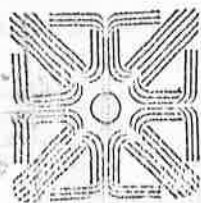


National Capital Region Planning Board
(Planning Committee)

**17th Meeting
11 August 1989**

Agenda & Minutes



B. N. SINGH
Chief Regional Planner
Tel 3825496

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राष्ट्रीय राजधानी क्षेत्र योजना बोर्ड
NATIONAL CAPITAL REGION
PLANNING BOARD
7th Floor, 'B' Wing,
I.O.C. Building, Janpath,
शहरी विकास मंत्रालय
(Ministry of Urban Development)

नई दिल्ली, तारीख

Dated, New Delhi, the 18.7.1989

No.K-14011/50/89-NCRPB

MEETING NOTICE

Subject: 17th Meeting of the Planning Committee of the NCR Planning Board to be held at 11.00 A.M. on 11-8-1989 in the NCR Planning Board Office, New Delhi.

...

The 17th meeting of the Planning Committee of the NCR Planning Board will be held at 11.00 A.M. on August 11, 1989 in the Office of the NCR Planning Board. The Agenda items together with notes for the meeting are being sent separately. You are requested to kindly make it convenient to attend the meeting.

(B.N. Singh)
Chief Regional Planner
&
Member-Convenor

To

1. Chairman and all members of the Planning Committee.
2. All officers of the NCR Planning Board.

SP'E
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LIST OF THE MEMBERS OF THE PLANNING COMMITTEE OF THE
NATIONAL CAPITAL REGION PLANNING BOARD, NEW DELHI
(AS ON 19.7.1989)

1. Shri K.K. Bhatnagar,
Member Secretary, NCRP Board.
2. Shri A.N. Mathur, Phone:41884
Secretary,
Town & Country Planning & Urban Estate,
Govt. of Haryana, Chandigarh.
3. Shri P.N. Bhandari,
Secretary,
Housing & Urban Dev. Deptt.,
Govt. of Rajasthan, Jaipur.
4. Shri Karnail Singh,
Secretary,
Housing Department,
Govt. of U.P., Lucknow-226001.
5. Smt. Adarsh Mishra,
Secretary (L&E),
Delhi Administration,
I.P. Estate, New Delhi-110002
6. Shri K.S. Bains,
Vice Chairman, DDA,
Vikas Sadan, Near INA Colony,
New Delhi.
7. Shri D.S. Meshram,
Chief Planner,
T & C P Organisation,
'E' Block, IP Estate, New Delhi.
8. Shri Ramesh Chandra,
Deputy Adviser (H&U),
Planning Commission,
Yojana Bhawan, Sansad Marg,
New Delhi.
9. Shri S.M. Prasad, Phone:384191
Dy. Director General (TP),
Deptt. of Telecommunications,
7th Floor, Sanchar Bhawan,
New Delhi-110001.
10. Shri D.P. Gupta, Phone:389432
Chief Engineer (Planning),
Ministry of Surface Transport,
Transport Bhawan,
New Delhi-110001.
11. Shri Atul K. Gupta,
Director (Planning & Coord),
Department of Power,
Ministry of Energy, Cabin 3,
4th Floor (New Lift),
Shram Shakti Bhawan, New Delhi.
12. Shri Pardeep Kumar,
Director,
T & C P & Chief Administrator
H U D A, Govt. of Haryana,
Chandigarh.
13. Shri C.S. Mehta,
Chief Town Planner,
T & C Planning Deptt.,
Govt. of Rajasthan,
Rambagh Circle,
Jaipur.
14. Shri J.P. Bhargava,
Chief Town & C. Planner
Govt. of Uttar Pradesh,
7, Bandaria Bagh,
Lucknow-226001
15. Shri S.K. Sharma,
Chairman-cum-Managing
Director, H U D C O,
Hudco House, Lodhi Road,
New Delhi-110003
16. Dr. S. Maudgal,
Director,
Department of Environmet,
Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi.
17. Shri S.M. Mittal,
Executive Director (MTP),
Ministry of Railways,
2nd Floor,
Rail Bhawan,
New Delhi-110001.
18. Shri B.N. Singh (Convenor),
Chief Regional Planner,
NCR Planning Board.
19. Shri R.K. Jain
Additional Secretary
Ministry of Urban
Dev
New Delhi

Copy forwarded to :-

1. Shri B.D. Gilati, Chief Coordinator Planner-NCR, Ph:23147/23654-GURG
61, Shop-cum-Office, Sector 8, Panchkula, District: Ambala, Haryana.
2. Shri J.C. Gambhir, Commissioner (Planning), D.D.A.,
I.P. Estate, New Delhi-110002

TOWN PROFILE : DMA AND PRIORITY TOWNS

**CIRCULATED AMONG MEMBERS IN
PLANNING COMMITTEE MEET
HELD ON AUGUST 11, 1989**

NCR PLANNING BOARD JULY, 1989

AGENDA ITEMS FOR THE 17TH MEETING OF
THE PLANNING COMMITTEE TO BE HELD AT
11.00 A.M. ON AUGUST 11, 1989 IN THE
OFFICE OF THE NCR PLANNING BOARD.

- Item No. 1 : Confirmation of the minutes of the last meeting held on March 3, 1989.
- Item No. 2 : Formulation of Development Proposals for financing during the 8th Plan for Priority and DMA Towns.
- Item No. 3 : Town Profiles for DMA and Priority Towns.
- Item No. 4 : Formulation of Sub-Regional Plans.
- Item No. 5 : Preparation for Master Plans for DMA and Priority Towns.
- Item No. 6 : Study on wholesale distributive trades in the National Capital Region.
- Item No. 7 : Pilot study for monitoring of landuse changes through I.R.S. Resolution Remote Sensing Data for areas of NCR in Collaboration with the Defence Terrain Research Laboratory (D T R L).
- Item No. 8 : Functional Plan for Delhi Metropolitan Area.
- Item No. 9 : Revolving fund for NCR.
- Item No. 10 : Any other item with the permission of the Chair.

AGENDA ITEM NO. 1 : CONFIRMATION OF THE MINUTES OF THE LAST MEETING HELD ON MARCH 3, 1989.

The 16th Meeting of the Planning Committee was held on March 3, 1989 and the Minutes of the Meeting were circulated on March 13, 1989. Shri G. Kumar, Director, Metropolitan Transport, Ministry of Railways (Railway Board), referring to para 16 of the minutes, in a communication to the office of the NCR Planning Board has stated that the following lines need to be modified as given below :-

Para 16

For

As

".....that doubling of the line between Muradnagar and Meerut was likely to be completed by the end of Seventh Plan."

".....that proposal for doubling of the line between Muradnagar and Meerut was under consideration for inclusion in the 8th Five Year Plan of the Railways."

2. The Planning Committee may kindly confirm the minutes after considering the above amendment.

AGENDA ITEM NO. 2 : FORMULATION OF DEVELOPMENT PROPOSALS FOR FINANCING DURING 8TH PLAN FOR PRIORITY AND DMA TOWNS.

The NCR Planning Board in its 10th Meeting on July 17, 1989 has approved the Investment Plan for NCR for the 8th Five Year Plan prepared by the Working Group constituted by the Board (copy enclosed for ready reference). The Investment Plan is under submission to the Planning Commission for its consideration. The Investment Plan is now required to be followed by preparation of development proposals for financing during 8th Plan in respect of each Sub-region by the participating States. The task of preparing the above proposals basically lies with the Planning Cells of the Sub-regions. The Cells would be required to complete the preparation of development proposals for various items in collaboration with the implementing agencies and make it available through the State Governments to the Board.

2. For Investments in the provision of infrastructure by HUDCO through a 'Separate Window', a number of projects were identified (copy at annexure -1) for submission to HUDCO. The State Governments were requested for formulation of such projects vide letter No.K-14011/60/88-NCRPB dated 7.3.89. The progress of preparation of projects indicate that no project has yet been approved so far. The HUDCO has issued guidelines for financing of infrastructure project, according to which the first step is to prepare Project Financing Plan (PFP) in respect of each Project. A copy of the HUDCO guidelines already circulated to the States is enclosed for ready reference.

3. During the discussions in the Working Group Meetings, it was decided that each State would prepare the investments in the respective Sub-region for various development items apart from the NCR development proposals.

4. As per recommendations of the Working Group on Investment Plan, assistance of International Agencies like the World Bank, would be sought for financing the NCR Development Programme. This would require preparation of projects for assistance by the World Bank.

5. It will thus be seen that the Planning Cells have to play an important role in the task of project formulation. The Cells have been created to be self-contained in areas of planning, project formulation and monitoring the progress of the schemes. The experience so far in the working of Planning Cells shows that they are not yet fully geared up for various tasks assigned to them. In the context of the 8th Five Year Plan, the need for systematic project formulation under the State Sector can not be over-emphasised. Planning Committee may kindly consider ways and means for accelerating the formulation of projects in respect of Priority and DMA Towns, infrastructural schemes for financing by HUDCO and other institutional sources, and formulation of Investment Plan for other development sectors of the State and Projects for the World Bank assistance.

AGENDA ITEM NO. 3 : TOWN PROFILES FOR DMA AND PRIORITY TOWNS

A draft of the Town Profiles for DMA and Priority towns has been prepared by the office of the NCR Planning Board and a copy of the same will be circulated in the meeting. All the participating States are requested to go through the Town Profiles and intimate the gaps, if any, so that these could be completed. These Town Profiles could be used in formulation of development proposals for financing during the 8th Plan.

AGENDA ITEM NO. 4 : FORMULATION OF SUB-REGIONAL PLANS

In the 16th meeting of the Planning Committee held on 3.3.1989, it was decided that the Sub-regional Plan for each Sub-region including Delhi Union Territory should be prepared by March, 1990. The procedure for the publication of the Sub-regional Plans had been discussed in the 15th meeting of the Planning Committee on 5.10.1988 and it was decided that the same procedure as applicable to the publication of the Regional Plan under the NCR Planning Board Act, 1985 would be followed for the Sub-regional Plans as well.

2. With a view to assisting the participating States in the preparation of Sub-regional Plans, a Computer Aided Settlement System Analysis had been undertaken by the Physical Research Laboratory (PRL) Ahmedabad, on behalf of the NCR Planning Board. The PRL has made available the analysis of the settlement system of the various Sub-regions and these have been forwarded for further action to the Planning Cells on the dates indicated below :-

Rajasthan Sub-region = 12.4.1989

Haryana Sub-region = 1.5.1989

Uttar Pradesh Sub-region = 19.7.1989

3. The Base Maps for the Sub-regions had been completed earlier by September, 1988.

4. The Chairperson, NCR Planning Board, in her opening remarks to the 10th Meeting of the NCR Planning Board on 17.7.89 had requested the participating States and Union Territory to complete the Sub-regional Plans for the respective Sub-regions by the end of March, 1990. The Planning Committee may kindly discuss the progress made by the participating States in the preparation of the Sub-regional Plans.

Annexure-I

Identified Infrastructure Schemes in NCR towns for HUDCO financing.

Haryana :

1. Water Supply Scheme at Rewari by HUDA
2. Wholesale Wool and Woolyarn market Scheme at Panipat by HUDA.
3. Vegetable and Fruit wholesale market with warehousing at Kundli by HUDA.

Rajasthan :

1. Building Material Stock Yard at Alwar.

Uttar Pradesh :

1. Sewage Treatment Plant-Cis Hindon-Ghaziabad by city Board Ghaziabad.
2. Water Supply and Low Cost Sanitation by Municipal Board Bulandshahr/UP Jal Nigam in Bulandshahr.
3. Water Supply and Low Cost Sanitation by Khurja Municipal Board/UP Jal Nigam in Khurja
4. Water Supply and Low Cost Sanitation by Hapur Municipal Board/U.P. Jal Nigam in Hapur.

5/1

Md. J. ...

18/5/89

GUIDELINES

for

Financing of

Urban

Infrastructure

Schemes

February 1989

hudco

HOUSING AND URBAN DEVELOPMENT CORPORATION
HUDCO HOUSE
LODHI ROAD, NEW DELHI-110003
PHONE : 699534.

GUIDELINES FOR FINANCING URBAN INFRASTRUCTURE SCHEMES

I Background and Objectives

The Seventh Five Year Plan has emphasised the need for multi-pronged efforts in order to check the deterioration of conditions in our cities and towns and the need to devise special arrangements to assist in orderly and timely investments in urban infrastructure. The existing arrangements are clearly inadequate to deal with the growing urban services deficit, both in terms of maintaining services and extending them to unserved areas. The acceleration in the rate of urbanisation has heightened attention both to the inadequacy in existing infrastructure in terms of water supply, sewerage, sanitation, solid waste management, roads, transport, health and education, community facilities etc. and the poor access to these services of a large population at low income levels. Since the level of urbanisation will continue to increase, the financial requirements of urban development will also continue to increase. If we seek to promote efficient and equitable urban growth, ways and means have to be found to provide incentives as well as control mechanisms for local authorities to conserve resources while making the necessary investments in urban infrastructure and services. This necessarily implies a systematic financial structure which increases the access of local authorities and functional agencies to capital funds along with an assumption of much greater financial responsibility to make the former possible, while improving the access of the urban poor to basic services like water supply and sanitation in an integrated spatial framework. It would also sustain the base for economic activities in growing urban areas as outlined by NCU.

II Objectives

The objectives of the urban infrastructure wing in HUDCO would be :

- 1 To increase the supply of capital that is made available to local authorities to finance infrastructural projects with special reference to urban services;
- 2 To help cities of all sizes, especially small and medium towns to provide adequate urban services by providing long term finance for urban projects;
- 3 To help in the channelling and monitoring of funds in a systematic manner for urban development activities through State level agencies.
- 4 To offer technical assistance in project preparation, installation of a viable local revenue structure, and in the adequate pricing of urban services.

III Types of Eligible Schemes

HUDCO's financial assistance would be available for remunerative and non-remunerative urban infrastructure projects within the framework of city and regional investment and spatial plans.

The projects for assistance may include :

- 1 Upgradation and augmentation of urban services like water supply, sanitation, sewerage and sewage disposal, drainage, roads and bridges, solid waste management, ~~health care and community amenities like schools~~ related to housing themes, including the acquisition and development of land for these services;
- 2 Support to fully or partially self-liquidating projects like markets, office complex, bus stands, truck terminals, improvement of transport, industrial and business infrastructure, production of building materials etc.
- 3 Infrastructure provision including social infrastructure related to the facilitation of city and neighbourhood level projects for shelter, slum upgradation and urban renewal;
- 2 Supportive activities for the integrated development of specific or whole areas of a metropolitan city/town.
- 3 Support to the development of peripheral areas of a city or new township/ growth centres in an integrated regional context including the provision of infrastructure in guided land development schemes by public or private agencies.
- 6) Support to the coordinated provision of infrastructure and housing in priority growth centres assisted under other Central or State schemes such as IDSMT, industrial growth centres, NCR development etc., for industrial dispersal and balanced urbanisation;
- 5 Support to innovative urban development schemes of public or private agencies including land development and urban renewal, and the leasing of equipment for city level services.

Priority would be given for

- a) augmenting housing activity in terms of helping to bring more land into the market or servicing new settlements;
- b) upgradation of existing settlements in the city core or the substandard parts of the city;
- c) where consistent with State policy, promoting land development or regularisation of unauthorised colonies with the involvement of owners/ developers;
- d) helping to support development of new growth areas as recommended by the NCU;

- e) extending access to services for the urban poor, especially women and disadvantaged groups;
- f) improve the financial capability and organisational strength of local bodies.

IV Who may borrow

- 1 HUDCO's finance will be available to all agencies in public sector at the State, regional or local level with a legal mandate to implement schemes of urban and industrial infrastructure. These may include State Urban Finance Corporations, State Municipal development agencies, State functional agencies for housing, various urban services and transport, Development Authorities including National Capital Region Board, Municipal Corporations and Municipal Councils, Cantonment Boards and other local bodies, Improvement Trusts etc. It may also finance joint sector or private concerns on merit.
- 2 Initially, preference will be given to cities with less than one million population in 1981 (and those not assisted under World Bank Projects). Preference will be given to projects with a good pay back potential or those which combine remunerative and non-remunerative projects in a self-liquidating package, based on levy of adequate user charges or taxes. Where State level urban financing agencies exist as in the case of Kerala or coordinating bodies like NCR Board, HUDCO will consider channelling the funds through such an institution for the implementation of local level projects on agreed terms of appraisal. There will be no bar for co-financing of projects with other agencies on agreed terms.
- 3 In considering an application from an agency, HUDCO will assess :
 - i) its organisational set up,
 - ii) the adequacy of the delegation of powers,
 - iii) its past performance and established implementation and monitoring capacity in particular area;
 - iv) its financial performance/standing including viability of ongoing systems.

V Project Report

In order to obviate infructuous work and delays due to detailed scrutiny of the project proposal prior to a decision on its viability, the intending borrowers may submit a Planning and Financing Proposal (PFP) prior to submitting the loan application which would contain the following particulars :

- a Description of the city and the sector of assistance and the ongoing developments of different agencies;

- b Master Plan Regulations pertaining to urban development of the site;
- c Type of contemplated development i.e. utility, social and commercial infrastructure proposed to be developed. The planning approach with conceptual designs and sketches of the proposed development
- d Low cost technology proposed to be used for construction and development works;
- e Approximate cost of the total project and loan amount;
- f Details of financial performance over the last five years in terms of expenditure and revenue on capital and revenue budget, level of taxes and user charges etc.

The PFP will be scrutinised by HUDCO's Technical Committee in consultation with the borrowing agency. If it is approved in principle, with or without modification, the borrowing agency will be asked to submit a detailed proposal with documentation charges normally within 6 months. This will help the agencies to advance planning preparation and avoiding documentation delays as well as make the technical interaction more meaningful. However, if the agency prefers to submit the complete loan application in the first instance it would be free to do so.

If Planning and Financing Proposal (PFP) of the borrowing agency is approved for financial assistance the borrower should prepare and attach a detailed project report in the form of an operational action plan taking into account the following information depending on the type of scheme proposed :

- 1 Detailed reasons for initiating the proposed scheme;
- 2 Conformity with the Master Plan/interim development plan for the area;
- 3 General topography of the scheme area;
- 4 The essential infrastructure available in respect of the proposed sector and project area at present indicating the present standards as well as the proposed standards;
- 5 Sources of existing water supply, electricity, etc, depending on the items of infrastructure proposed for increasing their present distribution pattern and potential for their augmentation;
- 6 Existing sewage collection/disposal, solid waste disposal, sanitation and drainage system and proposed future plans in the case of sewerage and sanitation;
- 7 Existing transportation pattern and proposed expansion in future, in the case of transportation projects;
- 8 Details of urban infrastructure schemes completed in the recent past and schemes in progress with the assistance of Central Government, State Government, LIC, IDA etc;

- 9 Coordination of the development works within the framework of the approved Master Plan;
- 10 Climatic conditions of the area, drainage problems, variation in subsoil water level during the year, danger of flooding, etc, as may be relevant;
- 11 Whether land acquired and compensation paid;
- 12 Details of adoption of latest technology and/or use of local materials and techniques;
- 13 A description of the entire proposal with respect to location, site, design, specification, calculation, drawings etc;
- 14 Urban design and architectural quality of administrative buildings, headworks, recreation facilities, landscaping, works of art, etc.
- 15 Allowances made for physical contingencies and uncertainties in detailed estimates. The project should preferably be capable of being completed within three years without any need for provision for escalation;
- 16 Provision for operation and maintenance of the infrastructure items to be funded in terms of the agency's responsibility and levy of user charges. Justification should be given where full operation and maintenance cost and debt servicing is not proposed to be recovered.

HUDCO's Consultancy Services :-

HUDCO's consultancy services are available for preparing the project reports. The consultancy fee can also be built into the project cost.

VI The detailed project report should be arranged under the following headings:

- 1 General information
- 2 Details regarding analysis of alternatives
- 3 Project description
- 4 Technical details including arrangements for maintenance of assets
- 5 Capital requirements and costs
- 6 Operating/maintenance and debt service requirements and cost
- 7 Financial analysis and cash flow
- 8 Social profitability analysis (Social and Environmental benefit)

VII Project Design

The project should be designed keeping in view the adoption of the latest innovations made in the construction/relevant technology and use of local construction material so as to keep the cost of the project to the minimum possible. Provisions of the codes of planning practices suggested by HUDCO should be followed. It should be structured within a viable integrated development approach and linked to the long term municipal and State plans for urban development.

VIII General Guidelines

Each loan application sent to HUDCO should be accompanied with a Bank Draft of Rs 10,000 as documentation charges at the time of submission of the final proposal.

The application fee will not be refunded even if the applicant withdraws the scheme after submission.

The borrowing agency must ensure that it is competent under its constitution or the law governing it, to raise the loan. The land on which the scheme is to be implemented should be in the applicant's possession and be free of encroachment or encumbrances. The loan application must be accompanied by a resolution of the Executive Body of the Organisation authorising the proposed borrowing from HUDCO. Approval of State Govt wherever necessary should also be furnished.

HUDCO's officers will, as far as possible, inspect the actual site of development or hold discussions with the State agency before the first loan instalment is released and also later, to ensure the progress of the scheme in accordance with the programme, plans and specification of the sanctioned scheme. Assistance will be available from HUDCO for the preparation of projects by way of consultancy at fees varying with the size of the town and the nature of the project. These costs would be allowed to be included in the total project cost.

IX Extent of Financing

HUDCO will finance between 50 to 100 per cent of the total project cost on the basis of reassessment of the nature of the scheme and the financial position of the agency. The balance cost will have to be met either from the funds provided by the State Govt or from other resources of the borrowing agency itself or from the related projects. The borrowing agency will have to give adequate proof to this fact while submitting the loan application.

The first instalment will be released after :

- The borrower has mobilised and utilised its proportionate share of investment
- Loan agreement and other formalities required have been completed
- Necessary security has been given to HUDCO

The release of the second and subsequent instalments will depend on the progress of work, utilisation of the amounts previously advanced to HUDCO's satisfaction, mobilisation and utilisation of the borrowers' proportionate share of investment, submission of progress reports as required in the prescribed proforma and on compliance with other requirements of the loan agreement.

No advance (or further advance as the case may be) from the sanctioned loan will be made if the borrower revises the originally approved plans and estimates and proceeds with construction without getting written approval from HUDCO.

Borrowers will have to satisfy HUDCO that over-runs will not occur in terms of cost and time as HUDCO neither finances any over-runs in cost nor does it agree to a reduction in the physical size of the project to keep the expenditure within the sanctioned project cost.

Separate agreements may be reached in respect of funding State level urban financing agencies or joint sector ventures.

X Interest Rate

The loan will carry a gross interest rate at 13.25 per cent to 15.25 per cent per annum depending on the type and nature of the project. However, a rebate of 0.25 per cent in the interest rate will be considered for timely repayments.

The borrower must pay the Corporation interest on the loan amount calculated on each instalment from the date of its release by HUDCO. The interest will be due and payable quarterly on the 31st March, 30th June, 30th September and 31st December each year, the first instalment of interest (for a proportionate period, if necessary), being due and payable on the due date, immediately following the date of disbursement against the loan.

In the event of default of payment of a loan instalment and/or interest on the due dates, additional compound interest at the penal rate of two and a half per cent will also be payable on such overdue payment.

HUDCO reserves the right at any particular time to vary the interest rate on the loan amount or a part thereof yet to be released depending upon its lending interest rate for Urban Infrastructure Schemes at the time of release of such amounts by giving prior written notice to the borrower of such variation.

XI Repayment Period

The loan will have to be repaid within 5 to 15 years depending on the nature of project and the request of the borrowing agency.

The period of 5-15 years would be reckoned from the date of release of first instalment of loan as such include the construction period.

It would be open to State agencies to channel HUDCO loans at varying mixes of loan and grants,

or at varying interests according to nature of the project, by combining grants available in the State budget provided HUDCO is satisfied that the funds are channelled to local bodies according to an integrated financing plan for urban areas and that the long term financial viability of local bodies is not adversely affected.

XII Commitment Charges

The borrower must complete all legal and other documentation within four months of the issue of loan sanction. If the borrower fails to do so, a commitment charge of one per cent per annum will be payable on the total loan sanctioned, from the expiry of four months of the date of issue of sanction to the date when the legal documentation is completed in all respects and all other pre-requisites for the drawal of the first loan instalment are complied with.

XIII Security

Loans advanced by HUDCO have to be secured by either an unconditional and irrevocable bank guarantee from a scheduled bank acceptable to HUDCO or a State Govt guarantee or such other security that is acceptable to HUDCO.

Borrowing agencies giving a bank guarantee as security need to ensure that the bank is willing to give the guarantee in HUDCO's prescribed proforma.

XIV APPLICATION FORM AND ADDITIONAL INFORMATION

Loan application form and additional information required if any, may be obtained from :

H K Yadav, Chief Special Projects
Infrastructure Services Division

HOUSING AND URBAN DEVELOPMENT CORPORATION LIMITED
HUDCO HOUSE, LODI ROAD, NEW DELHI - 110 003
TELEPHONE: 617696, 699534

AGENDA ITEM NO. 5 : PREPARATION OF MASTER PLANS FOR DMA AND PRIORITY TOWNS

With the approval of the Regional Plan - 2001 and its statutory enforcement with effect from January 23, 1989, concrete steps for preparation/revision of Master Plans of the towns included in the Delhi Metropolitan Area and the Towns identified for Priority development have become crucial for the implementation of the policies contained in the Regional Plan. The 15th meeting of the Planning Committee had discussed at length the status of the preparation of the Master Plans by the participating States. The action needed in the preparation/revision of Master Plans is annexed (Annexure-II). The Planning Committee may kindly discuss the upto-date position in this regard and suggest measures for completing the Master Plans by March 1990, the date stipulated for completion of the Sub-regional Plans by the participating States.

AGENDA ITEM NO. 6 : STUDY ON WHOLESALE DISTRIBUTIVE TRADES IN THE NATIONAL CAPITAL REGION

The Regional Plan 2001 for the National Capital Region has the following policy statement in respect of Wholesale Trades and Commercial activities :-

- a) Decentralisation of wholesale trade and commerce in Delhi :

There should not be any special advantage in terms preferential treatment or lower taxes by way of incentives to wholesale trades in Delhi vis-a-vis the adjoining States. Those wholesale which are hazardous in nature such as plastic and PVC goods, chemical, timber, food grains, iron and steel and building material and, require extensive space may be decentralised by developing suitable additional locations outside Delhi.

- b) Development outside Delhi with DMA :

There are certain wholesale trades and storages in Delhi which are hazardous because of their location in congested areas and also due to bulk handling activities relating to plastic and PVC goods, chemical, timber, food grains, iron and steel and building material. There wholesale trades in addition to new trades and related activities should be encouraged to be developed in the DMA towns.

The possibility of developing modern Super Markets should be explored in the Delhi Metropolitan Area towns.

