ANNEXURE

ANNEXURE – 1/I

1. CONSTITUTION OF THE BOARD

The National Capital Region Planning Board was constituted on the 28th March 1985 under the provisions of National Capital Region Planning Board Act, 1985. The Board under the chairmanship of the Union Minister of Urban Development has 21 members of the re-constituted Board and the 10 co-opted members. The composition is as under:

1. Union Minister of Urban Development	Chairman
2. Union Minister of Power, Government of India	Member
3. Union Minister of Communications and Information Technology, Government of India	Member
4. Union Minister of Railways, Government of India	Member
5. Union Minister of Shipping, Road Transport and Highways, Government of India	Member
6. Chief Minister, Government of Haryana	Member
7. Chief Minister, Government of Rajasthan	Member
8. Chief Minister, Government of Uttar Pradesh	Member
9. Lieutenant Governor, National Capital Territory of Delhi	Member
10. Chief Minister, Government of National Capital Territory of Delhi	Member
11. Minister of State for Urban Development	Member
12. Minister of Town and Country Planning, Government of Haryana	Member
13. Minister of Urban Development, Government of Rajasthan	Member
14. Minister, Urban Development, Government of Uttar Pradesh	Member
15. Chief Secretary, Government of National Capital Territory of Delhi	Member
16. Chief Secretary, Government of Haryana	Member
17. Chief Secretary, Government of Rajasthan	Member
18. Secretary, Ministry of Urban Development, Government of India	Member
19. Secretary, Housing and Urban Development, Government of Uttar Pradesh	Member
20. Chief Planner, Town and Country Planning Organization, Government of India	Member
21. Member Secretary, National Capital Region Planning Board	Member Secretary

Co-opted Members

1. Chief Minister, Government of Madhya Pradesh
2. Chairman, Railway Board, Government of India
3. Principal Advisor (HUD), Planning Commission, Government of India
4. Secretary, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India
5. Secretary, Ministry of Shipping, Road Transport and Highways, Government of India
6. Secretary, Department of Expenditure, Ministry of Finance, Government of India
7. Secretary, Department of Power, Government of India
8. Secretary, Department of Urban Development and Housing, Government of Punjab
9. Secretary, Department of Urban Development and Housing, Government of Madhya Pradesh
10. Vice-chairman, Delhi Development Authority

2. FUNCTIONS OF THE NCR PLANNING BOARD

Under Section 7 of the NCR Planning Board Act, 1985, the functions of the Board are:

(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 coordinate 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 or Sub-regions and phasing of development of 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.

The Board is further empowered to coordinate and monitor the implementation of the Regional Plan and to evolve harmonised policies for control of land uses and development of infrastructure in the National Capital Region so as to avoid any haphazard development of the region. The statutory National Capital Region Planning Board is a coordinating and monitoring body and the responsibility of executing the schemes in the concerned States remains with the participating States or their authorized implementing agencies. The Board is also empowered to select and finance the development of any urban area outside the National Capital Region under the counter-magnet concept in order to achieve the objectives of the Regional Plan.

The Board, under the provisions of the Section 4 of NCR Planning Board Act, 1985, constituted a committee called the Planning committee for assisting the Board in the discharge of its functions. The composition is as under:

Member Secretary	NCR Planning Board	**Chairman**
Joint Secretary	Ministry of Urban Development dealing with Housing and Urban Development	**Members**
Secretary	In-charge of Urban Development, Haryana	
	In-charge of Urban Development, Rajasthan	
	In-charge of Urban Development Uttar Pradesh	
	In-charge of Urban Development NCT-Delhi	
Vice-chairman	Delhi Development Authority	
Chief Planner	Town and Country Planning Organization	
Director	Town Planning Department, Haryana	
Chief Town Planner	Government of Rajasthan	
Chief Town Planner	Government of Uttar Pradesh	
Representative	from Ministries of Shipping, Road Transport and Highways,	**Co-opted Members**
Representative each	Communications and Information Technology, Railways, Department of Power, Department of Environment	
Representative	Planning Commission	
Chairman-cum-Managing Director	HUDCO	
Chief Regional Planner	NCR Planning Board	

ANNEXURE – 1/II

1. STUDY GROUPS

Following are the study groups constituted for preparation of Regional Plan-2021:

a) NCR Policy zones, demographic profile and settlement pattern

b) Regional land use and rural development

c) Physical infrastructure including transport and communications

d) Utility and service infrastructure including power, water, sewerage, solid waste, drainage, irrigation etc.

e) Social infrastructure including education, health, shelter, recreation, law and order etc.

f) Environment including tourism, heritage, pollution, disaster management etc.

g) Institutional Framework

h) Economic and Fiscal Policy including resource mobilisation, funding etc.

2. MEMBERS OF THE STUDY GROUPS AND SUB-GROUPS

Study Group I: NCR Policy zones, demographic profile and settlement pattern
Members

1. Shri D.S. Meshram (Chairman)
   Former Chief Planner, TCPO,
   107, Dhruva Apartments, I.P.Estate,
   New Delhi

2. Dr. R.B. Singh,
   Department of Geography,
   Delhi School of Economics,
   Delhi University,
   North Campus, Delhi

3. Dr. S .K. Kulshrestha,
   Hony Director CRDT (ITPI),
   Institute of Town Planners, India
   4-A, Ring Road, I.P. Estate,
   New Delhi

4. Prof. Krishna Gopal,
   Deptt of Geography,
   Punjab University, Chandigarh

5. Deputy Registrar General,
   Census of India, Man Singh Road,
   New Delhi

6. Chief Coordinator Planner (NCR),
   Town and Country Planning Department,
   Government of Haryana,
   Sector 18A, Chandigharh,
   Haryana

7. Chief Town Planner (NCR),
   Town and Country Planning Department,
   Government of Rajasthan,
   Nagar Niyojan Bhavan,
   Pt. Nehru Marg, Jaipur, Rajasthan

8. Chief Coordinator Planner (NCR),
   Town and Country Planning Department,
   Nagar Nigam Bhawan, llnd Floor,
   Navyug Market, Ghaziabad

9. Shri A.K. Jain,
   Addl. Commissioner (Planning),
   Delhi Development Authority,
   Vikas Minar, I.P. Estate,
   New Delhi.

10. Late Shri K.A. Reddy, (Convener)
    Joint Director, NCRPB
    (Up to October 2001)

11. Shri J. N. Barman, (Convener)
    Joint Director, NCRPB

12. Shri Manmohan Singh, (Co-convener)
    Deputy Director, NCRPB
    (Up to May 2001)

13. Ms. Anjali Pancholy, (Co-convener)
    Assistant Director, NCRPB

Co-opted Members

1. Shri M. L. Chotani,
   Associate Town and Country Planner,
   Town and Country Planning
   Organisation, Vikas Bhawan, E-Block,
   I.P. Estate, New Delhi

2. Dr. R. P. Singh,
   Assistant Registrar General,
   Census of India,
   West Block-1, R.K. Puram, New Delhi

3. Ms. M.Z.Bawa,
   Joint Director (Planning),
   Delhi Development Authority,
   D-6, Vasant Kunj, New Delhi

4. Shri Abdul Qaiyum,
   Former Town and Country Planner,
   TCPO, AO-20, Kalakunj,
   Shalimar Bagh, New Delhi

5. Shri B. K. Jain,
   Director (Planning), DDA
   D-6 Vasant Kunj, New Delhi

6. Shri Kshirsagar,
   Town and Country Planner,
   Town and Country Planning
   Organisation, Vikas Bhawan, E-Block,
   I.P. Estate, New Delhi

Sub-group 1: NCR Policy zones

Sub-group 2: Demographic profile

Sub-group 3: NCR settlement pattern

Study Group II: Regional land use and rural development
Members

1. Prof. H.B. Singh, (Chairman)
   School of Planning and Architecture,
   New Delhi
2. Prof. Padma Vasudevan,
   Indian Institute of Technology,
   New Delhi
3. Dr. V. Raghavswamy,
   Head-Landuse, NRSA,
   Government of India, Hyderabad
4. Prof. (Ms.) Atiya Habib,
   Jawahar Lal Nehru University,
   New Delhi
5. Prof. Kavas Kapadia,
   School of Planning and Architecture,
   New Delhi
6. Shri K.T. Gurmukhi,
   Chief Planner, TCPO, New Delhi
7. Shri U. K. Srivastava,
   Chief Town Planner
   NCR Planning Cell, Rajasthan
8. Shri S. K. Zaman,
   Chief Coordinator Planner,
   NCR Planning Cell, UP
9. Shri R. C. Aggarwal,
   Chief Coordinator Planner,
   NCR Planning and Monitoring Cell,
   Haryana
10. Shri Chandra Bhallabh,
    Additional Commissioner,
    Delhi Development Authority, New Delhi
11. Shri Chandu Bhutia,
    Associate Town and Country Planner,
    NCR Planning Cell, Government of NCT-Delhi
12. Shri J. N. Barman, (Convenor)
    Joint Director, NCRPB
13. Shri S. Surendra, (Co-convenor)
    Deputy Director, NCRPB

Co-opted Members

1. Prof. Shovan Saha,
   School of Planning and Architecture,
   New Delhi
2. Shri S.C. Gupta,
   School of Planning and Architecture,
   New Delhi.
3. Dr. A. Panneerselvam,
   School of Planning and Architecture,
   New Delhi
4. Prof. S. Suneja,
   School of Planning and Architecture,
   New Delhi,
5. Prof. Mahavir,
   School of Planning and Architecture,
   New Delhi,
6. Shri Manu Bhatnagar,
   Advisor-NHD, INTACH, New Delhi

Sub-group 1: Regional land use

Sub-group 2: Rural development

Study Group III: Physical infrastructure including transport and communications
Members

1. Dr. P.K. Sikdar, (Chairman)
   Director, Central Road Research Institute,
   Mathura Road, New Delhi
2. Shri P.S. Rana,
   Director, Corporate Planning, HUDCO,
   India Habitat Centre, Lodhi Road, New Delhi
3. Prof. A. K. Sharma,
   Head, Department of Transport Planning
   School of Planning and Architecture
   4, Block-B, I.P. Estate, New Delhi
4. Shri C.C. Bhattacharya,
   Chief Engineer, (Traffic and Transportation),
   Ministry of Surface Transport,
   Transport Bhawan, New Delhi
5. Shri Anurag Mishra, CTPM,
   Northern Railway, Railway Board,
   Rail Bhawan, New Delhi

6. Shri S.K. Jain,
Executive Director (Metro Project),
Railway Board, Rail Bhawan,
New Delhi

7. Ms. Geeta Banerjee,
Director,
Telecom (Long Term Planning),
Department of Telecommunications,
Sanchar Bhavan, New Delhi

8. Shri A.K. Bhargava,
Executive Director (Technical),
TCIL, TCIL Bhawan, G.K.1-48, Delhi

9. Shri Vijay Risbud,
Commissioner (Planning),
Delhi Development Authority,
Vikas Minar, I. P. Estate, New Delhi

10. Shri I.M. Singh,
Engineer-in-Chief, PWD,
Government of NCT Delhi,
Kasturba Gandhi Marg, New Delhi

11. Shri G. Sharan,
Secretary (General),
Indian Road Congress,
Jamnagar House, Shahjahan Road,
New Delhi

12. Shri U.K. Srivastava,
Chief Town Planner (NCR),
Town and Country Planning Department,
Government of Rajasthan,
Nagar Niyojan Bhawan,
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13. Shri R.C. Aggarwal,
Chief Coordinator Planner (NCR),
C/O Chief Administrator,
HUDA Office, SCO, Sector – 6,
Panchkula, Haryana

14. Shri S.K. Zaman,
Chief Coordinator Planner (NCR),
Town and Country Planning Department,
IInd Floor, Nagar Nigam Bhawan,
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15. Associate Town Planner,
NCR Planning and Monitoring Cell,
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B-Block, Vikas Bhawan,
I.P.Estate, New Delhi

16. Dr. N.B. Johri, (Convenor)
Joint Director, NCRPB

17. Shri Utpal Deka, (Co-convenor)
Assistant Director, NCRPB
(Up to June 2001)

18. Shri Dinesh Arora, (Co-convenor)
Assistant Director, NCRPB

Study Group IV: Utility and service infrastructure including power, water, sewerage, solid wastes, drainage, irrigation etc.
Members

1. Shri O.P.Chadha, (Chairman)
Former Chief Engineer, PHED-Haryana,
315, Sector-15, Faridabad, Haryana

2. Shri Rama Prashad,
Advisor, CPHEEO,
Ministry of Urban Development,
Nirman Bhawan, New Delhi

3. Dr. S.B. Singh,
Director, Central Ground Water Board,
Jamnagar House, New Delhi

4. Shri S.N. Kataria,
Director (UT Division),
Central Water Commission,
Sewa Bhawan, R.K. Puram, New Delhi

5. Shri A.K. Kaul,
Chief Engineer,
U.P.Jal Nigam, Jal Nigam Colony,
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6. Shri S.K. Kulshreshtha,
Chief Engineer,
Public Health Engineering Department,
Government of Rajasthan,
2, Civil Lines, Near Railway
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7. Shri V.K. Gupta,
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Public Health Engineering Department,
Haryana, Bay 13-18,
Sector 4, Panchkula, Haryana

8. Director, NRSA,
Balanagar, Hyderabad

9. Prof. Dr. S.D. Joaddar,
Head, Deptt. of Physical Planning,
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10. Dr. S. Mukhopadhyay,
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Central Electricity Authority,
Sewa Bhavan, Room No.712,
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R.K.Puram, New Delhi

11. Shri A.K. Malik,
Director, Central Electricity Authority,
Sewa Bhavan, North Wing,
West Block, R.K. Puram,
New Delhi

12. Shri G.R. Sharma,
Chief Engineer,
DHBVN, Post Office,
Power House, Shakurbasti, Delhi

13. Shri U.K. Srivastava,
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Town and Country Planning Department,
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15. Associate Town Planner,
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17. Shri S. K. Rohilla (Co-convenor)
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1. Shri J.S. Aluwalia,
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2. Shri S.K. Huria,
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344, Sector 16-A,
Faridabad, Haryana

3. Shri P.K. Jain (Retd.),
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E-3, Water Works Flats,
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4. Ms. Usha Raghupathy,
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5. Shri M.L. Kansal,
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C-109, Preet Vihar, Delhi

6. Shri A. K. Gupta
Chief Engineer,
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7. Shri R. K. Garg,
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8. Chief Engineer (Ganga),
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9. Dr. S. P. Bansal
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Delhi Development Authority,
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Sub group 1: Power **Sub-group 2: Water, sewerage and solid waste management** **Sub-group 3: Drainage and irrigation**

Study Group V: Social infrastructure including education, shelter, recreation, law and order etc.
Members

1. Shri Vinay D. Lall, (Chairman)
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8. Shri R.C. Aggarwal,
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Sector-6, Panchkula, Haryana

9. Shri S.K. Zaman,
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10. Shri Chandu Bhutia,
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Vikas Bhawan, I.P. Estate, New Delhi

11. Mr. V.K. Thakore, (Convenor)
Joint Director, NCRPB

12. Shri P. Sisupalan, (Co-convenor)
Deputy Director, NCRPB
(Up to February 2001)

13. Ms. Anjali Pancholy, (Co-convenor)
Assistant Director, NCRPB

Co-opted Members

1. Shri S.P.Jakhanwal,
Professor and Advisor,
Society for Development Studies,
Core VI A, India Habitat Centre,
New Delhi

2. Shri Chandra Ballabh,
Addl. Commissioner, MP- 2021 Unit,
DDA D-6, Vasant Kunj
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3. Dr. (Ms.) Stuti Lall,
Society for Development Studies,
Core VI A, India Habitat Centre,
New Delhi

4. Shri Tanmay Kumar,
Collector, Alwar, Rajasthan

5. Shri Manjeet Singh,
Additional Commissioner
(Slum and Wing), Slum and J.J. Wing
Vikas Kutir, I.P. Estate, New Delhi

6. Shri Sabir Ali
Planner,
Centre for Social Development,
Lodhi Road, New Delhi

7. Dr. Ashok Kumar
Assistant Professor, Physical Planning,
School of Planning and Architecture,
I.P. Estate, New Delhi

8. Shri Ajay Suri
Associate Professor
Society for Development Studies
India Habitat Centre, New Delhi

Sub-group 1: Review of Regional Plan-2001 **Sub-group 2: Informal settlements** **Sub-group 3: Housing**
Sub-group 4: Education, medical, security, PDS and other social infrastructure **Sub-group 5: Database, monitoring and evaluation system**

