas of NCR. Some of these activities are being carried out since long and are also well recognised
from the point of view of specialisation and their export potentials.

(ii) The studies carried out by NCR Planning Board have identified the following informal sector activities which could be incorporated in and fully integrated with, the process of planned development of the DMA/priority towns in NCR viz.

Alwar: Engineering and metal work, Leather work, Murti Kari, Carpet, weaving and Pottery.

Meerut: Handloom, Sports goods and Scissors and blades Industry

Khurja: Pottery and Ceramics.

Panipat: Handloom Industry.

Hapur: Metal products.

Rewari: Brasswares.

Mewat Region: Potteries.

(iii) Enquiries have also shown that there is scope for development of informal sector activities in the fields of gem polishing, garment manufacturing and the services sector.

(iv) These activities have tremendous scope for upgradation & expansion and it is felt that if properly nurtured they can play the role of a vibrant component of the economy in NCR and can provide gainful employment to the potential migrants to Delhi. Since in the past no efforts have been made with regard to provision of adequate infrastructure facilities for these activities in an
organised way they are being carried out in substandard conditions in congested areas of towns. An improvement in the working conditions by suitably locating them with provision of adequate infrastructure and improvement in the technology will enhance the prospects of these activities and generate more employment.

(V) On the basis of the findings of these studies NCR Planning Board has undertaken some informal sector projects in the priority towns of the NCR in collaboration with the local agencies. These projects are:

Meerut: - Sports Goods Complex.
- Handloom Complex.
- Scissors and Blades Complex.

Alwar: - Leather Work
- Murtikari
- Potteries
- Carpet weaving

Rewari: - Brassware Complex

(vi) The objective of these projects would be to provide; access to shelter, access to services and hygienic living and working environment to the workers; working capital for marketing of products; facilities for skill upgradation etc.

(vii) This along with the aforesaid organised activities which are to be decentralised and dispersed over
NCR as a whole, such informal sector activities will have to be given their due place in the planning & development of the various new townships cited above.

**Suggested Locations for the Core-economic Activities:**

Keeping in view the observations made above the following Core-economic activities are suggested in the selected priority and DMA towns.

<table>
<thead>
<tr>
<th>Name of the Towns</th>
<th>Core-economic activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Meerut</td>
<td>(i) Industry</td>
</tr>
<tr>
<td></td>
<td>(ii) Govt and Public Sector Offices</td>
</tr>
<tr>
<td></td>
<td>(iii) Wholesale Trade</td>
</tr>
<tr>
<td></td>
<td>-Textile &amp; Readymade garments</td>
</tr>
<tr>
<td></td>
<td>(iv) Informal Sector</td>
</tr>
<tr>
<td></td>
<td>-Sports goods</td>
</tr>
<tr>
<td></td>
<td>-Handlooms</td>
</tr>
<tr>
<td></td>
<td>-Scissors and blades</td>
</tr>
<tr>
<td>2. Hapur</td>
<td>(i) Industry</td>
</tr>
<tr>
<td>3. Bulandshahr</td>
<td>(i) Industry</td>
</tr>
<tr>
<td>4. Khurja</td>
<td>(i) Industry</td>
</tr>
<tr>
<td></td>
<td>(ii) Informal Sector</td>
</tr>
<tr>
<td></td>
<td>-Pottery &amp; Ceramics</td>
</tr>
<tr>
<td>5. Palwal</td>
<td>(i) Industry</td>
</tr>
<tr>
<td></td>
<td>(ii) Inland Container Depot</td>
</tr>
<tr>
<td>6. Rohtak</td>
<td>(i) Industry</td>
</tr>
<tr>
<td></td>
<td>(ii) Govt &amp; Public Sector Offices</td>
</tr>
<tr>
<td></td>
<td>(iii) Wholesale trade</td>
</tr>
<tr>
<td></td>
<td>-Textiles &amp; Readymade Garments</td>
</tr>
<tr>
<td>7. Panipat</td>
<td>(i) Industry</td>
</tr>
<tr>
<td></td>
<td>(ii) Wholesale trade</td>
</tr>
<tr>
<td></td>
<td>-Food grains</td>
</tr>
</tbody>
</table>
8. Rewari
   (i) Industry
   (ii) Wholesale trade
       - Fuel Oil
   (iii) Informal Sector
       - Brass wares

9. Dharuhera
   (i) Industry
   (ii) Wholesale trade
       - Hardware and Building material

10. Alwar
    (i) Industry
    (ii) Govt & Public Sector offices
    (iii) Wholesale trade
         - Building material
    (iv) Informal Sector
         - Leather work
         - Murtikari
         - Potteries
         - Carpet wearing

11. Bhiwadi
    (i) Industry
    (ii) Wholesale Trade
        - Hardware & Building material

12. Bahadurgah
    (i) Industry

13. Kundli
    (i) Industry
    (ii) Wholesale trade
        - Fruits & vegetables

II Package of Incentives:

To encourage units to locate in the new towns the following package of incentives are recommended:

LAND;
- Priority for allotment of land be given to existing units who are willing to shift outside Delhi.
- The land so provided be given at a concessional rate,
viz. predetermined rates including cost of acquisition and cost of development and administrative charges.

- Early possession of this land be given to the owners so that the entrepreneurs are able to undertake internal development of the land.

- Proper infrastructure required for functioning of the industry to be developed by the concerned public agencies.

- The land so allotted be more than the existing areas so as to allow for renovation/modernisation and technical development depending on the need of each unit.

- Entrepreneurs be allowed to retain part of their existing lands, provisions of the Master Plan from where the units are shifting and the said land be allowed to be developed by the owners as per provisions and land uses under the Master Plan.