- c) Development outside DMA within NCR :

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

2. In order to evolve specific proposals for development of alternative/additional locations in the Region, the NCR Planning Board had entrusted a study to M/s Operations Research Group, Baroda. The selected commodities identified for the study are :

- (a) Textiles
- (b) Autoparts and Machinery
- (c) Fruits and Vegetables
- (d) Hardware and Building Material

STATUS OF PREPARATION OF MASTER PLANS IN NCR

HARYANA

| TOWNS | | PRESENT POSITION | ACTION NEEDED |
|------------|----------------------|---|--|
| <u>DMA</u> | | | |
| 1. | Faridabad-Ballabgarh | Master Plan prepared for the population of 10.0 lakhs by 2001. | Regional Plan has assigned a population of 10.0 lakhs. No revision is needed. |
| 2. | Gurgaon | Master Plan prepared for 2001 is for a population of 10.0 lakhs. | Needs to be revised so as to be in conformity with the population assignment of 7 lakhs envisaged in the Regional Plan. |
| 3. | Bahadurgarh | Master Plan prepared for 1991 perspective for the population of 1.0 lakh. | Need to be revised for 2.0 lakh population assigned by Regional Plan-NCR. Needs to be revised in collaboration with DDA. |
| 4. | Kundli | No Master Plan exists. | Master Plan needs to be prepared for the assigned population of 1.50 lakhs. Master Plan of Kundli needs to be prepared in collaboration with DDA. |

HARYANA

| TOWNS | PRESENT POSITION | ACTION NEEDED |
|------------------------|---|---|
| <u>PRIORITY TOWNS</u> | | |
| 1. Panipat | Master Plan prepared for the perspective of 2001 for a population of 5.00 lakhs. | No revision is needed Regional Plan - 2001 assigned a population. |
| 2. Rohtak | Master Plan for Rohtak prepared with the perspective-2001 for a population of 3.25 lakhs. | Master Plan needs to be revised to accommodate the assignment of 5.00 lakhs Regional Plan-NCR |
| 3. Palwal | Master Plan exists for 2001 for a population of 1.00 lakh. | Needs to be revised to 3.00 lakh population per NCR Plan assignment |
| 4. Rewari | Master Plan prepared for the perspective of 1991 for a population of 0.75 lakh. | Needs to be revised to date 1.10 lakh population 2001 as assigned by t Plan-NCR. |
| 5. Dharuhera | Plan exists for the perspective of 2001 for a population of 1.20 lakhs. | Needs to be revised as integrated plan for Dharuhera complex to account total population of 1 |
| 6. Bhiwadi (Rajasthan) | No Plan exists. Master Plan is under preparation. | |

UTTAR PRADESH

ACTION NEEDED

PRESENT POSITION

TOWNS

DMA

1. Ghaziabad-Loni

Master plan prepared with the perspective of 2001 for a population of 11.00 lakhs.

Regional Plan NCR envisages 11.00 lakh population by 2001. No revision is needed.

2. NOIDA

Master Plan prepared with the perspective of 2001 for a population of 5.50 lakhs.

Regional Plan NCR envisages 5.50 lakh population by 2001. No revision is needed.

PRIORITY TOWNS

1. Meerut

Master Plan for Meerut is prepared for 1991 for a population of 13.00 lakhs.

Regional Plan-NCR, assigned a population of 15.50 lakhs for Meerut by 2001. Master plan needs to be revised.

2. Hapur

Master Plan exists for 2001 for a population of 2.0 lakhs.

Master Plan is under revision for the assigned population of 4.50 lakhs as indicated in the Regional Plan-NCR.

3. Bulandshahr

Master Plan exists for the perspective year of 2001 for a population of 1.87 lakhs.

Master Plan needs to be prepared for a population of 8.00 lakhs for Bulandshahr-Khurja Complex with the following break up:

No Master Plan exists.

Bulandshahr : 5.00 lakhs
Khurja : 3.00 lakhs

Khurja

RAJASTHAN

TOWNS

PRESENT POSITION

ACTION NEEDED

PRIORITY TOWNS

1. Alwar
Master Plan prepared for the perspective of 2001 for a population of 3.85 lakhs.

Needs to be revised to accommodate 5.00 lakh population as assigned in the Regional Plan-NCR.

2. Bhiwadi

Master Plan to be part of Rewari-Dharuhera-Bhiwadi Complex for assigned population of :

Rewari : 1.10 lakhs
Dharuhera : 0.75 lakh
Bhiwadi : 1.15 lakhs

- (e) Foodgrains
- (f) Iron and Steel
- (g) Timber
- (h) Fuel Oil (Petro Chemicals)

The report on "Over view and Strategy" along with the Commodities' reports (8 reports) submitted by the Consultants are enclosed. The findings and recommendations of the Consultants would be discussed in the meeting of the Planning Committee.

AGENDA ITEM NO. 7 : PILOT STUDY FOR MONITORING OF LANDUSE CHANGES THROUGH I.R.S. RESOLUTION REMOTE SENSING DATA FOR AREAS OF NCR IN COLLABORATION WITH THE DEFENCE TERRAIN RESEARCH LABORATORY (D T R L).

The Project Sanctioning and Monitoring Group in its meeting held on 3.3.1989 had approved developing a Monitoring System through Satellite Imageries and Aerial Photographs to evaluate the persistent trend of change in landuse in the National Capital Region in collaboration with Defence Terrain Research Laboratory (D T R L), Ministry of Defence, New Delhi. It was decided by the Group that in the first instance, Pilot study be undertaken for some areas of the National Capital Region to ascertain the feasibility of application of satellite data interpretation for monitoring of changes in the landuse. The DTRL has developed monitoring system on pilot basis in respect of three areas studied by them around Delhi. A presentation of the work undertaken by DTRL will be made during the meeting.

AGENDA ITEM NO. 8 : FUNCTIONAL PLAN FOR DELHI METROPOLITAN AREA

Under Section 16 of the NCR Planning Board Act, 1985, the NCR Planning Board is required to prepare Functional Plans after the Regional Plan has come into operation. Such Functional Plans are required to be prepared on various development aspects for the proper guidance of the participating States and the Union Territory. The Regional Plan - 2001 identifies Delhi Metropolitan Area as one of the policy zones for application of Plan policies. Accordingly, a Functional Plan for Delhi Metropolitan Area to effectuate the implementation of the policies of the Regional Plan is under preparation. The NCR Planning Board Secretariat initiated the preparation of an 'Outline Functional Plan' during 1988-89 and had presented the Outline Plan to the Coordination Committee set up by the Board for Delhi and Delhi Metropolitan Area on March 2, 1989. After intensive deliberations and exchange of views, the Outline Functional Plan has now reached the draft stage. A presentation of the Draft Functional Plan for DMA shall be made before the Planning Committee for consideration and suggestions thereon.

AGENDA ITEM NO. 9 : CONSTITUTION OF REVOLVING FUND FOR FINANCING
NCR SCHEMES

In the 13th meeting of the Planning Committee held on 4th April, 1988, it was decided in principle, that the participating State Governments/implementing agencies may create a separate Revolving Fund for financing NCR Schemes. It was further decided that detailed guidelines should be issued in consultation with the participating State Governments. Accordingly, draft regulations for constitution of the fund were circulated to the participating State Governments and Delhi Administration on 16th August, 1988 for their consideration and detailed comments/suggestions thereon.

The views of the Government of Uttar Pradesh and Haryana are still awaited inspite of regular reminders having been issued to them. As regards the Government of Rajasthan, UIT, Alwar has accepted the draft regulations and have suggested a few minor changes. Similarly, the Delhi Development Authority (DDA) has accepted the draft regulations and have proposed minor changes according to their accounting procedure. This proposals has also been made by the Working Group in its report for the VIII Plan.

A copy of the draft regulations, along with copies of comments received from Rajasthan and D.D.A. are enclosed.

The matter is again placed before the Planning Committee for consideration.

The Board hereby makes the following regulations for the constitution of a revolving fund by the implementing agencies for financing the execution of projects/schemes sponsored by the Board.

1. SHORT TITLE AND COMMENCEMENT:

- (i) These regulations may be called NCR Revolving Fund Regulations, 1988.
- (ii) These shall come into force w.e.f. _____

2. DEFINITIONS:

In these regulations, unless the context otherwise requires:

- (i) 'Act' means the National Capital Region Planning Board Act, 1985.
- (ii) 'Board' means the National Capital Region Planning Board constituted under Section 3 of the Act.
- (iii) 'Implementing Agency' means the Authority, Housing Board, Corporation, Improvement Trust or a Municipal Body constituted by the participating State Government/Union Territory and to whom the execution of NCR schemes/projects have been entrusted.
- (iv) 'Fund' means the Revolving Fund created by the implementing agency for financing the execution of NCR schemes/projects.
- (v) Participating States means the States of Haryana, Rajasthan and Uttar Pradesh.
- (vi) Union Territory means the Union Territory of Delhi.

3. RECEIPTS INTO THE REVOLVING FUND:

The following items of receipts shall be credited into the fund:

- (i) Moneys received from Board in the shape of loans or Grants-in-aid.
- (ii) Moneys provided by the State Government/Union Territory or the Implementing Agency out of their own resources not less than the moneys received from the Board.
- (iii) Revenue generated by the schemes financed by the NCR Planning Board due to sale of plots (residential/commercial), sale of residential flats, sale of shops, etc.
- (iv) Miscellaneous receipts such as interest on deposits of the fund kept in bank or in some other financial institution.

4. EXPENDITURE:

The following expenditure may be met out of the amounts in the fund:

- (i) Purchase of land.
- (ii) Development of land which has been purchased from the fund or from other sources of the implementing agencies.
- (iii) Construction of residential flats, shops, industrial sheds, etc.

- (iv) Payment of interest and repayment of principal in respect of loans taken from the Board.
- (v) Any other expenditure with the approval of the Board.

5. TEMPORARY DIVERSION OF FUNDS:

In case of extreme urgency/emergency or due to circumstances beyond the control of the implementing agencies, amounts available in the Fund may be temporarily utilised on schemes/projects other than those approved by the Board. The Fund shall be recouped to the extent funds were diverted, at the earliest, but not later than the close of the financial year in which funds were diverted to other projects/schemes. A report of the diversion and recoupment of funds shall be submitted to the Board before 30th April of the following year.

6. SHORTFALL IN THE FUNDS:

In case in any year expenditure on the approved projects exceeds the available amounts in the Fund, the excess expenditure shall be made out of other available resources of the Implementing Agencies and those resources may be recouped out of the revenues generated by the NCR planning Board assisted schemes at a later date. A report in this regard shall be submitted to the Board by the Implementing Agencies half yearly.

7. ACCOUNTS OF THE FUND:

As far as possible separate bank account with a separate cash book in the usual form may be maintained in respect of all receipts into the Fund and expenditure therefrom. Where this is not feasible due to the accounting system followed by the Implementing Agencies, the account records of the Fund may be kept on Proforma basis from month to month.

8. ANNUAL ACCOUNTS OF THE FUND:

Within three months of the close of the financial year, the Implementing Agency shall submit a copy of the annual accounts of the Fund to the Board (i.e. Receipt and Pay Account for the month of March in Form A and Annual Statement of completed schemes in the financial year in Form B).

9. INSPECTION OF THE ACCOUNTS:

The Board shall have the authority to inspect locally the account records maintained for receipt and payment transactions of the Fund or call for any information that may be considered necessary by the Board in this behalf.

Annual Statement of Completed Schemes, ^{year} ~~year~~ _____
 Name of Implementing Agency _____

1. Name of the Scheme: _____
 2. Estimated Cost: _____ Date of Start _____ Date of Completion _____

3. Actual Expenditure:

- (i)
 (a) Cost of Acquisition of land _____
 (b) Cost of Development of land _____
 (c) Cost of Constn. of flats/
 Shops/sheds etc. _____

Total (i) _____

(ii) Departmental charges levied on percentage basis as per rules of the Agency. _____

(iii) Interest on borrowed capital _____

(iv) Other Misc. expenditure _____

Total (i), (ii) (iii) & (iv) _____

4. Amount of Revenue generated

(a) Sale of Plots/flats/Shops etc. _____

(b) Misc. receipts _____

Total receipts (a + b) _____

5. Net financial Implication
 (difference of Col.3 & 4)

6. Mode of adjustment of net financial implications

(i.e. whether transferred to NCR Revolving Fund, General Revenues of the Agency; or used for some other purpose)

No. UIT / 15944/88

Dated : 28 - 6 - 88

The Finance & Accounts Officer,
National Capital Region Planning Board,
7th Floor, 'B' wing,
I.O.C. Building, Janpath,
New Delhi

Sub :- Creation of a separate fund by the
implementing agencies for execution
of NCR Schemes

Ref :- Your letter No. G-27034/15/87-88/
NCR FB CU 16/11/88

Sir,

With reference to your letter cited above,
you will be glad to know that we are already operating the
accounts books on the same pattern as envisaged in the draft
regulation. The following suggestions may please be considered

- (a) In the draft regulation, there is no provision for debiting
the administrative & supervision charges, therefore, in
rule 4 this provision may please be inserted.
- (b) In rule 6 it may please be inserted that the excess ex-
penditure on NCR projects if incurred in any year shall
be made out of the available resources of the other NCR
project receipts.

Yours faithfully,

A. S. Gupta

Director
N.C.R. Cum Secretary
U. I. T. ALW/R.

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COMMENTS OF DDA ACCOUNTS DEPARTMENT ON THE DRAFT
REGULATIONS CIRCULATED BY THE NCIB OFFICE

(a) In para-3 and 4 of the Regulations, item of receipts and expenditure which will appear in the Receipt and Payment A/c. of the implementing agency as a part of the Revolving Fund have been defined. The Heads of A/cs indicated in Receipt and Payment A/c. of the Revolving Fund of H.C.R. Scheme have not been properly classified under major, minor and detailed Heads of A/cs. It is necessary that the A/cs. of the transactions are prescribed in accordance with the general principle and methods of maintenance of A/cs. On the payment side there is no provision for exhibition of expenditure on Administrative Heads/Estt. engaged in implementation of these schemes. This needs to be looked into.

(b) In para-7 of the Regulation it has been stated that where maintenance of separate Bank Account/ separate Cash Book is not feasible the account records of the funds may be kept on proforma basis from month to month. It is felt that maintenance of a separate Bank Account and a separate Cash Book is a must for recording transactions of H.C.R. by the executing agencies. As such, no relaxation needs to be allowed in the matter.

(c) Manner and periodicity in which the implementing agency will render the account to the Board needs to be specified. Form of Accounts should be got approved from Central Govt. in consultation with C.A.O.

GURGAON

1. Locational Attributes :

Gurgaon is located at Latitude 28 27', longitude 77 02' on an average height of 221 metres above mean sea level, at a distance of 37 kms. from Delhi. Delhi-Jaipur National Highway No.8 touches the town, Delhi Ahmedabad metre gauge railway line passes through the town.

2. Demographic Features :

Gurgaon has witnessed a very fast population growth in the last four decades. Between 1941-81 the population of town has increased by more than 900%. In 1941 Gurgaon was a tiny settlement of less than ten thousand population and in 1981 it has more than one lakh population. Growth of population of the town in last four decades is illustrated below :

| Year | Area (sq.kms) | Population | Decadal Growth Rate | Density of population |
|------|------------------|------------|---------------------------|--------------------------|
| 1941 | - | 9935 | 37.83% | - |
| 1951 | - | 18613 | 87.35% | - |
| 1961 | 5.18 | 37868 | 103.45% | 7310 |
| 1971 | 15.33 | 57151 | 50.92% | 3728 |
| 1981 | 24.13 | 100877 | 76.51% | 4181 |

In 1981 density of population of the town was 4181 persons per sq. km. literacy rate during the year was 65.59%, sex ratio in the last three decades i.e. 1961, 1971 and 1981 was 868, 875 and 869 respectively and S.C./S.T. population in the town during 1981 was 11,118 constituting 11.01% of the population.

3. Employment Structure :

i) Present Activity Structure :

nine categories workers classification for 1981 is not available at present. In 1971 Gurgaon was very much dominated by tertiary sector activity as 77.10% of the total work force was employed in trade and commerce (20.46%), transport and communication (9.73%) and other services (46.91%). Similarly in 1961 tertiary sector activities employed 75.73% of work force in trade and commerce (14.88%), transport and

1961 tertiary sector activities employed 75.73% of work force in trade and commerce (14.88%), transport and communication (20.30%) and other services (40.55%).

ii) Proposed Activity structure :

Between 1971 and now the activities structure of Gurgaon has undergone a sea change. Keeping in view the trend and also the recommendations of the Regional Plan, the following activity structure has been envisaged for 2001 :

| | Total Workers | Primary Sector | Industry | Construc- tion | Trade & com- merce | Trans- port & Commu- nica- tion | Othe & Ser vic |
|-----|------------------|-------------------|----------|-------------------|--------------------------|---|----------------------|
| % | 100% | 2% | 40% | 10% | 16% | 10% | 22% |
| No. | 245,000 | 4,900 | 98,000 | 24,500 | 39,200 | 24,500 | 53,900 |

As is evident from the table, industry will be the most important employment generator absorbing almost one lakh workers. However, there will be a balance in terms of employment opportunity between secondary sector activities (50% work force) and tertiary sector activities (48% workforce), there is a tilt in favour of secondary sector activities in proposed activity structure for 2001 when compared with the activity structure of 1961 and 1971.

4. Economic Activities :

i) Present Functions in Regional Context :

Gurgaon does not have any regional level activity and most of its activities are local in nature. However, in last few years the town is emerging as an industrial centre, specially after the establishment of Maruti Udyog Limited.

ii) Possibility of Informal Sector Activities and Development of Regional Markets :

The town does not possess any significant informal sector activity, nor there is much scope for any of such activity in the immediate future.

The town does not have regional market for any commodity.

5. Role Assigned in the Regional Plan - 2001 :

Gurgaon town almost touches the outskirts of Delhi and therefore has been designated as one of the six Delhi Metropolitan Area towns. Regional Plan has envisaged that D.M.A. towns should have controlled moderate growth and assigned a population of 7 lakh to Gurgaon for 2001.

Keeping in view the growth trends of industrial activity in the town during last few years, the Regional Plan has envisaged a shift in the composition of work force in 2001 from dominance of tertiary activities in 1961 (75.73%) and 1971 (77.10%) to secondary sector activities (50%) in 2001.

6. Infrastructure Development :

i) Water Supply :

According to State Government figures furnished to NCR Planning Board the total regulated water supply in the town (as on 1.5.1987) is 1.4 M.G.D. (6.3 MLD) and about 80% of the total population is covered by piped water supply @ 63 lpcd taking population figures at 1 lakh (1981 census).

ii) Sewerage System :

Gurgaon town is partially covered with sewerage system as about 60% of population has access to the system covering about 65% of town area. Sewage is pumped out into open fields and low lying areas without any treatment.

iii) Drainage System :

According to NIUA Draft Report on Resource Mobilisation about 30% population is served with storm water drainage system.

iv) Solid Waste Management :

According to NIUA report refuse is generated @ 180 gms. per capita daily and managed @ 144 gms. per capita daily, thus only about 80% of the refuse generated is managed.

v) Educational Facilities :

In Gurgaon there are two colleges of arts, science and commerce, four higher secondary schools, 11 secondary schools, 16 middle schools and 21 primary schools.

vi) Health Facilities :

Gurgaon has reasonable level of medical facilities as there are three hospitals with 140 beds, one T.B. clinic with two beds, one family planning centre with 10 beds, and three dispensaries.

vii) City Roads/Local Roads :

Gurgaon has 121.74 kms. of total road length out of which 95% is surfaced and 5% is unsurfaced.

7. Institutional Framework :

Except for HUDA areas, civic amenities such as water supply supply, sewerage, drainage, solid waste management etc. are being maintained by Municipal Committee, Gurgaon HUDA maintains civic amenities in residential sectors developed by HUDA and yet not handed over to the civic authority.

Department of Urban Estates, Government of Haryana is responsible for acquisition of land for all development purposes. In Gurgaon HUDA has developed/allotted/auctioned residential sectors and Industrial sesctor. Haryana State Industrial Development Corporation has also developed some industrial areas of Gurgaon.

8. Existing Mater Plan/Development Plan proposals vis-a-vis Regional Plan proposals :

The town has a Development Plan for perspective year 2001 for a projected population of 10 lakhs, whereas Region Plan - 2001 has assigned a population of only 7 lakhs for the same perspective year, therefore, the Development Plan need to be revised to be in conformity with the Region Plan.

FARIDABAD - BALLABHGARH COMPLEX

1. Locational Attributes :

Faridabad-Ballabhgarh Complex is situated at 28 23' Latitude(N), 77 18' Longitude(E) at an average height of about 200 metres above mean sea level on National Highway No.10 between Delhi and Mathura, at a distance of 31 km. from Delhi. Delhi Mathura Broad Gauge Railway Line also passes through the Complex.

2. Demographic Features :

The Complex has been constituted with the amalgamation of Faridabad town, Faridabad N.I.T., Ballabhgarh and about 38 villages, it is spread over an area of 178.24 sq. kms. with a population of 330,864 in 1981. As the complex has been newly constituted, therefore, the comparative data for eariler census year is not available.

In 1981 the density of population of the complex was only 1856 persons per sq.km., the lowest among priority and D.M.A. towns of National Capital Region except Alwar, where density is slightly lower (1822 persons per sq. km.). Literacy rate in the complex during the year was 57.0%, there were 740 females for every 1000 males; S.C./S.T. population during the year was 35,329 constituting 10.68% of the total population.

3. Employment Structure :

i) Present Activity Structure :

In 1981 Faridabad Complex is the only town in N.C.R. with industry employing more than 50% of its work force. It is a secondary sector activities dominated town as 59.91% of the work force was employed in industry (55.74%) and construction activities (4.17%). Tertiary sector activities employed 35.08% of the work force in trade and commerce (10.63%), transport and communication (3.53%) and other services (20.92%). In 1971 the situation was more or less the same as industry employed 54.69% of the total workforce.

ii) Proposed Activity Structure :

As per Regional Plan the proposed activity structure for 2001 would be as indicated :

Proposed Activity Structure for 2001 :

| Total Workers | Primary Sector | Industry | Construc- | Trade & com- merce | Trans- port & Commu- nica- tion | Othe Ser- vice | |
|------------------|-------------------|----------|-----------|--------------------------|---|----------------------|--------|
| % | 100% | 2% | 45% | 6% | 16% | 7% | 24% |
| No. | 3,50,000 | 7,000 | 1,57,500 | 21,000 | 56,000 | 24,500 | 84,000 |

In the proposed activity structure the ratio of workers in industry has been decreased from + 55% to 45% and in primary sector from 5% to 2%, whereas the ratio of construction has been increased by about 2% and tertiary sector activities increased from 35% to 47%. The proposed changes in the activity structure needs to be explained. In absolute terms the work force would increase from 1,12,243 workers in 1981 to 350000 by 2001 an increase from 2,37,757; out of this 40% is allocated to industry alone, trade and commerce 18.5%, transport & communication 8.6% and other services 25.5%. To sustain the growth of industrial sector there was a definite need to strengthen the service sector and a step in the desired direction.

4. Economic Activities :

i) Present Functions in Regional Context :

Faridabad Complex is most industrialised among all the D.M.A. and priority towns of N.C.R., it will not be an exaggeration to state that in whole of North India, it is one of the most industrialised complex. Some of the industrial units at Faridabad are of national fames to mention a few of them such as Escorts, Eicher Tractors, Goodyear Tyres, Kelvinators, Bata, Hindustan Vacuum, Gedore Tolls, etc.

ii) Possibility of Informal Sector Activities and Development of the Regional Markets :

Most of the industries in Faridabad-Ballabhgarh complex are in the organised sector, there is no significant informal sector industrial activity at present and nor there is much scope for such activities in the immediate future.

Although Faridabad Complex is one of the biggest producer of consumer goods - including durable consumer goods - and engineering goods but the town does not possess a regional market for sale or purchase of any such commodity/article. The goods are produced in Faridabad

Complex but sold mostly elsewhere.

5. Role Assigned by Regional Plan - 2001 :

The urban sprawl of Faridabad Complex starts from the boundary of Delhi Union Territory itself, therefore, it has been designated as one of the Delhi Metropolitan Area, like other D.M.A. towns (excluding Delhi). Faridabad Complex is envisaged to have controlled moderate growth so that the volume and directions of growth are well co-ordinated; A rapid growth of D.M.A. towns will not moderate or reduce the problems of Delhi as their inter-dependence is intensive and necessarily mutual, therefore, the complex should have a moderate growth.

6. Infrastructure Development :

i) Water Supply :

Faridabad Complex has potable underground water and deep tube wells are the only source of regulated water supply. According to NIUA draft report on Resource Mobilisation the daily supply of water at Faridabad Complex is 27 MLD @ 99 lpcd covering only about 50% of the total population. The residual 50% population depends on spot sources such as open wells, tubewells and hand pumps.

For 2001 the town is likely to have a population of 10 lakhs and Regional Plan has envisaged water supply @ 360 lpcd. At the recommended rate the daily requirement of water supply by 2001 would be 360 MLD whereas the present supply is only 27 MLD thus there will be an additional requirement of 333 MLD by 2001.

ii) Sewerage :

Only about 50% of the population has access to sewerage system. There is no sewage treatment plant in the complex. Sewage is pumped in open channels and Gaunchi Drain.

In industrial town like Faridabad Complex there is urgent need to extend the accessibility of sewerage system and need to treat sewage before it is let off.

iii) Drainage :

Faridabad Complex has open surface drainage system with 126 km. length and covering about 45% of population. The storm water is disposed off into

open nallahs and partially into the sewage system. The annual cost of operation & maintenance of drainage system is Rs.7 to Rs. 8 lakhs.

iv) Solid Waste Management :

In Faridabad Complex refuse is generated @ 290 gms. per capita daily and managed @ 257 gms. per capita daily. Thus 89% of the refuse generated is managed.

v) Education Facilities :

According to 1981 census there are three degree colleges out of which one is Arts-Commerce, one Arts-Science and one Arts-Commerce-Science, one polytechnic, 12 higher secondary schools, 18 high schools, 31 middle schools and 62 primary schools.

vi) Medical Facilities :

The complex has three hospitals with 432 beds, 16 dispensaries with ten beds including E.S.I. dispensaries and one family planning centre.

vii) Local Roads :

According to 1981 census FCA has 388 kms of total road length of which 327 km (84.28%) is pucca and 61 km (15.72%) is Kuchha.

7. Institutional Framework :

Faridabad - Ballabhgarh Complex is under the overall charge of Chief Administrator Faridabad-Ballabhgarh Complex Administrator, except for those sectors where HUDA has not yet handed over charge to FCA and in these sectors HUDA is responsible for maintenance of civic services. Chief Administrator is assisted by Administrators of Ballabhgarh, N.I.T. and Faridabad for maintenance of civic amenities in areas under their jurisdiction.