Study Group VI: Environment including tourism, heritage, pollution, disaster management etc.
Members

1. Prof. A.K. Maitra, (Chairman)
Director,
School of Planning and Architecture,
4, Block-D, I.P. Estate, New Delhi

2. Member Secretary,
Central Pollution Control Board,
Parivesh Bhawan,
East Arjun Nagar, Delhi

3. Shri A. S. Arya,
Professor Emeritus,
EE-1, 72/6, Civil Lines,
University of Roorkee, Roorkee

4. Member Secretary,
INTACH, 71, Lodhi Estate, New Delhi

5. Shri A.G. Krishna Menon,
Director, TVB, School of Habitat Studies,
Sector D, Pocket II,
Vasant Kunj, New Delhi

6. Mrs. Sunita Narain,
Director,
Centre for Science and Environment,
41, Tughalakabad Institutional Area,
New Delhi

7. Shri Pankaj Kumar,
Member Secretary,
Delhi Pollution Control Committee,
ISBT, Kashmere Gate, Delhi

8. Director,
Ministry of Tourism,
Government of India

9. Shri. T. C. Gupta,
Director,
BMTPC, Nirman Bhawan, New Delhi

10. Shri U.K. Srivastava,
Chief Town Planner (NCR),
Town and Country Planning Department,
Government of Rajasthan,
Nagar Niyojan Bhawan,
J.L. Nehru Marg, Jaipur, Rajasthan

11. Chief Coordinator Planner (NCR),
Town and Country Planning Department,
Government of Haryana,
Sector 18 A, Chandigarh, Haryana

12. Chief Coordinator Planner (NCR),
NCR Cell, Nagar Nigam Bhawan,
Navyug Market, Ghaziabad, UP

13. Shri Chandu Bhutia,
Associate Town and Country Planner,
L&B Department, Government of Delhi,
Vikas Bhawan, I.P. Estate,
New Delhi

14. Shri Rajeev Malhotra, (Convenor)
Joint Director, NCRPB

15. Shri Suresh K. Rohilla, (Co-convenor)
Assistant Director, NCRPB

Co-opted Members

1. Dr. S. Mukherjee,
School of Environment Sciences,
Jawahar Lal Nehru University,
New Delhi

2. Dr. A.K. Sinha,
Suptd. Archeologist,
A.S.I. Delhi Circle,
Safdarjung Tomb, New Delhi

3. Ms. Savita Bhandari,
Director (Landscape),
Delhi Development Authority,
Vikas Minar, New Delhi

4. Shri B.K. Jain,
Director (Planning), MPPR-I, D-6,
Vasant Kunj, Near Flyover, New Delhi

5. Shri Ratish Nanda,
Consultant (Heritage and Conservation),
1557, Sector B, Pocket 1,
Vasant Kunj, New Delhi

6. D.I.G.,
Forests, Ministry of Environment and
Forests, Paryavaran Bhawan,
CGO Complex, New Delhi

7. Dr. Durgesh Rai,
Department of Earthquake,
Engineering, University of Roorkee,
Roorkee, U.P.

8. Shri S.C. Gupta,
Retired Addl. Commissioner (Planning), DDA
A-5, Golf View Apartments,
Saket, New Delhi

9. Director,
Central Water Commission,
Sewa Bhawan, R.K. Puram,
New Delhi

10. Director,
Geological Survey of India,
Pushpa Bhavan, Push Vihar, Delhi

11. Shri J.K. Prashad,
Deputy Chief,
BMTPC, Core V-A,
India Habitat Centre,
Lodhi Road, New Delhi

12. Shri Manu Bhatnagar,
Advisor, NHD, INTACH,
71, Lodhi Estate, New Delhi

13. Shri Raghu Babu,
CPCB

14. Ms. Sanjukta Bhaduri,
Assistant Professor,
Department of Environmental
Planning, SPA

15. Ms. Meenakshi Dhote,
Assistant Professor,
Department of Environmental
Planning, SPA

16. Shri Anand Kumar,
CPCB

17. Shri Ajay Raghav,
CPCB

18. Shri Sidharath Yadav,
CPCB

19. Ms. Meenakshi Singh,
Project Associate,
ENVIS Centre on Human Settlements, SPA

Sub-group 1: Environment **Sub-group 2: Heritage and tourism** **Sub-group 3: Disaster management**

Study Group VII: Institutional Framework
Members

1. Shri K.C. Shivramakrishnan, (Chairman)
   Centre for Policy Research,
   Dharam Marg, Chanakyapuri
   New Delhi

2 Shri D.S. Meshram,
   President,
   Institute of Town Planners India,
   I.P. Estate, New Delhi

3. Prof. G.K.Mishra,
   Indian Institute of Public Administration,
   Ring Road, I..P.Estate, New Delhi

4. Shri Ramesh Narain Swamy,
   Principal Secretary,
   Urban Development,
   NCT Government of Delhi,
   Vikas Bhawan, I.P. Estate, New Delhi

5. Shri V.M. Bansal,
   Secretary and Commissioner,
   DDA, Vikas Sadan, INA, Delhi

6. Ms. Nisha Singh,
   Deputy Secretary (DD),
   Ministry of Urban Development,
   Nirman Bhawan, New Delhi

7. Shri O.P. Mathur,
   Director, NIPFP,
   Special (Qutub) Institutional Area,
   Satsang Vihar, New Delhi

8. Shri E.F.N. Rebeiro,
   Director, AMDA, Siri Institutional Area,
   Khel Gaon Marg, New Delhi

9. Shri N.C. Wadhwa,
   Director,
   Department of Town and Country Planning,
   Government of Haryana, Sector 18 A,
   Chandigarh, Haryana

10. Shri B.R. Mehta,
    President, Council of Architecture,
    Core VI-A, First Floor,
    India Habitat Centre,
    Lodhi Road, New Delhi

11. Shri A.B. Pawar,
    President, Indian Building Congress,
    Sector-VI, R.K. Puram, New Delhi

12. Mrs. Shiel Sethi,
    Legal Advisor (NCRPB),
    89, Sant Nagar, New Delhi
13. Shri U.K. Shrivastava,
    State Chief Town Planner,
    Town and Country Planning Department,
    Government of Rajasthan,
    Nagar Niyojan Bhawan,
    J.L. Nehru Marg, Jaipur, Rajasthan
14. Shri B.C. Datta,
    Chief Regional Planner, NCRPB

15. Dr. N.B. Johri, (Convenor)
    Joint Director, NCRPB

Study Group VIII: Economic and Fiscal Policy including resource mobilization, funding etc.
Members

1. Dr. V.K. Tewari, (Chairman)
   Director, NIUA,
   India Habitat Centre, Core IV-B, 1st Floor
   Lodhi Road, New Delhi

2. Prof. M. C. Purohit,
   Professor,
   National Institute of Public Finance and Policy,
   Special (Qutub) Institutional Area,
   Satsang Vihar, New Delhi

3. Prof. S. Gangopadhyay,
   Indian Statistical Institute,
   Satsang Marg, Qutub Institutional Area
   New Delhi

4. Prof. Gangadhar Jha,
   NIUA, India Habitat Centre,
   Core IV-B, Ist Floor,
   Lodhi Road, New Delhi

5. Prof. Arup Mitra,
   Institute of Economic Growth,
   Delhi University, North Campus, Delhi

6. Prof. D.B. Gupta,
   National Council of Applied,
   Economics Research,
   I.P. Estate, Ring Road, New Delhi

7. Shri U.K. Srivastava,
Chief Town Planner (NCR),
Town and Country Planning Department,
Government of Rajasthan,
Nagar Niyojan Bhawan,
J.L. Nehru Marg Jaipur, Rajasthan

8. Shri R.C. Aggarwal,
Chief Coordinator Planner (NCR)
Town and Country Planning Department,
Government of Haryana,
Sector -6, Panchkula, Haryana

9. Shri S.K. Zaman,
Chief Coordinator Planner (NCR)
NCR Planning and Monitoring Cell,
2nd Floor, Nagar Nigam Bhavan,
Near Navyug Market, Ghaziabad, UP

10. Shri Chandu Bhutia,
Associate Town and Country Planner,
L&B Department, Government of Delhi,
Vikas Bhawan, I.P. Estate, New Delhi

11. Shri V K Thakore (Convenor)
Joint Director, NCRPB

12. Shri P. Shisupalan, (Co-convenor)
Assistant Director, NCRPB
(Up to February 2001)

13. Ms. Anjali Pancholy, (Co-convenor)
Assistant Director, NCRPB

Co-opted Members

1. Shri B.K. Jain,
Director (MPD-2021), DDA
MP 2021 Unit, D-6, Vasant Kunj,
New Delhi

2. Shri A.N. Gupta,
Director (Finance), HUDCO,
IHC, Lodhi Road, New Delhi

Sub-group 1: Economic activities and fiscal policy

Sub-group 2: Resource mobilisation and funding

3. MEMBERS OF NRSA TEAM (associated with the creation of database generation and preparation of maps)

1. Dr. V. Raghavswamy,
Group Director,
LU&US/RS&GIS-AA
Overall Coordinator

2. Pro.f. V. K. Jha,
Head, RRSSC, Dehradun

3. Dr. K. H. V. Durga Rao,
Scientist

4. Shri B. Ramesh,
Senior Scientist

5. Dr. S. K. Subrahmanyam,
Senior Scientist

6. Shri Tapas Ranjan Martha
Scientist

WORKING GROUP

A Working Group was constituted for further strategizing and phasing the Plan in respect of relevant areas. This Group also undertook a preliminary appraisal of draft Regional Plan-2021 in the context of recommendations of Review Plan-2001. This Group further examined the latest inputs received from the State Governments pursuant to the decision of 48th meeting of the Planning Committee.

The constitution of the Group is as under:

1. Shri Syed S. Shafi, (Chairman)
   Former Chief Planner
   TCPO and Former UN Expert on Urban Planning and Development
   Flat No. 22, Hauz Khas SFS Apartments
   New Delhi

2. Shri R. C. Aggrawal
   Former Chief Regional Planner and
   Consultant, NCRPB

3. Shri Rajeev Malhotra
   Joint Director, NCRPB

4. Shri K. S. Chandrashekar
   Joint Director, NCRPB

5. Shri S. Surendra (Secretary)
   Deputy Director, NCRPB

PUBLICATION UNDER SECTION 12 OF THE NCRPB ACT, 1985

HINDUSTAN TIMES 27/12/04

NATIONAL CAPITAL REGION PLANNING BOARD

FORM A
(See Rule 23)

NOTICE UNDER SUB-SECTION 1 OF SECTION 12 OF THE NATIONAL CAPITAL REGION PLANNING BOARD ACT 1985 READ WITH RULE 23 OF THE NATIONAL CAPITAL REGION PLANNING BOARD RULES, 1985.

Notice is hereby given that:

(1) (a) The draft of the Regional Plan 2021 has been prepared, and

(b) A copy thereof will be available for inspection in the office of the **National Capital Region Plannning Board situated at 1st Floor, Core-IVB, India Habitat Centre, Lodhi Road, New Delhi** and for convenience of the public, also in the offices of the NCR Planning and Monitoring Cells as under:

(i) Chief Coordinator Planner, C/o Chief Administrator, HUDA, SCO, Sector-6, Panchkula, Haryana.

(ii) Chief Town Planner (NCR) Town and Country Planning Department, Govt. of Rajasthan, Nagar Niyojan Bhawan, Jawaharlal Nehru Marg, Jaipur, Rajasthan.

(iii) Chief Coordinator Planner, NCR Cell, Town & Country Planning Deptt, Nagar Nigam Bhawan, Navyug Market, Commercial Building, 2nd Floor, Ghaziabad, U.P.

(iv) Associate Town & Country Planner, NCR Planning Cell, Govt. of NCT, Delhi, Room No. 507, 5th Level, B-Wing, Delhi Secretariat, I.P. Estate, New Delhi, on all working days from 11 a.m. to 3 p.m. till the date mentioned in Para 3 hereinafter.

(2) Objections and suggestions are hereby invited to the Draft Regional Plan.

(3) Objections and suggestions may be sent in writing to the **Member Secretary, National Capital Region Planning Board situated at 1st Floor, Core-IVB, India Habitat Centre, Lodhi Road, New Delhi** on or before 9th February, 2005.

Any person making the objection or suggestions should also give his name and address.

Member Secretary
National Capital Region Planning Board

Place: New Delhi. Date: 27.12.2004.

davp 1076(5)2004 (937989_1)

WIKU 30/1/05

NATIONAL CAPITAL REGION PLANNING BOARD, NEW DELHI

Prepared

Draft Regional Plan– 2021 of NCR

for
a balance and harmonised development of National Capital Region (NCR)
and
Notified for inviting objections / suggestions from public in leading Newspapers on 27.12.2004

Only Two weeks left

Send your objections / suggestions
Latest by 9.2.2005

To
Member Secretary, National Capital Region Planning Board
Core IV-B, First Floor, India Habitat Centre, Lodhi Road,
New Delhi-110003. Fax: 24642163

The Plan is displayed at NCR Planning Board, New Delhi and all the NCR Planning Cells at Delhi, Chandigarh (Haryana), Ghaziabad (UP) & Jaipur (Rajasthan). The Plan is also available on sale both in Hindi & English at a price of Rs. 225/.

davp 2004/1640

THE TIMES OF INDIA 8/2/05

NATIONAL CAPITAL REGION PLANNING BOARD, NEW DELHI

Prepared

Draft Regional Plan– 2021 of NCR
&
Notified on 27.12.2004 and also advertised on 29/30.01.2005 in leading Newspapers for inviting objections / suggestions from public.

DATE EXTENDED UPTO 9.3.2005

On the request of public and various organizations, the date for receiving objections / suggestions on draft Regional Plan-2021 has been extended up to 9.3.2005.

Send your objections / suggestions to:
Member Secretary, National Capital Region Planning Board
Core IV-B, First Floor, India Habitat Centre, Lodhi Road,
New Delhi-110003. Fax: 24642163

The Plan is displayed at NCR Planning Board, New Delhi and all the NCR Planning Cells at Delhi, Chandigarh (Haryana), Ghaziabad (UP) & Jaipur (Rajasthan). The Plan is also available on sale both in Hindi & English at a price of Rs. 225/ in cash.

davp 2004/659

NOTIFICATION UNDER SECTION 13 OF THE NCRPB ACT, 1985 AND RULE 27 OF THE NCRPB RULES, 1985

NATIONAL CAPITAL REGION PLANNING BOARD

FORM B

(See Rule 27)

New Delhi, the 23rd August 2005

Notice under Sub-section 1 of Section 13 of the National Capital Region Planning Board Act, 1985 read with Rule 27 of the National Capital Region Planning Board Rules, 1985

Notice is hereby given that: -

(1) (a) The final Regional Plan has been prepared; and

(b) A copy thereof will be available for inspection in the office of the National Capital Region Planning Board situated at Core-IV B, 1st Floor, India Habitat Centre, Lodhi Road, New Delhi-110 003 on all working days from 11.00 A.M. to 3.00 P.M.

MEMBER SECRETARY
NATIONAL CAPITAL REGION PLANNING BOARD

NATIONAL CAPITAL REGION PLANNING BOARD

Form B

(See Rule 27)

Notice under Sub-section 1 of Section 13 of the National Capital Region Planning Board Act, 1985 read with Rule 27 of the National Capital Region Planning Board Rules, 1985.

Notice is hereby given that:

(1) (a) The final Regional Plan has been prepared; and

(b) A copy thereof will be available for inspection in the office of the National Capital Region Planning Board situated at Core-IV B, 1st Floor, India Habitat Centre, Lodhi Road, New Delhi-110003 on all working days from 11.00 A.M. to 3.00 P.M.