- Land be also provided for developing housing facilities on priority for the workers and officers in the vicinity of relocation site.

OTHER INCENTIVES:

- Financial institutions may be requested to examine provision of Loans on soft terms for shifting units. This could be in terms of greater moratorium, lower rate of interest and longer period of repayments etc.
comparable to those extended to rehabilitation of new units.

- Exemption from Central and Local Sales Tax and local octroi for five years as is given to new units be extended to those units which shift.
- Rebate in electricity and water charges be given to the units which shift.
- Exemption from property tax for a period upto five years be given to such units which shift.

III Institutional Machinery:

Setting up of institutional machinery to ensure joint action for timely implementation, it was felt that such a mechanism could only be worked out when detailed time bound functional plan for different sectors of core economic activities are prepared. This mechanism will, however, differ from case to case. In general, it was felt that a mechanism consisting of a mix of following may help to achieve the required objective:

1. Guidelines which establish 'give and take' relationship between the 'exporting authority' (i.e. Delhi Administration) and the receiving authority (i.e. concerned State Government). This will include package of incentives and concessions
offered by these authorities and who is to do what? This can be in the form of resolution of the Board.

2. Setting up of joint venture projects by various agencies of Delhi Administration with their counter-parts in the States (the relationship for such joint ventures to some extent can be covered in the guidelines) as in 1. above.

3. Aggressive marketing by the various development agencies of the State Governments (in the light of benefits accruing out of 'give and take' relationship).


The new strategy approved by the NCRPB envisages that the new townships which are to be developed should be centred around core economic activities. As a part of the dispersal process, definite, linkages will have to be developed as far as possible, between the other activities to be developed in the new townships and those activities which are identified for relocation out of Delhi. The committee discussed this issue in the light of various activities which have already been identified for relocation out of Delhi. The action programme suggested by the Committee in respect of the three major employment generators in Delhi viz, Industry, Central Government and Public Sector Offices and Trade and Commerce is as follows:
(a) Industry

In the Delhi Master Plan - 2001 certain recommendations have been made with regard to shifting of non-conforming industrial units outside Delhi such as heavy, large and hazardous and noxious units. Industries Department, of Delhi Administration, has identified 10 hazardous/noxious units (Annexure I) in the first instance and notices have already been issued that these are to be closed down by 31st July, 1993. Besides this, Industries Department has also identified 1476 polluting units and submitted this list to Delhi Development Authority. Out of these 1476 units, 258 units were identified as noxious/hazardous in nature.

Following action programme is proposed in such cases:

i) In case of 10 units; the Industries Department of Delhi Administration would write to each individual unit to contact the Industries Departments/Industries Development Corporations of the participating States of NCR for allotment of land in the Priority Towns. The allotment of land to those people whose industries have been closed down in Delhi is to be made on perferential basis and while locating their industries in these towns they will have to abide by the local environment and pollution control measures.

ii) The list of 258 industries pertaining to noxious/hazardous out of 1476 are required to be
further scrutinised by Delhi Administration/Delhi Development Authority and notices to be given as per the legal provisions and the same procedure as mentioned at (i) could be followed.

iii) A Sub-committee consisting of members from Industries Department, Delhi Administration, Delhi Development Authority and the NCR Planning Board be constituted by the NCR Planning Board to regularly monitor and coordinate the programme of action. The representatives of the State Governments can also be co-opted in this Committee, as and when required.

b) Central Government and Public Sector Offices and Institutions.

The policies with regard to location of Central Government and Public Sector Offices in the Regional Plan - 2001 as well as in the MPD-2001 envisages that in Delhi only those offices are to be allowed which perform Liaison, protocol and Ministerial functions, which by their nature cannot be performed anywhere else except in the National Capital. In the process of identification of Public Sector Offices based on the criterion laid down in the Regional Plan - 2001, a high powered Committee under the Chairmanship of Cabinet Secretary was constituted by Government of India in 1986. The Committee has identified 24 Public Sector offices (Annexure II) which are to be shifted out of Delhi. Beside this, Ministry of Urban Development has also identified 13 Government offices (Annexure III). Following action programme is suggested in this regard.
i) Primarily, the responsibility to shift these identified Government and Public Sector offices would rest with Ministry of Urban Development. But, since MPD-2001 also contains similar restrictions with regard to location of these offices, Delhi Development Authority could now initiate appropriate action in accordance with the legal enforcement provisions for shifting of these offices out of Delhi. A time bound programme in this regard is to be prepared by the Delhi Development Authority in consultation with the Ministry of Urban Development.

ii) Some of the towns in NCR viz. Meerut in U.P. Sub-region, Rohtak in Haryana Sub-region and Alwar in Rajasthan Sub-region have very good physical and social infrastructure and, developed land for offices, institutions and housing for the employees is available at much cheaper rates in these towns. These offices in turn may contact concerned development agencies e.g. Meerut Development (MDA), Haryana Development Authority (HUDA) and Urban Improvement Trust (UIT), Alwar for allotment of land for office accommodation and housing at these places.

iii) Besides making provision for housing for the employees, other incentives in the form of CCA, HRA etc., as given to employees working in Delhi, should be given to employees who may be affected by this shifting. Other incentives such as allowances for study of Children etc. as recommended in the Regional Plan - 2001 should also be thought of. The action in this regard is to be initiated by NCRPB.
iv) Institutions of National/Regional importance with requirement of extensive areas (say 2 acres or more) should not be located in Delhi. They should be considered for location in DMA/Priority Towns. DDA to consider adopting this as policy for institutional land allotment.