As in other towns of Haryana land is acquired by the Department of Urban Estates, Government of Haryana and development and sale/allotment of plots is done mostly by HUDA.

In Faridabad Complex Haryana State Industrial Development Corporation has also developed a small Industrial Area and has also constructed a few industrial sheds.

8. Existing Development Plan vis-a-vis Regional Plan
Proposals :

Faridabad Ballabhgarh Complex has a Development plan for perspective year 2001 and for a projected population of 10 lakh and the Regional Plan NCR has also assigned a population of 10 lakh for the same perspective year and therefore the Development Plan is in conformity with Regional Plan to this extent.

Faridabad-ballabhgarh Complex Area Plan is for 22495 acres and with projected population of 10 lakh the gross density is around 110 persons per hectare whereas the Regional Plan 2001 has proposed a gross density of 125 persons per hectare for towns with population over 5 lakhs and therefore a need for reconciliation.

BAHADURGARH

1. Locational Artributes :

Bahadurgarh is sitated at 38-56' North Latitude and 76-56' East Longitude at average a height of 213 metres above mean sea leve on National Highway No.10, at a distance of 37 kms. from Delhi. Delhi-Ferozpur Broad Gauge railway Line passes through the town.

2. Demographic Features :

Bahadurgarh is a fast growing town, during the last four decades (1951-81) its population has increased by 235%. The population growth of Bahadurgarh is illustrated below :

| Year | Area (sq.kms) | Population | Decadal growth |
|------|------------------|------------|----------------|
| 1951 | - | 11,170 | + 36.12% |
| 1961 | - | 14,982 | + 34.13% |
| 1971 | - | 25,812 | + 72,29% |
| 1981 | 9.0 | 37,488 | + 45,23% |

The town has a very low density rate of 4165 persons square km. Literacy rate of the town in 1981 was 59.62, S.C./S.T. population in 1981 was 4299 constituting 11.47% of the total population. In the last three decades i.e. 1961, 1971, 1981 the ratio of females per thousand males was 873,824, 850 respectively.

3. Employment Structure

i) Present Activity Structure :

Nine categories work force classification for 1981 is not available at present./ In 1971 Bahadurgarh was tertiary sector activities dominated town as 60.74% of the workforce was employed in trade and commerce (21.15%), transport and communication (8.47%) and other services (31.12%); secondary sector activities employed only 28.88% of work force out of which industry employed 27.09% and construction activities only 1.79%. However, there was marked shift in the role of primary sector between 1961 and 1971 as their ratio decreased from 21.71% in 1961 to 10.38% in 1971. Thus in 1961 Bahadurgarh was rural in character and in 1971 there was shift in the ratio of employment structure from primary to secondary and tertiary sector activities.

ii) Proposed Activity Structure :

Regional Plan has envisaged the following employment structure for Bahadurgarh in 2001 :

| | Total | Primary | Industry | Construc- tion | Trade & Comm. | Trans- port & Comm. | other |
|-----|-------|---------|----------|-------------------|---------------------|---------------------------|-------|
| % | 100% | 6% | 30% | 4% | 25% | 10% | 25% |
| No. | 70000 | 4,200 | 21000 | 2800 | 17500 | 7000 | 17500 |

Regional Plan has envisaged a balanced activity structure for Bahadurgarh as about 30% of work force would be employed in industry, 25% in trade and commerce and 25% in other services. Looking at 1971 activity structure it may be observed that ratio of tertiary sector activities have been maintained at about 60% and there is a marginal shift of 4% proposed work force from primary sector activities to secondary sector activities, which seems to be very realistic for a town of Bahadurgarh size.

4. Economic Activities :

i) Present Functions in Regional Context :

Bahadurgarh is a very small town and most of its activities are local in nature. People in villages and small towns around Bahadurgarh depend for their educational and medical facilities on the town. It is a good commercial centre and caters to the needs of people of its hinterland. However, there is no regional level economic or social activity in the town.

ii) Possibility of Informal Sector Activities Development and Location of Regional Markets:

There is no significant informal sector activity at Bahadurgarh and nor there seems to be much scope for any such activity in the near future.

Visibally Bahadurgarh town seems to be humming with commercial activities and caters to the needs of the small neighbouring towns and hinterland. But commercial activities at Bahadurgarh are not, strictly speaking, regional in character. However, the available infrastructure can be strengthened and if concerted effort made, the status of existing commercial activities can be increased. Moreover, Regional Plan has assigned a sizeable proportion of workers (25%) in the proposed work force (year - 2001) to be employed in trade and commerce.

5. Role Assigned by Regional Plan - 2001 :

Bahadurgarh is one among the six Delhi Metropolitan Area towns and has been assigned a population of 2 lakhs for 2001. Like other D.M.A. towns, Regional Plan has envisaged a moderate growth of population for Bahadurgarh. Regional Plan in its strategies on population growth has indicated that although the D.M.A. towns have the potential to relieve population pressure of Delhi but the over-growth of D.M.A. towns would aggravate problems of Delhi itself and, therefore, the D.M.A. towns should have only very moderate population growth.

Regional Plan has envisaged that by 2001 Bahadurgarh should come up with industry as main economic activity employing about 30% of the expected work force, followed by trade and commerce (25%) and other services (25%).

6. Infrastructure Development

i) Water Supply :

Underground water in Bahadurgarh is brackish and, therefore, is unfit for human consumption. For drinking water supply the town has to depend on Western Yamuna Canal. In Bahadurgarh the water storage capacity is 4.5 m.l.d. whereas actual supply is 4.1 m.l.d. covering only 70% of population @ 130 lpcd.

ii) Sewerage :

About 60% of the Bahadurgarh population has access to underground sewerage system. Sewage is generated @ 2.87 m.l.d. and is used for irrigation purposes without any treatment. The total length of sewer lines in the towns is about 35 kms. Covering 1888 houses in April, 1987. The annual cost of maintenance and operation of sewage system is Rs.1.95 lakh.

iii) Drainage :

The town has open surface drains, with about 15 kms of length covering about 40% of the municipal area. Annual cost of operation and maintenance of drainage system is Rs.0.40 lakh.

iv) Solid Waste Management :

Municipal Committee Bahadurgarh is responsible for solid waste management and refuse is generated @ 267 gms per capita daily and managed @ 133 gms. per capita daily i.e. only about 50% of the refuse generated is managed. Garbage is collected manually by carts and disposed off through trolleys (mechanically) and used for sanitary land fill.

v) Educational Facilities :

In Bahadurgarh there are three degree colleges including one college of education (B.Ed.), 4 higher secondary schools, 5 high schools, 5 middle schools and nine primary schools. Keeping in view the size of the town, educational facilities in the town are adequate.

vi) Medical Facilities :

Bahadurgarh town has one hospital with 25 beds, two E.S.I. dispensaries and one family planning centre.

vii) Local Roads :

Bahadurgarh has 8 kms. of road length out of which 75% is surfaced and 25% unsurfaced.

7. Institutional Framework :

Civic amenities such as water supply, sewerage, drainage, solid waste management are chiefly maintained by Municipal Committee except of residential areas developed by H.U.D.A. where these services are maintained by HUDA.

Development Plan of Bahadurgarh was prepared by the office of District Town Planner, Rohtak and approved by state Govt. To execute the plan the land acquisition is primarily done by Department of Urban Estates, Government of Haryana and development/allotment/auction is done by Haryana Urban Development Authority.

8. Existing Development Plan vis-a-vis Regional Plan Proposals :

Bahadurgarh has an approved Development Plan for the perspective year 1991 for a population of one lakh. As a result of the approval Regional Plan-2001 NCR, the Development Plan, Bahadurgarh has to be revised and to be made in conformity with Regional Plan.

KUNDLI

1. Locational Attributes :

Kundli is located at 28 52' Latitude (N), 77 07' Longitude (E) on Delhi-Haryana border at a distance of about 22 kms. from Delhi on Delhi-Ambala National Highway No. 1. Delhi-Amritsar Broad Gauge Railway Line passes through the town.

2. Demographic Features :

Kundli was not a town when the last census was taken in 1981 and therefore the demographic features of the town cannot be described.

3. Employment Structure

i) Present Activity Structure :

For want of census data the present activity structure cannot be described. However, it may be mentioned that Kundli is being developed primarily as an industrial town and at first instance Haryana State Industrial Development Corporation has developed two Industrial Estates with 106 plots in Industrial Estate-I with sizes varying from 1/4 acre to 1 acre and 92 plots in Industrial Estate - II with sizes varying from 1/8 acre to 1/2 acre. But very few industrial units have been set and most of the plots are lying unbuilt and some of built up plots are also lying unused. Industry is the only visible economic activity.

(i) Proposed Activity Structure :

Regional Plan has proposed the following activity structure for Kundli for perspective year 2001 :

| | Total Workers | Primary | Indus- try | Cons- truc- tion | Trade & Com- merce | Trans- port & Commu- nication | Other Ser- vices |
|-----|------------------|---------|---------------|------------------------|--------------------------|--|------------------------|
| % | 100% | 2% | 40% | 10% | 16% | 10% | 22% |
| No. | 52500 | 1050 | 21000 | 5250 | 8400 | 5250 | 11550 |

Secondary Sector activities and tertiary sector activities are evenly balanced in the proposed activity structure for 2001.

4. Economic Activities :

i) Present Functions in Regional Context :

Kundli is a new town and in the immediate future may not have any economic activity of regional significance.

ii) Possibility of location of regional markets and development of informal sector activities :

As stated earlier Kundli is newly up coming town but in the immediate future there may not be scope for any such activity.

5. Role assigned in Regional Plan - 2001

Kundli has been designated as one of the D.M.A. town as it is located on the Delhi-Haryana border and has been assigned a population of 1.5 lakhs. However, as in the case of other DMA towns, Kundli will be allowed to have controlled growth, although it may be having the potential to grow at much faster pace.

6. Infrastructure

Data relating to infrastructure is not available.

7. Institutional Framework

The Haryana State Industrial Development Corporation is the most important agency for Kundli as it has developed the two existing Industrial Estates and is responsible for their development, disposal and also maintenance of civic amenities. As in other towns of Haryana, land acquisition is done by Department of Urban Estates, Government of Haryana and development works have been executed by HSIDC.

8. Master Plan vis-a-vis Regional Plan proposals

The Development Plan for Kundli is under preparation and therefore a comparison with Region Plan cannot be made.

NOIDA

1. Locational Attributes :

NOIDA falls in Tehsil Dadri District Ghaziabad, Uttar Pradesh on Delhi U.P. Border with Hindon river in the East and Yamuna in the South West. The town is located at 28° 38' Latitude (N) and 77° 02' Longitude (E) on Delhi-Aligarh State Highway at a distance of 13 kms from Delhi, the town does not have a rail link.

2. Demographic Feature :

According to census NOIDA was not a town in 1981 and therefore demographic data is not available, however, the present population of NOIDA is estimated at about

3. Employment Structure :

Present activity Structure :

As already mentioned the census data for 1981 is not available. However, NOIDA Master Plan has projected the following figures for 1983-89.

| | <u>Phase I</u> 1983 | <u>Phase II</u> 1983-89 | <u>Phase III</u> 1989-95 | <u>Phase IV</u> 1996-2001 |
|-----------------------|------------------------|----------------------------|-----------------------------|------------------------------|
| (Existing) | | | | |
| 1. Industrial workers | 15,000 | 45,000 | 80,000 | 1,00,000 |
| 2. Working force | 25,000 | 85,000 | 1,75,000 | 2,00,000 |
| 3. Population | 75,000 | 2,00,000 | 4,00,000 | 5,00,000 |

NOIDA has been developed primarily as an industrial township and the Master Plan has proposed 50% of the total force to be engaged in industry with participation rate of 36.36%

ii) Proposed Activity Structure :

Regional Plan has proposed an activity structure as under:

| Title | % | No. |
|---------------------------|------|----------|
| Total workers | 100% | 1,92,000 |
| Primary Sector | 2% | 3,840 |
| Industry | 40% | 76,800 |
| Construction | 6% | 11,520 |
| Trade & Commerce | 20% | 38,400 |
| Transport & Communication | 12% | 23,040 |
| Other Services | 20% | 38,400 |

Industry would be the most predominant function in the proposed activity structure for 2001.

4. Economic Activities :

i) Present Functions in Regional Context :+

NOIDA is an industrial town and there is no other major activity except that a Film Studio is coming up in NOIDA and it may encourage related film activities.

ii) Possibility of location of Regional Markets and Development of Informal Sector Activities :

In the immediate future there no such activity is likely to come up.

5. Role Assigned in the Regional Plan:

NOIDA is one of the six DMA towns and has been assigned a population of 5.5 lakhs. Regional Plan in its strategy on demographic profile has stated that although DMA towns have the potential to absorb the population pressure of Delhi, but they should have only controlled moderate growth and induced population growth has to take place beyond DMA towns.

6. Infrastructure :

NOIDA is a well planned township and has all the physical infrastructure such as water supply, sewage, drainage, solid waste management, etc. but the relevant data is not available for the time being.

v) Educational Facilities :

The township has abundant provision for the required number of educational institutions of all levels. Among the institutions already functioning are the Delhi Public School, Apeejay School, Cambridge School, and the U.P. State Government Degree College, Intermediate College and primary schools, There is one I.T.I. The National Vocational Training Institute for Women have already acquired land in NOIDA.

viz) Medical Facilities :

The NOIDA Plan has made a provision of 35 dispensaries, 5 nursing homes, and 6 specialised hospitals. A Government dispensary and an ESI dispensary are already functioning. Work has already begun on 200 beds hospital, work on a 30 beds hospital is already in hand, Several nursing home sites have already been allotted.

vii) Local Roads :

Data is not available.

7. Institutional Framework :

New Okhla Industrial Development Authority (NOIDA) is headed by a full time chairman, an IAS Officer in the rank of Finance Commissioner, besides two more senior IAS Officers in the capacity of Chief Executive and Deputy Chief Executive and are involved in the day to day planning & execution of various policies and procedures. Besides the three senior IAS Officers NOIDA organisation has a Chief Architect, Chief Project Engineer, Chief Local Adviser, Financial Adviser, Chief of Maintenance, Chief Electrical & Mechanical Engineer, Secretart-cum-Administrative officer and Personnel Officer and Development Managers who look after various areas of operation in NOIDA.

8. Existing Master Plan vis-a-vis Regional Plan Proposals :

The Master Plan of NOIDA has been prepared for perspective year 2001 for a population of 5.5 lakh and Regional Plan 2001 has also assigned a population of 5.5 lakh to the town.

However, the Regional Plan has proposed a participation rate of 35% with total work force at 1,92,000 and the Master has proposed the work force at 2,00,000 (36.36%). Moreover workforce engaged in industry have been proposed at 1,00,000 (50%) by the Master Plan whereas the Region Plan has proposed 76,800 industrial workers (40%). The Master Plan of NOIDA shall have to be modified to the extent.

GHAZIABAD

1. Location Attributes:

Ghaziabad urban agglomeration is one of the six DMA towns of NCR located at Latitude 28 - 39 longitude 77 - 26 on an average height of 212 metres above mean sea level, on National Highway No.24 at a distance of 15 Kms from Delhi. Ghaziabad Railway Junction acts as a gateway to Delhi from three directions i.e. Kanpur-Calcutta direction, Moradabad-Lucknow direction and Meerut-Saharanpur-Ambala direction.

2. Demographic Features:

Ghaziabad U.A has experienced a spectacular growth of population in the last four decades as is evident from the following table:

| Year | Population | Decadal Growth Rate |
|------|------------|---------------------|
| 1941 | 23,834 | 126.57% |
| 1951 | 43,745 | 183.54% |
| 1961 | 70,438 | 161.02% |
| 1971 | 127,700 | 181.29% |
| 1981 | 287,170 | 1124.88% |

Between 1941-81 the population of Ghaziabad U.A has increased by more than eleven times from a mere 23,834 in 1941 to 287,170 in 1981. The urban agglomeration is spread over an area of 65.77 sq.kms and has a density of 4366 persons per sq.km. In 1981 literacy rate was 51.72%. Sex ratio indicating females per thousand males - in the last three decades was 805, 795 and 791 for years 1961, 1971 and 1981 respectively.

3. Employment Structure:

(i) Present Activity Structure:

According to 1981 census Ghaziabad's activity structure is dominated by tertiary sector activities as 62.56% of the work force is employed in trade and commerce (14.07%), transport and communication (11.48%) and other services (37.01). Ratio of industrial workers has decreased from 34.63% in 1971 to 28.67% in 1981 whereas in other services the ratio has increased from 24.54% in 1971 to 37.01% in 1981, thus indicating that the town is emerging as an administrative centre in last one decade.

(ii) Proposed Activity Structure:

The proposed activity structure in Regional Plan for 2001 is as under:

| Total Workers | Primary Sector | Industry | Construction | Trade & Commerce | Transport & Communication | Other Services |
|---------------|----------------|----------|--------------|------------------|---------------------------|----------------|
| 100% | 0.5% | 38% | 6% | 15.5% | 10% | 30% |
| 3,30,000 | 1,650 | 1,25,400 | 19,800 | 51,150 | 33,000 | 99,000 |

The proposed activity structure continues to be dominated by tertiary sector activities but at the same time the ratio of industrial workers has been increased from 28.67% in 1981 to 38% in 2001.

In absolute terms the proposed activity structure, out of the total increase in work force from 86,227 in 1981 to 3,30,000 in 2001, share of industry is 1,00,680 (41.30%), followed by other services 67,090 (27.52%), transport and communication 39,021 (16.0), trade and commerce 23,097 (9.48%) and construction 16,584 (6.8%), whereas in primary sector activities the ratio during the period would decrease from 5.04% to 0.5% and in absolute terms also the number of workers would decrease by 2,699 (1.1%).

4. Economic Activities:

(i) Present Functions in Regional Context:

Ghaziabad is multifunctional town because at one point of time it gives the impression of an industrial town, an administrative town and as well a town with trade and commerce activities, but at the same time the U.A does not possess any Regional level activity in any of these. However, people of the surrounding small towns and hinterland definitely depend on Ghaziabad for their day-to-day needs. Closeness to Delhi also has an adverse impact on the emergence of any regional level activity in the town.

(ii) Possibility of Regional Informal Sector Activities and Development of Regional Markets:

Ghaziabad does not have any significant informal sector activity at present nor there is likelihood of any such activity in near future.

Although the commercial activities at Ghaziabad are more than local in nature as people from surrounding areas and neighbouring towns depend for their commercial requirements on the town, yet the town does not have any regional level economic activity.

5. Role Assigned by Regional Plan-2001:

Ghaziabad is one of the six Delhi Metropolitan Area Towns on the periphery of Delhi, and has been assigned a population of 11 lakhs, the highest among D.M.A. towns. Regional Plan in its strategy on demographic profile has very clearly stated that although the DMA towns have the requisite potential to relieve Delhi from population pressures, but the over growth of DMA towns would add to the problems of Delhi itself. Therefore, DMA towns may be allowed only controlled moderate growth so that the volume and directions of growth are well co-ordinated.

6. Infrastructure Development:

(i) Water Supply:

For water supply purposes Ghaziabad Urban Agglomeration is divided in two parts viz. CIS - Hindon and Trans-Hindon. In Cis-Hindon area the underground water is potable wherein Trans-Hindon the ground water is saline and water of river Hindon is also unfit for human consumption, so the entire town depends for its water supply system on deep tube wells in Cis-Hindon area.

According to NIUA, Draft Report on Resource Mobilisation daily water supply at Ghaziabad is 58 MLD and only 72% of the population is covered by piped water supply @ 204 Lpcd- the population actually covered by the system and without taking into account leakages and wastages.

Region Plan has suggested a norm of 360 lpcd for 2001 and for assigned population of 11 lakh, the total requirement would be 396 MLD, by 2001 whereas the present supply is only 52 MLD.

(ii) & (iii) Sewerage and Drainage System:

Ghaziabad has very poor level of sanitary services as only about 25% of its population is covered by sewerage system and 45% population by drainage system. There is no sewage treatment plant.

(iv) Solid Waste Management:

Refuse is generated @ 275 gms per capita daily in the town, managed @ 201 gms per capita daily thereby meaning that only 73% of the refuse generated is managed.

(v) Education Facilities:

Ghaziabad U.A has four colleges - Arts (2), Arts-Science (1) and Arts-Science-Commerce (1), 15 Higher Secondary Schools, 16 High Schools, 35 Middle Schools and 72 Primary Schools.

(vi) Medical Facilities:

According to 1981 census there are three hospitals with 103 beds, two dispensaries, one T.B. Clinic and one family planning centre in the town.

(vii) Local Roads:

The total length of local roads in Ghaziabad is 940.96 Kms, out of which 93% (about 875Kms) are surfaced and 7% (about 66 Kms) unsurfaced. Among all the priority and DMA towns Ghaziabad has the highest local road length.

7. Institutional Framework:

Municipal Board Ghaziabad is responsible for maintenance of civic services such as water supply, sewerage, drainage, solid waste management etc.

U.P Jal Nigam is responsible for planning and implementation of water supply schemes.

Ghaziabad Development Authority undertakes acquisition, development and disposal of land.

U.P. Housing Board is responsible for development of land, construction and disposal of built up houses.

8. Master Plan vis-a-vis Regional Plan Proposals:

Ghaziabad has a master plan for perspective year 2001 with a projected population of 11 lakh and the Regional Plan has also assigned a population of 11 lakh for 2001. The Master Plan has proposed land use for 21986.45 acres (8901 hectares approximately) with a proposed gross density of 123.58 persons per hectare whereas the Regional Plan has proposed a gross density of 125 persons per hectares for towns with over 5 lakh population.

Master Plan has proposed the participation rate at 30% for 2001 whereas the Regional Plan has also proposed the same participation rate. The employment structure as proposed in Master Plan is almost similar to the employment structure proposed in Regional Plan. The town will have 38% workers engaged in industry, 6% in construction, 15.5% in trade and commerce, 10% in transport and communication and 30% in other services. The proposals of the Master Plans are in conformity with the proposals of Regional Plan.

PALWAL

1. Locational Attributes :

Palwal is located at 28° 08' Latitude 77° 19' Longitude on an average height of 195 mtrs. above mean sea level. The town is situated on Delhi-Agra National highway No.2 at a distance of 61 kms. from Delhi. Delhi Mathura Broad Gauge Railway Line also passes through the town.

2. Demographic Features :

Palwal has experienced uneven population growth in the last four decades as is indicated below :

| Year | Area (sq.kms) | Population | Decadal Growth | Density of population (persons per sq.kms) |
|------|------------------|------------|-------------------|---|
| 1951 | - | 13915 | + 2.27% | - |
| 1961 | - | 27863 | +100.24% | 5379 |
| 1971 | - | 36207 | + 29.95 | 6559 |
| 1981 | 5.52 | 47328 | + 30.72 | 8574 |

S.C./S.T. population in 1981 was 6743, constituting 16.25% of the total population. Sex ratio in the town in the last three decades was 901 (1961), 853 (1971) and 870 (1981) females per thousand males.

3. Employment Structure :

i) Present Activity Structure :

Although Palwal is dominated by tertiary sector activities as more than 61% of its work force was employed in trade and commerce (25.54%), transport and communication (8.11%) and other services (27.36%) in 1971, yet 16.59% of work force was employed in agriculture and allied activities. In 1981 the situation does not seem to be different as more than 11% of work force continues to be employed in primary sector activities. Industry has a very normal role as about 18% of the work force was employed in this activity in 1971. Nine category data for 1981 is not available for the time being.

ii) Proposed Activity Structure in Regional Plan - 2001

The Regional Plan has envisaged Palwal to be developed as tertiary sector activities dominated town:

| | Total Workers | Primary Sector | Industry | Construc- tion | Trade & com- merce | Trans- port & Commu- nica- tion | Othe- r Ser- vice |
|-----|------------------|-------------------|----------|-------------------|--------------------------|---|-------------------------|
| % | 100% | 9% | 15% | 4% | 17% | 21% | 34% |
| No. | 90000 | 8100 | 13500 | 3600 | 15300 | 18900 | 30600 |

In proposed economic activity structure the share of tertiary sector activities has been increased from 61% in 1971 to 72% in 2001, whereas the share of primary sector activities has been reduced from 16.59% in 1971 to 9% 2001. The proposed reduction in ratio of primary sector activities is just and normal feature for any urban centre of 3.00 lakh size.

4. Economic Activities :

i) Present Functions in the Regional Context :

Palwal is a small town and does not possess any regional level economic activity. However, it caters to the commercial needs of the neighbouring small towns and hinter land.

Regional Plan envisages the town to be developed mainly as tertiary sector activities dominated town (72% of work force of 2001) because the town is located at a focal point having excellent transport links both rail and road and adequate infrastructure facilities.

ii) Possibility of Informal Sector Activities Development & Location of Regional Centre :

There is no significant informal sector activity in the town at present, nor there is any possibility for such activity in the immediate future.

5. Role assigned in Region Plan 2001 :

Palwal is one of the four priority towns/complex of Haryana Sub-region, recognised for induced development as regional centres so as to arrest the

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Delhi bound potential migrants by creating employment opportunities in secondary and tertiary sectors and act as magnet centre to attract economic activities.

6. Infrastructure Development :

i) Water Supply :

Palwal has potable underground water and deep tube wells are the only source of regulated water supply. The present supply is 4.5 million gallons daily @ 105 lpcd. About 80% of the population is covered by the regulated water supply system and residual 20% depends on spot sources mainly wells and bore-wells.

Regional Plan admits that Palwal has chronic water scarcity and therefore has laid a lower target of 225 lpcd for 2001. Therefore for assigned population of 3 lakh the total requirement of water would be 67.5 million litres daily by 2001.

ii) Sewerage :

Sewerage facility is available in the town but only about 25% of population and about 27% of area is covered by this facility. The extension of the facility to cover more area and population is in progress. The quantity of sewage generated daily is only 0.14 million litres and the sewage is discharged into link drain without any treatment. Operation and maintenance of the system costs the municipality Rs.32,500 annually.

The sewerage facility need to be extended to cover more population and area. The concerned authorities may take appropriate action to arrange for treatment of sewage before it is let off.

iii) Drainage :

Palwal has about 2 kms. length of storm water drain covering about 30% of population. The drains are open and combined with sewerage system. The storm water flows to low lying areas, ponds and Palwal link drain. The coverage of the facility need to be extended.

iv) Solid Waste Management :

The benefit of solid waste management facility is available to only 75% of the population of Palwal town and about 65% of its area. Garbage is collected manually. The quantum of solid waste generated daily is 33 M.T. The ultimate disposal of

garbage is done mechanically and used to level the low lying areas. It is a basic facility and therefore should be made available to all the inhabitants of the towns. Refuse is generated @ 205 gms. per capita daily and collected @ 154 gms. per capita daily, thus only 75% of the refuse generated is managed.

v) Educational Facilities :

As per 1981 census data, Palwal has one college (Arts and Science), 5 higher secondary Schools, 7 matriculation/high schools 8 middle schools and 20 primary schools. Keeping in view, the size of the town, the educational facility seem to be adequate.

vi) The town has sufficient medical facilities as there are two hospitals with 140 beds, in addition to one dispensary and one family planning centre.

vii) Local Roads/Internal Roads :

According to 1981 census Palwal has 27.1 kms. of total road length out of which 18.7 kms (69%) are surfaced and 8.4 kms. (31%) unsurfaced.