MEMBER SECRETARY
NATIONAL CAPITAL REGION PLANNING BOARD

Place: New Delhi
Dated : 3rd October 2005

davp 1076(11)2005 (1070013_1)

ANNEXURE 4/I

AVAILABILITY OF URBANISABLE LAND IN NCT-DELHI FOR 2021

S. No.	Land Use	Area		Remarks
		(in Hectares)	(%age to total area)	
1	2	3	4	5
1.	Total geographical area of NCT-Delhi	1,48,300.00	100.00	
2.	Built-up area (as per IRS IC LISS III satellite data 1999)	70,162.00	47.31	
3.	Natural features to be conserved (forest, wild life sanctuary, ridge, river Yamuna and other water bodies/drains)	19,509.10	13.16	Forest-303.56 hectares, Wild life sanctuary- 28.54 hectares, Ridge-7777 hectares, river Yamuna-9700 hectares, Other water bodies/drains-170 hectares
4.	Sub-Total (Built-up + Natural features)	89,671.10	60.47	
5.	Balance land available in NCT-Delhi (1-4)	58,628.90	39.53	
6.	Land to be kept reserved for:			
(i)	Disposal of solid wastes generated up to 2051 [sanitary landfill, processing and statutory green belts) (refer Annexure 4/II)]	10,000.00	6.74	
(ii)	Metro services/utilities e.g. power plants, grid stations, water and sewerage treatment plants etc.	10,000.00	6.74	
(iii)	Agriculture zone in NCT-Delhi including dairy farming, horticulture, green belts etc.	11,000.00	7.42	
7.	Sub-total of S.No.6	31,000.00	20.90	
8.	Proposed/actual land available for urbanization (5-7)	27,628.90	18.63	
9.	Total urbanisable area 2021 (including built-up area 1999) (2+8)	97,790.90	65.94	
10.	Population, which can be accommodated in 97,790.90 hectares @ 225 PPH=**220 lakhs**			

ANNEXURE 4/IIa

AVAILABILITY OF WATER IN NCT-DELHI

(Up to the year 2021 from existing known sources of water and the population it can sustain)

1.	Population (2021)	220 lakhs
2.	Rate of water supply	225 lpcd
3.	Water requirement for 220 lakhs population in the year 2021 including 15% losses (743 mld)	5693 mld say, 5700 mld
4.	Fresh Water available from various known sources	
i)	Surface Water-Yamuna and WJC	
a)	Chandrawal waterworks-river Yamuna at Wazirabad barrage	409 mld (90 mgd)
b)	Wazirabad waterworks-river Yamuna at Wazirabad barrage	545 mld (120 mgd)
c)	Haiderpur waterworks-Western Yamuna canal	908 mld (200 mgd)
d)	Nagloi waterworks-Western Yamuna canal	182 mld (40 mgd)*
e)	NCT-Delhi parallel branch (lining of canal)	91 mld (20 mgd)**
	Sub-total (i)	**2,135 mld**
ii)	Shahdara waterworks-water from Upper Ganga canal	454 mld (100 mgd)
iii)	Water expected from Tehri Dam	635 mld (140 mgd)@
iv)	Sub-surface water available	370 mld (81 mgd)
v)	Sub-surface water which can be available from Yamuna flood planes after protecting the same for ground water recharging in NCT-Delhi	200 mld (44 mgd)
	Total (i)-(v)	3,794 mld say, 3,800 mld
5.	Gap between demand and supply of drinking water	1,900 mld
6.	Gap to be bridged by use of recycled waste water (about 50% of S. No. 3 i.e., 3,800 mld) for non-potable purpose	1,900 mld

Note:

* *91 mld available at present*

** *Work in progress*

@ *Work in progress*

ANNEXURE 4/IIb

LAND REQUIREMENT FOR SANITARY LAND FILLING IN DELHI UP TO THE YEAR 2051

S. No.	Particulars	2001-2021	2022-2035	2036-2051
1	2	3	4	5
a)	Generation of wastes			
i)	Per capita waste generation per day	685 gms	685 gms	685 gms
ii)	Projected Population	Year 2021: 220 lakhs	Year 2035: 260 lakhs*	Year 2051: 300 lakhs
iii)	Waste generation (beginning of block year)	6,000 MT/day	15,000 MT/day	18,000 MT/day
iv)	Waste generation (end of the block year)	15,000 MT/day	18,000 MT/day	20,550 MT/day
b)	Assuming life of sanitary landfill	20 years	15 years	15 years
c)	Total waste generated	=0.5(6000+15000)x365x20 = 76.65 x 10^6 MT	=0.5(15000+18000)x365x15 = 90.34 x 10^6 MT	=0.5(18000+20550)x365x15 = 105.53x 10^6 MT
d)	Total waste volume (assumed density 0.85 MT/m^3)	=76.65 x 10^6/0.85 = 90.18 x 10^6 m^3	=90.34 x 10^6/0.85 = 106.28 x 10^6 m^3	=105.53 x 10^6/0.85 = 124.15 x 10^6 m^3
e)	Volume of daily cover	=0.1 x 90.18 x 10^6 = 9.02 x 10^6 m^3	=0.1 x 106.28 x 10^6 = 10.63 x 10^6 m^3	=0.1 x 124.15 x 10^6 = 12.42 x 10^6 m^3
f)	Volume of liner and cover system	0.125 x 90.18 x 10^6 = 11.27 x 10^6 m^3	0.125 x 106.28 x 10^6 = 13.29 x 10^6 m^3	0.125 x 124.15 x 10^6 = 15.52 x 10^6 m^3
g)	First Estimate of volume requirement of waste, liner and cover systems (d)+(e)+(f)	(90.18+9.02+11.27) x 10^6 = 110.47 x 10^6 m^3	(106.28+10.63+13.29) x 10^6 = 130.20 x 10^6 m^3	(124.15+12.42+15.52) x 10^6 = 152.09 x 10^6 m^3
h)	Likely shape of landfill (Partly below and partly above ground)	Rectangular in plan Length: Width = 2:1	Rectangular in plan Length: Width = 2:1	Rectangular in plan Length: Width = 2:1
i)	Area restriction	Nil	Nil	Nil
j)	Possible maximum height	10 metres (half below ground and half above ground)	10 metres (half below ground and half above ground)	10 metres (half below ground and half above ground)
k)	Area required	=110.47 x 10^6/10 m^2= 11.05 sq kms	=130.20 x 10^6/10 m^2= 13.02 sq kms	=152.09 x 10^6/10 m^2= 15.21 sq kms
l)	Area will be Approximate Dimension of each	3.7 sq kms (Assuming 3 different locations) 2.7 km x 1.4 km (2700 m x 1400 m)	3.26 sq kms (Assuming 4 different locations) 2.5 km x 1.3 km (2500 m x 1300 m)	3.80 sq kms (Assuming 4 different locations) 2.7 km x 1.4 km (2700 m x 1400 m)
m)	Additional 30 metres land will be required around the landfil to place the equipments around landfil sites			
n)	As per Schedule III, para 10 of Notification No. 583 dated 27.09.1999 of MOE&F, a 500 metres wide buffer zone of no development be maintained around landfill site and shall be incorporated in the town planning departments land use plans.			
o)	Approximate dimension of each site incorporating para (m&n)	3760 m x 2460 m	3560 m x 2360 m	3760 m x 2460 m
p)	Total area required for sanitary landfill site for NCT-Delhi up to the year 2021 assuming 100% garbage will go to landfill site	3760 m x 2460 m x 3 = 3.76 km x 2.46 km x 3 = 27.75 sq kms	3560 m x 2360 m x 4 = 3.56 km x 2.36 km x 4 = 33.61 sq kms	3760 m x 2460 m x 4 = 3.76 km x 2.46 km x 4 = 37 sq kms

Note:

** As the projection was not available, it has been worked out on the basis of assumption for the mid value*

1. *Land requirement for disposal of solid wastes, which will be generated in NCT-Delhi up to the year 2051, through sanitary land filling is 100 sq kms assuming 100% disposal through landfill.*
2. *Assumptions for calculation of land requirement:*
   - *(i) Density of solid waste=0.85MT/m^3.*
   - *(ii) Maximum height/depth of filling proposed is 10 metres on the basis of half below ground and half above ground and likely shape of landfill will be rectangular.*
   - *(iii) Three different locations have been proposed for sanitary landfill sites during the period 2001-2021, four locations for 2022-2035 and four locations for 2036-2051.*
   - *(iv) All solid waste will be disposed off through sanitary landfill.*
3. *Land area requirement will reduce if only 50% waste is disposed off through sanitary landfill and change in height/depth of filling. Land requirement will be 15.7 sq kms up to the year 2021 in case 50% waste is disposed off through sanitary landfill. In addition to this, if depth/height of filling is increased to 20 metres, the land requirement up to the year 2021 will be 7.35 sq kms.*

ANNEXURE 4/III

POPULATION OF NCR CITIES/TOWNS, 1981-2001 AND PROJECTIONS FOR THE YEAR 2011 AND 2021

S. No.	Sub-region/City/Town	Class	Civic Status 2001	Population			Decadal Growth		Exponential Method		Water's Formula		Ratio Method	
				1981	1991	2001	1981-1991	1991-2001	2011	2021	2011	2021	2011	2021
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
I	**Haryana**													
1	Panipat district													
1	Panipat	I	UA	1,37,927	1,91,212	3,54,148	38.63	85.21	4,96,231	6,95,318	6,10,521	9,26,928	5,34,121	7,02,929
2	Samalkha	III	MC	13,532	18,384	29,866	35.86	62.46	40,149	53,973	47,932	70,229	45,043	59,279
3	*Asan Khurd*	V	CT	-	-	8,066	-	-	-	-	-	-	12,165	16,010
2	Sonepat district													
4	Sonepat	I	UA	1,09,369	1,43,922	2,25,074	31.59	56.39	2,99,243	3,97,852	3,52,763	5,10,353	3,39,453	4,46,737
5	Gohana	III	MC	26,188	32,496	48,532	24.09	49.35	63,703	83,616	73,764	1,04,904	73,195	96,328
6	Ganaur	IV	MC	16,489	20,952	29,006	27.07	38.44	37,324	48,028	41,679	57,319	43,746	57,572
7	Kharkhoda	V	MC	9,279	13,151	18,763	41.73	42.67	24,331	31,551	27,593	38,491	28,298	37,242
3	Rohtak district													
8	Rohtak	I	UA	1,66,767	2,16,096	2,94,577	29.58	36.32	3,77,593	4,84,003	4,18,064	5,70,467	4,44,277	5,84,689
9	Maham	IV	MC	11,722	15,083	18,174	28.67	20.49	22,634	28,188	23,038	29,040	27,410	36,073
10	Kalanaur	IV	MC	12,380	14,524	16,853	17.32	16.04	20,819	25,718	20,518	25,040	25,417	33,451
4	Jhajjar district													
11	Bahadurgarh	I	UA	37,488	57,235	1,26,746	52.68	121.45	1,89,712	2,83,960	2,36,119	3,71,103	1,91,156	2,51,571
12	Jhajjar	III	MC	24,247	27,693	39,002	14.21	40.84	50,406	65,146	56,796	78,757	58,822	77,413
13	Beri	IV	MC	13,490	14,508	16,162	7.55	11.40	19,798	24,251	18,765	21,976	24,375	32,079
14	*Ladrawan*	V	CT	-	-	8,008	-	-	-	-	-	-	12,078	15,895
15	*Sankhol*	V	CT	-	-	5,179	-	-	-	-	-	-	7,811	10,280
5	Faridabad district													
16	Faridabad	I	M. Corp	330,864	617,717	1,055,938	86.70	70.94	14,41,618	19,68,168	17,45,461	25,96,447	15,92,550	20,95,872
17	Palwal	I	MCl	47,328	59,168	100,722	25.02	70.23	1,37,333	1,87,250	1,66,106	2,46,800	1,51,907	1,99,917
18	Hodal	III	MC	18,740	25,635	38,309	36.79	49.44	50,293	66,025	58,251	82,863	57,777	76,037
19	Hathin	IV	MC	6,553	7,863	10,916	19.99	38.83	14,056	18,100	15,720	21,648	16,463	21,667
20	Hasanpur	V	MC	5,190	7,130	9,090	37.38	27.49	11,466	14,463	12,174	15,980	13,709	18,042
21	*Tilpat*	V	CT	-	-	6,369	-	-	-	-	-	-	9,606	12,641
6	Gurgaon district													
22	Gurgaon	I	UA	1,00,877	1,35,884	2,28,820	34.70	68.39	3,10,950	4,22,558	3,75,051	5,55,524	3,45,103	4,54,172
23	Sohna	III	MC	12,667	16,348	27,570	29.06	68.64	37,483	50,960	45,227	67,019	41,581	54,722

S. No.	Sub-region/City/Town	Class	Civic Status 2001	Population			Decadal Growth		Exponential Method		Water's Formula		Ratio Method	
				1981	1991	2001	1981-1991	1991-2001	2011	2021	2011	2021	2011	2021
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
24	Firozepur Jhirka	IV	MC	9,400	12,413	17,755	32.05	43.04	23,039	29,895	26,160	36,534	26,778	35,241
25	Taoru	IV	MC	6,912	12,534	17,328	81.34	38.25	22,289	28,672	24,871	34,181	26,134	34,393
26	Hailiey Mandi	IV	MC	10,140	13,263	17,081	30.80	28.79	21,596	27,305	23,088	30,503	25,761	33,903
27	Pataudi	IV	MC	8,422	11,278	16,085	33.91	42.62	20,856	27,042	23,649	32,983	24,259	31,926
28	Punhana	IV	MC	4,325	8,697	13,179	101.09	51.54	17,368	22,888	20,231	28,935	19,876	26,158
29	Nuh	IV	MC	5,992	7,492	11,039	25.03	47.34	14,437	18,881	16,620	23,508	16,649	21,911
30	Dundahera	IV	CT	4,604	6,767	10,626	46.98	57.03	14,144	18,827	16,698	24,192	16,026	21,091
31	Farukknagar	V	MC	6,367	8,046	9,521	26.37	18.33	11,811	14,651	11,842	14,706	14,359	18,898
7	Rewari district													
32	Rewari	I	MCl	51,562	75,342	1,00,684	46.12	33.64	1,28,429	1,63,820	1,40,559	1,89,771	1,51,850	1,99,842
33	Dharuhera	IV	MCl	5,266	10,848	18,892	106.00	74.15	25,944	35,627	31,549	47,170	28,493	37,498
34	Bawal	IV	CT	7,760	9,010	12,144	16.11	34.78	15,523	19,842	17,075	23,161	18,315	24,104
35	Rewari (Rural)	VI	CT	-	-	4,454	-	-	-	-	-	-	6,717	8,840
II	**Rajasthan**													
1	Alwar district													
36	Alwar	I	UA	1,45,795	2,10,146	2,66,203	44.14	26.68	3,35,282	4,22,288	3,35,959	4,36,259	3,49,426	4,43,422
37	Bhiwadi	III	CT	1,729	15,285	33,877	784.04	121.64	50,724	75,949	57,013	90,278	44,468	56,430
38	Khairthal	III	M	15,962	22,741	32,005	42.47	40.74	41,356	53,439	43,533	60,108	42,011	53,312
39	Rajgarh	III	M	-	20,223	25,009	-	23.67	31,327	39,240	30,965	39,528	32,828	41,658
40	Behror	III	M	1,085	16,238	22,856	1,396.59	40.76	29,535	38,166	31,091	42,933	30,001	38,072
41	Tijara	IV	M	12,199	15,399	19,921	26.23	29.37	25,214	31,913	25,548	33,639	26,149	33,183
42	Kherli	IV	M	-	12,263	15,506	-	26.45	19,522	24,577	19,542	25,344	20,354	25,829
43	Govindgarh	IV	CT	-	7,991	10,089	-	26.25	12,697	15,980	12,700	16,454	13,243	16,806
44	*Kishangarh*	V	CT	-	-	9,473	-	-	-	-	-	-	12,435	15,779
III	**Uttar Pradesh**													
1	Meerut district													
45	Meerut	I	UA	5,36,615	8,49,799	11,61,716	58.36	36.70	14,90,153	19,11,444	15,17,842	20,87,016	14,53,500	18,23,742
46	Mawana	II	MB	37,620	51,701	69,191	37.43	33.83	88,289	1,12,658	89,160	1,21,075	86,569	1,08,621
47	Sardhana	III	MB	30,138	42,980	48,314	42.61	12.41	59,291	72,762	54,404	64,137	60,449	75,847
48	Kithaur	III	NP	13,791	19,270	23,614	39.73	22.54	29,519	36,900	28,574	36,500	29,545	37,071
49	Hastinapur	III	NP	11,637	15,081	21,249	29.60	40.90	27,465	35,501	28,291	39,546	26,586	33,358
50	Sewal Khas	IV	NP	10,278	14,402	18,451	40.12	28.11	23,300	29,423	23,074	30,462	23,085	28,966
51	Lawar	IV	NP	11,535	14,471	18,035	25.45	24.63	22,631	28,397	22,104	28,608	22,565	28,313
52	Parikshitgarh	IV	NP	11,328	13,677	17,369	20.74	26.99	21,889	27,585	21,584	28,321	21,732	27,267
53	Phalauda	IV	NP	10,357	13,970	17,206	34.88	23.16	21,533	26,948	20,901	26,806	21,528	27,011
54	Karnawal	IV	NP	9,895	11,047	12,609	11.64	14.14	15,523	19,109	14,392	17,243	15,776	19,794
55	Kharkhoda	IV	NP	8,708	10,550	12,593	21.15	19.36	15,651	19,452	14,926	18,654	15,756	19,769