c) Wholesale Trade and Commerce

i) New wholesale markets should be developed in the Priority/DMA Towns as per the locations suggested by the Consultants in the study sponsored by NCRPB.

ii) The possibility of joint collaboration of the agencies of Delhi Administration e.g. Delhi Agricultural Marketing Board etc with their counter-parts in the concerned participating States should be explored.
List of hazardous obnoxious industries to be shifted from NCT, Delhi (Notice issued)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name &amp; Address of the Unit</th>
<th>Item of Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>M/s. Coates of India Ltd. 7, DiF Area, Kirti Nagar, Delhi.</td>
<td>Printing Ink</td>
</tr>
<tr>
<td>2.</td>
<td>M/s. Shri Ram Food &amp; Fertilizers Najafgarh Road, Delhi.</td>
<td>Castic Soda, Vanaspati Oil etc.</td>
</tr>
<tr>
<td>3.</td>
<td>M/s. JHA Printing Ind. (P) Ltd. A-42, Mayapuri Phase-I</td>
<td>Printing Ink &amp; Varnish</td>
</tr>
<tr>
<td>4.</td>
<td>M/s. Punjab Steel Works B-38, Mayapuri, Phase-I.</td>
<td>Forging of Steel</td>
</tr>
<tr>
<td>5.</td>
<td>M/s. Metal Forging (P) Ltd. B-1, Mayapuri Phase-I.</td>
<td>Forging</td>
</tr>
<tr>
<td>7.</td>
<td>M/s. Kumar Sons B-24, Okhla Indl. Area, Ph-I.</td>
<td>Forging</td>
</tr>
<tr>
<td>10.</td>
<td>M/s. Cement Corporation of India Clinker Grinding Unit, Tuglakabad, Okhla, N. Delhi.</td>
<td>Portland Cement</td>
</tr>
<tr>
<td>S.No.</td>
<td>Name of the Public Sector Undertakings</td>
<td>Status of office to be shifted</td>
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<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.</td>
<td>National Seeds Corporation Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>2.</td>
<td>State Farms Corporation of India Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>3.</td>
<td>Central Warehousing Corporation.</td>
<td>Regional Office &amp; Construction Cell</td>
</tr>
<tr>
<td>4.</td>
<td>Food Corporation of India.</td>
<td>Central Training Institute &amp; Zonal Office (North)</td>
</tr>
<tr>
<td>5.</td>
<td>Hospital Services Consultancy Corporation of India Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>6.</td>
<td>Helicopter Corporation of India.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>7.</td>
<td>Airlines Allied Services Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>8.</td>
<td>National Airport Authority of India.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>9.</td>
<td>National Small Industries Corp. Ltd.</td>
<td>Regional Office</td>
</tr>
<tr>
<td>10.</td>
<td>National Fertiliser Corporation Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>11.</td>
<td>Fertiliser Corporation of India.</td>
<td>Headquarters</td>
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<tr>
<td>12.</td>
<td>Hindustan Fertiliser Corporation Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>13.</td>
<td>Pyrites, Phosphates and Chemicals Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>14.</td>
<td>Paradeep Phosphates Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>15.</td>
<td>Indo-Burma Petroleum Co. Ltd. (Chemicals Division).</td>
<td>Headquarters</td>
</tr>
<tr>
<td>17.</td>
<td>National Textiles Corporation (Delhi Punjab and Rajasthan) Ltd.</td>
<td>Regional Unit</td>
</tr>
<tr>
<td>18.</td>
<td>Minerals &amp; Metals Trading Corp. of India Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>19.</td>
<td>State Trading Corporation of India Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>20.</td>
<td>National Thermal Power Corp. Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>21.</td>
<td>Rural Electrification Corp. Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>22.</td>
<td>National Project Construction Corpn. Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>23.</td>
<td>Bharat Heavy Electricals Ltd.</td>
<td>Headquarters</td>
</tr>
<tr>
<td>24.</td>
<td>Cement Corporation of India.</td>
<td>Headquarters</td>
</tr>
</tbody>
</table>
LIST OF 13 GOVERNMENT OFFICES IDENTIFIED FOR SHIFTING FROM NCT, DELHI.

1. Coastal Guard Head Quarters
2. Research & Devpt. Centre, Postal Department
3. Dte. of Inspection (N1C), Dept. of Supplies
4. Publication, Films, Song & Drama Divisions and
5. Dte. of Field Publicity, I & B Ministry National Crime Records Bureau, Min. HA.
6. Dept. of Light Houses & Light Ships
7. Central Instt. of R & Trg. in Emp. Service
9. Department of Publication
10. C.P.W.D. Training Institute
11. National Acad. of Customs, Excise & Narcotics
12. All India Soil & Landuse, Survey, Min. of Agri.
13. Board of Indl. & Financial Reconstruction
 TERMS OF REFERENCE FOR THE FORMULATION OF PROJECT REPORTS FOR AN INTEGRATED PHYSICAL, FINANCIAL AND MANAGEMENT PLAN FOR BHIVADI-DHARUHERA-REWARI COMPLEX KEEPING IN VIEW THE NEW STRATEGY FOR ACCELERATED DEVELOPMENT OF NCR THROUGH THE GROWTH OF NEW TOWNSHIPS.

1. Introduction:

The National Capital Region Planning Board proposes to undertake the preparation of Project Report for an integrated physical, financial and management plan for Bhivadi-Dharuhera-Rewari Complex keeping in view the new strategy for accelerated development of NCR through the growth of new townships as indicated in the letter to which this TOR is an enclosure by engaging the services of a professional Group of Consultants. The text of the Study, its objectives, scope and terms of reference, are given below, to help the Consultants to evolve an appropriate methodology for preparation of the project report. For any further information, the office of the National Capital Region Planning Board or its Planning Cell at Alwar/ Gurgaon may be contacted.