7. Institutional Framework :

Municipal Committee of Palwal is responsible for maintenance of civic amenities such as water supply, sewerage, drainage, solid waste management, etc. for areas under its control, whereas HUDA is responsible for maintenance of these facilities for newly developed areas for a minimum period of five years. The Municipal Committee will be responsible for maintenance of these facilities in area developed by HUDA once the charge is handed over to the Municipal Body.

Like any other town of Haryana, acquisition of land is the responsibility of Department of Urban Estates, Government of Haryana and development/allotment/auction is primarily done by HUDA.

8. Existing Development Plan proposals viz-a-vis Regional Plan proposals :

Palwal has a Development Plan for perspective year 2001 with a projected population of only one lakh whereas Region Plan - 2001 has assigned a population of 3 lakh for the same perspective year i.e 2001. In view of the anomaly the development Plan need to be revised so as to be in conformity with the Regional Plan.

ROHTAK TOWN PROFILE

1. Locational Attributes :

Rohtak is located on an average height of 219 metres above mean sea level at 28 22' East Longitude and 76 35' North Latitude. The town is situated on National Highway No. 10 at a distance of 75 kms. from Delhi and 92 kms. from Hissar. Delhi-Ferozpur broad guage railway line also passes through the town. Rohtak district is bounded by Jind and Sonapat districts in the North, Gurgaon and Mahendergarh Districts in the South, Union Territory of Delhi in the East and Hissar and Bhiwani districts in the west.

2. Demographic Features :

Population of Rohtak has grown from 88,193 in 1961 to 124,755 in 1971 @ 41.46% and between 1971-81 to 166,767 @ 33.68%. Municipal area of the town increased from 11.66 sq. kms. in 1971 to 22.03 in 1981 and density of populatin (persons per sq. kms.) decreased from 10699 in 1971 to 7570 in 1981. SC/ST population in 1981 was 21493 constituting 12.95% of the total population.

3. Employment Structure :

i) Present Activity Structure :

So far tertiary sector activities have dominated the Rohtak economy as according to 1981 Census 68.83% of the total work force was engaged in trade and commerce (27.92%), transport and communication (8.45%) and other services (32.46%), secondary sector activities employed only 26.33% of work force comprising 21.49% in manufacturing and 4.84% in construction. In 1971 also the situation was more or less similar as 75.94% of workforce was employed in tertiary sector and 19.39% in secondary sector activities. Thus, the analysis of empirical data indicates that Rohtak has been a centre of administraiton and trade and commerce. The town had very low industrial profile.

ii) Proposed Activity Structure in Regional Plan-2001 :

Regional Plan has envisaged the following employment structure for 2001 ;

(Figures in brackets are in %)

| Total Workers | Primary Sector | Industry | Construc- tion | Trade & Commerce | Trans- port & Communi- cation |
|------------------|-------------------|----------|-------------------|------------------------|--|
| % 100% | 7% | 28% | 4% | 20% | 13% |
| No. (150) | (10.5) | (42) | (6) | (30) | (19.5) |

4. Economic Activities :

i) Present Functions in the Regional Context :

Rohtak possesses one of the best educational and health facilities of Northern India. It is the Headquarter of Maharishi Daya Nand University and also has a Medical College and Hospital. Rohtak caters to the educational and medical requirements of the adjoining towns and hinterland.

Rohtak is a famous commercial centre for wholesale cloth market. There are about 250 wholesalers with an annual turnover of more than Rs.40 crores. Cloth is received from Amritsar, Ludhiana, Surat, Ahmedabad, Bombay, Delhi and Indore and caters to the needs of adjoining towns and hinterland.

The town also has about 70 firms dealing in timber and pather with an annual turnover of about Rs.10 crore. Timber is procured from Jammu and Malasia and pather from Kota, Rajasthan. Local consumption of pather and timber is hardly 40% and more than 60% is sold to clients from outside the town.

ii) Possibility of Informal Sector Activities Development & Location of Regional Markets :

At present there is no significant informal sector industrial activity in this town, nor there seem to be scope to develop such activity in the immediate future.

As already mentioned the cloth market of Rohtak is biggest in Haryana, perhaps second largest in North India next only to Delhi. There seems to be potential to develop the existing cloth market at Rohtak to a Regional Market.

5. Role Assigned in Regional Plan-2001 :

Rohtak has been identified as a priority town in Regional Plan-2001 and has been assigned a population of 5 lakh. The plan envisages that the town will have

induced development to accomodate the Delhi bound potential migrants by creating employment opportunities in secondary and tertiary sectors and shall act as one of the magnet - centre to attract economic activities.

Rohtak has excellent health and educational facilities, adequate transport infrastructure (both rail and road), the Regional Plan, therefore, envisages that because of induced and deliberate measures the town is likely to be developed as a centre of administration (other services 28% of total work force in 2001), and industrial activity (28%) followed by trade and commerce (20%) and transport and communication (13%).

6. Infrastructure Development L.:

i) Water Supply :

Yamuna canal is the main source of water supply to Rohtak town. Subsoil water is brackish and is unfit for human consumption. Rohtak has an installed capacity of 12 MLD and water production is also 12 MLD. But the present system covers only about 80% of population.

The Regional Plan has assigned a population of 5 lakh to Rohtak and has laid a target of 360 lpcd for year 2001. At this rate the total requirement would be 180 MLD whereas the present supply is a meagre 12 MLD and thus there would be an additional requirement of 168 MLD by 2001.

ii) Sewerage :

There is a separate sewerage system covering 50% area (11.01 sq. kms.) and 50% population of the town. The surface of the town is like a saucer and therefore there is no natural outflow of sewage, it has to be pumped out in three to four stages and is used partly for irrigation and partly discharged into Drain No. 8 without any treatment.

Thus there is a need to extend the coverage of sewerage facility and an urgent need to treat sewage before it is let off.

iii) Drainage :

Rohtak has a separate drainage system which is partly covered and partly open. Almost 50% of area (11.01 sq. kms) and 50% population is covered by this facility.

The town is highly flood prone despite best efforts being made to overcome the calamity. However, it may be stated that flood cannot be avoided completely as surface of the town is saucer type. As a result whenever there is rain discharge of water through gravity does not take place and water is automatically drained towards centre of the town. Thereafter, water is pumped out in three to four stages into Drain No. 8 for ultimate disposal into Yamuna Canal.

iv) Solid Waste Management :

Municipal Committee Rohtak is responsible for solid waste management. Refuse is generated @ 236 gms. per capita daily and managed @ 199 gms. daily and thus only about 84% of the refuse generated is managed.

v) Educational Facilities :

Rohtak has gained national prominence with the coming up of Maharishi Daya Nand University and Medical College, which have been developed on most modern lines. Ayurvedic Degree College is also situated on the outskirts of the town. Other educational institutions in town include 2 Polytechnics, Industrial Training Institute, 6 Degree Colleges, 3 Colleges of Education and a number of High/Higher Secondary Schools.

vi) Medical Facilities :

Rohtak possesses one of the best medical facilities of Haryana. It houses the Post Graduate medical College & Hospital in addition to four Hospital with a total bed strength of 1231 (1981). There are number of dispensaries, family planning centres and a T.B. Clinic.

vii) City Roads/Local Roads :

The total length of local roads in Rohtak town is only 31 kms. out of which 68% is surfaced and almost one third road length (32%) is unsurfaced. The health of the local roads need to be approved.

7. Institutional Framework :

Municipal Committee Rohtak is responsible for civic administration of this town. For areas newly developed or old areas developed by HUDA but charge not yet handed over to Municipal Committee, the civic administration such as maintenance of water supply, sewerage, drainage, solid waste management, is done by HUDA itself.

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As in the other towns of Haryana acquisition of land is done by the Department of Urban Estate, Government of Haryana, Development and disposal of land is mostly done by Haryana Urban Development Authority.

8. Existing Development Plan vis-a-vis Regional Plan-2001 :

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Rohtak has an approved Development Plan for perspective year 2001 for a projected population of 2.25 lakh only whereas the Regional Plan has assigned a population of 5 lakh to Rohtak for the same perspective year and therefore the Development Plan needs to be modified and be drawn in conformity with Regional Plan - 2001.

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Rewari-Dharuhera-Bhiwadi Complex

1. Locational Attributes :

Regional Plan-2001 NCR has conceived Rewari-Dharuhera-Bhiwadi to be developed as a complex although they are three separate entities falling in the jurisdiction of two states namely Haryana (Rewari & Dharuhera) and Rajasthan (Bhiwadi). Dharuhera is located on Delhi-Jaipur National Highway No. 8 at a distance of 80 kms from Delhi, Bhiwadi is located in the East of Dharuhera at a distance of 3 kms. and Rewari in its West at a distance of 13 kms. Location of the towns is as under :-

| Town | Latitude | Longitude | Average Height Above Mean Sea Level (Metres) |
|-----------|----------|-----------|--|
| Bhiwadi | 28° 13' | 76° 50' | 261 |
| Dharuhera | 28° 12' | 76° 47' | 248 |
| Rewari | 28° 12' | 76° 37' | 244 |

2. Demographic Features :

Bhiwadi and Dharuhera have not been declared as town in 1981 census, they were only village abandies; population of Rewari has grown at a very slow pace compared to other towns of Haryana. This may be observed from the following table:

| Year | <u>Rewari Town</u> | | <u>Haryana State Urban</u> | |
|------|--------------------|------------|----------------------------|----------------|
| | Area (sq. kms) | Population | Decadal Growth | Decadal Growth |
| 1951 | - | 34082 | + 11.11% | + 37.19% |
| 1961 | 6.06 | 36994 | + 8.54% | + 35.02% |
| 1971 | 6.06 | 43885 | + 18.63% | + 35.58% |
| 1981 | 6.06 | 51562 | + 17.49% | + 59.47% |

In terms of population growth Rewari is said to be a decaying town in the last few decades. Density of population in this town increased from 7241 persons per sq. km. in 1971 to 8509 persons per sq. kms in 1981. S.C./S.T., population in 1981 was 6361, constituting 12.34% of the total population.

3. Employment Structure :

i) Present Activities :

Census data for Bhiwadi and Dharuhera is not available as they were not towns in 1981. However, it is a well known fact that Bhiwadi and Dharuhera have been conceived as industrial townships.

Rewari has been dominated by tertiary sectors activities as 73.13% of the work force was employed in trade and commerce (35.09%), transport and communication (16.33%) and other services (21.71%); Industry employed only 20.67% including 4.85 in the household industry in 1971. In 1981, the share of household industry has increased to 8.50%

ii) Proposed Activity Structure :

Regional Plan has proposed the following employment structure for 2001

Title

| Name of town | % | No |
|---------------------------|--------|-------|
| Rewari | | |
| Total work Force | 100% | 33000 |
| Primary Industry | 9% | 2970 |
| Construction | 15% | 1320 |
| Trade & Commerce | 21% | 6930 |
| Transport & Communication | 15% | 4950 |
| Other Services | 36% | 11880 |
| Dharuhera | | |
| Total work Force | 100.0% | 22500 |
| Primary Sector | 5% | 1125 |
| Industry | 50% | 11250 |
| Construction | 4% | 900 |
| Trade & Commerce | 16% | 3600 |

| | | |
|---------------------------|--------|-----|
| Transport & Communication | 7% | 157 |
| Other Services | 36% | 405 |
| Bhiwadi | | |
| Total Work Force | 100.0% | 345 |
| Primary Sector | 5% | 17 |
| Industry | 50% | 172 |
| Construction | 4% | 13 |
| Trade & Commerce | 16% | 55 |
| Transport & Communication | 7% | 24 |
| Other Services | 18% | 62 |

As compared to 1971 census figures there is a marked shift in the proposed employment structure of Rewari for 2001, for the simple reason that Rewari is being developed as part of Rewari-Dharuhera-Bhiwadi complex wherein Dharujera and Bhiwadi will come up primarily as industrial township and Rewari will provide the supporting tertiary sector activities because of its existing infrastructure. Thus, the proposals of this Regional Plan -2001 are very logical, specially when looked from regional context.

4. Economic Activities :

i) Present Functions in the Regional Context :

Both Dharuhera and Bhiwadi have come up as industrial townships with supporting tertiary sector activities.

Rewari is known for its traditional brassware informal sector industrial activity. Rewari is an important centre of trade and commerce and caters to the needs of the neighbouring small towns and hinterland. Rewari also has very big grain market which is of regional significance. However, industries of the town could not flourish and have the desired impact, growth of Maryana Petrochemicals Ltd. is only an exceptional case.

157 ii) Possibility of Informal Sector Activities

405 Development & Location of Regional Markets :

Bhiwadi and Dharuhera are still in their infancy and therefore at this stage it is difficult to assess the possibility of informal sector activities and location of regional markets in these towns.

17 Rewari has a traditional informal sector
172 industrial activity in brassware; brassware activity at
13 Rewari is distinctly of two types i.e. fine handicrafts
55 used as show pieces and second is brass utensils. If
24 deliberate measures are taken this activity has scope
62 to grow, specially the fine craftsmanship available for
show pieces has potential to flourish.

As already mentioned elsewhere Rewari is a mandi town because more than 35% of its work force was employed in trade and commerce 1971. The town caters to the trade & commerce needs of small neighbouring towns and hinterland for their day-to-day requirements. There is scope to develop the already existing commercial character of the town.

The grain market of Rewari is of significant importance it can be said to be one of the grain mandi of the Haryana Sub-Region and has potential for further development.

Rewari is located at a crucial rail point and has such vital railway links that it can serve as a very important goods arresting (going towards Delhi) railway station, specially from west and thereafter the goods may be diverted to Haryana, Punjab, Jammu and Kashmir, and Rajasthan by rail as well as road.

5. Role Assigned in Regional Plan-2001 :

Rewari has been identified as one of the priority towns in Regional Plan-2001, and has been assigned a population of 1.10 lakh. Rewari is to be developed alongwith Dharuhera and Bhiwadi as a complex. All the three towns of the complex together have been assigned a population of 3.00 lakhs by 2001, Dharuhera will have a population of 0.75 lakh and Bhiwadi 1.15 lakhs.

The complex will be developed as a regional centre and through provision of adequate infrastructure and services, will be able to dissuade the potential outmigrating population and also attract and absorb Delhi bound migrants.

Region Plan has envisaged to develop Rewari as a tertiary sector oriented town employing 72% of the

proposed work force in 2001 in trade and commerce (21%) transport and communication (15%) and other services (36%). Only 15% of work force is proposed to be engaged in industrial sector including household industry.

On the other hand Bhiwadi and Dharuhera are proposed to maintain their industrial character and the Plan envisages that 50% of the proposed work force will be engaged only industry by 2001. Rewari will provide administrative and other tertiary sector services to these towns.

6. Infra-structure Development :

Infrastructure data for Dharuhera and Bhiwadi is not available.

i) Water Supply :

Yamuna canal is the major source of water supply in Rewari. In addition deeps tube wells at Dharuhera supplement the scarce water supply available from canal. Average daily protected water supply in the town is 6.35 million litres @ 134 litres per capita daily. About 5% of population depends on spot water resources.

Regional Plan-2001 has assigned a population of 1.10 lakh to the towns and has recommended a per capita target of 225 lpcd, at this rate the total requirement for the assigned population will be 24.75 million litres daily. Thus in addition to existing available supply there will be need to arrange for 18.4 million litres daily by 2001. Rewari alongwith Dharuhera & Bhiwadi have been assigned a lower per capita target of 225 lpcd because there is chronic scarcity of water supply in the belt.

For Rewari-Dharuhera-Bhiwadi complex for assigned population of 3 lakh by 2001 the total water supply requirement would be 67.5 million litres daily.

ii) Sewerage :

Sewerage system of Rewari is partly separate and partly combined; part of it is covered and part of it open and only about 55% of population of the town is having the benefit of the facility. About 3.5 million litres of sewage is generated daily and part of it is used for irrigation purposes and the rest is discharged on land without treatment.

Thus there is need to extend the coverage of the town under sewerage system and urgent need to treat sewage before it is discharged either on land or for irrigation purposes.

iii) Drainage :

Drainage system of the town is combined with sewerage system and about 30% of population and 20% of area is covered by this facility. The drains are open. About 80% of the drainage discharge is used for irrigation purposes and the rest is discharged on land.

vii) Solid Waste Management :

Municipal Committee is responsible for solid waste collection and disposal, About 36 M.T. of garbage is generated daily and about 80% of it is disposed off and used for sanitary land fill. Hand carts, trolleys and tractor trailers are used for collection of garbage. Only about 80% of the population is covered by solid waste management. Annual cost of solid waste management is about Rs. 20 lacs.

v) Educational Facilities :

Rewari has adequate educational facilities as there are 4 colleges - including college of education-7 higher secondary, 12 matric/high schools 12 middle school and 15 primary schools-1981 census.

vi) Medical Facilities :

Keeping in view the population size of Rewari the town has adequate medical facilities. There are two hospitals with 70 beds, a dispensary and family planning centre at Rewari.

vii) Local Roads

Data of local roads for the towns of Dharuhera and Bhiwadi have not been reported. In Rewari the total length of local roads is 38 kms and of which 92% are surfaced roads and 8% unsurfaced roads.

7. Institutional Framework :

Rewari has a Municipal Committee to maintain civil amenities such as water supply, sewerage, drainage, solid waste management, etc. At present in this town of Haryana land acquisition is done by Department of Urban Estates, Government of Haryana, and development/disposal of land is done mainly by Haryana Urban Development Authority.

Dharuhera has been developed by HUDA and maintenance of civic amenities is also being done by HUDA.

Bhiwadi has been developed by RIICO and maintenance of civic amenities is the sole responsibility of RIICO in the Industrial Area. The residential areas of Bhiwadi are being developed by U.I.T. Alwar and the local body for the residential areas is Notified Area Committee and the Committee is responsible for maintenance of civic amenities

8. Existing Development Plan Proposals vis-as-vis Regional Plan Proposals :

Development Plan for Bhiwadi is under preparation

Dharuhera has an approved Development Plan for perspective year 2001 with projected population of 1,20,000 whereas Regional Plan-NCR has assigned a population of 75,000 for 2001 and therefore the Development Plan of Dharuhera may be suitably modified.

There is an approved Development Plan for Rewari whose population (110 lakh) and perspective year (2001) is in conformity with the recommendations of the Regional Plan-2001. The Plan has envisaged an area of 1400 hectares for 1.10 lakh population for 2001 with gross density of 78.57 persons per hectare whereas Regional Plan-NCR has proposed a density of 110 persons per hectare for towns with population 1 to 5 lakhs and therefore the Development Plan may be modified to suit the provision of this Regional Plan.

PANIPAT

1. Location Attributions:-

Panipat is one of the eight priority towns/complexes identified by Regional Plan-2001 to be developed as a Regional Centre. The town is located 85 km north of Delhi at Latitude 29 23' and Longitude 79 58' at a height of 225 metres above mean sea level. It is situated on Delhi-Amritsar National Highway No.1; Delhi-Ambala Broad Gauge Railway line also passes through the town.

2. Demographic Features:-

Panipat is one of the fast growing towns of Haryana-as is evident from the following table :

| Year | Area (Sq. Kms.) | Population | Growth Rate (Decadal) | Density of population (persons per sq. km.) |
|------|-----------------|------------|-----------------------|---|
| 1951 | - | 54981 | 45.31% | - |
| 1961 | 7.77 | 67026 | 21.91% | 8626 |
| 1971 | 7.77 | 87981 | 31.26% | 11323 |
| 1981 | 20.82 | 137927 | 56.77% | 6625 |

Literate population in the town in 1981 was 78434 constituting 56.87% of total population S.C./S.T. population in the town during the year was only 13368 i.e. 9.69%

3. Employment Structure:

i) Present Activity Structure:

Secondary sector and tertiary sector economic activities are of equal significance as they employed 47.10% and 47.09% of work force respectively, in 1981. Industry was the most important employment generating activity employing 43.37% of work force alone followed by trade and commerce (23.24%), other services (17.79%) and transport and communication (6.06%). In 1971 Panipat was tertiary sector activities dominated employing more than 55% of work force, but there is a change in structure of employment between 1971-1981 in favour of industry.

ii) Proposed Activity Structure in Regional Plan-2001

Regional Plan has envisaged the following employment structure to the towns for 2001:

| Title % | Nos. |
|---------------------------|----------|
| Total workers | |
| 100% | 1,60,000 |
| Primary Sector | |
| 4% | 6,400 |
| Industry | |
| 40% | 64,000 |
| Construction | |
| 4% | 6,400 |
| Trade & Commerce | |
| 20% | 32,000 |
| Transport & Communication | |
| 12% | 19,200 |
| Other Services | |
| 20% | 32,000 |

Of the total envisaged increase in absolute number of workers from 41,892 in 1981 to 1,60,000 in 2001, share of industry is 45,829 (38.80%) other services 24,546 (20.78%), trade and commerce 22,268 (18.85%) and transport and communication 16,666 (14.11%).

In relative terms the share of industry has been decreased from 43.37% in 1981 to 40% in 2001, and trade and commerce from 23.24% in 1981 to 20% in 2001 and on the other hand the share of transport and communication has been increased from 6.06% in 1981 to 12% in 2001, and other services from 17.79% to 20% in 2001. The proposals of Regional Plan for 2001 are very balanced and a regional centre with 5 lakh population with

industrial activity as main stay, the supporting service sector has to come up to desired level to sustain the economic activities.

4. Economic Activities :

i) Present Functions in the Regional Context:-

Handloom industry of Panipat in the informal sector is not a mere regional level activity rather an activity of national significance. Panipat handloom products have acquired a reputation for quality and durability all over the country and also in some foreign markets. It also occupies a crucial position in the supply of goods for defence forces, accounting for almost three-fourths of the supply of the supply of "barrack blankets."

Over the years, Panipat has also emerged as the largest wool mandi in Northern India, next only to Rajasthan. Traditionally, Panipat has specialised in woolen yarn of carpet grade, which is supplied to carpet manufacturers all over the country.

ii) Possibility of Informal Sector Activities

Development & Location of Regional Markets:

As already mentioned, Panipat is known for its handloom industrial activity in the informal sector. Society for Development Studies was assigned by NCR Planning Board to examine the informal sector activities at Meerut and Panipat and recommend "Development Strategy for Informal Sector." S.D.S. has taken a census of 101 handloom units in two clusters of Panipat, namely, G.T.Road & Shiv Nagar. According to S.D.S., there is high degree of specialisation in handloom industry. The units specialize in one or two product items. The most predominant products of the handloom units in Panipat is furnishings, particularly curtain cloth & bed sheets. As many as 56.5% of the census units specialize in production of these two items. Blankets also form an important product line in the industry and 28.7% of units manufacture blankets. The other products are cotton durries and shawls. As many as 11% and 4% units specialise in the production of durries and shawls respectively.

The observations of the study are : the forward and backward linkages of the handloom industry has stimulated all round growth of economic activities in Panipat and the prospects of further developing the handloom industry into a major growth point, seem to be bright.

Wool mandi of Panipat is of regional significance as Panipat is the biggest wool market of North India, next only to Rajasthan. Woolen grade yarn produced at Panipat is supplied to carpet manufacturers throughout India. There seems to be enough scope to strengthen the already existing infrastructure and thereby scope to generate additional employment opportunities in these sectors.

5. Role Assigned in Regional Plan-2001

Regional Plan has recognised the need to develop Panipat as a Regional Centre and accordingly special programmes are being promoted in the city to stimulate economic activities and generate employment to accommodate Delhi bound potential migrants.

Panipat is proposed to be developed mainly as an industrial town with (40% of work force) with supporting commercial activity (trade and commerce with 20% work force) and administrative sector (other services 20% work force) for 2001. Keeping in view the past experience and future potential of industrial development-specially in the informal sector - at Panipat, the Plan expectations of the city would be successfully achieved.

6. Infrastructure Development

i) Water Supply

Panipat depends on deep tube wells for regulated water supply. The storage capacity at Panipat is 36.89 million litres whereas actual supply is 27.63 million litres daily @ 215 lpcd. Only 74% of the population has the facility of regulated supply and the rest 26% of population depend on spot sources for their water requirements. For the assigned population of 5 lakh by 2001, Panipat would require 180 million litres of water daily @ 360 lpcd-the norms suggested by Regional Plan.

ii) Sewerage :

Panipat has partly combined and partly separate sewerage system covering an area and population of about 40%. About 7 million litres of sewage is generated daily and part of it is used for irrigation and part of it let off on land without any treatment.

iii) Drainage :

Drainage system of Panipat is open and covers only about 50% of population and 55% of area. Storm water is

let off, on low lying areas and ponds and part of it is used for irrigation purposes.

iv) Solid Waste Management :

Panipat Municipal Committee is responsible for solid waste management. The per capita refuse generated in the towns is 208 grams and per capita refuse collected is 190 grams, thereby indicating that about 91% of the refuse generated is managed.

v) Educational Facilities :

Panipat possesses reasonable level of educational facilities as according to 1981 census there are 3 Arts, Science and Commerce colleges, 5 higher secondary schools, 9 matric/high school, 9 middle school and 26 primary schools.

vi) Medical Facilities :

There are three public hospitals with 114 beds in addition to three dispensaries and two family planning centres at Panipat. Keeping the size of town in view, the level of educational facilities seems to be insufficient.

vii) Local Roads :

As per census Panipat has a total road length of 138 kms. out of which 113 kms (81.88%) is pucca and 25 kms (18.12%) is kucha.

7. Institutional Framework :

Municipal Committee, Panipat is responsible for maintenance of water supply, sewerage, drainage, solid waste management, etc. whereas Haryana Urban Development Authority is responsible for maintenance of these civil services for areas developed by HUDA and possession not yet given to Municipal Body.

Acquisition of land for development purposes, is normally done by the Department of Urban Estates, Government of Haryana and development disposal is done by HUDA

8. Existing Development Plan proposals vis-a-vis Regional Plan Proposals:

Panipat has an approved Development Plan for perspective year 2001 and projected population of 5 lakhs, this is in conformity with the Regional Plan NCR proposals as the plan has assigned a population of 5 lakhs to Panipat for the perspective year 2001.

However, it may be mentioned that Panipat Development Plan has proposed a total area of 5858 hectares for Integrated Development Plan for 2001 for 5 lakh population and this gives a gross density of 85 persons per hectare whereas the Region Plan-2001 has proposed a density of 110 persons per hectare for towns with population of 1 to 5 lakhs.

HAPUR

1. Local Attributes

Hapur is situated at Latitude 28 43' and Longitude 77 46' about 211 metres above mean sea level on National Highway No.24 at a distance of 57 kms. from Delhi. Delhi-Moradabad Broad Gauge Railway Line passes through the town.