S. No.	Sub-region/City/Town	Class	Civic Status 2001	Population			Decadal Growth		Exponential Method		Water's Formula		Ratio Method	
				1981	1991	2001	1981-1991	1991-2001	2011	2021	2011	2021	2011	2021
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
56	Daurala	IV	NP	9,146	10,025	10,685	9.61	6.58	12,974	15,754	11,439	12,643	13,369	16,774
57	Behsuma	IV	NP	7,906	9,060	10,561	14.60	16.57	13,059	16,148	12,275	15,014	13,214	16,579
58	*Aminagar urf Bhurbaral*	V	CT	-	-	5,500	-	-	-	-	-	-	6,881	8,634
59	*Mohiuddinpur*	V	CT	-	-	4,890	-	-	-	-	-	-	6,118	7,677
2	Baghpat district													
60	Baraut	II	MB	46,292	67,705	85,708	46.26	26.59	1,07,932	1,35,920	1,06,263	1,39,114	1,07,235	1,34,550
61	Khekada	III	NP	24,984	35,191	40,335	40.85	14.62	49,698	61,235	46,208	55,595	50,466	63,321
62	Baghpat	III	MB	17,157	24,939	36,384	45.36	45.89	47,458	61,902	49,451	70,336	45,522	57,118
63	Chhaprauli	IV	NP	13,805	16,008	17,798	15.96	11.18	21,793	26,684	19,842	23,108	22,268	27,941
64	Tikri	IV	NP	11,315	12,784	13,427	12.98	5.03	16,258	19,685	14,161	15,334	16,799	21,079
65	Doghat	IV	NP	10,019	12,310	13,263	22.87	7.74	16,139	19,637	14,351	16,090	16,594	20,821
66	Aggarwal Mandi	IV	NP	9,353	10,871	12,405	16.23	14.11	15,271	18,798	14,156	16,956	15,521	19,474
67	Aminagar Sarai	IV	NP	6,837	8,274	10,112	21.02	22.21	12,633	15,782	12,211	15,564	12,652	15,875
3	Ghaziabad district													
68	Ghaziabad	I	M Corp	2,87,170	5,11,759	9,68,256	78.21	89.20	13,66,611	19,28,856	14,89,453	23,22,451	12,11,449	15,20,035
69	Hapur	I	MB	1,02,837	1,46,262	2,11,983	42.23	44.93	2,76,020	3,59,402	2,87,019	4,06,944	2,65,226	3,32,786
70	Loni	I	NP	10,259	36,561	1,20,945	256.38	230.80	2,20,926	4,03,558	2,17,289	3,71,270	1,51,322	1,89,868
71	Modinagar	I	UA	87,665	1,23,279	1,39,929	40.63	13.51	1,72,063	2,11,578	1,58,939	1,89,321	1,75,074	2,19,670
72	Behta Hajipur	II	CT	4,058	30,360	94,298	648.15	210.60	1,66,028	2,92,320	1,67,298	2,83,970	1,17,982	1,48,036
73	Muradnagar	II	MB	26,047	44,395	74,151	70.44	67.03	1,00,515	1,36,253	1,08,124	1,62,422	92,775	1,16,407
74	Pilkhuwa	II	MB	37,884	50,162	66,907	32.41	33.38	85,305	1,08,762	86,025	1,16,581	83,712	1,05,035
75	*Dharoti Khurd*	III	CT	-	-	34,044			-	-	-	-	42,595	53,445
76	Garhmukteshwar	III	MB	17,914	25,241	33,847	40.90	34.10	43,210	55,164	43,673	59,377	42,348	53,135
77	Dasna	III	NP	13,037	16,963	24,434	30.11	44.04	31,764	41,292	32,964	46,597	30,571	38,358
78	Faridnagar	IV	NP	9,116	10,940	11,272	20.01	3.03	13,599	16,406	11,651	12,257	14,103	17,696
79	Ordi. Fact. Muradnagar	IV	CT	9,026	12,792	10,756	41.72	-15.92	12,536	14,611	8,431	4,716	13,458	16,886
80	Niwari	V	NP	7,078	8,841	9,921	24.91	12.22	12,171	14,931	11,154	13,125	12,413	15,575
81	Patala	V	NP	7,847	9,181	9,733	17.00	6.01	11,806	14,320	10,363	11,371	12,178	15,280
82	Babugarh	V	NP	2,389	3,581	5,939	49.90	65.85	8,033	10,866	8,631	12,934	7,431	9,323
4	Gautam Buddh Nagar district													
83	NOIDA	I	CT	37,000	1,46,514	3,05,058	295.98	108.21	4,45,731	6,51,274	4,86,073	7,75,378	3,81,678	4,78,901
84	Dadri	II	MB	19,723	32,883	57,416	66.72	74.61	78,912	108,456	85,426	130,193	71,837	90,136
85	Jewar	III	NP	15,275	21,376	27,016	39.94	26.38	34,009	42,811	33,455	43,747	33,802	42,412
86	Rabupura	IV	NP	8,999	10,769	13,046	19.67	21.14	16,267	20,283	15,646	19,801	16,323	20,481
87	Dankaur	IV	CT	7,935	9,531	11,999	20.11	25.89	15,091	18,980	14,817	19,320	15,013	18,837
88	*Salarpur Khadar*	IV	CT	-	-	10,750	-	-	-	-	-	-	13,450	16,876
89	Jahangirpur	V	NP	6,447	8,206	9,510	27.28	15.89	11,745	14,505	10,999	13,378	11,899	14,929

S. No.	Sub-region/City/Town	Class	Civic Status 2001	Population			Decadal Growth		Exponential Method		Water's Formula		Ratio Method	
				1981	1991	2001	1981-1991	1991-2001	2011	2021	2011	2021	2011	2021
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
90	Bilaspur	V	NP	4,661	6,127	7,481	31.45	22.10	9,344	11,671	9,027	11,498	9,360	11,744
91	Kakod	V	NP	4,299	5,838	7,139	35.80	22.29	8,920	11,145	8,624	10,998	8,932	11,207
5	Bulandshahr district													
92	Bulandshahr	I	MB	1,03,436	1,27,201	1,76,425	22.98	38.70	2,27,126	2,92,398	2,32,626	3,22,448	2,20,737	2,76,964
93	Khurja	II	MB	67,119	80,305	98,610	19.65	22.79	1,23,324	1,54,233	1,19,509	1,52,912	1,23,377	1,54,805
94	Sikandarabad	II	MB	43,135	60,992	69,867	41.40	14.55	86,076	106,044	80,000	96,195	87,415	1,09,682
95	Jahangirabad	II	MB	29,301	37,981	51,394	29.62	35.32	65,757	84,135	66,708	91,184	64,302	80,682
96	Guloathi	III	MB	24,416	33,982	42,903	39.18	26.25	53,995	67,954	53,088	69,367	53,679	67,352
97	Siana	III	MB	22,410	29,888	38,999	33.37	30.48	49,461	62,730	49,401	66,027	48,794	61,223
98	Debai	III	MB	22,430	27,721	34,877	23.59	25.81	43,859	55,153	43,047	56,105	43,637	54,752
99	Shikarpur	III	MB	21,499	29,197	33,187	35.81	13.67	40,820	50,209	37,743	45,023	41,522	52,099
100	Anupshahr	III	MB	15,193	19,684	23,795	29.56	20.88	29,655	36,959	28,489	35,990	29,771	37,355
101	Naraura	III	NP	9,573	15,652	20,407	63.50	30.38	25,877	32,812	25,836	34,513	25,533	32,036
102	Aurangabad	III	NP	11,622	15,402	20,097	32.52	30.48	25,488	32,326	25,457	34,025	25,145	31,550
103	Pahasu	IV	NP	9,016	13,127	17,122	45.60	30.43	21,713	27,536	21,683	28,973	21,422	26,879
104	Khanpur	IV	NP	8,311	11,420	13,761	37.41	20.50	17,138	21,344	16,434	20,706	17,217	21,603
105	Bugrasi	IV	NP	8,307	11,093	12,789	33.54	15.29	15,777	19,463	14,725	17,820	16,001	20,077
106	Chhatari	IV	NP	5,862	8,202	10,903	39.92	32.93	13,890	17,694	13,987	18,915	13,641	17,116
107	Bhawan Bahadur Nagar	V	NP	6,779	9,101	9,322	34.25	2.43	11,234	13,538	9,574	9,978	11,663	14,634

Source: Census 2001- Final Population Totals, Census of India

Note:

1) Projections have been made for 97 towns in NCR

2) Town names in italics indicate that the town has been added for the first time in Census 2001. Projections have not been made for these.

3) The projections have been made as per methodology suggested by the Study Group on Policy zones, demographic profile and settlement pattern.

4) This does not include NCT-Delhi

Size Class of Towns

Class-I	*1,00,000 +*
Class-II	*50,000 to 99,999*
Class-III	*20,000 to 49,999*
Class-IV	*10,000 to 19,999*
Class-V	*5,000 to 9,999*

Civic Status

UA	*Urban Agglomeration*
M Corp	*Municipal Corporation*
M Cl	*Municipal Council*
MC	*Municipal Committee*
MB	*Municipal Board*
NP	*Nagar Panchayat*
CB	*Cantonment Board*
CT	*Census Town*

ANNEXURE 6/I

A) CLASSIFIED TRAFFIC VOLUME COUNT AT SELECTED POINTS (1999)

Description	Non-Motorized Vehicles	Motor Cycles	Auto Rickshaw	Passenger Car	Bus	Trucks	Sub-Total	Motorized Vehicles
1	2	3	4	5	6	7	(5-7)=8	(3-7)=9
Boundary of Delhi NH2	5,636	10,504	392	20,077	1,408	8,211	29,696	40,592
Boundary of Delhi NH8	1,733	8,901	175	24,650	2,533	9,441	36,624	45,700
Boundary of Delhi NH10	2,965	4,541	746	6,667	863	5,084	12,614	17,901
Boundary of Delhi NH1	1,938	3,863	312	12,714	2,305	11,338	26,357	30,532
Boundary of Delhi SH57	2,277	1,752	112	1,833	526	3,857	6,216	8,080
Bridge over Hindon NH24	8,085	15,122	8,317	22,578	7,924	15,514	46,016	69,455
Bridge over Hindon NH24 bypass	6,670	5,003	1,732	5,807	1,221	2,803	9,831	16,566
Ghaziabad-Modinagar (NH58)	2,711	4,966	457	8,225	1,920	5,591	15,736	21,159
Modinagar-Meerut (NH58)	2,135	3,073	578	6,560	2,150	5,057	13,767	17,418
Meerut-Baghpat	866	514	14	492	193	1,029	1,714	2,242
Yamuna river-Wazirabad bridge	14,657	14,014	2,941	8,274	4,619	9,332	22,225	39,180
Yamuna river-ISBT bridge	14,989	19,673	13,460	21,342	6,853	13,957	42,152	75,249
Yamuna river-Yamuna bridge	30,465	19,054	12,275	8,290	335	1,279	9,904	41,233
Yamuna river-ITO bridge	16,097	58,837	16,795	48,361	9,340	2,831	60,532	1,37,164
Yamuna river-Nizamuddin bridge	7,477	34,889	6,411	53,011	4,397	7,675	65,083	1,06,383
Yamuna river-Okhla bridge	4,059	7,448	1,419	11,402	845	5,909	18,156	27,023

B) DIRECTIONAL PROPORTIONS FLOW AT MORNING AND EVENING PEAK HOUR

Location	Time	Peak	%Flow to NCT-D	%Flow from NCT-D
1	2	3	4	5
Ghaziabad-Modinagar (NH58)	Morning Peak	1030-1130	55.4	44.6
	Evening Peak	1730-1830	46.7	53.4
Modinagar-Meerut (NH58)	Morning Peak	1000-1100	50.3	49.7
	Evening Peak	1215-1315	38.0	62.0
Yamuna river-Wazirabad bridge	Morning Peak	0830-0930	74.2	25.8
	Evening Peak	1730-1830	46.8	53.1
Yamuna river-ISBT bridge	Morning Peak	1045-1145	60.3	39.6
	Evening Peak	1530-1630	133.0	67.0
Yamuna river- Yamuna bridge	Morning Peak	1000-1100	57.8	42.2
	Evening Peak	1615-1715	55.9	43.9
Yamuna river-ITO bridge	Morning Peak	0915-1015	66.4	33.6
	Evening Peak	1845-1945	24.7	75.3
Yamuna river-Nizamuddin bridge	Morning Peak	0830-0930	79.3	20.7
	Evening Peak	1745-1845	42.4	57.6
Yamuna river-Okhla bridge	Morning Peak	1030-1130	47.4	52.6
	Evening Peak	1700-1800	43.7	56.3

Source: The Feasibility Study on the construction of Expressways in the National Capital Region in India, JICA Study Team, Pacific Consultants International, March 2000.

ANNEXURE 6/II

A) BREAK-UP OF TRIPS ON THE BASIS OF THE ORIGIN-DESTINATION

	Internal to External (Delhi to NCR)	External to Internal (NCR to Delhi)	External to External (Outside Delhi)	Total
1	**2**	**3**	**4**	**5**
Number of Trips (in lakhs)	12.54	14.32	7.34	34.21
Percentage of Total (%)	36.67	41.86	21.27	100.00

Source: The Feasibility Study on the construction of Expressways in the National Capital Region in India, JICA Study Team, Pacific Consultants International, March 2000.

B) BREAK-UP OF TRIPS ON THE BASIS OF THE MODE USED

	Public Mode	Private Mode	Total
1	**2**	**3**	**4**
Number of Trips (in lakhs)	24.47	9.73	31.54
Percentage of Total (%)	71.54	28.46	100.00

Source: Identification of Rail Projects for Commuter Traffic for Delhi and NCR, March 1999, RITES.

ANNEXURE 6/III

A) TRANSPORT DEMAND FORECAST FOR DESIGN YEARS IN URBAN AREAS OF NCT-DELHI

S. No.	Item	2005	2011	2025
1	2	3	4	5
1.	Intra city trips (lakhs)	160.4	215.4	260.6
2.	Modal split-Public transport (%)	82.00	82.00	82.00
3.	Mass transport trips (lakhs)	131.5	176.6	213.7
•	MRTS (lakhs)	43.2	58.0	71.0
•	NR (lakhs)	14.2	19.0	23.0
•	Bus (lakhs)	74.1	99.6	119.7
4.	Peak hour factor (%)	10.00	10.00	10.00
5.	Peak direction factor (%)	60.00	60.00	60.00

Source: Identification of Rail Projects for Commuter Traffic for Delhi and NCR, RITES, March 1999.

B) PROJECTED TRAVEL DEMAND FOR INTERCITY TRIPS IN NCT-DELHI AND NCR

Mode	Daily Transport Demand (in lakhs)		
	2005	2011	2025
1	2	3	4
Rail	13.11	16.72	34.03
Bus	13.77	17.56	35.73
Other modes	5.90	7.52	15.32
Total	**32.78**	**41.80**	**85.08**

Source: Identification of Rail Projects for Commuter Traffic for Delhi and NCR, RITES, March 1999.