2. National Capital Region:

The National Capital Region (NCR) extends over an area of 30,242 sq. km. comprising National Capital Territory of Delhi; Faridabad, Gurgaon, Rohtak, Sonipat and Panipat District of Haryana; six tehsils of Alwar district, namely Alwar, Ramgarh, Behror, Mandawar, Kishangarh and Tijara of Rajasthan and, three
districts, namely, Meerut, Ghaziabad and Bulandshahr of Uttar Pradesh.

3. Regional Plan-2001 for NCR:

Regional Plan-2001 for the National Capital Region approved by the Board and notified with effect from 23rd January, 1989 has twin objectives of achieving a manageable Delhi and balanced and harmonised development of the entire Region. The Plan provides policy framework for achieving the above objectives.

Recognising the different level of development and growth trends observed in the Region, the Plan has suggested application of differential policies for identified zones. The three special zones along with the policy approach and population re-distribution targets for the year-2001 AD are as under:

i) National Capital Territory (formerly Union Territory of Delhi), for decelerated growth, to contain its population at the level of 112.0 lakh.

ii) Delhi Metropolitan Area (DMA) excluding National Capital Territory, for moderate growth, to accommodate 38.0 lakh population.

iii) NCR excluding DMA for accelerated growth, to accommodate 175.0 lakh population.

For relieving the pressure on Delhi and containing its growth of population, the Regional Plan envisages development of a four-tier hierarchical system of
settlements consisting of regional centres, sub-regional centres, service centres and basic villages. The Regional Plan also recommends induced development of 8 selected priority town/town complexes namely, Meerut, Narpur, Bulandshahr-Khurja, Palwal, Panipat, Rohtak, Rewari-Dharuhera-Bhiwadi and Alwar through creation of employment generating activities in secondary and tertiary sectors to act as magnets for attracting both the economic activities now centralised in NCT and deflecting Delhi-bound potential migrants.

The sub-regional centres, service centres and basic villages for Uttar Pradesh Sub-regional have already been identified in the approved up Sub-regional Plan, whereas the same are in final process of identification by the State Governments of Haryana and Rajasthan as per their respective draft Sub-regional Plans. Out of the 6 identified DMA towns 3 i.e. Ghaziabad, NOIDA and Faridabad-Ballabgharh, have been experiencing rapid growth during the last few decades while, in the remaining 3 viz Gurgaon, Kundli and Bahadurgarh, growth has ranged from slow (Gurgaon) to virtually nil (Kundli). As Gurgaon has already a highly developed urban infrastructure to facilitate rapid growth in the current decade, the present strategy therefore, is to take up only Bahadurgarh and Kundli for accelerated development on the same lines as the 8 priority towns cited above.
4. The New Strategy for the Development of National Capital Region:

The Regional Plan-2001 envisages deflection of a 20 lakh population from National Capital Territory of Delhi during 1990-2001. Accordingly, deflection of a proportion a population of 10 lakhs need to be provided for in the 8th Five Year Plan itself i.e. 1992-97. The deflected population is planned to be accommodated mainly in the 8 priority towns/complexes as well as the two DMA towns of Kundli and Bahadurgarh through a process of induced development of self-contained integrated townships in the vicinity of the existing towns. The detailed strategy to achieve these objectives is as follows:

i) Developing new townships alongside the identified 'priority'/DMA towns and complexes in accordance with specific Master Plans, each providing for a total population growth assigned in accordance with the overall population profile of NCR envisaged for the year 2001. The State Governments and their implementing agencies would be mainly responsible for development of these townships including the basic services/infrastructure thereof.

ii) The townships to be so developed should be created around core economic activities such
as large/medium industries, large commercial complexes like ICD and wholesale market yards and office complexes to be relocated outside Delhi as part of the overall dispersal strategy, or else as new green-field projects of the State/Central Governments.

iii) Higher order social facilities of regional or national importance such as educational/medical/engineering institutions, universities, hospitals, sports complexes, tourist centres and industrial estates may also be among the specific activities to be promoted in these townships.

iv) Financing Mechanisms:

Setting up of NCR Development Finance Corporation (NCRDFC):

In order to trigger the large-scale development in NCR within the limited available time-frame of 9 years (1992-2001) as per the basic strategies outlined above, it is vital that the central budgetary support of Rs. 200 crores in the Eighth Five Year Plan should be optimally utilised as 'seed money' to raise additional resources through a judicious mix of public and private sector investments. Accordingly there is need to set up a separate financial institution for the National Capital Region
at the apex which would be in a position to raise additional resources through market borrowings and loans from various financial institutions such as HUDCO, UTI, NHB, LIC & GIC. In this context, it is proposed that the NCR Planning Board will invest the aforesaid amount of Rs. 200 crores together with Rs. 50 crores of net anticipated internal accruals, as and when realised, to float a captive financial institution called National Capital Region Development Finance Corporation Ltd. (NCRDFC) under the Companies Act, 1956. This company, which may also invite equity support from the participating States, Delhi UT and their agencies as well as the aforesaid financial institutions, will be the nodal financing institution for the large-scale town development projects in the NCR investment programme for the State Sector VIII Plan period and beyond.

As regards the mode of financing the said large-scale development projects at the sub-regional level through the NCRDFC, the following options are available:

1. Joint Stock Companies:
   (a) Concept:
   The NCR Planning Board, through NCRDFC, can
promote joint stock limited companies under the Companies Act, 1956 for development of new towns as per overall strategy cited above. Equity participation in the joint stock companies could be to the extent of 51% by the participating States, the Board and the financial institutions taken together and the remaining 49% may be left for private sector investment. A certain portion of the share capital should be reserved for subscription by those whose lands are acquired for development of such projects.