2. Demographic Features :

Hapur the second largest town of Ghaziabad district and third largest among the towns of U.P. sub-region. In the last three decades there had been a steady increase in the growth rate of population of the town as is indicated below :

| Year | Area (sq.km) | Population | Decadal Growth Rate | Density (persons per sq.km) |
|------|-----------------|------------|---------------------------|-----------------------------------|
| 1961 | 5.83 | 55,248 | 12.16% | 9,476 |
| 1971 | 5.83 | 71,266 | 28.99% | 12,224 |
| 1981 | 5.83 | 102,837 | 44.30% | 17,639 |

The town is growing congested and density its is highest when compared with the density of other towns of U.P. Sub-Region in 1981. For every 1000 males in 1961, 1971 and 1981 there were 847, 863 and 867 females respectively. SC/ST population in 1981 was 21757 constituting more than one fifth of the total population (21.57%).

3. Employment Structure

i) Present Activity Structure :

Hapur is tertiary sector activities dominated town as 62.88% of the work force is employed in trade and commerce (24.10%), transport and communication (14.86%) and other services (23.92%) in 1981; Manufacturing, processing repairing etc. industries employed 23.61% out of which 4.19% were employed in the household industry during the year. In 1981 there was not much change in activity structure when compared to 1971 data. In 1971 about 24.78% of the work force was employed in secondary sector whereas the comparative picture 1981 is 26.37; in 1971 about 61.30% of work force was employed in tertiary sector and in 1981 the comparative ratio is 62.88%. Thus, there is no appreciable change in the activity structure between

1971 and 1981.

ii) Proposed Activity structure R.P. 2001.

In the proposed activity structure for 2001, tertiary sector activities will employ 62% of the total proposed work force, there is negligible change when compared to 1981 figures (62.88%); however, the ratio of secondary sector activities has been increased from 26.37% in 1981 to 32% in 2001 and there is corresponding decrease in the ratio of primary sector activities from 10.75% in 1981 to 6% in 2001. The detail of the proposed activity structure for 2001 is given below :

| | Total Workers | Primary | Indus- try | Cons- truc- tion | Trade & Com- merce | Trans- port & Commu- nication | Other Se- ctor |
|-----|------------------|---------|---------------|------------------------|--------------------------|-------------------------------------|----------------------|
| % | 100% | 6% | 28% | 4% | 22% | 13% | 27% |
| No. | 135000 | 8100 | 37800 | 5400 | 29700 | 17550 | 36450 |

4. Economic Activities

i) Present Functions in Regional Context :

Grain and gur market of Hapur is not only the most important grain market of Northern India, but one of the most important foodgrain mandies of India as a whole.

The town does not possess any other regional level activity.

ii) Possibility of Informal Sector Activities and Development of Regional Markets :

There is no worth while informal sector activity in the town at present and nor there is much scope of such activity in the near future.

Grain and gur mandi of Hapur is of regional significance and to retain the present status, necessary inputs, including infrastructure facilities, may be planned in the course of preparation of Sub-regional plan and project plans.

5. Role assigned by Regional Plan-2001 :

Hapur is one of the three towns/complexes of Uttar Pradesh Sub-Region, identified to be developed as

a Regional Centre on priority basis and assigned a population of 4.5 lakh for 2001. To achieve the assigned population, the Region Plan has envisaged the town to develop with tertiary sector dominating in creating additional employment opportunities. Industry will also play a significant role in generating employment opportunities. These additional employment opportunities will absorb Delhi bound potential migrants.

6. Infrastructure Facilities :

i) Water Supply :

Underground water at Hapur is potable and the only source of water supply. Twelve deep tube wells with a capacity to produce 14.5 million litres daily. The regulated water supply covers 81% of population @ 145 lpcd. The residual 19% population depends on spot sources such as wells and hand pumps. Regional Plan has assigned Hapur a population of 4.5 lakh and recommended water supply @ 360 lpcd by 2001 and at the prescribed rate the total requirement of water supply in the town by 2001 would be 162 mld. Thus, the present meagre supply of 1.45 mld shall have to augmented by 147.5 mld to achieve the targetted rate for assigned population by 2001.

ii) Sewerage :

The existing sewerage facility covers hardly 30% of population. Sewerage facility is available in the form of water borne latrines only. There is no sewage treatment plant. Sewage is pumped out into open fields and low lying areas.

iii) Drainage :

Drainage facility is available in the town covering about 39% of population. The drains are open and separate from sewerage system.

iv) Solid Waste Management :

Refuse is generated @ 121 gms. per capita/daily and managed @ 81 gms per capita/daily i.e. only 67% refuse generated is managed.

v) Educational Facilities :

Level of educational facilities in the town is reasonable as there is one arts college, one arts-science & commerce college, 14 high/higher secondary schools, 28 middle schools and 48 primary schools.

vi) Medical Facilities :

Hapur does not have adequate medical facility as there is no hospital, there is one primary health centre with four beds, two dispensaries with one bed, one family planning centre and one T.B. clinic. Hapur has to depend on Meerut for medical facilities.

vii) Local Roads :

The total length of local roads in Hapur is 154.63 kms. out of which about 83% (approx. 128.5 kms.) is surfaced and about 17% (approx. 26 kms) is unsurfaced.

7. Institutional Framework

Municipal Board of Hapur is responsible for maintenance of civic amenities such as water supply, sewerage, drainage, solid waste management etc. in the town.

All the activities associated with acquisition, development and disposal of land and construction of houses at Hapur are being undertaken by U.P. Housing Board.

8. Development Plan vis-a-vis Regional Plan proposals:

Hapur has a Development Plan for perspective year 200 projected population of 2 lakhs only whereas the Regional Plan has assigned a population of 4.5 lakh for the same perspective year and therefore the Plan has to be revised.

MEERUT

1. Locational Attributes:

Meerut, the largest town of National Capital Region next only to Delhi, is situated at 29-41 Latitude, 77 - 43.3" Longitude 221 metres above mean sea level at a distance of 65 from Delhi. 55 Kms from Muzaffarnagar, 32 Kms from Hapur and 50 Kms from Ghaziabad. Delhi-Saharanpur broad gauge railway line passes through the town.

2. Demographic Profile:

Meerut is most strategically located and fast growing town of Western U.P. In 1981 the population of the town crossed 5 lakh. Growth of population of the urban agglomeration in last four decades is indicated below:

| year | Population | Decadal Variation |
|------|------------|-------------------|
| 1951 | 242,091 | +33.44% |
| 1961 | 286,660 | +18.41% |
| 1971 | 371,760 | +29.69% |
| 1981 | 536,615 | +44.34% |

The population of Meerut has more than doubled between 1951-81, though not at a consistent rate. In 1981 the density of population of the town was 6640 persons per Sq.km. Females per thousand males in 1961, 1971 & 1981 were 807, 816 and 848 respectively. SC/ST population in 1981 was 63533, constituting 11.84% of the total population. Literacy rate was only 50.30% in 1981.

3. Employment Structure:

(i) Present Activity Structure:

As per 1981 census data, Meerut is tertiary sector activities dominated town employing 62.89% in trade and commerce (22.30%), transport and communication (8.55%), and other services (32.04%). Industry is also a very important function as it employed 28.25% of the total work force of 1981. However, in 1971 the town was highly dominated by other services, as this segment employed 40.70% of the work force and between 1971 and 1981 there was marked shift in employment structure from other services to trade and commerce and industry as the share of industry increased from 24.68% to 28.25% between 1971 and 1981 and trade and commerce from 18.17% in 1971 to 19.78% in 1981.

(ii) Proposed Activity Structure Region Ploan-2201

There is no appreciable change in the proposed activity structure of 2001 and the 1981 structure, specially in the predominant functions. The proposed activity structure is indicated below"

| Total workers | Primary sectors | Industry | Construction | Trade & Commerce | Transport & Communication |
|---------------|-----------------|-------------|---------------|------------------|---------------------------|
| 100% | 2% | 29%(28.25%) | 4% (2.92%) | 20% (19.75%) | 9% (6.75%) |
| 4,96,000 | 9920 | 1,43,840 | 19840 | 99,200 | 44,640 |

N.B.: Figures in brackets indicate comparative 1981 census figures.

Thus there is marginal increase in the employment ratio of tertiary sector activities from 62.89% in 1981 to 65% in 2001; Ratio of secondary activities has also marginally increased from 31.17% in 1981 to 33% in 2001; Ratio of primary sector activities has gone down from 5.96% in 1981 to 2% in 2001, which seems to be very realistic for a fast growing town of Meerut size.

4. Economic Activities:

(i) Present functions in the Regional Context:

Meerut is the most important commercial, industrial, administrative and educational centre of Western U.P. Several important urban centres such as Ghaziabad, Hapur, Baraut & Baghpat are situated within 50 Kms. It is closely inter linked with them and its strategic location has provides a good scope to develop as a Regional Centre for administrative, as well industrial-cum-commercial activities.

Educational facilities available at Meerut are the best when compared to other towns of the sub-region. It houses the headquarters of Meerut University; there is a medical college in addition to a number of degree colleges and other educational institutions.

(ii) Possibility of Informal Sector Activities
Development & Location of Regional
Markets:

Informal sector forms the core of industrial base in Meerut. Accordingly to Society for Development Studies on Informal Sector on Meerut. "in early eighties about 9000 household industrial units formed the industrial base of Meerut. The base is provided by weaving industry (about 8000 Units) the sports goods industry (500 Units) and the scissors and blade industry (300 Units), which are estimated to provide 60,000 jobs".

Meerut Development Authority has formulated a plan for rehabilitation of already existing handloom units in a new location. This is being done with a view to reduce the acute congestion in the city. The Plan includes the setting up of residential-cum-work place for the informal sector handloom weaving units at Hath Karga Nagar. Land has already been acquired and in Phase-I, about 4,300 units will be accommodated. Each unit will be given a built up space measuring 40 sq.mts (3.75mts X 11.25 mts.) at a price of Rs. 18,000. Higher purchase facility will be made available to the informal sector entrepreneurs. NCR Planning Board is already committed to make the scheme a success and has already advanced a sum of Rs. for the scheme.

The scissors and blades industry is also looking for better locations as it has already made a representation to District Industries Centre to set up 25 clusters for their activities with 20 units in each cluster. The demand envisages for each unit a room of 15 ft x 10 ft dimension and an open area of the same size for future expansion of their operations.

Meerut is one the most important centre of trade and commerce of Western U.P. and the most important centre of wholesale and retail trade and commercial activities of U.P. Sub-Region of N.C.R. Region plan has allocated a sizeable proportion of work force (20%) to be employed in this segment of economic activity for 2001.

5. Role Assigned in Region Plan 2001:

Meerut is most important among the eight priority towns/complexes chosen for induced development, as it has been assigned the highest population i.e. 15.5 lakh, which is almost three times its population in 1981 - 5.36 lakhs. The town has the potential to generate additional employment

opportunities and act as magnet centre by absorbing Delhi bound potential migrants and achieve the assigned population. The town has been designated to be developed as a centre of administration for the towns of U.P Sub-Region. Regional Plan has also recognised the potential of Meerut to be developed as a centre of industrial activities formal as well as informal sectors and trade and commerce. By 2001 the town will continue to be dominated by tertiary sector economic activities but at the same time industry will play a significant role in shaping the employment structure of the town.

6. Infrastructure Facilities:

(i) Water Supply:

Upper Ganga Canal and deep tube wells (No.32) are the two sources of regulated water supply at Meerut. Actual water supply in the town is 75.45 million litres daily @190 litres per capita daily, covering about 75% of the total population. The rest 25% depends on spot sources such as wells and hand pumps which is quite substantial for a town of Meerut size.

(ii) Sewerage:

For the purpose of sewerage, city has been divided into 12 zones and of these main trunk sewer has been laid in 5 zones and branch sewer has still to be completed in two zones. These schemes cover only a population of 1.60 lacs. In addition, in Shastri Nagar sewer has been laid by U.P Awas and Vikas Parishad covering about 1 lakh population. Only about 45% of the total population of the town excluding contonment is being served by sewerage system. The sewage is used partly for irrigation purposes and partly discharged into Abu Nala. There is no sewage treatment system.

(iii) Drainage:

The old town, except newly developed areas, is drained off by the existing system of surface drains and three main Nalas namely, Abu Nala, Northern Drain and Southern Drain. However, it appears that the surface drains already constructed had not been designed to carry storm water but only for spent water from kitchen and toilets of the residential areas. It may be possible to dispose off the complete storm water of the town through the three main Nalas. About 65% of the total population of the town has access to drainage system.

(iv) Solid Waste Management:

According to Draft Report of National Institute of Urban Affairs on Resource Mobilisation of Local Bodies, in Meerut refuse is generated @232 grams per capita daily and managed @ 155 grams per capita daily. Refuse managed is only 67% of the refuse generated.

(v) Educational Facilities:

Meerut has very good educational facilities and is the headquarters of Meerut University. There are seven colleges with Arts, Science & Commerce, one Medical College, six type/short colleges, 36 Intermediate/Higher Secondary Schools, 58 Matriculation/High Schools, 101 Middle Schools and 223 Primary Schools -1981 census.

(vi) Medical Facilities:

There are 10 hospitals with 1147 beds, 3 dispensaries, one T.B Clinic, one Nursing Home and one Health Centre at Meerut - 1981.

(vii) Local Roads:

The total length of local roads in Meerut is 720.11 Kms out of which 72% (about 520 Kms) is surfaced and 28% (about 201 Kms) unsurfaced.

7. Institutional Framework:

Meerut Urban agglomeration has four constituents i.e. Baksarkhera whose local civic body is Town Area Committee,; Kanker Khara whose local civic body is also a Town Area Committee; Meerut, has a Municipal Board to perform the functions of local body and Meerut Cantonment has a Cantonment Board to maintain civic amenities such as water supply, sewerage, drainage, solid waste management etc.

U.P. Jalnigam is responsible for planning and execution of water supply schemes.

Meerut has Meerut Development Authority for preparation, execution/implementation of development programmes and disposal of land.

U.P. Housing Board undertakes development of land, construction of houses etc.

B. Existing Master Plan vis-a-vis Regional Plan Proposals:

Although Meerut has an approved Master Plan but its perspective year is 1991 for projected population of 13 lakh whereas the Region Plan NCR has assigned a population of 15.5 lakh for 2001. The Master Plan therefore needs to be revised and recommendations of the Regional Plan incorporated.

BULANDSHAHR-KHURJA COMPLEX

1. Location Attributes:

Bulandshahr and Khurja are two separate towns of Bulandshahr district located at a distance of 19 Kms from each other, have been conceived by Regional Plan-2001 as one complex for the purposes of development.

Bulandshahr is located at Longitude 77 - 51 East and Latitude 28 - 24 North about 200 metres above mean sea level on Delhi-Moradabad State Highway No.18 at a distance of 71 Kms from Delhi and 90 Kms from Meerut. Khurja is located at Longitude 77 - 51 East, 28 - 15 Latitude North about 198 metres above mean sea level at a distance of 90 Kms from Delhi on Bulandshahr-Aligarh State Highway.

2. Demographic Features:

Bulandshahr has experienced a faster population growth in the last three decades when compared to Khurja as is indicated below:

| year | Bulandshahr | | Khurja | |
|------|-------------|----------------|------------|----------------|
| | Population | Decadal Growth | Population | Decadal Growth |
| 1961 | 44,163 | +17.78 | 41,491 | +7.88 |
| 1971 | 59,505 | +34.75 | 50,245 | +21.10 |
| 1981 | 103,436 | +73.83 | 67,119 | +33.58 |

In 1951 the population of Khurja was more than that of Bulandshahr whereas in 1981 the population of Bulandshahr is more than one and a half times than that of Khurja. Density of population of Bulandshahr and Khurja in 1981, was 11016 and 6479 persons per square Km respectively. Ratio of females per thousand males in the two towns during last three decades was :

| | 1961 | 1971 | 1981 |
|-------------|------|------|------|
| Bulandshahr | 831 | 850 | 867 |
| Khurja | 853 | 866 | 880 |

In 1981, 38.27 of Khurja population was literate whereas in Bulandshahr 48.05% was literate.

3. Employment Structure:

(i) Present Activity Structure:

1981 census classification of workers in nine categories for both the towns is not available. In 1971 Bulandshahr was tertiary sector activities dominated town as 70.86% of the total workers were employed in trade and commerce (27.58%), transport and communication (11.53%) and other services (31.95%), whereas industry employed only 19.83% of the total workforce; primary sector activities employed only 5.93%.

In Khurja also the tertiary sector activities were dominant but much less when compared with Bulandshahr as 58.34% of the work force in 1971 was employed in trade and commerce (23.52%), transport and communication (10.77) and other services (24.05%), industrial activities were better in Khurja as these activities employed 25.29% of work force. Khurja continues to maintain its rural character as 13.31% of its work force was engaged in primary sector activities in 1971 and even in 1981 more than 10% of its work force was depending on agricultural activities as a source of employment.

(ii) Proposed Activity Structure Regional Plan-2001:

Regional Plan has envisaged the following employment structure for 2001:

Bulandshahr

| Total work force | Primary Sector | Industry | Construction | Trade & Commerce | Transport & Communication | Other Services |
|------------------|----------------|----------|--------------|------------------|---------------------------|----------------|
| 100% | 4% | 40% | 4% | 20% | 12% | 20% |
| 1,50,000 | 6,000 | 60,000 | 6,000 | 30,000 | 18,000 | 30,000 |

Khurja

| 100% | 4% | 40% | 4% | 20% | 12% | 20% |
|--------|-------|--------|-------|--------|--------|--------|
| 90,000 | 3,600 | 36,000 | 3,600 | 18,000 | 10,800 | 18,000 |

Khurja and Bulandshahr have been assigned the same work force ratios for 2001 in other words it may be said that they have been treated as one unit while assigning work force ratios for 2001. All the three segments of tertiary sector activities would account for 52% of work force in 2001 whereas industry alone would account for 40% of work force. As compared to 1971 work force ratio there is a marked shift in the ratios of proposed work force from primary & tertiary sector activities to secondary sector activities in 2001. Thus while preparing Regional Plan, NCR Planning Board has taken a cautious decision to generate highest job opportunities in the industrial sector.

4. Economic Activities:

(i) Present functions in Regional Context:

Bulandshahr is a very important centre of trade and commerce of U.P. Sub Region. People from neighbouring towns and hinterland come to Bulandshahr for marketing.

Khurja is known for potteries not only in U.P. Sub-Region but in the whole of Northern India and is an important source of employment generation.

(ii) Possibility of Informal Sector Activities and development of Regional Markets:

Potteries of Khurja are a very prominent and most visible economic activity. It is a traditional industry and well known not only in Northern India but whole of India.

There is perhaps enough scope for potteries to grow and the activity may be provided all the necessary inputs in the form of infrastructure facilities, raw-materials, promotion of entrepreneurial skill, improvement of technology, etc. A boost to potteries will enable the town to grow in the direction as envisaged in Regional Plan.

Commercial activities at Bulandshahr may not be of regional nature, but they are definitely more than of local nature as they cater to the needs of neighbouring towns and hinterland and can be strengthened if suitable infrastructure facilities are made available. Detail feasibility studies may be made when sub-regional plans are prepared.

5. Role Assigned in the Regional Plan-2001:

The two towns are envisaged to be developed as one complex, both towns supplementing development activities of each other and function as a Regional Centre and generate employment opportunities in industry, trade and commerce and in the service sector with the main objective of arresting the movement of local people towards Delhi who are in search of jobs and also to deflect the potential Delhi bound migrants from other parts of the country.

6. Infrastructure facilities:

(i) Water Supply:

Underground water in Khurja and Bulandshahr is potable and these towns depend on deep tube wells for their regulated water supply. According to NTUA report on Resource Mobilisation daily regulated water supply in Bulandshahr was 9.83 MLD and Khurja 4.84 MLD in 1986 @ 141 and 81 lpcd covering a population of 60% and 77% respectively. Spot sources, mainly open wells and hand pumps were a major source of water supply as about 40% of the population of Bulandshahr and 23% of the population of Khurja was dependant on spot sources in 1986.

On the basis of recommended norm of 360 lpcd and assigned population of 8 lakh for the complex as envisaged in Regional Plan 2001, the total requirement of water supply will be 288 MLD whereas the present supply is only 14.67 MLD which is just a small fraction.

(ii) Sewerage:

Khurja and Bulandshahr do not have any sewerage facility.

(iii) Drainage:

There are open surface drains in Bulandshahr and Khurja. In Bulandshahr the total coverage is 84% whereas in Khurja the coverage is 45%.

(iv) Solid Waste Management:

According to NIUA report on Resource Mobilisation refuse is generated @ 267 gms per capita daily in Bulandshahr and managed @ 180 gms per capita daily thus only 67% of the refuse is managed.

In Khurja refuse is generated @ 250 gms per capita daily and managed @ 160 gms per capita daily i.e. only 70% of the refuse generated is managed.

(v) Educational Facilities:

As per 1981 census in Bulandshahr there is one college of Arts, one college of science, two recognised type/shorthand colleges, 8 Higher Secondary Schools/Inter Colleges, 2 High Schools, 6 Middle Schools and 46 Primary Schools.

In Khurja there is one degree college with Arts subjects, one college with Arts-Science-Commerce, one Polytechnic, one Shorthand/Type College, 5 Higher Secondary Schools/Inter Colleges, one High School, 5 Middle Schools and 25 Primary Schools.

(vi) Medical Facilities:

Medical Facilities at Khurja are reasonable as there is one hospital with 76 beds and one family planning centre.

In Bulandshahr medical facilities are very good as there are 6 hospitals with 250 beds, 3 I.D. Centres with 50 beds, and one family planning centre. These facilities cater to the needs of neighbouring small towns and hinterland.

(vii) Local Roads:

The total length of local roads in Bulandshahr is 209.11 Kms out of which 79% (about 165 Kms) is surfaced and 21% (about 34 Kms) is unsurfaced. In Khurja the length of local road is 105.66 Kms out of which 94% (about 99 Kms) is surfaced and 6% (about 6.5 Kms) is unsurfaced.

7. Institutional Framework:

For maintenance of civic amenities such as water supply, sewerage, drainage, solid waste management etc. Bulandshahr and Khurja have their respective Municipal Boards.

For the purposes of acquisition, development and disposal of land for various uses, Khurja and Bulandshahr have one Authority known as Bulandshahr-Khurja Development Authority.

U.P. Housing Board undertakes development of land, construction of houses on behalf of Local Bodies inside the local body limits and of its own outside the local body limits. Where it undertakes such activities of its own, it is also responsible for disposal of such houses, in other case it hands over possession to local body for disposal of such houses.

8. Existing Development Plan vis-a-vis Regional Plan Proposal:

Khurja does not have an approved development Plan as yet. Bulandshahr has a development plan and the present plan has projected a population of only 1.87 lakhs for 2001 whereas the Regional Plan has assigned a population of 5 lakhs for 2001. The Bulandshahr-Khurja complex has been assigned a population of 8 lakhs out of which Khurja will have a population of 3 lakhs.

ALWAR

1. Locational Attributes :

Alwar town is located at 27° 34' East Longitude and 76° 36' North Latitude, 268 metres above mean sea level. The town lies on Delhi-Ahmedabad metre gauge railway line and is situated at a distance of about 160 kms. from Delhi and 150 kms. from Jaipur. Alwar is traversed by Aravli Ranges.

2. Demographic Profile :

| Year | Area (Sq. kms.) | Population | Growth | Density of Population |
|------|--------------------|------------|--------|--------------------------|
| 1951 | - | 57868 | 6.88% | - |
| 1961 | 44.76 | 72707 | 25.64% | 1624 |
| 1971 | 40.47 | 100378 | 38.06% | 2480 |
| 1981 | 80.00 | 145795 | 45.25% | 1822 |

Since 1951, the growth rate of population has shown a consistent upward trend. Area under Alwar Municipal committee has also increased from 44.76 sq. kms. in 1961 to 80.00 sq. kms. in 1981. Number of females per thousand males in 1961, 1971, 1981 were 859, 832, 822 respectively. S.C./S.T. population in 1981 was 23650, constituting 16.22% of the total population.

3. Employment Structure :

i) Present Activity Structure :

Tertiary sector activities dominate the economy of Alwar as in 1981, 62.89% of the total workers were employed in trade and commerce (22.30%), transport and communication (8.55%) and other service (32.04%). Industrial activities were also prominent and employed 25.29% of workers. Although the service sector activities are dominant, industrial activities of the town are also significant.

ii) Proposed Activity Structure in Regional Plan-2001 :

There is not much deviation in proposed activity structure for 2001 when compared with 1981 structure. The proposed activity structure 2001.

| Title | % | No. |
|---------------------------|------|----------|
| Total workers | 100% | 1,50,000 |
| Primary Sectors | 5% | 7,000 |
| Industry | 30% | 45,000 |
| Construction | 4% | 6,000 |
| Trade & Commerce | 20% | 30,000 |
| Transport & Communication | 11% | 16,500 |
| Other Services | 30% | 45,000 |

Thus for 2001 proposed work force ratios there is marginal increase in secondary sector activities from 30.67% in 1981 to 34% in 2001 and a marginal decrease in tertiary sector of ratio from 62.89% in 1981 to 61% in 2001.

In absolute terms the total work force will increase from 38,970 in 1981 to 1,50,000, an increase of 285%, among different sectors the biggest expected increase will be in industry (35,140), followed by other services (32,514), trade and commerce (21,309), transport and communication (13,167) and construction (3905).

4. Economic Activities :

i) Present Functions in the Regional Context :

Alwar does not possess Regional level functions but some of the activities at Alwar are definitely more than local level activities and they cater to the needs of the nearby towns and hinter land and these may be mentioned as :

Grain Mandi of Alwar, is the biggest anaj mandi of Rajasthan Sub-region and the most valued commodity brought in this mandi is mustard. Others important arrivals are wheat, barley, grains, rape-seed, bajra & jawar. Annual arrivals are worth more than Rs. 50 crores.

Alwar possesses very good medical facilities as there are three general hospitals with more than 440 beds.

Level educational facilities at Alwar is good and cater to the needs of the surrounding areas.

5. Role Assigned in Regional Plan-2001

Regional Plan has identified Alwar as one of the eight priority towns/ecomplexes, and has recognised the need to induce the development of secondary and tertiary sector activities at Alwar. Thus the Regional Plan, by deliberate measures, will create employment opportunities for assigned population - and deflect Delhi bound potential migrants. The existing infrastructure facilities have the potential to develop and meet the requirements of secondary and tertiary sectors for 2001.

ii) Possibility of Informal Sector Activities Development and Location of Regional Markets :

Alwar does not have any significant informal sector activity and nor there is much scope to develop such activity in the near future.

Anaj mandi at Alwar is quite big and has the potential to be developed as a regional anaj mandi. A detailed study in this regard may be undertaken.