ANNEXURE 6/IV

A) PROPOSED RAIL NETWORK DEVELOPMENT PLAN IN NCT-DELHI

S. No.	Section	Proposals	
		Phase I (2011)	Phase II (2021)
1	2	3	4
1	Shahdara-Sahibabad	Dedicated BG double line and electrified (on MRTS standards)	-
2	Sahibabad-New Delhi railway station	Dedicated BG double line and electrified	-
3	Holambi Kalan-Narela	Dedicated BG double line and electrified (on MRTS standards)	-
4	Dayabasti-Bijwasan	Dedicated, electrified BG double line	-
5	Tilak Bridge-Tughlakabad	Dedicated BG double line electrified	-
6	Southern ring rail from Tilak bridge to Daya Basti	Strengthening, one more line	One more line (dedicated)
7	Patel Nagar to Shakurbasti	Dedicated BG double line electrified	-
8	Brar Square to Delhi Cantonment station	Dedicated, electrified BG double line	-
9	Terminal at Tilak bridge	EMU terminal	-
10	New Tilak bridge to Mayur Vihar (NCT-Delhi border)-part of New Tilak bridge Noida-Greater Noida new rail link	Dedicated, electrified BG double line	

B) PROPOSED RAIL NETWORK DEVELOPMENT PLAN IN NCR

S. No.	Section	Proposals	
		Phase I (2011)	Phase II (2021)
1	2	3	4
1	Narela-Sonepat	Strengthening, dedicated BG double line electrified	-
2	Sonepat-Panipat	Strengthening, automatic colour light signaling, one more BG line electrified	One more electrified BG line (dedicated)
3	Nangaloi-Bahadurgarh	Strengthening, automatic colour light signalling and electrification, dedicated BG double line electrified	-
4	Bahadurgarh-Rohtak	Strengthening, automatic colour light signalling and electrification, one more BG line	One more BG line (dedicated)
5	Bijwasan-Gurgaon	Dedicated, electrified BG double line	-
6	Gurgaon-Rewari	Strengthening and electrification, one more BG line	One more BG line (dedicated)
7	Sahibabad-Ghaziabad	Dedicated BG double line electrified	-
8	Ghaziabad-Meerut	Strengthening and electrification, one more BG line	One more BG line (dedicated)
9	Ghaziabad-Hapur	Strengthening and electrification	One more line
10	Ghaziabad-Khurja	Strengthening	One more line
11	Tilak Bridge-Noida	Dedicated BG double line electrified	-
12	NOIDA-Dadri	-	Dedicated BG double line electrified
13	Tughlakabad-Ballabhgarh	Dedicated BG double line electrified (new rail line)	-
14	Ballabgarh-Palwal	Strengthening, one more BG line	One more BG line (dedicated)
15	Shahdara-Shamli	Strengthening	One more line

Source: Identification of Rail Projects for Commuter Traffic for Delhi and NCR, March 1999, RITES

ANNEXURE 7/I

PLAN OF ACTION AND PHASING–POWER

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
1.	Future Demand and Augmentation of Power: Additional power generating capacity augmentation in the installed capacity of power plants required by the year 2021 is 23,345 MW for which following recommendations have been made:- § Allocation of power from the new central sector/mega projects to be made by the Ministry of Power. § Ministry of Power to consider allocation of power from the 15% unallocated quota from the Central sector projects available with the government. § State Governments to allocate power to their Sub-region from their new State sector projects § State Governments should ensure the allocated quota to their respective Sub-regions from the present allocation/ generation of power. § State Governments should enter MOU with power generation companies to ensure requisite allocation of power to the Sub-region simultaneously and expeditiously. § Efficient and clean technology based power plants should be encouraged/adopted to meet the growing power demand in order to reduce Greenhouse gases (GHG) levels.	Net generation needs to be augmented by about 4,500 MW by the year 2006-2007.	Net generation needs to be augmented by about 2,600 MW by the year 2011-2012.	Net generation needs to be augmented by about 8,000 MW by the year 2016-2017.	Net generation needs to be augmented by about 8,500 MW by the year 2020-2021.
2.	Load Management: Modern techniques for Load Management must be adopted to flatten the load curve and reduce the peak demand in the system to manageable proportion, vis-à-vis availability of generation in the grid through a control room by starting ripple generators, so that breakdown of generation is minimized. This will generate savings in the investment on additional generation of power for peak demand. Similarly, street lighting on National Highways/ State Highways within the NCR can have centrally controlled system for operation through operation of ripple generator. Energy efficient housing should be promoted and the concept of 66 KV underground cable ring main system should be planned	Directions to be issued to the participating States in the first year of the implementation to adopt the policies. CEA and State Government to undertake islanding of NCR after revisiting the system. Follow up and monitoring of implementation of policies to be done.	Follow up and monitoring of implementation of policies to be done.	Follow up and monitoring of implementation of policies to be done.	Follow up and monitoring of implementation of policies to be done.

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
	and executed in new townships to provide uninterrupted power supply. It is also proposed that an Islanding Scheme for NCR as second level of Island after NDMC/Delhi will be prepared by CEA and concerned State power utilities after revisiting the scheme which will be implemented by the concerned power utility companies for better load management.				
3.	Improvement in Transmission and Distribution: Transmission and distribution system in the region should be improved by properly designing the L.T. distribution system viz. service line & service mains and by providing transformers with adequate capacities, electronic meters, LT/HT breakers conforming to IE Rules and specifications and by promoting communications (automation) in power supply system. State Governments will also carry out periodic audit for identification of technical and commercial losses which will help in improving the transmission and distribution system on a regular basis.	Improvement in the T&D has already been initiated by the State governments of UP and Haryana. At least, 60% of the area of the region should be covered by the end of 10th Plan. State Governments will carry out periodic auditing on regular interval.	Remaining 40% of the area of NCR should be covered during the 11th Plan period. Capacity augmentation to be done for additional power generation. State Governments will carry out periodic auditing on regular interval.	Capacity augmentation to be done for additional power generation. State Governments will carry out periodic auditing on regular interval.	Capacity augmentation to be done for additional power generation. State Governments will carry out periodic auditing on regular interval.
4.	Sub-group within Northern Region Electricity Board: Sub-group within Northern Region Electricity Board should be created for NCR by Ministry of Power to oversee the power supply and periodically discuss the power issues in NCR and make recommendations regarding quality and reliability of power supply in the region.	Sub-group within NCRPB to be created by the Ministry of Power to oversee the implementation of the policies immediately and review of quality and reliability of power supply on regular basis.	Ministry of Power to implement the policies immediately and review of quality and reliability of power supply on regular basis.	Ministry of Power to implement the policies immediately and review of quality and reliability of power supply on regular basis.	Ministry of Power to implement the policies immediately and review of quality and reliability of power supply on regular basis.
5.	Sectoral Plans for Power: State Governments concerned will prepare Sectoral Plans for power and incorporate/integrate the same in their respective Sub-regional Plans in order to improve the quality of power supply in their respective Sub-regions.	State Governments concerned will prepare Sectoral Plans for power and incorporate/integrate the same in their respective Sub-regional Plans.	State Governments concerned to review on regular basis.	State Governments concerned to review on regular basis.	State Governments concerned to review on regular basis.

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
6.	Promotion for Non-conventional Energy Resources: Emphasis should be given for promoting non-conventional energy resources such as solar energy plants on roof top etc. in big hotels, institutions, commercial buildings, group housing etc. to meet part of power demand.	To be implemented by the respective State Governments through enactment of an Act in this regard in the first year of implementation of the Plan. Mass awareness to be created among public.	Mass awareness to be created among public.	Mass awareness to be created among public.	Mass awareness to be created among public.
7.	Public-Private Partnership: In view of the huge investment of about Rs.93,380 crores, for the generation of power and Rs.58,000 crores for transmission & distribution, in the year 2021, public/ private partnership should be promoted. Commercial approach and simplified procedures for the release of new connections, upgradation of demand load etc. should be adopted by these companies. In order to promote public/private partnership/ Joint Venture companies, the enabling provision in the Power Act may have to be made.	To be implemented by the respective State Governments in this regard in the first year of implementation of the Plan.	To be reviewed and improvement to be made as and when required.	To be reviewed and improvement to be made as and when required.	To be reviewed and improvement to be made as and when required.
8.	Review of Policies and Strategies for Power: In view of the reforms at the national level and technological advancements taking place, the review the Power Sector strategies and policies for NCR should be done at least once in every five years.		Review to be done in the year 2007-2008.	Review to be done in the year 2012-2013.	Review to be done in the year 2020-2021.
9.	Investment Plan: Power requirement in the region would be 23,345 MW by the year 2021 and accordingly there will be need to generate this additional power and strengthen/ expand the transmission and distribution lines in the region. Total investment required for the generation of power by the year 2021 will be Rs.93,380 crores and for strengthening/expansion of transmission and distribution system, it will be Rs.58,362 crores.	Investment requirement for augmenting power generation in the region is Rs.18,052 crores. Constituent State Governments will have to interact with Ministry of Power to get power allocated from Central sector project/mega projects, unallocated quota of Central Government, sign power purchase agreement with power generating companies	Investment requirement for augmenting power generation in the region is Rs.10,196 crores. Constituent State Governments will have to interact with Ministry of Power to get power allocated from Central sector project/mega projects, unallocated quota of Central Government, sign power purchase agreement with power generating companies or States with surplus power or enhance their capacity of power	Investment requirement for augmenting power generation in the region is Rs.31,120 crores. Constituent State Governments will have to interact with Ministry of Power to get power allocated from Central sector project/mega projects, unallocated quota of Central Government, sign power purchase agreement with power generating companies	Investment requirement for augmenting power generation in the region is Rs.34,012 crores. Constituent State Governments will have to interact with Ministry of Power to get power allocated from Central sector project/mega projects, unallocated quota of Central Government, sign power purchase agreement with power generating companies

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
		or States with surplus power or enhance their capacity of power generation. Investment of about Rs.11,282 crores will have to be made by States or transmission/distribution companies for improvement and upgradation of transmission and distribution system in the region.	generation. Investment of about Rs.6,372.50 crores will have to be made by States or transmission/distribution companies for improvement and upgradation of transmission and distribution system in the region.	or States with surplus power or enhance their capacity of power generation. Investment of about Rs.19,450 crores will have to be made by States or transmission/distribution companies for improvement and upgradation of transmission and distribution system in the region.	or States with surplus power or enhance their capacity of power generation. Investment of about Rs.21,257 crores will have to be made by States or transmission/distribution companies for improvement and upgradation of transmission and distribution system in the region.

ANNEXURE 8/I

STATUS OF WATER SUPPLY IN NCR TOWNS

S. No.	Sub-region/Town	Source	Installed Capacity (in mld)	Present Production (in mld)	Present rate of W/S (in lpcd)	Number of Water Treatment Plants	Type of Treatment
1	2	3	4	5	6	7	8
	Haryana						
1	Faridabad	T/W	115.33	115.33	100	NIL	Chlorination
2	Gurgaon	T/W/Canal	17.52	17.52	95	NIL	RF, Chlorination
3	Bahadurgarh	Canal	6.90	6.90	80	03	SSF, Chlorination
4	Panipat	T/W	38.40	38.40	145	NIL	Chlorination
5	Rewari	Canal	12.10	12.10	110	02	RSF, Chlorination
6	Palwal	T/W	5.91	5.91	80	NIL	Chlorination
7	Rohtak	Canal	22.39	22.39	80	13	SSF & RSF, Chlorination
8	Sonepat	Canal/T/W	14.63	14.63	80	1	RF, Chlorination
9	Samalkha	T/W	1.74	1.74	70	NIL	Chlorination
10	Gohana	T/W	2.82	2.82	70	NIL	Chlorination
11	Gannaur	T/W	1.20	1.20	45	NIL	Chlorination
12	Jhajjar	Canal	3.35	3.35	110	07	SSF, Chlorination
13	Haily Mandi	T/W	0.86	0.86	50	NIL	Chlorination
14	Pataudi	T/W	1.06	1.06	70	NIL	Chlorination
15	Sohna	T/W	1.48	1.48	70	NIL	Chlorination
16	Hodel	T/W	3.86	3.86	110	NIL	Chlorination
17	Nuh	T/W	0.68	0.68	80	NIL	Chlorination
18	Meham	Canal	1.35	1.35	70	05	SSF, Chlorination
19	Bawal	T/W	1.04	1.04	100	NIL	Chlorination
20	Village Kosli	Canal	0.98	0.98	110	03	SSF, Chlorination
21	Village Kundli	T/W	0.94	0.94	110	NIL	Chlorination
22	Village Dharuhera	T/W	1.10	1.10	50	NIL	Chlorination
	Rajasthan						
1	Alwar	T/W-114 Nos. O/W-31 Nos. H.P's-327 Nos.	32.50	29.50	98	NIL	Chlorination
2	Bhiwadi	N.A.	N.A.	2.40			
3	Khaithal	TW -8 Nos. O/W-2 Nos. HP-61 Nos.	1.50	1.30	65	NIL	Chlorination
4	Behror	TW-10 Nos. O/W-2 Nos. HPP-48 Nos.	1.10	1.40	75	NIL	Chlorination

S. No.	Sub-region/Town	Source	Installed Capacity (in mld)	Present Production (in mld)	Present rate of W/S (in lpcd)	Number of Water Treatment Plants	Type of Treatment
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
5	Tijara	TW-9 Nos. HP-41 Nos.	1.20	1.60	92	-	Chlorination
6	Shahjahanpur	TW-2 Nos. OW-2 Nos. HP-18 Nos.	0.30	0.30	35	-	Chlorination
	Uttar Pradesh						
1	Meerut	TW	150.00	150.00	142	One	Slow sand filter
2	Ghaziabad	TW	145.00	125.00	130	Nil	Chlorination
3	Bulandshahr	TW	14.00	12.00	75	Nil	Chlorination
4	Baraut	TW	6.00	4.00	50	Nil	Chlorination
5	Mawana	TW	5.80	3.13	30	Nil	Chlorination
6	Pilkhua	TW- 4	4.50	3.48	50		Chlorination
7	Muradnagar	TW	3.00	2.88	40	Nil	Chlorination
8	Garhmukteshwar	TW	3.96	3.00	99	Nil	Chlorination
9	Baghpat	TW	0.53	0.38	95	Nil	Chlorination
10	Dasna	TW	2.00	2.00	81	Nil	Chlorination
11	Phalauda	TW	0.35	0.35	28	Nil	Chlorination
	NCT-Delhi						
		River Yamuna	90 MGD	NA	225	Chandrawal WTP I & II	Conventional method
		River Yamuna	120 MGD	NA	-	Wazirabad WTP I, II &III	Conventional method
		Western Yamuna canal	200 MGD	NA	-	Haiderpur WTP I&II	Conventional method
		Western Yamuna canal	40 MGD	NA	-	Nangloi W.T.P.	Conventional method
		Ganga water	100 MGD	NA	-	Shahadara WTP	Conventional method
		Sub-surface water	81 MGD	-	-		Conventional method
		Total	**631 MGD**	**640 MGD**	**225**	**5**	
			2865 mld	**2924 mld**			

Note:
For remaining towns information was not available.
SSF: Slow Sand Filtration
RSF: Rapid Sand Filter
RF: Rapid Filtration
NCBWW: New Canal Based Water Works
Addl. Filtration Plant

ANNEXURE 8/II

PLAN OF ACTION AND PHASING-WATER

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
1.	Blueprint for Water Resources in the Region: Blueprint for water resources in the region including augmentation of drinking water should be prepared for NCR identifying all the potential surface water sources and ground water aquifers in the region and inter-basin transfer of water. This should include water mapping, desilting, augmentation of existing lakes/depressions for storage of rain/flood water, rain water harvesting, reuse and recycling of waste water, measures for conservation of water, inter basin transfer of water and include integrated land & water management for the region.	A detailed study will be needed to be taken up through an independent agency which will take about 2-3 years. This will lead to formulation of an Integrated Regional Scheme for augmentation of drinking water supply in the region.	Implementation and monitoring of the scheme to be done by the States.	Implementation and monitoring of the scheme to be done by the States.	Monitoring to be done to be done by the States.
2.	Integrated Regional Schemes for Augmentation of Drinking Water Supply (surface and ground): considering NCR as a single entity should be prepared. All the future planning for multi-purpose dams should be done considering the future demands of the NCR and not for NCT-Delhi only. Long term solutions should include construction of upstream reservoirs to store excess water during monsoon for use in lean period and inter-basin transfer of water such as Sarda-Yamuna link canal etc.	Scheme will be formulated on the basis of study at S. No. 1	Implementation and monitoring of the scheme to be done by the States.	Implementation and monitoring of the scheme to be done by the States.	Monitoring to be done by the States.
3.	Norms and Standards: § Rate of Water supply: *Urban* NCT-Delhi : 225 lpcd Population one lakh and above : 200 lpcd Population below one lakh : 135 lpcd *Rural* Spot Source : 70 lpcd Pipe supply : 100 lpcd § Unaccounted for water (UFW)-should be reduced to 15%	Should be implemented strictly by the participating States in their respective Sub-regions immediately and to be done in phases. In Phase I, all the towns getting water supply less than 100 lpcd should be taken up to enhance rate of water supply to 100 lpcd. Capacity of supply main and distribution system to be enhanced as per norms laid down in plan.	Augmentation of the capacities to be done based on increased demand. In Phase II, all the towns with population more than one lakh to be brought to 150 lpcd level and towns with population below one lakh to be brought 135 lpcd. Capacity of supply main and distribution system to be enhanced as per norms laid down in plan.	Augmentation of the capacities to be done based on increased demand. In Phase III, all the towns with a population one lakh and above should be brought to 200 lpcd supply level from 150 lpcd level. Capacity of supply main and distribution system to be enhanced as per norms laid down in plan.	Augmentation of the capacities to be done based on increase in demand due to increase in population.