II) Creation of 'Revolving Fund' by the Participating States

a) Concept

Each participating State Government may create a 'Revolving Fund' with the seed money provided by the Board (through its subsidiary, NCRDFC) and the respective States, on a matching basis, for developing the new townships. All the surplus revenues generated by these projects should be credited into this fund for the purpose of further development. The revolving fund is to be operated by the respective Sub-regional Development Authorities so that the surpluses could also be ploughed back into the
development of other Priority/Sub-regions/Service Centres within the same sub-region, if need be.

3) Creation of 'Development Fund'
   a) Concept

   The Board has already introduced the system of creation of a separate 'Development Fund' for each countermagnet town in which Board and the concerned State Government contribute equally, the Board's share being in the shape of an interest-bearing loan. This pattern of funding could be extended to the development of Priority Towns and Sub-regional Centres also with the money being channelised through NCRDFC.

5. Objectives:

   i) The objective is to prepare a detailed project report for an integrated physical, financial and management plan for Bhiwadi-Dharuhera-Rewari Complex keeping in view the new strategy for accelerated development of NCR through the growth of new townships.

   ii) The new integrated township for the complex, to be relocated alongside the existing towns of Rewari, Dharuhera & Bhiwadi should be complete with respect to the requisite urban infrastructure and revolve around identified
core economic activities, this composite new township to be designed to provide, in turn, a sufficiently strong economic base to meet the target laid down in Regional Plan-2001 for accommodating the assigned population for the entire complex by 2001 AD.

iii) This project should also aim at attracting the industrial/trading and service activities now centralised in Delhi and deflecting the Delhi bound potential immigrants for which purposes the level of infrastructure and facilities to be provided should be on par with the corresponding norms and standards now obtaining in Delhi.

iv) The project report will also spell out the planning, financial, administrative and fiscal measures required to be taken to generate the requisite level of employment and revenue and attain the rate of growth required for the complex as a whole to achieve the prescribed population target for 2001 A.D..

v) The Project Report should bear in mind that while Rewari and Dharuhera fall in Haryana, Bhilwadi as part of Rajasthan. The said town complex and the composite new township to be developed for the same thus straddle two separate sub-regions of NCR which are under
the control of States of Haryana, Rajasthan respectively.

6. Scope and contents of the Study:

(i) The project report will focus on the preparation of a detailed physical (i.e., infrastructure), financial and management plan for the development of the said townships and the complex as a whole for its—growth in accordance with the provisions of the Regional Plan-2001, the aforesaid strategy formulated by the Board and the Master land-use plan prepared in accordance with the said strategy. In this complex both the existing Bhiwadi and Dharuhera settlements could themselves be classified as single new townships and their respective draft Master Plans for development as per the populations assigned in Regional Plan - 2001 already been prepared by the respective State Governments and are under finalisation. In addition, an integrated development plan for Bhiwadi-Dharuhera Sub-complex has also been prepared with the assistance of the NCR Planning Board and the same is ready for final clearance and notification. In case of Rewari, which is an older
settlement a revised Master Plan has yet to be prepared to accommodate the additional population i.e. assigned population by 2001 AD minus the census population of 1991. There is, therefore, a prior need for identification of the proposed integrated new township area of the complex which is to be located within the town's urbanisable zone (as prescribed in Regional Plan - 2001) on the basis of which a revised Master Plan will have to be prepared for Rewari town itself.

The integration of Bhiwadi-Dharuhera with Rewari is considered imperative for the following special reasons.

i) On the South-West corridor between Gurgaon and Jaipur Rewari being the biggest urban centre can provide the higher-level social amenities in the way of education, health care and housing which the other 2 nodal centres of Dharuhera and Bhiwadi lack.

ii) Rewari, being the nearest railway head, would also provide Dharuhera and Bhiwadi with the much needed access to railway facilities till such time the
proposed railway link from Rewari to Bhiwadi materialises.

iii) Rewari, which is the biggest metre guage junction in the North India falls on the new Delhi Avoiding Line connecting Mathura-Alwar-Rewari-Hissar. In view of its strategic position it can be planned as an ideal alternative distributive centre to Delhi and facilities like ICD etc. can also be located here. In this way, Rewari could be developed as marketing and distributive centre not only for the entire complex but also for the various sub-regional centres situated in neighbouring areas of Haryana and Rajasthan.

The Study shall also cover the following aspects:

a) Identification of those specific economic activities which could be either dispersed from Delhi or developed as fresh green-fields projects, as the main engine of income generation in each of the new townships and complex as a whole and providing the gainful employment needed to support and sustain it.

b) Determining and detailing:
i) the land base and physical as well as social infrastructure required, for each of the new townships and the complex as a whole and its identified core economic activity/activities.

ii) the type, magnitude and quantum of employment opportunities involved.

iii) the level of overall public/private investment, including seed money and various concrete instruments & mechanisms to be provided to ensure the same, for the development of the proposed composite new township for the complex as well as its core economic base.

iv) the various sectoral land uses required to meet the complete urban needs of the complex as a whole for the periods ending 1997 and 2001, respectively, within the broad framework of the overall Master Plan of each town and for the population assigned in Regional Plan - 2001 for the year 2001.

v) The present status of the land uses with regard to their acquisition/ownership/development for projects already sanctioned or approved within the new township areas and the complex as a whole.
vi) The annual phasing of the implementation plan so as to ensure both the optimum use of all available resources and the overall viability of the project during both VIII and IX Plan periods.

vii) The annual land acquisition programme over the 8th and 9th Plan periods in terms of both physical area and financial requirements for the new township as a whole as well as each of the 3 nodes corresponding to the existing towns of Rewari, Dharuhera & Bhiwadi respectively.

viii) Estimates for providing the requisite urban infrastructure like roads, sewerage, water supply, storm water, drainage, solid waste management and conservancy; as well as social and economic infrastructure pertaining to education, health policy, shopping etc., for new township as a whole and its 3 constituent nodes, financing, execution and management.

ix) Phasing of expenditures and investments over both Eighth and Ninth Five Year Plan periods by providing for recovery and recycling of finances through appropriate planning/designing/pricing policies, allotment procedures and plot development controls.
x) The type of institutional arrangements required in order to ensure timely and proper implementation of the detailed project plan.