6. Infrastructure Development :

i) Water Supply :

The only source of regulated water supply to the town is deep tube wells (No. 34) and according to a study of NIUA (Resource Mobilisation - Draft Report) the total regulated water supply in the town is 1986 was 17.97 million litres daily @ 106 lpcd, covering about 92% population. The rest 8% of population depended on spot sources such as open well (No. 46) and hand pumps (No. 35).

Regional Plan - NCR has assigned a population of 5 lakhs for 2001 and also has recommended that water supply should be made available @ 360 lpcd. At the recommended level, the total requirement of water supply in year 2001 would be 180 MLD daily. Thus there would be an additional requirement of 162 MLD by 2001.

ii) Sewerage :

Alwar town does not have sewerage system except in U. I. T. Schemes. Most of houses in old city have dry latrines. In new colonies septic tanks have been built by some of the plot holders individually. Recently

water borne sewerage system has been introduced in Shivaji Park and Ashok Vihar residential schemes covering hardly 20% of the town population. There is no system to treat sewage.

iii) Drainage :

Alwar has open drainage system covering only 20% of population. Even the existing drainage system does not function efficiently as most of the drains get silted and choked and as a result ~~of~~ floods are a common feature during rainy season. Moreover, the town is located between foothills of Aravali Ranges on western side and railway line on eastern side and the city is expanding in between these two limits. During rainy season, the entire storm water flows from the hills towards railway line. The raised railway line serve as a barrier and there is no natural outflow of water and the storm water gets accumulated in nearby areas. Thus the drainage system of Alwar does not have a natural outflow and has to be given a serious thought.

iv) Solid Waste Management :

Only about 80% of the refuse of the town is managed. Refuse is generated @ 242 grams per capita daily and managed @ 194 grams per capita daily. Night soil is disposed through wheel barrows and septic tank.

v) Educational Facilities :

The town possesses adequate educational facilities as there are 2 colleges of Arts, one college of Arts and Science, one college of Science and Commerce and one Law College. There is a Homeopathy Medical College, one Polytechnic, one Industrial Training Institute, 2 Music High Schools, one Nursery Training Centre, one Teachers Training College and one Basic Teacher's Training School. There are 6 Higher Secondary School, 7 High School/Matric 27 Middle Schools and 59 Primary Schools.

vii) Medical Facilities :

Alwar has good medical facilities as there are three hospitals with 442 bed strength, one T.B. Centre with 30 beds, 4 dispensaries, 2 homeopathic dispensaries, one family planning Centre, 5 nursing homes and two public health centres. The medical facilities available at Alwar cater to the needs of nearby towns and hinterland and as well.

vii) Local Roads

The total length of local roads in Alwar is only 57.9 kms out of which about 24 kms (approximately 41%) is surfaced and a major portion about 34 kms (approximately 59%) is unsurfaced indicating the poor quality of local roads.

7. Institutional Framework i.

There is a Municipal Committee at Alwar to look after this maintenance of civic activities such as drainage, conservancy and sanitation, public lighting, waters supply and maintenance of roads. Beside this existence of municipal body at Alwar, there is an office of the Urban Improvement Trust, popularly known as UIT, which is responsible for the overall development of the town.

8. Master Plan vis-a vis Regional Plan Proposals

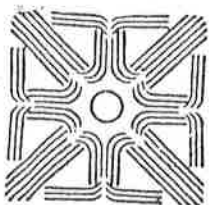
Alwar has an approved Master Plan for prospective year 2001 for a projected population of 3.85 lakh only whereas the Regional Plan has assigned a population of 5 lakh for prospective year 2001 and therefore the Master Plan need to be suitable modified.

INVESTMENT PLAN N C R

VIII FIVE YEAR PLAN (1990-95)

Report of the Working Group

APPROVED BY THE NCR PLANNING BOARD
IN ITS TENTH MEETING HELD ON 17.7.1989.



National Capital Region Planning Board
Ministry of Urban Development, Government of India.

April 1989

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EIGHTH PLAN INVESTMENT PROPOSALS FOR THE NATIONAL CAPITAL REGION

I. INTRODUCTION

The need for preparing Investment Proposals for the National Capital Region was discussed by the NCR Planning Board in its 9th meeting held on November 3, 1988 while approving the Regional Plan - 2001 for NCR. A Working Group was accordingly constituted to prepare the 8th Plan Investment Proposals. The constitution of the Group and its terms of reference are at Annexure-1.

The Group met on January 10, 1989 and decided to constitute following Sub-Groups with their composition as at Annexure-II.

- 1) Sub-Group on Employment.
- 2) Sub-Group on Regional Roads Investments.
- 3) Sub-Group on Central Sector Investments, and
- 4) Sub-Group on involvement of Private Sector.

A background report was prepared for consideration and discussions in the respective meetings of the Group/Sub-Groups. The Sub-Groups accordingly held their deliberations during January-April, 1989.

The Working Group finally met on April 13, 1989 to finalise its conclusions and recommendations for submission to the NCR Planning Board. The NCR Planning Board in its Tenth meeting held on July 17, 1989 approved the recommendations of the Working Group on Investment Plan for the 8th Five Year Plan (1990-95).

II. REGIONAL PLAN - 2001 FOR THE NATIONAL CAPITAL REGION

The Regional Plan-2001 for the National Capital Region was approved by the National Capital Region Planning Board in its 9th meeting held on November 3, 1988. The Regional Plan-primarily a policy document, is aimed at progressive deconcentration of economic activities away from Delhi and their dispersal to various parts of the NCR so as to contain Delhi's population size within manageable limits by 2001 A.D. The Plan envisages a balanced development of the Region and has identified 8 towns and complexes with growth potential for induced development to accommodate larger economic activities and population and, to reduce pressure of migration to Delhi. Besides, 6 Delhi Metropolitan Area towns have also been identified to absorb over spill population and economic activities from Delhi. In addition, 5 Counter-magnet Areas outside NCR have also been selected for development to intercept migratory flow towards Delhi from outside areas.

The NCR Planning Board, while approving the Regional Plan was conscious of the fact that the development of NCR has to be time bound in order to achieve its committed goal of saving Delhi through balanced development of the Region. This could be possible only through provision of adequate funds for implementation of integrated programmes in order of their sectoral priorities. This would necessitate prioritisation of investments and setting clear cut targets for resource allocations. The Working Group, in its meetings dealt at length on the general strategies and potentials for development and, adopted significantly positive approach in identifying the critical areas for such investment during the first Phase of the Plan coinciding with the 8th Five Year Plan period. The Group identified the critical mix of the investments as well as areas which could lead to triggering of development process in a systematic manner as envisaged in the Plan. The Group also noted that the success of the Plan would largely depend upon the vigorous implementation of the various policy measures together with the provision of infrastructure facilities and restructuring of economic base of the Priority Towns. The Group strongly felt that time and speed are of great importance for implementation of the NCR Plan and, unless adequate investments are made during the 8th Plan, it may be too late to avert the impending population explosion and likely deterioration of essential services in Delhi. The present level of investments during the 7th Plan has in fact not produced any significant and discernable impact in solving problems of the National Capital.

Salient Features of the Report of the National Commission on Urbanisation :

The Working Group also noted the various recommendations given by the National Commission on Urbanisation for the orderly urban development in the Country. After discussing a wide spectrum of urban issues like rapid population growth, inadequate infrastructure, financial constraints, scarce land resources etc., the Commission has come up with specific suggestions on broad range of policy interventions which are relevant to the development of the National Capital Region.

Basically, the Commission has identified 329 urban centres whose economic and physical bases are to be consolidated and of them, 8 fall in NCR. These are described as GEMs (Generators of Economic Momentum) which fall into 49 Spatial Priority Urbanisation Regions (SPURs), National Capital Region, having been identified as one of the foremost SPURs, the Commission has recognised the preponderance of the poor to be taken as the principal concern of the urban planning and, has suggested that physical planning of the cities must, therefore, change dramatically to achieve this sensitivity to the requirements of low income group and informal sector for shelter, employment, basic services and finance.

The recommendations of the Commission relating to dimensions of urbanisation, urban future, urban poverty, land as a resource, finance, urban management, planning the city, transport, housing, water and sanitation, energy, public sanitation and information system have been duly considered by the Working Group for their relevance in the context of the NCR.

III. STRATEGIES FOR INVESTMENT DURING 8TH PLAN

3.1 Goals and Objectives

The Regional Plan for the National Capital Region has its core goals and objectives of :

- i) achieving a manageable Delhi; and,
- ii) balanced and harmonious development of the Region.

These goals and objectives are sought to be achieved through a package of inter-related policy measures relating to various sectors of development and adopting strategies of selective decentralisation aiming at :

- a) containing the growth of Delhi UT within a manageable size of 112 lakhs by 2001 AD ;
- b) moderate growth of Delhi Metropolitan Area excluding Delhi U T to accommodate a total population of 38 lakhs by 2001 AD; and
- c) induced growth of the rest of the Region to hold 49 lakhs of urban population in towns/complexes identified for priority development i.e., 19 lakhs additional population in Priority Towns between 1990 and 2001 AD and, remaining 38 lakhs in urban settlements in rest of the Region beyond DMA.

3.2 General Strategies for Implementation of the Policy Measures

The major issues of spatial development for the NCR Plan investment stem out in the context of heavy concentration of economic activities and population in Delhi, reflecting imbalances in the regional development and a lack of integration between urban and rural areas. The National Capital Region Plan-2001 having taken a note of this as the core problem, has suggested integrated development of self contained Priority and DMA Towns within NCR and, Counter Magnet Areas outside the NCR as interceptors of potential migrants to Delhi. To achieve this objective, an inter-sectoral economic investment programme would be required with several strategies for suitably channelising the investments which would have the desired effect in achieving the objectives of the Regional Plan. The Regional Plan would need to be translated through several development programmes and projects of both long and short terms in nature. The programme and its implementation would require an

integrated approach to reduce the imbalances which have occurred between Delhi and the rest of the Region. This would be achieved through a purposive decentralisation of economic activities supported by development of infrastructure and such other complementary activities as would be required. The programme that need to be developed to achieve the above objectives is to create employment opportunities which must be linked with shelter and infrastructure at the local level supplemented by regional infrastructure like transport, telecommunications and power. It must be borne in mind that the large volume of migrants belong to economically weaker sections and low income groups and, the main thrust of development should therefore be to provide employment opportunities to this target population. The per capita cost of job creation should be kept as low as possible in order to provide the largest number of jobs within the resources available. At the local level, projects need to be integrated with urban investment programmes requiring participation of institutions in many sectors and a high degree of intersectoral coordination. In this context, rural development is relevant in so far it relates to the linkages with urban areas in provision of markets etc.

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

- i) Development of economic and employment generating activities (industries, wholesale distributive trade and commerce and, Government and Public Sector offices) leading to dispersal from Delhi to : a) other DMA and, b) Priority Towns.
- ii) Promotion and development of identified Priority Towns (Meerut, Hapur, Bulandshahr-Khurja, Panipat, Rohtak, Rewari-Dharuhera-Bhiwadi, Palwal and Alwar) in the Region through, a package of incentives and concessions with a view to decentralise economic activities mentioned in para i) together with emphasis on creation of employment opportunities particularly in informal sector activities. This would also include upgradation of skills, provision of other social welfare measures and services.
- iii) Provision and upgradation of physical and social infrastructure viz. telecommunications, and transport both road and rail and power at the regional level and, water supply, sanitation, solid waste management, education and health facilities at the local levels at norms and standards comparable to that of Delhi.

3.3 Thrust Areas for the Eighth Plan

The thrust areas of the 8th Plan in the NCR would be on the following aspects :

- 1) Generation of employment opportunities.
- 2) Provision and upgradation of Infrastructure.

The programmes and projects for development for investments at the regional and local levels need to be developed accordingly and implemented during the 8th Five Year Plan. The programmes developed during the 8th Plan should be continued in the subsequent Plans for their completion in addition to the respective plan programmes in the subsequent phases of development to achieve the broad objectives of the NCR Plan.

3.4 Operational Strategies and Programmes

The operational strategies, programmes and projects for investments during the 8th Five Year Plan in the NCR would be based on the following frame work :

Framework for Eighth Five Year Plan Investments

| Thrust Area : | Programme for Development. | Policy Zone/Towns |
|--|--|---|
| 1) Generation of Employment Opportunities. | | |
| a) Growth promotion and inducement of identified priority towns in the Region. | Development of economic activities for employment generation for induced growth : 1) Development of Industrial Estates. 2) Wholesale Trade & Commercial Complexes. 3) Central Govt. and Public Sector Offices. 4) Employment cum Shelter related activities. | Identified Priority Towns in the Region |

| | | |
|--|--|--|
| b) Decentralisation/ deconcentration of economic activities from Delhi. | 1) Location of economic activities such as distributive wholesale trade and commerce | DMA excluding Delhi U.T. and rest of the Region |
| | 2) Obnoxious, polluting and non-conforming industries | Rest of the Region |
| | 3) Central Govt. and Public Sector Offices | DMA excluding Delhi U.T. and rest of the Region. |
| 2) Provision and Upgradation of Infrastructure. | | |
| a) Regional Level. | a) Transport | Entire NCR |
| | i) Roads(NH, Expressways, SH) | Entire NCR |
| | ii) Railways | Entire NCR |
| | b) Telecommunications | DMA excl. Delhi UT and Priority Towns |
| | c) Power Development | Entire NCR |
| b) Local Level + | i) Residential Development | Priority Towns |
| | ii) Urban infrastructure | DMA excl. Delhi UT and Priority Towns |
| | a) Water Supply | |
| | b) Sanitation | |
| | c) Solid waste management | |
| | iii) Upgradation of Social Infrastructure | DMA excl. Delhi UT and Priority Towns |

3.5 Investment Priorities

A) Priority Towns

1) The Investment Plan should address to the creation of job opportunities in economic activities and also accommodation commensurate with increase in population assigned for induced growth during 1990-95 in the Priority Towns. In addition, 50% of the addition due to trend based increase would also be catered for.

2) The existing city's trend of growth in population should be taken into consideration for upgradation and rehabilitation of physical and social infrastructure during the 8th Plan. However, 50% of the addition due to trend based increase would be catered for provision of essential services by new development while the remaining 50% would be covered through improvement and rehabilitation of the existing infrastructural facilities. However, as the backlog in terms of deficit population as at the end of 7th Plan ie. 1989-90 is huge, and also as the provision of urban services is capital intensive, it is proposed to remove only the deficit upto 1990 during the 8th Plan.

3) Service requirements of the additional population due to induced growth will be included in the development of land proposed additionally for this population. Fig 1 indicates the population to be catered to for provision of services, employment opportunities and accommodation. (Table A)

B) DMA Towns

- i) upgradation and rehabilitation of physical and social infrastructure in all DMA towns excluding Delhi for population upto 1990.

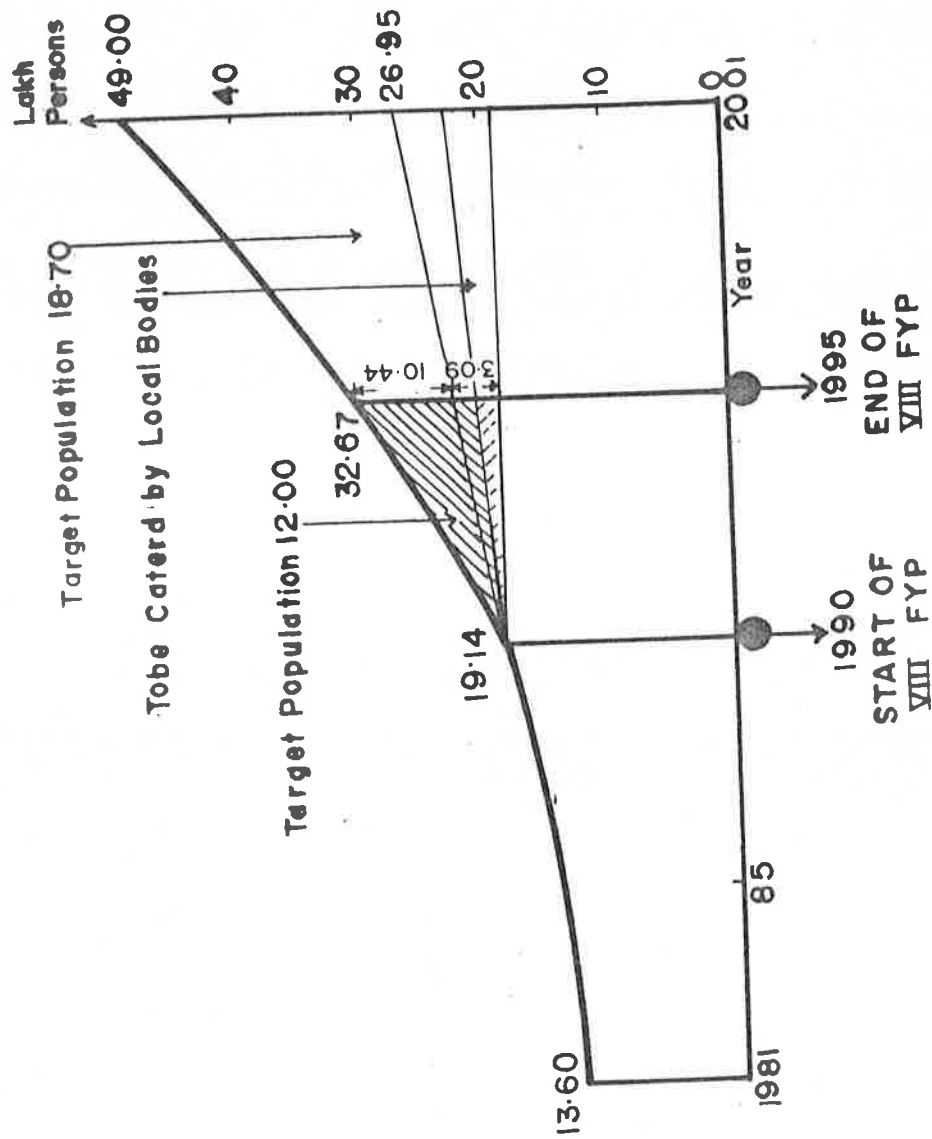
Fig 2 depicts the the population to be catered to in respect of provision and upgradation of infrastructural facilities. (Table B)

C) Regional Infrastructure

As regards regional level infrastructure, the investment plan would address the transport sector on the following :

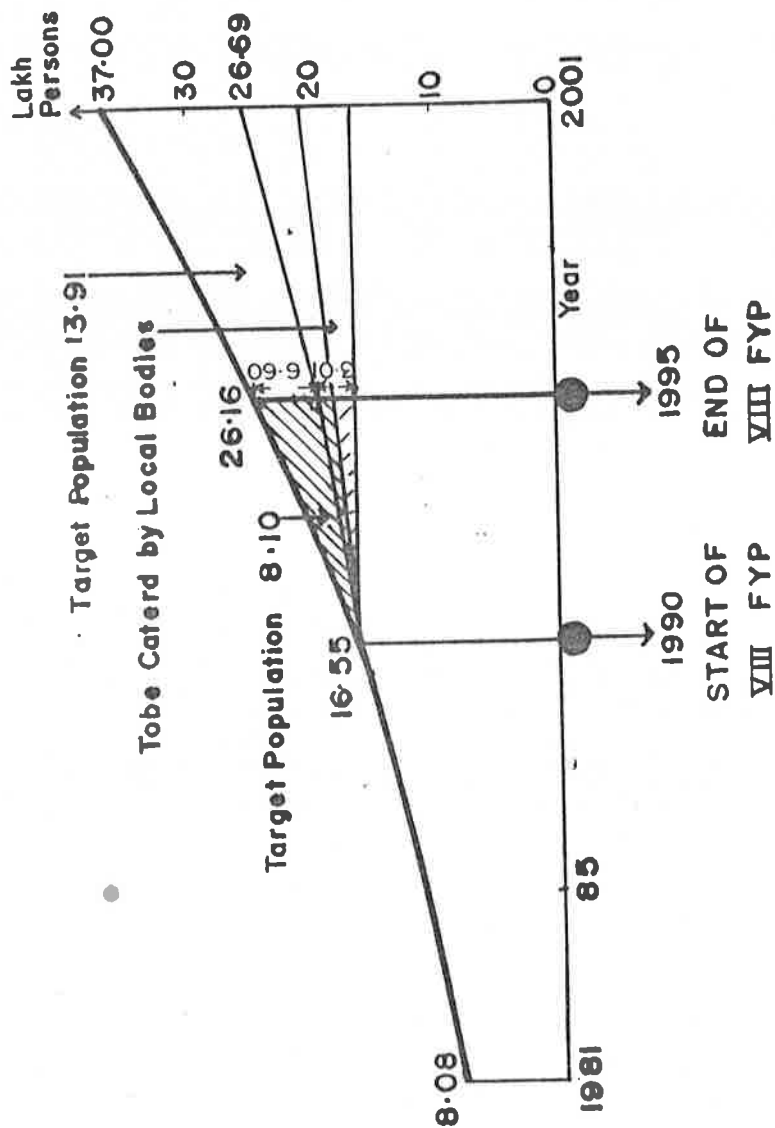
TARGET POPULATION FOR VIII PLAN INVESTMENT: PRIORITY TOWNS

FIG. I



TARGET POPULATION FOR VIII PLAN INVESTMENT: DMA TOWNS

FIG.2



Roads :

- a) removal of deficiencies on all existing NH stretches within NCR.
- b) land acquisition for all the 3 new express ways viz. Delhi-Ghaziabad-Meerut, Faridabad-NOIDA-Ghaziabad and Sonipat-Panipat, and undertaking of detailed studies for those would be provided for during the 8th Plan.
- c) Land acquisition for 60 metre R.O.W. of Regional roads and their development to 2 lane c/w along with the R.O.B. and R.U.B., culverts and town bypasses needed on these roads.

Rail :

- d) land acquisition for Regional Rail bypass connecting Khurja-Palwal-Rewari-Rohtak-Panipat and elimination of bottlenecks on the existing corridors.

Telecommunications :

- e) provision of telecommunication facilities practically on demand in all priority and DMA towns.

Power :

- f) uninterrupted and adequate supply of power to NCR through additional power allocation by installation of captive and dedicated power plant at a Central Power Station.

IV SECTORAL INVESTMENT PLAN FOR VIII FIVE YEAR PLAN

The Sectoral Investments will have to be considered from various points of view for adoption. The investments would be in the State and Central sectors. The financial cost has been worked out in accordance with the strategy proposed for the 8th Plan as set-forth in Chapter III. At this stage, it is not necessary to work out the total cost of entire physical Plan. What has been attempted by the Group is the investments required to be made in the public sector during the 8th Plan period (1990-95).

A. CENTRAL SECTOR

The need for balanced and harmonious development of the National Capital Region arose out of the planned growth of the National Capital itself. Apart from the fact that the limited territorial jurisdiction of the Union Territory of Delhi precludes large scale urbanisation in the Capital, the need for such a development of the Region becomes crucial because of the role played by immigration and the rising population and congestion in Delhi. The draft Master Plan for Delhi, 1959 and the Master Plan itself in 1962 recognised this need. The efforts for development of the Region under the aegis of the Central Government also began around that time. The first effort in this direction by the Central Government was made by making population assignments for the Ring Towns to disperse the likely influx of population in Delhi. These efforts later got enlarged with the setting up of informal bodies, once again, by the Central Government. The Town & Country Planning Organisation of the Government of India prepared the NCR Plan in 1973 and later, a number of schemes have been financed in towns of the Region by the Central Government. In other words, the Central Government, even before the NCR Planning Board Act was enacted in 1985, had taken the lead for the planned and balanced development of the Region in the context of the problems in Delhi.

The efforts of the Central Government finally culminated in the passing of the NCR Planning Board Act, 1985, and the setting up of the Board itself with the requisite facilities for planning the Region. However, the setting up of the Board and the preparation of the Plan could not coincide with the preparation and finalisation of the 7th Five Year Plan and hence adequate resources could not be allocated. This does not, however, in any manner belittle the importance which the Central Government should attach to the implementation of the statutory NCR Plan which has now become a reality. The Central Government should continue to take the lead in Planning, implementation, allocation

of funds and implementation of various policy guidelines contained in the Plan. The Board in its various meetings has every time emphasised this crucial role of the Central Government and its Ministries. The Working Group, echoing these strong feeling, reiterates the necessity to the various Ministries of the Central Government continuing to play the leading role. Fortunately, the Regional Plan-2001 provides a well thought out strategy and programmes, which have been finalised in consultation with the concerned Central Ministries, and which can now be implemented vigorously during the 8th Five Year Plan and subsequent plan periods.

The investments proposed for the Central Sector are broadly grouped as follows:

- (i) Development of railways.
- (ii) Development of roads, that is expressways and national highways.
- (iii) Development of telecommunications.
- (iv) Provision of additional power in the Region.

These would fall within the jurisdiction of the Ministry of Railways, Ministry of Surface Transport, Ministry of Telecommunications and Ministry of Energy, respectively. While emphasising the need for immediate investments in these sectors, the Group recognises the need for accordance of priorities in all the sectors, keeping in view the availability of resources. This would apply to all the sectors and sub-sectors including various stretches of proposed road projects which can be taken up on priority basis, keeping in view the availability of resources.

During the course of discussions with the Central Ministries, it was argued that due to limited availability of resources within the Urban Development sector itself, it would not be possible to allocate resources from the NCR Planning Board Fund for any of the Central Sector schemes and they would have to be accommodated within the budgets and programmes of the respective Central Ministries. However except for the needs of development of telecommunications and upgradation of National Highways, the other Ministries particularly the Ministry of Railways and Department of Power have taken the stand that their national priorities do not coincide with the priorities suggested in the NCR Plan. The programmes relating to their sectors and the provision for Expressways can be taken up only if specific allocations are made in the Integrated NCR Development Plan

(a) National Highways:

The proposal is to strengthen and widen the existing National Highways over a length of 292 km at the cost of Rs. 219 crores during 8th Plan. The National Highways for improvement are NH-2, NH-8, NH-24 and NH-10. The work on NH-1 is already in progress and expected to be completed by the close of the 7th Plan. (Table 1).

(b) Expressways :

The NCR Plan recognises the need for 3 expressways namely Delhi-Meerut, Faridabad-NOIDA-Ghaziabad and Sonapat-Panipat -- all on new alignments. These expressways will have a right of way of 100m with 4 lanes to start with and, with an ultimate capacity of 6 lanes with limited access. These expressways would facilitate fast movement of traffic which would siphon off the outward traffic from Delhi and decongest the heavily loaded present roads connecting the DMA and Priority Towns with Delhi. A feasibility study for the expressways on behalf of the Board has been undertaken by Consultants. The Group recommends that approximately, 20% of the investment on the expressways be made during the 8th Plan. On this basis 8th Plan would need Rs. 45 crores (Table-1).