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
4.	Protection of Land for Ground Water Recharging: Recent studies of Central Ground Water Board have revealed that additional exploitation to the extent of 1,816 mld (1.82 MCM/day), 454 mld (0.45 MCM/day) and 908 mld (0.91 mcm/day) could be made available by harvesting the ground water potential of aquifer system of river Yamuna, upper Ganga canal system and Ganga flood plains respectively falling within NCR. In the Sub-regional Plans and Master/Development Plans, all the flood plains and other ground water recharging areas such as ponds, lakes, other water bodies etc. should be identified and protected from the invasion by other land uses and encroachments. At least, 2-5% area should be earmarked under water bodies (natural as well as constructive) in the distribution of landuses.	The areas to be protected for ground water recharging have already been identified in the Plan on the basis of the study done by IIRS, Dehradun on "Geology, Geomorphology and Ground Water prospects for NCR". These areas should be protected in the sub-regional plans and master plans by the respective State governments and should be implemented on priority basis immediately.	State Governments to ensure protection of ground water recharging areas while undertaking the development works in their respective Sub-regions.	State Governments to ensure protection of ground water recharging areas while undertaking the development works in their respective Sub-regions.	State Governments to ensure protection of ground water recharging areas while undertaking the development works in their respective Sub-regions.
5.	Intensive urban development/induced developments/water consuming industries, should not to be recommended/proposed in grey/dark blocks of ground water potential.	State Governments to ensure its implementation in their respective Sub-regions and monitor the same on regular basis.	State Governments to ensure its implementation in their respective Sub-regions and monitor the same on regular basis.	State Governments to ensure its implementation in their respective Sub-regions and monitor the same on regular basis.	State Governments to ensure its implementation in their respective Sub-regions and monitor the same on regular basis.
6.	Recycling of waste water for non drinking water use: Recycling of waste water for non drinking water use should be promoted. All the town level urban irrigation for landscaping, hotels, industrial units, air-conditioning of large centrally air-conditioned buildings/institutions, large installations and other non-potable demands should be met through treated recycled waste water as per norms. At least 50% of the treated waste water should be recycled for these purposes and emphasis should be laid towards waste minimization, which will also help in improving the environment as a whole. Government may also provide liberal tax rebates for Institutions/ industries adopting recycling of waste water to compensate for the cost involved in treating waste water for recycling. No fresh water should be used for irrigation purpose if treated waste water is available.	To be implemented and monitored on regular basis by the respective State Governments. Initially it is to be implemented in institutions/hotels and new colonies under development/proposed to be developed. If required, enabling provisions in the respective acts of the local bodies may be made by the respective State Governments.	To be implemented and monitored on regular basis by the respective State Governments.	To be implemented and monitored on regular basis by the respective State Governments.	To be implemented and monitored on regular basis by the respective State Governments.

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
7.	Mass Awareness should be created among public through mass media with regard to saving water and waste minimization.	To be implemented and monitored by the respective State Governments.	To be implemented and monitored by the respective State Governments.	To be implemented and monitored by the respective State Governments.	To be implemented and monitored by the respective State Governments.
8.	Commercial Approach is required to be adopted by the local bodies for revenue generation. Water charges should cover at least O&M cost. The structure of the water tariff should be demand based and increase telescopically depending upon the monthly consumption and should be reviewed periodically as a built in mechanism to make the service self sustaining and a deterrent to wastage. Tariff for the recycled treated waste water should be fixed accordingly to encourage its non-potable uses such as gardening, horticulture and other uses referred above. "Public-Private Partnership" needs to be introduced for operation and maintenance of the water supply schemes.	States should improve water tariff by the end of 11th Plan. Water tariff to be reviewed every five years by the State Governments.			
9.	Institutional Capacity Building: Water demand management and institutional capacity building measures, e.g. zoning, setting up a contingent valuation fund, transparent operation-maintenance, regulatory guidelines etc. for efficient operation of the system contribute towards improvement in the finances.	Capacity building is a continuous process and required to be taken up immediately by the respective State Governments. The Board should help the State Governments in conducting the courses for capacity building.			
10.	Emphasis should also be given to the quality of water as per BIS standards and CPHEEO Manual.	Constituent States to ensure the quality of water as per standards and ensure implementation from first year of the plan and future also.	Constituent States to ensure and monitor.	Constituent States to ensure and monitor.	Constituent States to ensure and monitor.
11.	Allocation of Land for Water Treatment Plants and Water Distribution System: Planning of the city must incorporate advance land allocations at appropriate places for different components of water treatment & distribution systems.	To be ensured by the constituent States/development authorities in the first year of the implementation of Plan and subsequently to follow the same.	To be ensured by the constituent States/development authorities.	To be ensured by the constituent States/development authorities.	To be ensured by the constituent States/development authorities.

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
12.	Provision for Special Component Plan for NCR should be made by the Planning Commission in the five-year plans and Sub-component Plans should be prepared by the respective State Governments. Centrally Sponsored Schemes for Infrastructure Development (drinking water supply, sewerage, sewage treatment plant, drainage, roads, power etc.) in NCR should be formulated with state share of 25%, central grant of 25% and remaining 50% could be interest bearing loan from NCRPB.	Respective State Governments, Central Ministries and Planning Commission to ensure the provision. Ministry of Urban Development and Poverty Alleviation to form a centrally sponsored scheme for the purpose.	Respective State Governments, Central Ministries and Planning Commission to ensure the provision. Centrally sponsored scheme to continue.	Respective State Governments, Central Ministries and Planning Commission to ensure the provision. Centrally sponsored scheme to continue.	Respective State Governments, Central Ministries and Planning Commission to ensure the provision. Centrally sponsored scheme to continue.
13.	Investment Plan: Total water requirement in the region would be 11,984 mld by the year 2021. Accordingly, there will be need to produce additional water and to strengthen/expand the water supply distribution system in the region. Total investment required for the production/augmentation of water would be about Rs. 5,992.15 crores by the year 2021 and for strengthening/expansion of distribution system/network, it would be about Rs.7,190.57 crores.	Fund requirement for drinking water supply is estimated to be Rs.2,637 crores.	Fund requirement for drinking water supply is estimated to be Rs.3,955 crores.	Fund requirement for drinking water supply is estimated to be Rs.3,955 crores.	Fund requirement for drinking water supply is estimated to be Rs.2,637 crores.

ANNEXURE 9/I

STATUS OF SEWERAGE IN NCR TOWNS

S. No.	Sub-region/Town	Sewerage System Combined/Separate	Coverage (in %)	Number of STP capacity (in mld)	Quantity generated (in mld)	Quantity intercepted for treatment (in mld)	Disposal to drain/river/ irrigation
1	2	3	4	5	6	7	8
	Haryana						
1	Faridabad	Separate	65	1 No.-45 1 No.-50 1 No.-20	105.00	105.00	Agra canal Gaunchi drain/Yamuna Buria *nala*/Yamuna
2	Gurgaon	Separate	60	2 Nos.; 30 each	13.14	13.14	Najafgarh drain
3	Bahadurgarh	Separate	60	-	5.18	-	Drain No. 8
4	Panipat	Separate	50	2 Nos.; 10 and 35	28.80	28.80	Yamuna River
5	Rewari	Separate	70	-	9.08	-	Irrigation
6	Palwal	Separate	60	1 No, 12	4.43	4.43	Gaunchi drain
7	Rohtak	Separate	65	-	16.79	-	Drain No.8
8	Sonepat	Separate	40	1 No, 30	10.97	10.97	Drain No.6
9	Samalakha	Separate	60	-	1.30	-	Drain No. 6
10	Gohana	Separate	25	1No, 3.5	2.12	2.12	Drain No. 6
11	Gannaur	Separate	40	-	0.90	-	Drain No. 6
12	Jhajjar	Separate	65	-	3.00	-	Drain No. 8
13	Haily Mandi	Separate	75	-	0.65	-	Irrigation
14	Pataudi	Separate	-	-	0.80	-	Irrigation
15	Sohna	Separate	60	-	1.09	-	Irrigation
16	Hodel	Separate	-	-	2.90	-	Gaunchi drain
17	Nuh	Separate	30	-	0.51	-	Irrigation
18	Meham	Separate	-	-	1.01	-	Irrigation
19	Bawal	Separate	-	-	0.78	-	Irrigation
20	Village Kosli	Separate	-	-	0.74	-	Irrigation
21	Village Kundli	Separate	-	-	0.71	-	Drain No. 8
22	Village	Separate	-	-	0.83	-	Sahibi River
	Dharuhera	-	-	-	-	-	-
	Rajasthan						
1	Alwar	Com/Sep. Partial	5	Nil	10.50	Nil	River Gajuka
2	Bhiwadi	Separate	3	Nil	0.02	Nil	Drain Matiala village
3	Khaithal	Separate	3	Nil	0.42	-	Sahibi River
4	Behror	Separate	-	-	0.45	-	-
5	Tijara	Separate	-	-	0.52	-	-
6	Shahjahanpur	Separate	-	-	0.09	-	-

S. No.	Sub-region/Town	Sewerage System Combined/Separate	Coverage (in %)	Number of STP capacity (in mld)	Quantity generated (in mld)	Quantity intercepted for treatment (in mld)	Disposal to drain/river/ irrigation
1	2	3	4	5	6	7	8
	Uttar Pradesh						
1	Ghaziabad	Separate	70	2 Nos., 73 & 56	109.00	30	Drain/River
2	Meerut	-	30	Nil	80.00	-	-
3	Sayana	Nil	Nil	Nil	Nil	Nil	Nil
4	Dasna	Nil	-	-	-	-	-
5	Mawana	-	-	-	-	-	-
6	Hapur	Combined	40	58.60	586.00	Nil	Drain/Irrigation
7	Anoopshahar	No sewerage system	-	-	-	-	River Ganga
8	Bugrasi	Combined	85	-	-	-	-
9	Shikarpur	Nil	Nil	Nil	Nil	Nil	Nil
10	Bulandshahr	No sewerage system	-	-	-	-	-
11	Karkhodha(Meerut)	No sewerage system	-	-	-	-	
12	Parikshit Garh	Nil	Nil	Nil	Nil	Nil	Nil
13	Babugarh	Only 85% individual houses have flush toilet system					
14	Phalawada Meerut	Nil	Nil	Nil	Nil	Nil	Nil
15	Pilkhuwa	-	-	-	-	-	-
16	Bhawan Bahadur Nagar, Bulandshahar	-	-	-	-	-	-
17	Baghpat	-	-	-	-	-	-
18	Karnawal	Nil	Nil	Nil	Nil	Nil	Nil
19	Baraut	No sewerage system	-	-	-	-	-
20	Baghpat	No sewerage system	-	-	-	Yamuna River	-
21	Daurala	-	-	-	-	-	-
22	Dankaur	-	-	-	-	-	Drain
23	Gulaothi	-	-	-	-	-	-
24	Muradnagar	-	-	-	-	-	-
25	Siwal Khas	Nil	Nil	Nil	Nil	Nil	Nil
26	Hastinapur	-	-	-	-	-	-
27	Chaproli (Bhagpat)	No sewerage system	-	-	-	-	-
	NCT-Delhi						
1	NCT-Delhi	Separate		1828.00	2540.00	1500.00	Partly for irrigation and rest in river Yamuna

Note:
For remaining towns information was not available.

ANNEXURE 9/II

PLAN OF ACTION AND PHASING–SEWERAGE, SOLID WASTE MANAGEMENT, DRAINAGE AND IRRIGATION

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
SEWERAGE					
1.	Master Plans should be prepared for sewerage system and its treatment for all the identified towns.	To be prepared by the State governments by the year 2006.	Implementation and monitoring to be done by the States on regular basis.	Implementation and monitoring to be done by the States on regular basis.	Implementation and monitoring to be done by the States on regular basis.
2.	All identified towns should have cent percent sewerage system and should treat their sewage up to the desired standards. Existing townships/cities where existing sewerage system is in poor condition, these systems should be rehabilitated. Remaining towns may initially be provided with low cost sanitation systems followed by sewerage system with appropriate treatment facilities. All the urban villages should be provided with the facilities equivalent to the towns, within whose controlled areas they are located. Other rural areas should be provided with low cost sanitation (LCS) measures such as sanitary latrines, septic tanks and soak pits.	To be implemented in the towns with a population of 5 lakhs and above. LCS to be provided in the 30% area.	To be implemented in the towns with a population from 2-5 lakhs. LCS to be provided in the 40% area.	To be implemented in the towns with a population below 2 lakhs. LCS to be provided in the 30% area.	Upgradation/augmentation of capacities for the increased population. Upgradation/augmentation of capacities for the increased population.
3.	Master/Development Plans of the towns and cities should incorporate land allocations at appropriate locations for such facilities.	To be done immediately as per norms prescribed in the Regional Plan.	To ensure the compliance.	To ensure the compliance.	To ensure the compliance.
4.	Overall management of surface drains and sewerage system in a town with its effluent treatment facilities should be with single agency and policy of dual agencies should be discarded.	To be implemented immediately.	To ensure the compliance.	To ensure the compliance.	To ensure the compliance.
5.	Recycling of waste water for non drinking water use should be promoted to the extent of at least 50% of the waste water generated. If required, enabling provisions in the respective acts of the local bodies may be made by the respective state governments.	To be done immediately.	To ensure the compliance.	To ensure the compliance.	To ensure the compliance.

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
6.	Mass awareness should be created for waste minimization.	To be done immediately.	To ensure the compliance.	To ensure the compliance.	To ensure the compliance.
7.	Commercial approach is required to be adopted by the local bodies for revenue generation. Tariff should be so fixed that it meets at least the Operation and Maintenance cost of the sewerage system, if not the capital cost of the system. Introduction of sewage tax and improved recovery of taxes may help in reducing the revenue-expenditure gap. The structure of the sewage tax should be demand based and increased telescopically depending upon the monthly consumption of water and should be reviewed periodically as a built-in mechanism to make the service self sustaining and a deterrent to wastage. Public-private partnership needs to be introduced for operation and maintenance of the sewerage schemes and sewage treatment plants.	To be implemented immediately. States should improve water tariff by the end of 11th Plan.	To ensure the compliance. States should improve water tariff by the end of 11th Plan.	To review the tariff structure and if required to be enhanced.	To review the tariff structure and if required to be enhanced.
8.	Institutional capacity building measures should be adopted.	Capacity building is a continuous process and is required to be taken up immediately by the respective State governments. The Board should help the State governments in conducting the courses for capacity building. Training courses for capacity building to continue. Tariff to be reviewed.			
9.	External Development Charges (EDC) should be proportionately spent for the development of physical infrastructure in the existing township and new area under development.	To be done immediately	To ensure the compliance	To ensure the compliance	To ensure the compliance
10.	Provision for Special Component Plan for NCR in the five-year plan and Sub-component Plan by the State governments should be made. Centrally Sponsored Schemes for Infrastructure Development in NCR should be formulated and implemented.	Should be implemented immediately	To ensure implementation	To ensure implementation	To ensure implementation
11.	Total estimated sewage generation in the urban areas of the region is estimated to be 6,935 mld by the year 2021 and accordingly, there will be need to strengthen/expand the sewerage system and its treatment capacities in the region. Total investment required for laying of sewerage system would be	Fund requirement for laying of sewerage system is estimated to be Rs.1,248.29 crores.	Fund requirement for laying of sewerage system is estimated to be Rs.2,912.68 crores.	Fund requirement for laying of sewerage system is estimated to be Rs.2,496.58 crores.	Fund requirement for laying of sewerage system is estimated to be Rs.1,664.39 crores.