7. General:

i) The study area would be the urbanisable envelope of the towns of Bhiwadi, Dharuhera of and Rewari and the area demarcated for the complex in Regional Plan - 2001.

ii) The study is to be completed within a period of 6 months.

iii) All data and support material required for the Project Report should be compiled and analysed by the Consultant from the reliable secondary sources and supplemented through primary surveys where necessary.

iv) The details about the methodology and data outputs in respect of project formulation should be indicated in the bid offer by the Consultant.

v) The Consultant will be required to work in close coordination with the NCR Planning Cells of Haryana & Rajasthan and also submit fortnightly progress reports indicating the progress of the study and all related surveys.

vi) All data collected by the Consultant for the study shall be made available to the NCR Planning Board/Cell in proper organised
format and these data shall remain the
property of the Board.

vii) The data collected and the research results
of this study shall not be divulged to other
agencies without the explicit approval of the
NCR Planning Board.

viii) The Inception Report should indicate the
number of drawings and diagrams proposed to be
included therein.

ix) The Consultant is required to submit 25 sets
of all the reports, plans and other documents
at each stage of this work.

x) On award of the Consultancy, the Consultant
is required to submit an Inception Report
within one week, detailing all the data,
surveys and studies to be conducted by them
and also indicate the sources of obtaining
the data and time required for doing so. The
bid document should contain a time schedule
of the study as follows:

- Inception Report 4 weeks
- Data collection, Analysis and Summary findings 6 weeks
- Interim report including tentative recommendations 5 weeks
- Draft Report 5 weeks
- Final Report 4 weeks
xi) The Consultant shall provide an irrevocable Bank Guarantee for 10% of the value of the contract valid for the entire period of consultancy payable by the Banker. The guarantee will be operated upon in the event of non-performance of the contract in part or whole.

8. Payment Schedule:

The schedule for release of payment for the study shall be as follows:

i) On receipt and approval of the Inspection Report. - 15%

ii) On completion of surveys and receipt of analysis of summary of findings. - 15%

iii) On approval of Interim Report - 30%

iv) On receipt and approval of Draft Final Report. - 20%

v) On receipt of Final Report - 20%

Agreement:

On award of the consultancy, the Consultancy will be required to enter into an agreement with the Board for the successful completion of the study as per the Terms and Reference.

**********
MINUTES OF THE 30TH MEETING OF THE PLANNING COMMITTEE OF NATIONAL CAPITAL REGION PLANNING BOARD HELD AT 3.00 P.M. ON 14TH SEPTEMBER, 1993 IN THE OFFICE OF THE NATIONAL CAPITAL REGION PLANNING BOARD, JANPATH BHAWAN, NEW DELHI.

List of participants is annexed.


It was suggested by Shri Bhaskar Chatterjee, Special Secretary, Town & Country Planning Department, Haryana that proceedings relating to Agenda Item No. 7 of the 29th meeting of Planning Committee held on 20.3.1993 had not been correctly recorded in so far as it related to Haryana Govt's stand on the proposed constitution and modalities of the NCR Development Finance Corporation. According to him, Shri B.D Gulati, who was representing Haryana Govt. at the said meeting, had specifically mentioned that the draft memorandum of Association was still under consideration of the Haryana Government. Subject to these observations the minutes of the 29th meeting of the Planning Committee held on 20.3.1993 were confirmed.


(i) Sub-regional Plans:

(a) Sub-regional Plan of Rajasthan:

This item was discussed under Agenda Item No. 3.

(b) Sub-regional Plan of Haryana:

Chairman, Planning Committee explained that as per the procedure, in force, once the draft Sub-regional Plan had been duly revised by the State Government in the light of the observations of the Planning Committee, the amended draft would need to be cleared by the Planning Committee before being placed before the Board for formal approval. He indicated that the time stipulated by the Planning Committee for completion of this process had already been exceeded in the case of the Haryana Sub-regional Plan. Sh. Bhaskar
Chatterjee, intimated that apart from certain recommendations of the Planning Committee viz. on the need for (a) providing for a green belt of 2 km. width all along the Delhi – Haryana border; and (b) including a comprehensive land-use plan for the Haryana Sub-region, which were not susceptible to implementation by Govt. of Haryana for various important reasons, all other relevant observations of the 28th meeting of the Planning Committee held on 8.1.1993 had already been accepted and duly incorporated in the revised draft plan. He indicated that the Haryana Government would shortly be sending the said revised draft plan to the Board along with a covering note explaining the points of difference on the 2 aforesaid issues for discussion in the next meeting of the Planning Committee.

(c) Sub-regional Plan for NCR – Delhi.