(c) Railways :

The main objective in the NCR Plan is to provide diversion for goods traffic which would help in lessening the load on the existing rail tracks and terminals in the Delhi area, besides providing high speed, high capacity mode of transport between Delhi and the other towns removing the existing bottlenecks. In order to achieve this, a regional bypass connecting Khurja, Palwal, Rewari, Jhajjar and Rohtak over a length of 210 km is proposed for which feasibility study by the Ministry of Railways is already on. In addition, the proposal includes laying of additional pair of lines between Palwal-Delhi and Delhi -Khurja; laying of single broad-gauge line between Delhi and Alwar and, doubling Muradnagar-Meerut Cantonment section. All these lines except Delhi-Alwar section will be electrified. During the 8th Plan, the proposal is to complete the works on all the sections except Delhi-Alwar which will spill over to the subsequent Plan. Out of an estimated total cost of Rs. 807 crores, works costing Rs. 414 crores will be taken up during the 8th Plan. (Table- 1).

(d) Telecommunications:

Telecom is one of the essential pre-requisites in the context of achieving the objective of NCR Plan namely decentralisation of economic activities and population away from Delhi. The major plan proposals to achieve these objectives are to fully automatise the telephone services, provision of telecom and telex facilities on demand, extension of STD facilities from Delhi to Priority Towns and connecting Priority and DMA towns with the mother city through reliable media. It is estimated that in all, about 1.19 lakh lines would have to be added during the 8th Plan besides replacement of 0.31 lakh old lines. The investment requirement, besides for the provision of new telephone lines for provision of telex facilities and also rehabilitation of the outdated telephone lines and exchanges during the 8th Plan would be around Rs. 375 crores (Table. 1)

(e) Power:

Power is an essential pre-requisite for any development. NCR constituents have been by and large facing power shortages in the past. The shortage has been to an extent of 8 to 15% during 1986-87 on restricted demand.

The peak load demand is forecast at 3027 MW by the end of the 7th Plan which will reach a figure of 4795 MW by the end of 8th Plan. Load demand will, thus, increase by nearly 60% during the 8th Plan period.

For effective dispersal and development of mainly economic activities away from Delhi in the Priority Towns, uninterrupted power supply in adequate quantity should be made available in the entire NCR. Correspondingly, the transmission and distribution network should also be augmented. On the basis of anticipated power supply position at the end of the 8th Plan in the constituents of NCR excluding Delhi as forecast by the Central Electricity Authority, the shortage is estimated on pro-rata basis to be about 607 MW. The Group considered the various options and came to the conclusion that setting up of a captive unit for meeting the shortage would alone meet the requirements.

It recommends that the Central Power Station at Dadri of 817 MW of power contemplated to be generated through gas turbines and, the units to be taken up subsequently could be kept to the extent to meet the requirement of NCR as captive units and be commissioned within 8th Plan.

At the prevailing cost of generating power with associated transmission through gas turbine at Rs. 1.0 crore per MW, an amount of Rs. 607 crores would be the investment requirement during the 8th Plan. In addition, the additional transmission and distribution network in the NCR areas may have to be met financially by the Centre and the State Governments. This would cost another Rs. 90 crores during the 8th Plan. The transmission lines would be inter-state in nature. (Table. 1)

B. STATE SECTOR

The various items of development proposed for the VIII Plan period are as under :

- (i) Land acquisition for the population as indicated in Section III para 3.5 Sub para 1 for Priority Towns. 20% of the land acquired would be developed for residential purpose to meet major requirement of EWS and LIG categories. In the cost of development, provision of services such as water supply, sewerage, drainage, local roads and electrification has been included.
- (ii) Land acquisition and development for economic activities in the Priority Towns.
- (iii) The deficit population upto 1990 in terms of essential services such as water supply, sanitation, and solid waste management and, traffic improvement including augmentation of road transport facilities would be addressed to during the 8th Plan (1990-95) both in Priority and DMA towns.
- (iv) Upgradation of Regional roads including items of land acquisition, widening and construction of bridges and culverts both for inner and outer grids.
- (v) Contributions towards bridging the interest rates of the institutional sources and the rates of interest as prevalent for NCR Project.
- (vi) Institutional Strengthening for Plan Implementation.
- (vii) Infrastructure Improvement in Sub-Regional Centres, Service Centres and Basic Villages.

(i) Land Acquisition and Development for Residential Use:

The total population that would be required to be catered for will be of the order of 12.00 lakhs (induced growth 10.45 lakhs + 50% trend based increase 1.55 lakhs) during the VIII Plan. Land to accommodate 12.00 lakhs of population is proposed to be acquired.

At a gross density of 300 p/ha, an area of 4000 hectares would be required. In addition, 20% of the land acquired would be developed for residential use to meet major requirement of the EWS and LIG categories. The cost of land acquisition and development is worked out at Rs.460 crores. (Table: 2)

ii) Land Acquisition and Development of Economic Activities :

Provision of economic activities in the Priority Towns would be the key thrust of the development strategy of the VIII Five Year Plan. The major employment generation within the NCR in Priority Towns are under the following categories:

- I. Industries including Informal sector activities.
- II. Wholesale Trade & Commerce.
- III. Govt. & Public Sectors Offices.

It is proposed to develop industrial estates, informal sector activities, Wholesale Trade and Commerce and Government & Public Sector office complexes in the Priority Towns under the Public Sector investments while the DMA towns would continue to be developed by the concerned States from their own resources as has been the practice so far.

I. Industrial Development including Informal sector activities :

Total additional population in the Priority Towns would be of the order of 12 lakhs. While providing employment opportunities in the organised Industrial Sector, generation of employment opportunities in the Informal Sector activities in the form of work and shelter programmes should also be taken into account. Industrial development in the form of complexes and estates is proposed in Bulandshahr-Khurja and Rewari-Dharuhera-Bhiwadi complexes. In all, 250 hectares of land would be acquired and developed creating about 31250 job opportunities at an estimated investment of Rs. 71.25 crores as shown in Table : 3.

A number of towns have potential for development of informal sector activities. For the 8th Plan, Meerut, Hapur, Khurja, Panipat, Rohtak, Rewari, Alwar and Bhiwadi have been identified for development of informal sector activities. These activities covering a total area of 280 hectares would create 61500 jobs at an estimated cost of Rs. 65.10 crores. (Table : 3)

II. Wholesale Trade and Commercial Complexes:

The Group recommends that additional wholesale markets for the 8 commodity groups for which a comprehensive survey is being conducted by the Consultants on behalf of the Board be taken up for development in the 8th Five Year Plan along with the provision of godowns and loading/unloading facilities. Pending final recommendations for the location of wholesale markets by the Consultants, preliminary discussions have led to specific recommendations with respect to 5 commodity groups viz., Textiles and Readymade Garments, Fruits and Vegetables, Hardware and Building Material, Foodgrains and Iron and Steel. Of the remaining 3 commodities, for 2 commodities viz., Autoparts and Timber, the trades in these commodities being of local in nature, their locations have not been specifically suggested. The location of wholesale trading centre and depot for Fuel Oil would have to be developed by Indian Oil Corporation, and hence not included in costing. The proposed wholesale trades will cover an area of 85 hectares creating employment for 8500 persons at a total cost of development of these wholesale markets would be about Rs. 22.53 crores. (Table : 4) This does not include the cost of superstructure which should be met through institutional sources by the State Government/Implementing agencies.

III. Office Complexes:

Out of seven locations considered by the Group for development of office complexes, three locations are in Ghaziabad, Faridabad and Gurgaon which fall in DMA towns and the remaining four are in Meerut, Alwar, Bhiwadi and Rohtak which are Priority Towns. The Group was of the view that the Central Government had acquired about 400 hectares of land in Ghaziabad and 93 hectares in Faridabad as a follow up action of the recommendations of Delhi Master Plan prepared in 1962 should be utilised for. Some parts of these lands were developed for locating the offices and the residential units but have not been fully utilised due to various reasons.

In the five remaining towns viz., Gurgaon, Meerut, Alwar, Bhiwadi and Rohtak, in order to accommodate a total work force of about 62,000 in this sector during the Plan period, a total area of about 100 hectares is proposed to be developed. The total cost of development of these complexes would be about Rs. 28.50 crores (Table : 5).

iii) Augmentation and Rehabilitation of Physical Infrastructure (Water Supply, Sewerage, Solid Waste, Traffic Improvement and Augmentation of Road Transport facilities)

a) Water Supply :

In the augmentation and rehabilitation of the existing water supply schemes in the Priority and DMA towns, the present per capita supply vis-a-vis the requirement as per desired norms has been taken into account. Accordingly, the deficit in the quantum of supply for the estimated population upto 1990 has been computed. Accordingly, the deficit supply for the Priority Towns is estimated at 257.62 MLD and 246.69 MLD for the D.M.A. towns. In terms of deficit population, the corresponding figures are 6.38 lakhs and 7.35 lakhs. (Table : 6). The cost of removing the deficiency in water supply through augmentation and addition has been computed on the basis of prevailing rates for ground water sources as well as surface water through canal as applicable to the respective Sub - regions and the towns. The estimated cost thus works out to Rs.6065 lakhs for Priority Towns and Rs.5969 lakhs for D.M.A. towns. During the 8th Plan, 100% backlog upto 1990 in Priority and DMA towns would be removed and this will cost a total amount of Rs.120.34 crores.

b) Sanitation - Sewerage System :

Most of the towns lack in the provision of organised sewerage system and as such the backlog in this regard is huge. The deficit population by 1990 is estimated to be 14.80 lakhs in the Priority Towns and 13.26 lakhs in the DMA towns. The total cost has been worked out on the assumption that the deficiency to an extent of 25% will be met by the conventional sewerage system and the rest 75% by the low cost sanitation (LCS) measures in the Priority Towns and, 75% by conventional sewerage and 25% by low cost sanitation in the case of D.M.A. towns. At prevailing rates of cost of provision of sewerage system, conventional as well as LCS, the total amount works out to Rs.6486 lakhs for Priority Towns and, 10777 lakhs for the D.M.A. towns (Table : 7). It is proposed that only 50% of the deficiency upto 1990 in the provision of

sewerage system would be removed during the VIII Plan. Accordingly, for the Priority Towns, an amount of Rs.3243 lakhs and for DMA towns Rs.5389 lakhs would be the order of investment requirements during the VIII Plan.

c) Solid Waste Management :

The generation of garbage is generally more in the case of DMA towns compared to Priority Towns. It varies from 180 to 290 gm per capita a day in DMA towns against 121 to 267 gm in the Priority Towns. Presently, only part of the solid waste is being managed. In most of the cases, dumping of the garbage is not scientifically done.

On the basis of the present generation of garbage in the various towns, the deficit population by 1990 has been worked out. The deficit population in the Priority Towns amounts to 6.83 lakhs whereas in the DMA towns, it is 7.68 lakhs upto to 1990. The cost of managing the solid waste at the prevailing rates works out to Rs.405.80 lakhs for the Priority Towns and Rs.460.60 lakhs for the DMA towns, totalling thus, to Rs.866.40 lakhs. The proposal is that scientific method of managing solid waste in all the towns is introduced during 8th Plan to remove atleast the backlog upto 1990. This would greatly improve the garbage managing situation and render the towns conspicuously cleaner. Accordingly, this will cost during the 8th Plan Rs.8.66 crores, say Rs.9 crores. (Table; 8)

d) Road Improvement and Augmentation of Road Transport Facilities :

The DMA and Priority Towns would need traffic improvements in addition to augmentation of road transport facilities like depots and terminals and bus fleet. The estimated cost for DMA Towns both for traffic improvements and augmentation of bus fleet would be of the order of Rs 15 crores and that for Priority Towns, Rs. 10 crores.

iv) Upgradation of Regional Roads :

The Regional Plan - 2001 envisages two grids namely Outer and Inner grids for the inter-connection of Priority Towns and also enabling shortest and free movement network by diverting the bypassable long distance traffic through Delhi. It is proposed to upgrade existing stretches of the State Highways and Major District Roads for the purpose. The improvement includes the land acquisition for the 60 metre R.O.W. apart from provision of widening and strengthening,

bypasses to existing towns and Rail over/under bridges. A total of Rs. 205 crores investment would be required for implementing this proposed network in the 8th Five Year Plan (Table :9)

v) Contributions towards bridging the interest rates of the institutional sources and the rates of interest as prevalent for NCR Projects :

The Investment Plan for the NCR envisages acquisition of land and its development for various activities only during the Plan period. Due to the resource crunch even for land acquisition and development, the Implementing agencies would have to obtain supplementary assistance for these items and for construction of super structure, building, houses etc. in the schemes identified and implemented with the assistance of the NCR Planning Board. A view of the existing financing of the various institutional sources like NHB, LIC, IDBI shows that the interest rates for the schemes financed by these institutions on which funds are passed on to the State Governments by the Board are higher. It is, therefore, proposed that the State Governments may be assisted in bridging this gap in the interest rates to the extent of 50% by the NCRPB. An amount of Rs. 5 crores has been calculated on the turnover of Rs. 100 crores. The share of the Board would be restricted to 50%.

vi) Institutional Strengthening for Plan Implementation :

At the Central level, the NCR Planning Board has the responsibility for overseeing the Plan implementation both in the Central and State sectors. The Board is also responsible for financing the State Sector schemes, overseeing and monitoring the projects. The organisation at present has limited staff and would need to be strengthened suitably to cope with the increased work in the field of planning, assisting the participating States in identification of projects that would support the Regional development strategies and objectives. The preparation of the projects would be undertaken by the State Governments through its agencies. However, the Board would be required to examine the technical, institutional, economic and financial aspects of the proposed projects. After the receipt of the project, the same would be appraised after reviewing comprehensively and systematically all aspects of the projects viz. technical, institutional, economic and financial. During the implementation of the project, the Board would continue monitoring the physical and financial components of the project. As has been proposed by the Working Group, the Board would have to have a sound monitoring system for the

coordinated development and investment in the Central sectors.

At the State Level, a Steering Committee has already been set up by the participating States for overseeing the Plan preparation and project implementation by various agencies including development departments, local bodies and development authorities. In order that this Steering Committee serves the task effectively, it is proposed that a small cell in the State Town & Country Planning Departments be created in the form of a technical Secretariat for the steering Committee which would be the effective link between the proposed sub-regional Coordination Committee and the Planning Cells at the Sub-Regional levels, Housing and Urban Development Departments at the State level.

A Planning and Monitoring Cell (PMC) has been created in each participating State with a limited staff strength during the 7th Plan. These Cells have been created with the responsibility of preparing Sub-regional Plans, Master Plans for towns and, assisting the implementing agencies in formulation of projects and coordination of Plan implementation apart from monitoring the project implementation at the Local Level. The Cells at present are not equipped to fully deal with economic and financial aspects in the project formulation. It is felt that the Cells should be strengthened and they should continue during the Eighth Five Year Plan also with the financial assistance of the Board on matching basis.

It is proposed that a Sub-regional Coordination Committee be established under the Chairmanship of the Divisional Commissioner for each of the Sub-region of the NCR. A similar Committee may be set up for the Counter-magnets as well. The Planning and Monitoring Cell would act as the Technical Secretariat for coordinating Sub-regional Plan formulation and Project Implementation apart from monitoring of schemes.

Since a large number of Development Authorities and Local Bodies would be involved in the implementation of the Plan, they need to be equipped to adequately deal with the project preparation and implementation of projects with the anticipated magnitude of the investment during the Eighth Plan. It is suggested that each implementing agency creates a cell for NCR schemes which would have liaison with the Planning and Monitoring Cells of the participating States on all concerned aspects.

During the course of the preparation of the 8th Plan projects, a number of studies would be required to be undertaken at the local as well as Regional level and the cost of the studies should be included in the 8th Plan investment proposals.

A large number of personnel at various levels namely planning, implementation and management operational, middle and higher would need to be given training on aspects relating to project formulation, project implementation and monitoring system. Participation in relevant seminars, workshops both at the National Level and International Levels would also be useful in updating the knowhow of latest technologies for appropriate level of Officers.

An amount of Rs. 5 crores is suggested for strengthening of the above said Organisations during the Eighth Five Year Plan.

vii) **Infrastructure Improvement in Sub-Regional Centres, Service Centres and Basic Villages**

In terms of broad regional goals of the National Capital Region Plan, the Group felt that distribution of adequate infrastructural facilities in space and their quality would help diversify the economy of the rural areas, and for this purpose, improvement of infrastructure is imperative. The Regional Plan has suggested an hierarchy of settlement system which, besides the Regional Centres (Priority Towns), includes Sub-Regional centres, Service Centres and Basic Villages. The investment proposed for improvement of infrastructure in the Sub-Regional Centres, Service Centres and Basic Villages would be for provision of specialised infrastructure and services to enable them to act as nodes in transport system and thereby creating an environment to provide non-agricultural employment as an immediate alternative for potential outmigrants from the rural areas. A provision of Rs 50 crores has been proposed for this purpose.

V. **FINANCING N C R PLAN**

The Working Group has suggested a total investment of Rs. 2900 crores (Rs. 1750 crores in the Central and Rs. 1150 crores in the State Sector) besides Rs. 828 crores (Rs 100 crores in State sector and Rs 728 crores in the Central Sector) for development of Counter Magnet Areas during the 8th Plan.

The Working Group has recommended that out of the total investments of Rs. 2900 crores during the 8th Plan, the Central Investments of Rs. 1750 crores be

During the course of the preparation of the 8th Plan projects, a number of studies would be required to be undertaken at the local as well as Regional level and the cost of the studies should be included in the 8th Plan investment proposals.

A large number of personnel at various levels namely planning, implementation and management operational, middle and higher would need to be given training on aspects relating to project formulation, project implementation and monitoring system. Participation in relevant seminars, workshops both at the National Level and International Levels would also be useful in updating the knowhow of latest technologies for appropriate level of Officers.

An amount of Rs. 5 crores is suggested for strengthening of the above said Organisations during the Eighth Five Year Plan.

vii) **Infrastructure Improvement in Sub-Regional Centres, Service Centres and Basic Villages**

In terms of broad regional goals of the National Capital Region Plan, the Group felt that distribution of adequate infrastructural facilities in space and their quality would help diversify the economy of the rural areas, and for this purpose, improvement of infrastructure is imperative. The Regional Plan has suggested an hierarchy of settlement system which, besides the Regional Centres (Priority Towns), includes Sub-Regional centres, Service Centres and Basic Villages. The investment proposed for improvement of infrastructure in the Sub-Regional Centres, Service Centres and Basic Villages would be for provision of specialised infrastructure and services to enable them to act as nodes in transport system and thereby creating an environment to provide non-agricultural employment as an immediate alternative for potential outmigrants from the rural areas. A provision of Rs 50 crores has been proposed for this purpose.

V. **FINANCING N C R PLAN**

The Working Group has suggested a total investment of Rs. 2900 crores (Rs. 1750 crores in the Central and Rs. 1150 crores in the State Sector) besides Rs. 828 crores (Rs 100 crores in State sector and Rs 728 crores in the Central Sector) for development of Counter Magnet Areas during the 8th Plan.

The Working Group has recommended that out of the total investments of Rs. 2900 crores during the 8th Plan, the Central Investments of Rs. 1750 crores be

made in full. Under the State Sector, investment requirements for the regional roads (inner and outer grids) to an extent of Rs.205 crores have to be fully met by the State governments through the State Plan. Of the remaining Rs.945 crores under State sector, 50% (Rs.472.50 crores) outlay would be the Centre's share and the balance to be met by the State Governments. In case these are not allocated in the State sector, resources could be mobilised through institutional sources such as NHB, HUDCO, NABARD, LIC, GIC etc. and also, International Aiding agencies like the World Bank and Asian Development Bank.

VI. INTEGRATED NCR DEVELOPMENT PLAN

During the 7th Plan, funds have been allocated only in the urban development sector for NCR schemes which are passed on to the NCR Planning Board for financing land acquisition and development schemes in the Region as a loan on matching basis. The loan assistance during the 7th Plan due to a severe resource crunch was mainly restricted to only three towns namely Meerut in Uttar Pradesh, Panipat in Haryana and Alwar in Rajasthan. Efforts to increase the outlays of the Central Sector particularly for Railways, Telecommunications and Surface Transport (Roads) for initiating implementation of the NCR Plan proposals were not successful. During the 8th Plan, however, the proposal is to develop all the 8 Priority Towns/Complexes besides upgradation and rehabilitation of the physical and social infrastructure in the DMA towns. At the Regional level, investments in regard to National Highways, Expressways, Telecommunications and Railways would be under the Central Sector. Regional roads covering outer and inner grids as per the Plan proposals, would be under the State Sector.

The urgency for allocation of additional resources for implementation of NCR Plan policies and proposals has been brought to the attention of the Central Government time and again during the 7th Plan. In NCR, the investments would be for integrated sectoral programmes in which a large number of Ministries/Departments both at the Central and State levels would be involved. It is imperative, therefore, that the investment requirements in the various Ministries and Departments have to be adequate and accordingly provided for in their respective Plan budgets. Only this mechanism will ensure earmarking of adequate outlays and expenditure in a planned manner. This could be possible only through creation of a head namely "Integrated NCR Development Plan" in the respective budgets. For such of those NCR schemes which are not provided for in the normal budgets of the respective Ministries/Departments under

the "integrated NCR Development plan " head, their investment requirements should be included as additional requirements to be provided for by the NCR Planning Board to the respective Ministries. The NCR Planning Board reiterated in their meetings the utmost necessity for creation of such a Plan. This arrangement will be quite effective in the sense that funds in various sectors would get earmarked exclusively for NCR schemes both in the Central and State Plans with no possibility of them getting diverted to others.

The NCR Planning Board would develop a monitoring system to ensure proper utilisation of the funds under the Integrated NCR Development Plan. In sum, the advantages of a separate head in budget outlays would thus be the following :

- 1) To ensure integrated investment for the NCR schemes under various Central Ministries and State Governments.
- 2) To enable various Ministries/Departments to allocate adequate funds exclusively for the NCR schemes.
- 3) To ensure expenditure as planned in a systematic and integrated manner for NCR schemes by the various Ministries/Departments.
- 4) To facilitate systematic monitoring of financial and physical progress of the schemes, and
- 5) To ensure effective utilisation of the funds meant for investments on the NCR schemes.

The Integrated NCR Development Plan would be prepared by the respective Central Ministries and State Governments in collaboration with the NCR Planning Board. The 8th Plan and Annual Plans would indicate accordingly the flow of funds for the NCR schemes showing outlays and physical targets. Investment would be phased out in consonance with the physical targets identified for achievement during the 8th Five Year Plan in order to achieve the NCR Plan objectives within a planned time frame.

VII. NCR REVOLVING FUND

In accordance with the present funding policy, the NCR Planning Board provides financial assistance in the shape of interest bearing loans to the participating State Governments/Implementing agencies for execution of approved NCR Schemes in their Sub-regions. This is subject to the stipulation that the State Governments/Implementing Agencies spend,

at least, an equal amount from their own resources. By and large, the NCR schemes are remunerative. Revenue generated by these schemes are credited to the general funds of the concerned Implementing Agencies and, these are used for various purposes according to their own policies. Similarly, the payment of interest and the repayment of principal of the loan assistance provided by the Board is paid by the State Governments/Implementing Agencies out of their own funds.

In order that a separate revolving fund is created and NCR schemes are funded therefrom, it is proposed that each Implementing Agency should create a separate fund to be known as "Revolving Fund" for execution of approved NCR schemes. The following items of receipts and expenditure may be booked therein:

Receipts:

(a) Financial assistance provided by the NCR Planning Board in the shape of interest bearing loan or grant-in-aid.

(b) Budgeted funds of the State Government/Implementing Agency, not less than the financial assistance received from the NCR Planning Board.

(c) Revenue generated by the schemes such as sale of plots (commercial/residential etc.), sale of residential flats, sale of shops, sale of advertisement sites, etc.

(d) Miscellaneous receipts such as interest on deposits of the funds kept in Bank or in some other financial institutions.

Expenditure

(i) Purchase of land and its development.

(ii) Construction of flats, shops, industrial sheds etc.

(iii) Payment of interest and repayment of principal in respect of loans taken from the NCR Planning Board.

(iv) Any other expenditure connected with the sanctioned scheme.

During the initial stages of the operation of the fund, receipts may not be adequate to meet the items of expenditure listed above, especially those relating to payment of interest and repayment of

principal to the Board, as revenue receipts become available when the scheme is nearing completion or is completed. To meet such situations, State Governments/Implementing Agencies may use their own funds temporarily and recoup the same out of the revenue generated by the NCR schemes later.

The accounts of the above listed transactions should be kept separately, either on actual or proforma basis by the Implementing Agencies.

VIII. EVALUATION OF NCR SCHEMES

During the 7th Plan, the total investments by the NCR Planning Board in the implementation of NCR schemes would be of the order of Rs.32.34 crores. The NCR Schemes as of 1985 were those taken up under Integrated Urban Development Programmes (IUDP) under Centre's loan assistance since 1974, and these schemes were continued for their completion under NCRPB's assistance since March 1985. During the period 1974-85, before the constitution of the NCR Planning Board, the investment by the Central Government was of the order of Rs.13.68 crores. Thus, from 1974 till the end of 7th Plan, an Investment of Rs.46 crores would have been made in the NCR area under the State Sector as Centres' share. With this investment, over a period of 15 years, nearly 1575 hectares of land in 5 priority towns namely Meerut, Hapur, Panipat, Bhiwadi and Alwar and one DMA town namely Gurgaon has been acquired and developed. The investment has not made any discernable impact in achieving the objective of decentralised growth in the NCR.

During the 7th Plan, while the State Governments have taken steps to create Planning and Monitoring Cells for formulation of projects, the general experience has been that there has always been a time-lag in the preparation of projects resulting in delay for the implementing agencies to initiate action for its implementation. This has resulted, besides considerable delays, into cost over-runs of the schemes. It has also been observed that the projects were identified on adhoc basis. The analysis of the project formulation period clearly indicates the need to scientifically identify projects that fit into and support coherently the development strategy envisaged in the NCR Plan. The projects must also meet technical and financial feasibility and achievement of the objectives.

The other difficulty has been the land availability. It often takes more than 2 to 3 years in acquiring and actual possession of the land for the implementation of the schemes. This problem can be

resolved if adequate resources could be made available to the State Governments and implementation agencies for initiating action for large scale acquisition and possession of land possession.

The Board is required to ensure that the projects are objective oriented, soundly designed, and, follow the accepted norms and standards. More precisely, the technical appraisal is concerned with the question of objective targets, conformity of the project-use with the designated land use in Development Plan, physical layout, cost effective technology, and appropriateness of the norms and standards adopted for the provision of services and, the realism of the investment and implementation schedule. Technical appraisal would also include review of the cost estimates' accuracy within acceptable margins. The institutional capability for implementing the projects, its organisation, management and staffing pattern matter greatly in the operation of the scheme. Experience indicates that the institutional aspects have not been given due attention and, the need for institutional strengthening has been felt at the technical and managerial level.