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
	Rs.3,467.47 crore by the year 2021 and for treatment of waste water, the investment would amount to Rs. 4,854.46 crores.				
SOLID WASTE MANAGEMENT					
1.	All the towns in NCR should prepare detailed Solid Waste Management Plan as per directions of the Ministry of Environment & Forests and Norms & Standards given in the Manual of CPHEEO, MOUD&PA.	Should be prepared immediately compliance by the respective State Governments.	Respective State governments to ensure the implementation of the Plan.	Respective State governments to ensure the implementation of the Plan.	Respective State governments to ensure the implementation of the Plan.
2.	Land for treatment/disposal of solid waste should be earmarked while preparing the Master/Development Plan for various towns/cities. The acquisition of these sites by the Development Authorities and Municipalities should form a compulsory element of the development programme and properly budgeted for in their Plan documents.	To be done immediately compliance by the respective State Governments.	To ensure the compliance by the respective State Governments.	To ensure the compliance by the respective State Governments.	To ensure the compliance by the respective State Governments.
3.	The policy of waste minimization through recycling /recovery of resources should be adopted-at least 50% of the Solid Waste generated should be disposed off through other treatment technologies like composting and the balance through sanitary landfill.	To be done immediately compliance by the respective State Governments.	To ensure the compliance by the respective State Governments.	To ensure the compliance by the respective State Governments.	To ensure the compliance by the respective State Governments.
4.	Institutional capacity building measures should be taken including involvement of NGO's/Private Sector to improve the efficiency and effectiveness of Solid waste management at each stage such as waste collection, transfer/transportation, treatment and disposal. Local bodies and Panchayats should improve their financial conditions through better financial management and should also improve the revenue generation capacities	Capacity building is a continuous process and is required to be taken up immediately by the respective State governments. The Board should help the State governments in conducting the courses for capacity building. States should improve water tariff by the end of 11th Plan. Training courses for capacity building to continue. Tariff to be reviewed.			
5.	In the rural areas, there is no mechanism for collection and disposal of solid waste. This should be developed by associating local Panchayats.	All the urban villages to be covered in Tenth Plan.	Other villages to be covered by the end of Eleventh Plan.	To ensure the compliance by the respective State Governments.	To ensure the compliance by the respective State Governments.

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
6.	Total solid waste generation in the urban areas of the region would be about 27,236 MT/day by the year 2021 and accordingly there will be need to develop appropriate system for collection, transportation and disposal of solid waste in environmental friendly manner either through properly designed sanitary land filling or through other treatment methods. Total investment required for this would be about Rs.1,361.81 crores upto the year 2021.	Investment for solid waste management is estimated to be Rs. 544.73 crores.	Investment for solid waste management is estimated to be Rs. 340.45 crores.	Investment for solid waste management is estimated to be Rs. 272.36 crores.	Investment for solid waste management is estimated to be Rs. 204.27 crores.
DRAINAGE					
1.	Urban drainage system should be designed for maximum rainfall of five years frequency storm for internal as well as peripheral drains and ten years frequency storm for the main drains.	Should be adopted immediately by the respective State Governments.	To ensure the compliance by the respective State Governments.	To ensure the compliance by the respective State Governments.	To ensure the compliance by the respective State Governments.
2.	Integrated Regional Drainage Plan at the regional level and Drainage Master Plans at the District level should be prepared for enhancing the quality of regional and local drains taking into account the present/future development and settlement pattern in the region. All the related works at the regional level should be coordinated by a single agency.	Drainage Master Plans at the District level need to be prepared by the constituent State Governments and to be part of Blue print for water resources in the region indicated in policy at S. No. 1 of water.	Implementation and monitoring to be done by the respective State Governments.	Implementation and monitoring to be done by the respective State Governments.	Implementation and monitoring to be done by the respective State Governments.
3.	Measures should be taken to prevent the use of storm water drains for conveying sewage, dumping of solid wastes, sludge and unauthorized development/slum dwellings.	It should be implemented by the respective State Governments immediately.	Implementation and monitoring to be done by the respective State Governments.	Implementation and monitoring to be done by the respective State Governments.	Implementation and monitoring to be done by the respective State Governments.
4.	Investment required in this sector will depend upon the district Level drainage Master Plans to be prepared by the respective State governments and there Integrated Regional Drainage Plan. Provisions for fund requirement will have to be made by the constituent States on the basis of district level Drainage Master Plans on the same lines as for the irrigation channels.	To be implemented by the respective State Governments immediately.	Implementation and monitoring to be done by the respective State Governments.	Implementation and monitoring to be done by the respective State Governments.	Implementation and monitoring to be done by the respective State Governments.

S. No.	Policies/Proposals	10th Plan (2002-2007)	11th Plan (2007-2012)	12th Plan (2012-2017)	13th Plan (2017-2021)
1	2	3	4	5	6
IRRIGATION					
1.	Integrated Water Resource Management Approach for the region is required for optimum water resources utilization and demand management.	It should form part of Blue print for water resources in the region indicated in policy at S. No. 1 of water.	Implementation and monitoring to be done by the respective State Governments.	Implementation and monitoring to be done by the respective State Governments.	Implementation and monitoring to be done by the respective State Governments.
2.	Augmentation of water resources should be done through adopting rain water harvesting (micro and macro) and recycling/reuse of treated waste water.	To be implemented by the respective State Governments immediately.	Implementation and monitoring to be done by the respective State Governments.	Implementation and monitoring to be done by the respective States.	Implementation and monitoring to be done by the respective States.
3.	Sprinkler/drip irrigation should be promoted to save water. Cropping pattern should be decided on the basis of availability of water.	It should be implemented by the respective State Governments immediately.	Implementation and monitoring to be done by the respective State Governments.	Implementation and monitoring to be done by the respective State Governments.	Implementation & monitoring to be done by the respective State Governments.

ANNEXURE 9/III

STATUS OF SOLID WASTE IN NCR TOWNS

S. No.	Sub-region/Town	Quantity produced (MT/day)	Number of Collection centres	Number of transfer stations	Average travel Distance for disposal (km)	Number of Landfill Sites		Disposal by other means			
						Environmental friendly	Non-environmental friendly	Composting	Incineration	Pellatisation	Others
1	2	3	4	5	6	7	8	9	10	11	12
	Haryana										
1	Faridabad	461	-	-	7.0	1	4	-	-	-	Yes
2	Gurgaon	74	-	-	6.0	-	3	-	-	-	Yes
3	Bahadurgarh	34	-	-	4.0	-	2	-	-	-	Yes
4	Panipat	106	-	-	5.0	-	3	-	-	-	Yes
5	Rewari	44	-	-	4.0	-	2	-	-	-	Yes
6	Palwal	29	-	-	3.0	-	2	-	-	-	Yes
7	Rohtak	111	-	-	6.0	-	3	-	-	-	Yes
8	Sonepat	73	-	-	5.0	-	3	-	-	-	Yes
9	Samalakha	10	-	-	3.0	-	1	-	-	-	Yes
10	Gohana	16	-	-	2.0	-	2	-	-	-	Yes
11	Gannaur	11	-	-	1.5	-	1	-	-	-	Yes
12	Jhajjar	12	-	-	2.0	-	2	-	-	-	Yes
13	Haily Mandi	7	-	-	2.0	-	1	-	-	-	Yes
14	Patudi	6	-	-	2.5	-	1	-	-	-	Yes
15	Sohna	8	-	-	1.5	-	1	-	-	-	Yes
16	Hodel	14	-	-	1.5	-	1	-	-	-	Yes
17	Nuh	3	-	-	2.0	-	1	-	-	-	Yes
18	Meham	8	-	-	1.5	-	1	-	-	-	Yes
19	Bawal	4	-	-	2.0	-	1	-	-	-	Yes
20	Village Kosli	4	-	-	1.5	-	1	-	-	-	Yes
21	Village Kundli	3	-	-	1.5	-	1	-	-	-	Yes
22	Village Dharuhera	9	-	-	2.0	-	1	-	-	-	Yes
	Rajasthan										
1	Alwar	45	1145	4	2.5	-	5	-	-	-	Yes
2	Bhiwadi	3	-	3	1.0	-	4	-	-	-	Yes
3	Khairthal	4.4	-	1	-	-	1	-	-	-	Yes
4	Behror	3.2	-	4	-	-	4	-	-	-	Yes
5	Tijara	3	-	2	-	-	1	-	-	-	Yes
6	Shahjahanpur	0.14	-	1	-	-	1	-	-	-	Yes

S. No.	Sub-region/Town	Quantity produced (MT/day)	Number of Collection centres	Number of transfer stations	Average travel Distance for disposal (km)	Number of Landfill Sites		Disposal by other means			
						Environmental friendly	Non-environmental friendly	Composting	Incineration	Pellatisation	Others
1	2	3	4	5	6	7	8	9	10	11	12
	Uttar Pradesh										
1	Ghaziabad and Loni	500	465	-	-	-	-	Nil	Nil	Nil	-
2	Meerut	580	60	22	-	Nil	4 Hapur bypass Near RTO office Hapur road Delhi road	Nil	Nil	Nil	Dumping on old track
3	Sayana	16	Nil	Nil	-	Nil	Nil	Nil	Nil	Nil	Nil
4	Nagar Panchayat Dasna	-	-	-	-	-	-	-	-	-	-
5	Mawana	28	70	4	-	1	3	x	x	x	-
6	Hapur	80	15	2	-	2	2	-	-	-	-
7	Anoopshahar	12	15	2	-	-	2	-	-	-	-
8	Nagar Panchayat Bugrasi	-		-	-	-	2	-	-	-	-
9	Shikarpur	16	4	-	-	-	-	-	-	-	-
10	Nagar Palika	-		-	-	-	-	-	-	-	-
	Bulandshahr	71	2	-	-	-	2	-	-	-	-
11	Kharkhoda	-	-	-	-	-	3	-	-	-	
12	Prikshit Garh	-	-	-	-	2	-	-	-	-	-
13	Babugarh	-	-	-	-	2 Depressions	-	-	-	-	
14	Nagar Panchayat Phalwada	-	-	-	-	-	-	Combined Pond	-	-	-
15	Pilkhuwa	28	17	7	-	-	3	-	-	-	-
16	Nagar Panchayat B.B. Nagar (Bulandshahr)	-	-	-	-	-	3	-	-	-	-
17	Khekra	-	-	-	-	2	-	-	-	-	-
18	Karnawal	-	-	-	-	4	Nil	Nil	Nil	Nil	Nil
19	Baraut	40	-	-	-	3					
20	Baghpat	16	-	-	-	1	-	-	-	-	-
21	Dourala	-	-	-	-		2	-	-	-	-
22	Nagar Panchayat Dankaur	-	-	-	-	4	0	-	-	-	-
24	Gulavati	-	-	-	-		3	-	-	-	-
25	Muradnagar	32	-	-	-	3	-				
26	Nagar Panchayat	-	-	-	-	4	Nil	-	-	-	-
27	Siwal Khas	-	-	-	-	-	-				
28	Hastinapur	-	-	-	-	-	4	-	-	-	-
29	Chaproli	-	-	-	-	-	-	-	-	-	-

ANNEXURE-10/I

STATUS OF DELS, SWITCH CAPACITY AND WAITING LIST FOR NCR TOWNS

S. No.	NCR Town	Telecom Circle	Status as on 31.07.2001			Status as on 30.08.2003		
			Switch Capacity	DEls	W/L	Switch Capacity	DEls	W/L
1	2	3	4	4	5	7	8	9
	CNCR Town							
1	Faridabad	Haryana	84,630	76,462	6,790	1,13,500	87,019	434
2	Ballabhgarh	Haryana	18,500	16,814	927	23,000	17,912	0
3	Bahadurgarh	Haryana	14,500	11,030	861	26,300	15,141	268
4	Gurgaon	Haryana	1,01,300	8,16,531	4,423	1,37,800	90,142	1,133
5	Kundli	Haryana	2,500	2,132	225	6,600	3,010	0
6	Ghaziabad	U.P. (west)	1,18,500	1,04,632	4,351	1,64,000	1,20,060	657
6a.	Ghaziabad WLL	U.P. (west)	--	--	--	1,000	750	0
7	Noida	U.P. (west)	95,256	81,900	350	1,25,756	9,33,441	501
7a.	Noida WLL	U.P. (west)	--	--	--	4,000	3,259	0
8	Loni	U.P. (west)	5,500	4,568	1,472	12,000	9,099	190
		Sub-total	**4,40,686**	**3,79,191**	**19,399**	**6,13,956**	**12,79,833**	**3,183**
	Priority Town							
9	Rohtak	Haryana	38,006	31,271	429	57,250	38,048	1,107
10	Rewari	Haryana	10,000	9,885	2,083	18,600	14,874	859
11	Palwal	Haryana	9,000	7,899	628	13,500	10,549	304
12	Panipat	Haryana	40,900	35,840	1,029	59,350	47,619	158
13	Dharuhera	Haryana	1,500	1,445	421	3,800	2,558	170
14	Meerut	U.P. (west)	94,000	79,632	2,808	1,11,000	80,887	978
14a.	Meerut WLL		--	--	--	5,000	1,429	625
15	Bulandshahr	U.P. (west)	17,500	12,906	2,260	21,500	16,332	590
15a.			--	--	--	1,000	310	0
16	Khurja	U.P. (west)	9,000	5,282	1,820	11,500	8,082	558
17	Hapur	U.P. (west)	16,000	13,212	1,108	19,100	17,587	140
18	Alwar	Rajasthan	31,000	24,917	114	37,488	32,613	264
19	MIA-Alwar	Rajasthan	1,400	1,204	35	1,400	1,207	80
20	Bhiwadi	Rajasthan	6,000	4,362	233	9,600	8,196	57
21	Sonepat		--	--	--	35,868	28,126	0
		Sub-total	**2,74,306**	**2,27,855**	**12,968**	**4,05,956**	**3,08,417**	**5,890**
	Counter Magnet Town							
22	Gwalior	M.P.	78,256	61,704	Nil	91,992	74,096	0
23	Patiala	Punjab	57,000	52,851	368	71,000	53,326	265
24	Patiala Cel.		--	--	--	10,400	8,958	0
25	Hissar	Haryana	37,500	29,164	857	55,250	37,046	521
26	Kota	Rajasthan	58,000	51,069	Nil	91,196	71,889	58
27	Bareilly	U.P. (west)	49,500	44,794	1,320	71,900	54,502	494
		Sub-total	**2,80,256**	**2,39,582**	**2,545**	**3,91,738**	**2,99,817**	**1,338**
		Total	**9,95,248**	**8,46,628**	**34,912**	**14,11,650**	**18,88,067**	**10,411**

ANNEXURE -10/II

STATUS OF PROVISION OF VALUE ADDED SERVICES IN THE NCR TOWNS

S. No.	Value Added Services (status as on 31.07.2001)					
	NCR Town	Internet	Pager	Cellular Mobile Phone	ISDN	Data I-Net
1	2	3	4	5	6	7
1	Faridabad	A	A	A	A	A
2	Ballabhgarh	A	A	A	A	
3	Bahadurgarh	A	A	A	A	X
4	Gurgaon	A	A	A	A	A
5	Rohtak	A	A	A	A	A
6	Rewari	A	A	A	A	X
7	Palwal	A	A	A	A	X
8	Panipat	A	A	A	A	X
9	Dharuhera	A	A	A	A	X
10	Kundli	A	A	A	X	X
11	Ghaziabad	A	A	A	A	A
12	Noida	A	A	A	A	A
13	Loni	A	A	A	A	A
14	Meerut	A	A	A	A	A
15	Bulandshahr	A	A	A	A	A
16	Khurja	A	A	A	A	A
17	Hapur	A	A	A	A	A
18	Alwar	A	X	X	X	A
19	MIA-Alwar	A	X	X	X	A
20	Bhiwadi	A	X	X	X	A
21	Gwalior	A	A	A	A	A
22	Patiala	A	A	A	A	A
23	Hissar	A	A	A	A	X
24	Kota	A	A	A	A	A
25	Bareilly	A	A	A	A	A