Chairman, Planning Committee pointed out that as in the case of Sub-regional Plan for U.P., Haryana & Rajasthan, the draft Sub-regional Plan proposed by the NCR Planning Cell of DDA for NCT – Delhi would have to be processed by Govt. of NCT – Delhi in the first instance, before being scrutinised by NCR Planning Board and placed before the Technical Sub-group/Planning Committee for consideration. Keeping this in view, he requested JS(H), Shri A.P. Sinha, to expedite formal clearance by MOUD, to the creation and filling up of posts sanctioned for NCR Coordination Cell in Govt. of NCT – Delhi. While explaining that MOUD had already conveyed its acceptance in principle to the said proposal Shri Sinha agreed to confirm the same under a D.O. letter addressed to Chief Secretary, GMCT/Member Secretary, NCR Planning Board at the earliest.

(ii) Finalisation of time-bound programme for preparation of integrated Master Plans for formulation of detailed phased project plans for new townships.

Shri Bhaskar Chatterjee reported that the requisite ODPPs for the Haryana Sub-region were still in various stages of preparation resulting in an overrun in respect of the respective time schedules laid down in the 29th meeting of the Planning Committee held on 20.3.1993. He, however, assured the Chairman, Planning Committee that the Government of Haryana would be furnishing a revised schedule for finalisation of the requisite interim land use plans/ ODPPs as well as the new townships development project reports based thereon, within a week.
2. Shri H.K. Sharma, Chief Town & Country Planning Department, Uttar Pradesh informed the Chairman, Planning Committee that the requisite ODPs for the Bulandshahr - Khurja Complexes had been prepared and would be sent to the NCR Planning Board very shortly. As far as Hapur was concerned, detailed physical surveys were being carried out on the basis of which they would be finalising the ODP for the new township. Chairman, Planning Committee, requested Shri Sharma to adhere to the Planning Committee’s time-schedule for preparation of project reports in case of Meerut as well as Khurja - Bulandshahr Complex while expediting the ODP for Hapur.

3. Shri H.K. Sharma also undertook to send the promised note justifying for inclusion of Chola to NCR Planning Board in the proposed ODP for Khurja - Bulandshahr Complex to NCR Planning Board, within a week.

4. In the case of Rajasthan Sub-region, it was observed that the joint Master Plan for Bhiwadi and Dharuhera which had already been prepared and sent to the NCR Planning Board, was being notified shortly by the Government of Rajasthan. Further, the complete documentation on the approved land use-cum-development plan for Bhiwadi would be finalised and sent to the NCR Planning Board within the next 15 days.


The progress in respect of the various studies being undertaken as part of the on-going mid-term review of the Regional Plan – 2001 as well as preparation of the project reports for the new townships was reviewed. The representative of Central Electricity Authority indicated that the demand projections for the NCR were under review and that the projected requirements of the various Sub-regions for VIII & IX Plan periods would shortly be intimated to NCR Planning Board.

2. While discussing the setting up of the in-house Geographical Information System (GIS), it was observed by the Chairman, Planning Committee that as the process of digitisation of the updated base-maps would soon be commencing, a concrete effort should be made to collect all relevant non-spatial data so that the same could be simultaneously incorporated along with the former in the comprehensive data base under preparation for the GIS.
3. Regarding the proposed constitution and functions of the N.C.R.D.F.C., Chairman. Planning Committee mentioned that the matter had been tentatively discussed in the Project Sanctioning & Monitoring Group (PSMG) Meeting held in the forenoon. The salient features of the proposals placed before the PSMG in this behalf were also explained by him to the members of the Planning Committee.

4. On the suggestion of Shri A.P. Sinha, it was agreed that the progress of action taken in respect of all important decisions of the Planning Committee, over the last three years, be reviewed in the next meeting.

AGENDA ITEM NO. 3 : FINALISATION OF THE DRAFT SUB-REGIONAL PLAN FOR RAJASTHAN.

The draft Sub-regional Plan for Rajasthan Sub-region was discussed with reference to the observations of the 28th meeting of the Planning Committee held on 8.1.1993. It was observed that the revised report still included a provision relating to the direct link road between Bhiwadi & the National Capital City, which after due consideration was found to be inconsistent with the said views of the Planning Committee. It was accordingly agreed that NCR Planning Board would yet the revised draft in detail once again to verify that it conformed in all aspects to the relevant decisions of the Planning Committee, before placing it before the next Board meeting for formal approval.

AGENDA ITEM NO. 4 : SETTING UP OF A SEPARATE UNIVERSITY FOR NATIONAL CAPITAL REGION WITH OPTION FOR AFFILIATION REGIONAL COLLEGES OUTSIDE DELHI.

Chairman. Planning Committee briefly explained the genesis of the concept paper which was the outcome of a dialogue held by senior officers of Ministry of Human Resource Development, Government of NCT - Delhi and NCR Planning Board, on the one hand, and their counterparts in the Education Departments of participating States, on the other, with a view to enhancing the level of choice relating to the socio-economic infrastructure in NCR. Prof. S.K. Wasan, Registrar of Delhi University, then proceeded to highlight the various aspects of the concept as set forth in his paper. He explained that the idea was essentially to give the present and future NCR colleges located outside Delhi a clear-cut option to either affiliate themselves with the jurisdictional State University concerned or a separate Central University which could be established specially or
NCR. The representative of Haryana felt that it would be premature for him to make any comment on the paper at this stage. He stated that he would need to ascertain the views of Haryana’s Education Department before making any specific observations in the matter. Shri A.P. Sinha, Joint Secretary (H), MOUD while mentioning that the time given to the Committee to study the paper in depth was rather inadequate, expressed the view that a better option might be to strengthen the existing State Universities within NCR. Chairman pointed out that the concept of a Central University for NCR merely sought to extend the pattern of choice which already existed within the secondary school system, to the University level. Moreover, as there was no firm proposal either before the Central Govt. or NCR Planning Board as yet to set up such a Central University, the paper was intended mainly to help generate a consensus in the matter within the framework of the approved aims and objectives of the NCR Development Plan. Subject to these observations, the subject was deferred for further consideration at the next meeting.