Note:
A - Facility available
X - Facility not available

ANNEXURE -10/ III

REQUIREMENT OF FUNDS FOR TELECOMMUNICATIONS

S. No	NCR Town	Telecom Circle	2001		2006			2011		
			Population (Person)	Tel-density	Population (Person)	New Lines Required	Investment Required (in Rs.)	Population (Person)	New Lines Required	Investment Required (in Rs.)
1	2	3	4	5	6	7	8	9	10	11
Metro and Regional Centres within Central NCR										
1	Faridabad	Haryana	10,54,981	8.84	14,28,377	70,987	19,16,657	18,01,772	42,940	11,59,393
2	Bahadurgarh	Haryana	1,31,924	8.36	2,18,002	14,040	3,79,085	3,04,079	9,899	267,271
3	Gurgaon	Haryana	2,29,243	35.62	3,07,994	-46,234	0	3,86,744	-37,177	0
4	Kundli	Haryana	--	--	0	-2,132	0	--	-2,132	0
5	Ghaziabad	U.P. (west)	9,68,521	10.80	14,00,740	56,453	15,24,232	18,32,958	49,705	13,42,038
6	Noida	U.P. (west)	2,93,908	27.87	4,41,745	-31,099	0	5,89,581	-14,098	0
7	Loni	U.P. (west)	1,20,659	3.79	2,59,430	25,266	6,82,193	3,98,200	15,959	4,30,882
		Sub-total	**27,99,236**	**13.55**	**40,56,285**	**1,66,747**	**45,02,166**	**53,13,334**	**1,18,503**	**31,99,585**
Metro and Regional Centres outside Central NCR										
1	Rohtak	Haryana	5,16,624	6.05	6,04,511	38,248	10,32,688	6,92,397	10,107	2,72,888
2	Rewari	Haryana	1,36,305	7.25	1,65,732	9,174	2,47,701	1,95,158	3,384	91,369
3	Palwal	Haryana	1,00,528	7.86	1,35,664	7,702	2,07,964	1,70,800	4,041	1,09,097
4	Panipat	Haryana	2,91,521	12.29	3,48,495	4,237	1,14,395	4,05,468	6,552	1,76,903
5	Dharuhera	Haryana	100,946	1.43	1,18,099	12,136	3,27,681	1,35,251	1,973	53,259
6	Meerut	U.P. (west)	16,76,271	4.75	19,38,706	1,43,319	38,69,618	22,01,141	30,180	8,14,861
7	Bulandshahr	U.P. (west)	1,76,256	7.32	2,10,243	11,272	3,04,341	2,44,229	3,908	1,05,528
8	Khurja	U.P. (west)	98,403	5.37	1,09,492	7,310	1,97,357	1,20,580	1,275	34,430
9	Hapur	U.P. (west)	2,11,987	6.23	2,59,617	16,644	4,49,387	3,07,247	5,477	1,47,891
10	Alwar	Rajasthan	2,65,850	9.83	3,01,085	8,504	2,29,602	3,36,320	4,052	1,09,405
11	Bhiwadi	Rajasthan	33,830	12.89	54,353	1,889	50,991	74,875	2,360	63,722
		Sub-total	**36,08,521**	**6.31**	**42,45,994**	**2,60,434**	**70,31,725**	**48,83,466**	**73,309**	**19,79,352**
		Total	**64,07,757**	**9.47**	**83,02,279**	**3,47,716**	**1,15,33,891**	**1,01,96,800**	**2,17,870**	**51,78,937**

Note:
Proposed Tele-density (Number of Telephones/100 persons): 11.5

ANNEXURE 19/I

POLICIES AND STRATEGIES OF VARIOUS SECTORS 2021

<table>
<tr><th>S. No.</th><th>Sector</th><th>Sector Policy</th><th>Strategies</th><th>Agency Responsible</th></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr>
<tr><td>1.</td><td>Demography and settlement pattern</td><td>Spread of the developmental impulse of Delhi to whole of NCR by providing economic base and infrastructure to selected urban settlements, developing small & medium towns and rural areas, providing effective transportation system, rationalizing use of land, encouraging private participation, etc.</td><td>The following towns are prioritized for development to achieve balanced growth in NCR. Their population assignments for 2011 and 2021 and their future economic base will be as follows:

<table>
<tr><th rowspan="2">Town/Complex</th><th colspan="2">Population (in lakhs)</th></tr>
<tr><th>2011</th><th>2021</th></tr>
<tr><td>Faridabad-Ballabgarh</td><td>16.00</td><td>25.00</td></tr>
<tr><td>Gurgaon-Manesar</td><td>4.50</td><td>16.50</td></tr>
<tr><td>Ghaziabad-Loni</td><td>19.00</td><td>30.19</td></tr>
<tr><td>NOIDA</td><td>6.00</td><td>12.00</td></tr>
<tr><td>Sonepat-Kundli</td><td>3.50</td><td>10.00</td></tr>
<tr><td>Greater NOIDA</td><td>7.00</td><td>12.00</td></tr>
<tr><td>Meerut</td><td>15.00</td><td>22.00</td></tr>
<tr><td>Bahadurgarh</td><td>2.00</td><td>3.00</td></tr>
<tr><td>Panipat</td><td>5.00</td><td>7.00</td></tr>
<tr><td>Rohtak</td><td>4.20</td><td>6.00</td></tr>
<tr><td>Palwal</td><td>1.70</td><td>4.00</td></tr>
<tr><td>Rewari-Dharuhera-Bawal</td><td>2.00</td><td>4.00</td></tr>
<tr><td>Hapur-Pilkhua</td><td>3.00</td><td>4.50</td></tr>
<tr><td>Bulandshahr-Khurja</td><td>3.70</td><td>4.77</td></tr>
<tr><td>Baghpat-Baraut</td><td>1.60</td><td>3.00</td></tr>
<tr><td>Alwar</td><td>3.40</td><td>4.50</td></tr>
<tr><td>Greater Bhiwadi</td><td>1.00</td><td>3.00</td></tr>
<tr><td>Shahjahanpur-Neemrana-Behror</td><td>1.00</td><td>3.00</td></tr>
</table>

At the Sub-regional level, the hierarchy of settlements including rural clusters will be detailed out.</td><td>The concerned Development Authorities will prepare the Development Plan based on the Population assignments and review the same after ten years in consultation with the NCRPB and ensure incorporation of policies of Regional Plan-2021 in their Master/Development Plans.

The NCR Cells of the concerned State will prepare the Sub-regional Plan in consultation and with approval of the Board.</td></tr>
<tr><td>2.</td><td>Economic Base</td><td>• Integrated policy for the region as a whole should be pursued at the sub-regional level so as to effectuate the broader objectives of the Regional Plan-2021 by fostering rapid economic growth and achieving balanced</td><td>• The proposals/strategies/action plans at the sub-regional/ district level/town level should be dovetailed from the policy envisaged in the Regional Plan-2021.</td><td>The NCR Cells of the concerned State will incorporate the broad policies of Regional Plan-2021 at sub-regional level in consultation and with approval of the Board.</td></tr>
</table>

S. No.	Sector	Sector Policy	Strategies	Agency Responsible
1	2	3	4	5
		development of the region. • Change basic character of regional economy from the agricultural and pre- industrial to more diversified one. • A balanced policy for development of economic activities should be adopted in NCR for identified policy zones.		The State Government Policy will also be in coterminous with the policy of Regional Plan-2021
i)	Industry	• Decentralization of industries	For NCT-Delhi • Only those industries related to marketing and/or providing consumer needs will be allowed in Delhi • Only hi-tech industries should be allowed in Delhi • In the existing industrial areas, low-tech industries should be converted into hi-tech and those which are unable should be phased out within reasonable time For CNCR areas • No hazardous/ polluting industries should be allowed • Hi-tech industries should be allowed to flourish • Industries existing before 1986 will conform to EPA, 1986 For rest of NCR • All towns selected for priority development should have a strong industrial base and appropriate incentives should be given for setting of units • Local development authorities of the towns will prepare plans for adequate industrial areas along with infrastructure facilities	State Industrial departments, local development authorities and State Pollution Control Boards of the respective States.
ii)	Wholesale Trade and Commerce	• Wholesale trade based upon nature of use and catchments to be served.	For NCT-Delhi • No preferential treatment or low taxes to be given for wholesale trade in Delhi • No new wholesale market should be established in Delhi For CNCR areas • Commodities which require bulk handling such as PVC goods, chemicals, timber, iron & steel, food grains, building materials and commodities which are hazardous in nature. For rest of NCR • Adequate incentives should be given in order to encourage and accelerate growth of trade centres as proposed below within	Sales Tax Department, GNCTD Delhi Development Authority in its MPD-2021 should address this issue adequately. Local development authorities will ensure to make provision in their respective master plans, and provide infrastructure thereof. Concerned State Government will provide adequate incentives for

S. No.	Sector	Sector Policy	Strategies	Agency Responsible
1	2	3	4	5
			NCR.	establishing such trade centres in the listed cities and the local development authorities will ensure to make provision in their respective Master Plans, and provide infrastructure thereof.
iii)	Government/ Public Sector and Commercial/ Corporate Offices	• Relocate offices based upon nature of working and its importance.	For <u>NCT-Delhi</u> • Only those central government offices which perform ministerial, protocol functions will be within national capital. All other offices including public sector offices should be shifted from Delhi • No new office spaces should be created in newly developed community, district or sub city and city centres. • No unauthorized change of land/ building use should be allowed. For <u>CNCR areas</u> • Relocation or expansion of government offices/ PSUs which need to perform ministerial, protocol, laisoning functions which make it incumbent upon them to be located in Delhi alone, should be allowed in CNCR. For <u>rest of NCR</u> • All Central government offices and PSUs which are considered for shifting from Delhi should be located in any other town of NCR.	Ministry of Urban Development, GoI. Ministry of Urban Development, GoI, Delhi Development Authority and MCD. Ministry of Urban Development and all local authorities. Ministry of Urban Development and all local authorities.
iv)	Other Economic Activities	• To make NCR as Common Economic Zone (CEZ).	• Rationalization of tax structure • Extending Uniform Financial/Banking services • Removing the restrictions on Inter-State movement of taxis and auto rickshaws among NCR States • Providing uniform telecom facilities	Ministry of Finance and State Finance departments. Ministry of Finance and Reserve Bank of India Ministry of Shipping, Road Transport and Highways and State transport departments. Ministry of Communications and Information Technology.

S. No.	Sector	Sector Policy	Strategies	Agency Responsible
1	2	3	4	5
			• Providing uniform power supply	Ministry of Power, Central Electricity Authority and State Electricity Boards.
			• Integrated Education Policy	Ministry of HRD, UGC, AICTE and State education departments.
			• Integrated law and order machinery	Ministry of Home Affairs and State Police departments.
3.	Rural Development	• Less developed districts should be identified and agriculture and rural development should be given priority by inducing growth through promoting agro-based industries and by providing adequate agriculture marketing by evolving a Common "Specified Commodities Marketing Act" on the lines of Agricultural Produce Marketing Act, to enable the dispersal of Wholesale Distributive Trades to the NCR towns.	• The Sub-regional Plan for the concerned area of the participating States should not only be reflecting broad policy of Regional Plan-2021 but also should reinforce backward and forward linkages by evolving a hierarchical settlement system at lowest level.	The NCR Cells of the concerned State will incorporate the broad policies of Regional Plan-2021 at Sub-regional level in consultation and with approval of the Board.
			• The District Plans should be prepared with emphasis on agriculture and rural development and should be coterminous with policies of Regional Plan-2021	The concerned District Collectors will ensure preparation of District development Plans as per 73rd and 74th CAA. And the policy should be in consonance with the broad policy of the Regional Plan-2021.
4.	Regional Land Use	• The proposed Land Use 2021 broadly addresses the issues of natural conservation, over congestion, high development pressure, and sufficient green spaces which should be further reflected in the Sub-regional and Master Plans.	Four major zones have been identified as follows: • Regulated Area Zone: Intense pressure of development, should be effectively controlled and monitored, all controlled areas/development areas declared by respective State governments will be deemed as regulated area zones, no development in this zone can be undertaken except in accordance with the Master/Development Plan for respective areas as approved by the Board and notifies by the State government.	Respective State Governments, NCR Cells, local/development authorities.
			• Highway Corridor Zone: A width of 500 m. on either side of the ROW of national highways outside the controlled/development area, a regulated zone is to be provided, within which necessary planned development should be undertaken by the concerned State Government after taking into account the restriction of green buffer zone spelt out in the Regional Plan.	Ministry of Shipping, Road Transport and Highways, NHAI, District Collectors, development/local authorities and Forest departments.

S. No.	Sector	Sector Policy	Strategies	Agency Responsible
1	2	3	4	5
			• Natural Area Conservation Zone: All major natural features identified as environment sensitive areas are to be protected in this zone. Broad policies indicated in the Regional Plan should be further elaborated in the Sub-regional Plans and Master Plans. • Agricultural Area Zone outside development/controlled areas: to be regulated and guided by Village/Block Plans to be drawn under district planning process and this zone may be designated for primary sector production.	Respective state Governments, NCR Cells, local authorities, State tourism department and local revenue authorities. District Collectors and local revenue authorities.
5.	Environment and Disaster Management	• All natural features such as ridges, rivers, streams, paleo channels etc. are to be conserved. • Preserve good agricultural land • Protect and conserve both surface and ground water resources.	• In order to protect the natural features, a minimum distance from the edge of any of the natural features should be demarcated as a 'No Development Zone' at the Sub-regional and local level. • No agriculture land will be allowed for conversion to non-agriculture use. • Land use allocation to be done carefully in the Sub-Regional/Master Plans in order to protect/conserve surface/ground water resources. Ground water recharging area identified in the Regional Plan should be further elaborated in the Sub-Regional/Master Plan and policies in these plans should be further elaborated to protect them.	All NCR Cells should ensure that this provision has been incorporated in their Sub-regional/Master Plans of the concerned States. All local/development authorities to ensure implementation.
		• Database for air and water quality and noise/land pollution to be created. • While carrying out activities for development, provision under EPA 1986 and rules thereof to be followed.	• Based on the appropriate database, planning and development should be done on the carrying capacity concept for sustainable development of the region.	Department of Environment & Forests, Pollution control boards, local bodies, development authorities, District Collectors and other departments of concerned States
		• A Disaster management/post-disaster management Plan to be prepared.	• Database for occurrence of hazardous, damage cost in the building & infrastructure and economic losses suffered to be created and Disaster management Plans to be prepare. These plans to be incorporated in Sub-Regional/District/Master Plans. • Amendments in the present building bye-laws, town planning acts, municipal acts etc. to be carried out to include safety aspects from natural/man-made hazardous. Guidelines to be prepared.	All NCR Cells should ensure that this provision has been incorporated in their Sub-regional/Master Plans of the concerned States. All local/development authorities to ensure implementation.

S. No.	Sector	Sector Policy	Strategies	Agency Responsible
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6.	Tourism and Heritage	• Tourism to be an employment generating activity • All tourism sites including monuments/heritage areas/natural heritage sites etc. should be identified and adequately protected and conserved.	• State Governments should prepare tourism development plans for the listed areas mentioned in Regional Plan-2021and should be incorporated in Sub-regional Plans and tourism policy. • Tourist circuits should be created at Sub-regional level and at regional level. • Should be a key element in land use policy. • The tourism departments while preparing the Tourism development Plans at sub-region/local level should also identify all monuments/ heritages and should prepare action plan for such areas. • Fiscal incentives/ subsidies etc. should be given to private entrepreneurs for management of various tourist sites.	All NCR Cells, Archaeological Survey of India, State Archaeology/Tourism departments of concerned States and local authorities.

ANNEXURE 19/II

PROPOSED STAFF IN THE TECHNICAL WING OF NCR PLANNING BOARD

Posts	**Sanctioned Strength**	**Proposed Strength**	**Additional Strength**
Chief Regional Planner (Rs.18,300-22,000)	1	1	-
Additional Chief Regional Planner (Rs.16,400-20,000)	0	1	1
Joint Director (Technical) (Rs.12,000-16,500)	3	4	1
Deputy Director (Technical) (Rs.10,000-15,200)	2	8	6
Assistant Director (Technical) (Rs.8,000-13,500)	5	16	11
Planning Assistant (Rs.5,500-9,000)	1	4	3
Draughtsman (Grade III)/Technical Assistant (Rs.4,000-6,000)	1	2	1