AGENDA ITEM NO. 5 : UNIFIED TRANSPORT AUTHORITY FOR THE NATIONAL CAPITAL REGION - PROPOSED CONSTITUTION AND FUNCTIONS.

The Member Secretary explained the urgency for setting up a Unified Transport Authority for NCR on the pattern of NCRPB and subject to its overall control, in the present context. The relevant provisions of Regional Plan - 2001 and proceedings of the 16th Meeting of the Board were also referred to in this connection. Shri A.P. Sinha, at the outset, suggested one or two modifications to the proposal which were accepted by the Chairman. It was accordingly agreed that a fresh draft incorporating these changes would be circulated for more detailed discussion at the next meeting.

AGENDA ITEM NO. 6 : REPORT OF COMMITTEE CONSTITUTED UNDER THE CHAIRMANSHIP OF SHRI J.C. GAMBHIR, COMMISSIONER (P), DELHI DEVELOPMENT AUTHORITY, NEW DELHI TO SUGGEST A PACKAGE OF INCENTIVES AND THE MODALITIES FOR SPEEDY IMPLEMENTATION OF THE DECENTRALISATION PROCESS.

The salient features of the Report were presented by Shri J.C. Gambhir, commissioner (Planning), DDA and the Chairman of the Committee. Detailed consideration of the same was deferred so as to enable NCR Planning Board to examine the
Report in detail and place its specific proposal before the
committee.

AGENDA ITEM NO. 7: COMMISSIONING OF A DETAILED STUDY FOR
EXECUTION OF INTEGRATED TOWNSHIP PROJECT
FOR BHIMADI - DHARUHEA - REWARI COMPLEX.

Chairman, Planning Committee, explained the need as
well as the urgency for the NCR Planning Board to sponsor
the proposed study in addition to the 3 projects reports
under way for the new township at hapur, Panipat and Alwar
respectively. However, as desired by the representatives
from Haryana and Rajasthan, a decision in the matter was
defered to the next meeting.

Concluding:

Before the meeting concluded, it was agreed to hold the
next meeting within a month so as to enable the Planning
Committee to discuss all the deferred items in-depth and
take appropriate decision thereon as expeditiously as
possible. It was also agreed that every effort would be made
to circulate the agenda notes at least one week in advance
of each meeting of the Planning Committee so as to enable
each and every member to come fully briefed for discussion
and decision - making in future.

No.K-14011/9/93-NCRPB
NCR Planning Board,
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Date: 20th Oct., 1993

Copy for warded to Chairman and all members/Participants in
the Planning Committee Meeting.

(R.C. AGGARWAL)
Chief Regional Planner
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1) Sh. Cecil Norohna
   Member
   Secretary
   In Chair

2) Sh. A.P. Sinha
   Joint Secretary (HD),
   Ministry of Urban Development,
   Nirman Bhawan.
   Member

3) Sh. Bhaskar Chatterji,
   Special Secretary,
   Haryana, Town and Country
   Planning Department—own-chief Administrator.
   HUDA.
   Member

4) Sh. H.K. Sharma,
   Chief Town and Country Planner,
   Town & Country Planning Deptt.,
   Government of Uttar Pradesh,
   7, Bandaria Bagh, Lucknow - 226001
   Member

5) Sh. C.S. Mehta,
   Chief Town Planner,
   Town & Country Planning Deptt.,
   Government of Rajasthan,
   Jawaharlal Nehru Marg,
   Jaipur.
   Member

6) Sh. K.R. Bhagwan,
   Deputy Secretary (CM),
   Department of Power,
   Ministry of Energy,
   Shram Shakti Bhawan,
   New Delhi - 110001.
   Member

7) Sh. J.C. Gambhir,
   Commissioner (Pla.),
   Delhi Development Authority,
   Vikas Minar, New Delhi.
   Invitee

8) Sh. B.D. Gulati,
   Chief Coordinator Planner,
   NCR Planning Cell,
   Govt. of Haryana,
   Kothi No. 1095, Sector - 4,
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   Invitee
9) Sh. R.C. Aggarwal,
Chief Regional Planner,
NOR Planning Board.

10) Sh. K.T. Gurumukhi,
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11) Sh. B.L. Mehra,
Chief Town Planner,
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12) Sh. U.C. Das Gupta,
O.S.D., Housing Deptt.,
Govt. of U.P., Lucknow.

13) Sh. N.S. Jain,
Suprtn., Engineer (R) (Plg)
Ministry of Surface Transport,
Transport Bhawan, New Delhi.

14) Sh. S.K. Bansal,
Assistant Secretary,
Ministry of Power.
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15) Ms. B. Jaswani,
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16) Prof. S.K. Wasan,
Registrar, Delhi University.
Delhi.

17) Ms. M. Bawa,
Dy. Director,
Delhi Development Authority.
Delhi.
18) Sh. V.K. Vidvarthi,  
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Meerut.  

19) Sh. C.L. Bali,  
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Senior Planning Engineer  

2. Sh. R.P. Rastogi  
Regional Planner  

3. Sh. J.N. Barman  
Associate Planner  

4. Sh. V.K. Thakore  
Senior Research Officer  

5. Sh. K.L. Sachhar  
Finance & Accounts Officer  

6. Sh. N.K. Anja  
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7. Sh. M. M. A. Baig  
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8. Sh. P. Simapalan  
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9. Sh. Manmohan Singh  
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