A thorough economic appraisal of the project has not been possible for want of economic and financial analysis of the NCR project so far. The financial appraisal is concerned with recovering the investment from the project beneficiaries over a time.

It would be the endeavour of the Board as well as the implementing agencies to develop a system for timely preparation of projects and appraisal thereof by the Board, during the 8th Plan.

IX. DEVELOPMENT OF COUNTER MAGNET AREAS

The Regional Plan 2001 for the NCR envisages development of the following five Counter Magnet areas outside the NCR :

- i) Hissar in Haryana
- ii) Gwalior in Madhya Pradesh
- iii) Patiala in Punjab
- iv) Kota in Rajasthan
- v) Bareilly in Uttar Pradesh

The Regional Plan also envisages the development of these areas as a collaborative and participative effort requiring the State Governments to prepare an integrated long term development programme and its phasings coinciding with the Five Year Plans. The development programmes need to include promotional

aspects in economic activities with a view to enabling these areas to act as interceptors of migrants and also regional growth centres.

State Sector :

There was considerable discussion as to how adequate investments in the State sector should be made to initiate the process of development in the Counter magnet areas particularly in the context of resource crunch and, high priority to be given to the development of Priority Towns in the NCR. At the same time, the Working Group felt that unless funds are made available, it may not be possible to develop the towns in achieving the objectives set forth for them in the NCR Plan. Keeping these imperatives in view, the Working Group has recommended that concerned State Governments should be assisted with a revolving fund of say Rs. 20 crores on matching basis to each counter magnet area to initiate development during the 8th Five Year Plan. Thus the total fund requirements for five Counter magnets would be Rs.100 crores.

Central Sector

The Working Group recognises that upgradation of Regional infrastructure such as transport (roads and railways), and Telecommunications would be crucial to trigger-off the process of development in the Counter magnet areas. The Consultants- School of Planning & Architecture, New Delhi who conducted the study for Counter magnet areas also identified the critical areas for augmentation of infrastructure in the Central sector. Based on the above, the transport (Railways and National Highways) and the Telecommunication requirements in the Counter magnet areas have been worked out to cost Rs 728 crores under Central sector with the following break-up:

| Town | Railways (Rs. in crores | NH(Rs. in crores | Telecommunications (Rs. in crores) |
|----------|-------------------------------|------------------------|---------------------------------------|
| Hissar | 112.00 | 46.50 | 20.58 |
| Gwalior | 28.50 | 52.50 | 33.75 |
| Patiala | 118.40 | 76.65 | 26.07 |
| Kota | 14.00 ✓ | 56.25 ✓ | 48.50 ✓ |
| Bareilly | 26.40 | 42.00 | 26.10 |
| Total | 299.30 | 273.90 | 155.00 |

Grand Total Rs 728.20 crores. (Say Rs 728 crores).

The NCR Planning Board would assist the State Governments/Implementing Agencies in the formulation of projects, if necessary. The Board would monitor the implementation of the various programmes in collaboration with the State Governments. However, in the developmental process, the implementing agencies may seek the support of Chamber of Commerce, Marketing Association, Mandi Committees etc.

X. ROLE OF PRIVATE SECTOR FOR INVESTMENT IN THE NATIONAL CAPITAL REGION

The rationale for the involvement of the private sector in implementing urban development schemes is based on the realisation that the strategy of exclusive public sector operations has not been able to mobilise the requisite volume of resources for development and maintenance of urban infrastructure. Particularly, to increase the resource flow, the extension of the participation of private sector to non-public sector activities has become imperative. The Group referred to the recommendations of the National Commission on Urbanisation for the involvement of Private Sector in development of growth centres with a view to examine the possibilities of replication in the case of NCR too.

The Group felt that involvement of private sector should not be taken in a narrow sense; rather it should also include private corporate sector, cooperative sector, non-governmental organisations and other voluntary organisations including community participation. Joint Sector concept through a sound institutional system between the public sector and

private entrepreneurs, as in vogue in the industrial sector, could be another option for urban development. The Group also recognises that involvement of private sector should be essential not only to achieve an increase in the absolute quantum of resource flow, but also to induct a greater degree of efficiency in resource utilisation and reduce delays in project implementation.

i) Policy imperatives for involvement of private sector in National Capital Region.

The Group felt that certain basic criteria in involvement of private sector participation need to be drawn up which, inter alia, should look into :

- a) Increase in the absolute quantum of investment through private sector participation outside the public resources.
- b) Assessment of the likely increase in efficiency in resource utilisation compared to that of the existing level through public sector in various activities.
- c) Likely reduction in gestation period in project/scheme implementation.
- d) Assessment of the level of technology.
- e) Pricing mechanism for delivery of services.

The track record of the private developers in urban sector has been generally far from satisfactory. They have largely been operating in highly speculative land market of the larger cities and trying to make quick profits without fulfilling the commitments. Necessary safeguards would have to be ensured through statutory amendments in the concerned legislative and administrative framework in public interest for involving private sector.

ii) Joint Sector Concept

In implementing integrated urban development projects, a healthy partnership between the public sector and private entrepreneurs could be promoted. Such Joint Sector effort could be responsible for the development of all major infrastructure including water supply, sewerage etc. thus internalising their cost in the development. The effort in addition, will also encourage and promote neighbourhood developments through cooperatives.

iii) Legislative frame for Private Sector participation

The Group reviewed various experiences of private sector participation in urban Development in various States.

In Haryana, the Haryana Development and Regulation of Urban Areas Act, 1975 prohibits sub-division of land for any urban purpose without a licence and enables the private developers to have a role in the assemblage of land and subsequent development and, its disposal.

In Uttar Pradesh, the Lucknow Development Authority has recently involved private builders in development of residential schemes. Out of the land acquired by the LDA for residential schemes, a certain portion of the land is allotted to private developers for development. Thus, the private sector is involved to supplementing the implementing capacity of the LDA but is not involved with the land acquisition.

Under the Guided Urban Development scheme initiated by Madras Metropolitan Development Authority the private developers are responsible for land assemblage and provision of services, adopting low cost services, and planning standards. While the entire responsibility for providing off-site infrastructure is that of MMDA, only part of the expenditure towards on-site infrastructure is met by MMDA. The MMDA purchases LIG plots from the developers while the developers could dispose off the rest at prices fixed by the MMDA.

The Gujarat Town Planning and Urban Development Act, 1976 provides for an innovative means of land development, similar to that used in Korea and Japan. This enables the public sector to develop the land without fully acquiring it. Urban Development Authorities provide infrastructure and take up a certain percentage of land for circulation, open space, community facilities and low income group plots and, owners are given plots with adjusted boundaries and are reimbursed for the cost of the land taken for public use and charged a betterment tax.

The Group felt that in the context of NCR, a location specific model may have to be developed and as such recommends evolving a variation of similar approaches as being practiced in the State of Gujarat, Haryana, Tamilnadu and Maharashtra where part of the land is retained by the public agencies for recovering the cost of infrastructure and/or providing sites to low income groups. This could be the basis for involving private sector having due regard to the policy imperatives suggested above.

XI. SUGGESTED OUTLAY AT A GLANCE : NCR - VIII PLAN

A summary of the suggested outlays for Central and State sectors during VIII Plan is as under:

CENTRAL SECTOR

| NCR | Rs in Crores |
|-----------------------|--------------|
| 1. National Highways | 219.00 |
| 2. Expressways | 45.00 |
| 3. Railways | 414.00 |
| 4. Telecommunications | 375.00 |
| 5. Power Developemnt | 697.00 |
| Total | 1750.00 |

STATE SECTOR

| | |
|---|--------|
| 1. Land Acquisition and Development for Residential use | 460.00 |
| Total | 460.00 |
| 2. Land Acquisition and Development of Economic Activities | |
| i) Industrial Development including Informal sector activities (Rs 76.25+Rs 65.10) | 136.35 |
| ii) Wholesale Trade & Commercial Complexes | 22.53 |
| iii) Office Complexes | 28.50 |
| Total | 187.38 |
| 3. Augmentation and Rehabilitation of Urban Infrastructure in DMA (excl. Delhi UT) Priority Towns | 240.32 |
| Total | 240.32 |
| 4. Upgradation of Regional Roads (Inner & Outer Grids) | 205.00 |
| Total | 205.00 |

| | | |
|-------------|--|-----------------|
| 5. | Bridging the Interest rates | 5.00 |
| | Total | 5.00 |
| 6. | Institutional Strengthening for Plan Implementation | 5.00 |
| | Total | 5.00 |
| 7. | Infrastructure Improvement in Sub-Regional Centres, Service Centres and Basic Villages | 50.00 |
| | Total | 50.00 |
| GRAND TOTAL | | 1152.70 |
| SAY Rs | | 1150.00 Crores. |

Abstract :

(Rs in Crores)

| | | | |
|----------------|----------------|---------------|--------------------------|
| Central Sector | 1750 | Central Share | 2222.50 (1750+472.50) |
| State Sector | 1150 | State Share | 677.50 (472.50+205) |
| Total | Rs 2900 Crores | Rs | 2900.00 crores |

COUNTER MAGNET AREAS

Rs in Crores

1. Central Sector :

| | |
|--------------------|---------------|
| Telecommunications | 155.00 |
| National Highways | 273.90 |
| Railways | 299.30 |
| Total | 728.20 |
| say | 728.00 crores |

2. State Sector :
(As Revolving Fund)

100.00

828.00

ABSTRACT

Rs in Crores

| | | | |
|----------------|--------|---------------------------|--------|
| Central Sector | 728.00 | Central Share (728+50) | 778.00 |
| State Sector | 100.00 | State Share | 50.00 |
| Total | 828.00 | | 828.00 |

| Priority towns | Population 1981 | Projected Population 1990* (Trend based) | Population 1995** (Trend based) | Induced population 1995 (NCR Plan) | Additional population during 1990-95 (Natural increase) (4-3) | Additional population during 1990-95 due to induced growth (5-4) | Population which need to be planned during VIII Plan (1990-95) (6+7) | Population which Target population need upgradation rehabilitation of services in the existing city (7+9) (50% of Natural Increase) | |
|----------------|-----------------|--|---------------------------------|------------------------------------|---|--|--|---|-------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Meerut | 5.36 | 7.58 | 8.82 | 11.18 | 1.24 | 2.36 | 3.6 | 0.620 | 2.98 |
| Hapur | 1.02 | 1.43 | 1.70 | 2.82 | 0.27 | 1.12 | 1.39 | 0.145 | 1.25 |
| Bulandshahr | 1.03 | 1.69 | 1.99 | 3.19 | 0.30 | 1.20 | 1.50 | 0.150 | 1.35 |
| Khurja | 0.67 | 0.88 | 1.03 | 1.84 | 0.15 | 0.82 | 0.96 | 0.075 | 0.88 |
| Palwal | 0.47 | 0.60 | 0.61 | 1.69 | 0.01 | 1.08 | 1.09 | 0.005 | 1.09 |
| Panipat | 1.38 | 2.08 | 2.43 | 3.40 | 0.35 | 0.97 | 1.27 | 0.175 | 1.15 |
| Rohatak | 1.68 | 2.19 | 2.54 | 3.46 | 0.35 | 0.92 | 1.27 | 0.175 | 1.10 |
| Rewari | 0.52 | 0.60 | 0.67 | 0.82 | 0.07 | 0.15 | 0.22 | 0.035 | 0.19 |
| Dharuhera | - | - | - | 0.34 | - | 0.34 | 0.34 | - | 0.34 |
| Bhiwadi | - | - | - | 0.52 | - | 0.52 | 0.52 | - | 0.52 |
| Alwar | 1.47 | 2.09 | 2.44 | 3.41 | 0.35 | 0.97 | 1.32 | -0.175 | 1.15 |
| Total | 13.60 | 19.14 | 22.23 | 32.67 | 3.09 | 10.45 | 13.53 | 1.55 | 12.00 |

Note :
 * Based on 1971-81 growth rate.
 ** Interpolated from projections -2001 by the office of the Registrar General.

Table : B Population to be Planned during 1990-1995: D.M.A. Towns

| D.M.A. towns | Pop. 1981 | (population in Lakhs) | | | | | | | | | |
|--------------------------|-----------|--|---|-------|--|---|--|--|--|------|--|
| | | Projected population (Trend based) | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Target population to be planned during VIII Plan (1990-95) |
| | | Projected population 1990* (Trend based) | | | Projected population 1995** (NCR Plan) | Additional population during 1990-95 (Natural increase) | Additional population during 1990-95 due to induced growth (5-4) | Population which need to be planned during VIII Plan (1990-95) (6+7) | Population which need upgradation of services in the existing city (50% of Natural Increase) | | |
| Bahadurgarh | 0.37 | 0.52 | | 0.62 | 1.19 | 0.10 | 0.57 | 0.67 | 0.05 | 0.62 | |
| Faridabad-Ballabhgarh | 3.31 | 5.58 | | 7.50 | 7.59 | 1.92 | 0.09 | 2.01 | 0.96 | 1.05 | |
| Ghaziabad including Loni | 2.97 | 6.75 | | 7.29 | 8.68 | 0.54 | 1.39 | 1.93 | 0.27 | 1.66 | |
| Gurgaon | 1.01 | 1.70 | | 1.90 | 4.12 | 0.20 | 2.22 | 2.42 | 0.10 | 2.32 | |
| Kundli | - | - | | - | 0.68 | - | 0.68 | 0.68 | - | 0.68 | |
| NOIDA | 0.42 | 2.00+ | | 2.25 | 3.90 | 0.25 | 1.65 | 1.90 | 0.12 | 1.77 | |
| Total | 8.08 | 16.55 | | 19.56 | 26.16 | 3.01 | 6.60 | 9.61 | 1.50 | 8.10 | |

Note :

+ Induced population.

* Based on 1971-81 growth rate.

** Interpolated from kprojections -2001 by the office of the Registrar General.

Table 1 : Central Sector Proposals

(a) NATIONAL HIGHWAY

| SECTION | LENGTH in Km | EXIS- TING C/W (LANES) | PROP- POSED (LANES) | UNIT COST per Km | TOTAL COST (in crores) | VIII PLAN |
|---|-----------------|------------------------------|---------------------------|------------------------|------------------------------|--------------|
| a) Delhi-Gurgaon (NH-8) | 14 | 4 | 6 | .75 | 10.50 | 10.50 |
| b) Gurgaon-Behror (NH-8) | 102 | 2 | 4 | .75 | 76.50 | 76.50 |
| c) Faridabad-Hodal (NH-2) | 70 | 2 | 4 | .75 | 52.50 | 52.50 |
| d) Ghaziabad-Hapur (NH-24) | 28 | 2 | 4 | .75 | 21.00 | 21.00 |
| e) Delhi-Bahadur- garh-Rohtak NCR Boundary (NH-10) | 78 | 2 | 4 | .75 | 58.50 | 58.50 |
| Sub-Total | 292 | | | | 219.00 | 219.00 |

(b) EXPRESSWAY

| | | | | | | |
|----------------------------------|-----|-----|---|------|--------|-------|
| a) Delhi-Meerut | 60 | New | 4 | 1.50 | 90.00 | 18.00 |
| b) Sonapat-Panipat | 50 | New | 4 | 1.50 | 75.00 | 15.00 |
| c) Faridabad-NOIDA- Ghaziabad | 40 | New | 4 | 1.50 | 60.00 | 12.00 |
| Sub -Total | 150 | | | | 225.00 | 45.00 |

(c) RAILWAYS

| | | | | | |
|--------------------------------------|-----|--|--------------|--------|--------|
| 1. Palwal-Faridabad Delhi Section | 40 | laying and Electrifica- tion of additional pair of lines. | 1.00 | 80.00 | 80.00 |
| 2. Muradnagar-Meerut Cantt. | 34 | Doubling & Elect- rification. | 0.80 0.20 | 48.00 | 48.00 |
| 3. Delhi-Ghaziabad- Khurja | 83 | Laying & Elect- rification of additional pair of lines. | 1.00 | 166.00 | 166.00 |
| 4. Delhi-Alwar | 160 | Laying of single B.G line(new) | 0.80 | 128.00 | 52.00 |

| | | | | |
|--|---------------------|-----|--------|-------|
| 5. Regional Rail Bypass 210 (Khurja-Palwal-Sohana Rewari-Rohatak) | New Align- ment. | L.S | 385.00 | 68.00 |
|--|---------------------|-----|--------|-------|

| | | | | |
|-----------|--|--|--------|--------|
| Sub-Total | | | 807.00 | 414.00 |
|-----------|--|--|--------|--------|

(d) TELECOM :

| | | | | |
|---|-----------------|--|--------|--------|
| 1. Addl. Capacity to be augmented of Telephone Exchanges. | 1.19 lakh lines | | | |
| 2. Addl. Facility for Telex | | | 375.00 | 375.00 |
| 3. Replacement of worn- out lines & exchanges | 0.31 lakh lines | | | |

| | | | | |
|-----------|--|--|--------|--------|
| Sub-Total | | | 375.00 | 375.00 |
|-----------|--|--|--------|--------|

(e) POWER :

| | | | | |
|---|----------|------------|--------|--------|
| 1. Captive Units to gene- rate 607 M.W. of peak load to meet the demand at the end of the VIII Plan | 607 M.W. | 1.00/ M.W. | 607.00 | 607.00 |
| 2. Transimision and Distribution | | | 90.00 | 90.00 |

| | | | | |
|-----------|--|--|--------|--------|
| Sub-Total | | | 697.00 | 697.00 |
|-----------|--|--|--------|--------|

| | | | | |
|-------------|--|--|--|---------|
| GRAND TOTAL | | | | 1750.00 |
|-------------|--|--|--|---------|

Table : 2 Land Acquisition and Dvelopment for
Residential Use : Priority Towns

| Item in Investment | Area in Hect. | Unit Cost (Rs.in lacs) | Total Cost (Rs.in lacs) |
|---------------------|------------------|---------------------------|----------------------------|
| a) Land Acquisition | 4000 | 8.5 | 34000 |
| b) Land Development | 800 | 15.00 | 12000 |
| Total | | | 46000 |

Table : 3 Industrial Development including Informal Sector Activities

| Sl.No. Industrial Estates/ Complexes | Proposed area to be developed (in Hectares) | Employment Generation | Cost of Development (Rs. in lakhs) Land Acquisition Land development | Total cost |
|---|---|--------------------------|---|---------------|
| a) Industrial Estates/complexes : | | | | |
| 1. Bulandshahr-Khurja Complex | 150 | 18750 | 1275 | 3000 |
| 2. Rewari-Dharuhera-Bhiwadi Complex | 100 | 12500 | 850 | 2000 |
| Sub-Total | 250 | 31250 | 2125 | 5000 |
| b) Informal Sector Activities : | | | | |
| 1. Sports goods complex : Meerut | 165 | 50,000 | 1402 | 2415 |
| 2. Metal Based Product : Bhiwadi | 10 | 1,000 | 85 | 150 |
| 3. Pottery Complex Khurja | 40 | 4,000 | 330 | 600 |
| 4. Handloom Industry Panipat | 25 | 2,500 | 213 | 375 |
| 5. Brassware complex Rewari | 10 | 1,000 | 85 | 150 |
| 6. Informal Sector Hapur | 10 | 1,000 | 85 | 150 |
| 7. Activities as appropriate. | | | | |
| 8. " Alwar | 10 | 1,000 | 85 | 150 |
| " Rohtak | 10 | 1,000 | 85 | 150 |
| Sub-Total | 280 | 61,500 | 2370 | 4140 |
| | | | | 6510 |

Table 4: Wholesale Trade and Commercial Complexes

| Sl.No. | Wholesale Market commodity Group | Suggested Location | Proposed Area to be developed (in Hectares) | Employment Generation | Cost of Development (Rs. in lakhs) | Land Acquisition cost | Land development cost | Total |
|--------|----------------------------------|-----------------------------|--|-----------------------|------------------------------------|-----------------------|-----------------------|-------|
| 1. | Textiles and Ready-made Garments | i. Rohtak ii. Meerut | 10 10 | 1500 1500 | 85 85 | 200 200 | 285 285 | |
| 2. | Fruits & Vegetables | Panipat | Strengthening of existing Markets | | | | | |
| 3. | Building Materials | Dharuhera Alwar | 10 15 | 1,000 1,500 | 85 128 | 200 300 | 285 428 | |
| 4. | Iron & Steel | Gurgaon | 20 | 1,000 | 170 | 400 | 570 | |
| 5. | Foodgrains | i. Hapur ii. Panipat | Strengthening of existing Markets Strengthening of existing Markets | 2,000 | 170 | 230 | 400 | |
| Total | | | 85 | 8500 | 723 | 1530 | 2253 | |

Table 5: Office Complexes

| Sl.No. Suggested Locations | Proposed area to be developed (in Hectares) | | Employment Generation | Cost of Development (Rs. in lakhs) | | Land Acqui- sition | Land deve- lopment | Total cost |
|----------------------------|---|-----|--------------------------|---------------------------------------|---|--------------------------|-----------------------|---------------|
| | (Land in Possession): | 400 | | Developed Land in Possession | to be utilised for location of Offices. | | | |
| 1. Ghaziabad | | 400 | | | | | | |
| 2. Faridabad | | 93 | | | | | | |
| 3. Gurgaon | | 25 | 17000 | 212.5 | 500 | | | 712.5 |
| 4. Meerut | | 45 | 27000 | 382.5 | 900 | | | 1282.5 |
| 5. Alwar | | 15 | 9000 | 127.5 | 300 | | | 427.5 |
| 6. Rohatak | | 5 | 3000 | 42.5 | 100 | | | 142.5 |
| 7. Bhiwadi | | 10 | 6000 | 85.0 | 200 | | | 285.0 |
| Total | | 100 | 62,000 | 850.0 | 2000 | | | 2850.0 |

Table : 6

Sources: *N.I.U.A.- Draft Report on Resource Mobilisation for Local Bodies.
NOTE: Unit costs: (a) Tubewell of 30000 gallons (or 1.35 lakh litres) : Rs. 6 lakhs.
(b) Over Head Tank: (i) 2250 KL : Rs.1/Litre
(ii) 1000 KL : Rs.1.25/Litre.
(iii) 500 KL : Rs.1.40/Litre.

(c) Reorganisation of distribution network : Rs. 60/Capita.
(d) For Rohtak, Rewari, Panipat Gurgaon and Bahadurgarh rates on prorata basis from the respective projects have been taken.

Table : 7 Sanitation - Sewerage System

(Population in lakhs)

| Name of Town | Pop. 1986 | Pop.served -1986 * | Deficit Pop 1986 (2-3) | Pop increase 1986-90 | Deficit pop. 1990 (5+4) | 1/4 of deficit pop by normal sewerage system | 3/4 of deficit pop. by low Cost Sanitation |
|---------------------|-----------|--------------------|------------------------|----------------------|-------------------------|--|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 Popn. cost** | 8 Pop. cost*** |
| I. Priority Towns : | | | | | | | |
| 1. Meerut | 6.69 | 1.52 | 5.17 | 0.89 | 6.06 | 1.50 | 15.15 |
| 2. Hapur | 1.24 | 0.37 | 0.87 | 0.19 | 1.06 | 0.21 | 4.56 |
| 3. Buland Shahar | 1.36 | - | 1.36 | 0.33 | 1.69 | 0.42 | 2.65 |
| 4. Khurja | 0.78 | - | 0.78 | 0.10 | 0.88 | 0.22 | 4.22 |
| 5. Palwal | 0.54 | 0.14 | 0.40 | 0.06 | 0.46 | 0.11 | 1.27 |
| 6. Panipat | 1.73 | 0.69 | 1.04 | 0.35 | 1.39 | 0.35 | 2.20 |
| 7. Rohtak | 1.93 | 0.96 | 0.97 | 0.26 | 1.23 | 0.31 | 1.15 |
| 8. Rewari | 0.56 | 0.31 | 0.25 | 0.04 | 0.29 | 0.07 | 0.35 |
| 9. Alwar | 1.76 | 0.35 | 1.41 | 0.33 | 1.74 | 0.44 | 3.08 |
| | | | | | | | 0.72 |
| | | | | | | | 1.30 |
| | | | | | | | 4.35 |
| | | | | | | | 1.65 |
| | | | | | | | 0.87 |
| | | | | | | | 2.60 |
| | | | | | | | 0.92 |
| | | | | | | | 2.30 |
| | | | | | | | 0.50 |
| | | | | | | | 3.25 |

Total 16.59 4.34 12.25 2.55 14.80 3.63 37.00 11.17 27.86

II. DMA Towns :

| | | | | | | | | | |
|-----------------|------|------|------|------|------|------|-------|------|------|
| 1. Ghaziabad | 4.07 | 0.99 | 3.08 | 2.68 | 5.76 | 4.32 | 43.20 | 1.44 | 3.60 |
| 2. Noida | 0.70 | NA | NA | 1.30 | 2.00 | 1.50 | 15.00 | 0.52 | 1.25 |
| 3. Faridabad | 5.43 | 1.36 | 4.07 | 0.15 | 4.22 | 3.17 | 31.70 | 1.05 | 2.62 |
| Complex | | | | | | | | | |
| 4. Gurgaon | 1.11 | 0.67 | 0.44 | 0.59 | 1.03 | 0.77 | 7.70 | 0.26 | 0.65 |
| 5. Bahadur Garh | 0.45 | 0.27 | 0.18 | 0.07 | 0.25 | 0.79 | 1.90 | 0.06 | 0.15 |
| 6. Kundli | | | | | | | | | |

Total 11.06 3.29 7.77 4.79 13.26 9.95 99.50 3.31 8.27

Source : * Draft Report on Resource Mobilisation, NIUA, New Delhi.

** @ Rs 1000 percapita
*** @ Rs 250 Percapita.

Table : 8 Solidwaste Disposal- Priority & DMA Towns - 1990

| Sl. No. | Priority Towns | Population 1981 | Projected population 1986 | Garbage generated PC/day (gms) | Garbage managed PC/day (gms) | Deficit PC/gm (5-6) | Total Deficit 1986 (Tonnes/Day) | Population 1990 | Projected 1990 | Deficit 1986 | Population 1990 | Additional population (1986-90) | Total Population by 1990 | Total Cost @Rs.60/PC (Rs.lakhs) |
|-----------------------|-------------------|-----------------|---------------------------|--------------------------------|------------------------------|---------------------|---------------------------------|-----------------|----------------|--------------|-----------------|---------------------------------|--------------------------|---------------------------------|
| | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | | |
| Priority Towns | | | | | | | | | | | | | | |
| 1. | Meerut | 5.36 | 6.69 | 232 | 155 | 77 | 51.5 | 7.58 | 2.22 | 0.89 | 3.11 | | 186.60 | |
| 2. | Hapur | 1.02 | 1.24 | 121 | 81 | 40 | 4.90 | 1.43 | 0.41 | 0.19 | 0.60 | | 36.00 | |
| 3. | Buland-Shahr | 1.03 | 1.36 | 267 | 180 | 87 | 11.83 | 1.69 | 0.44 | 0.33 | 0.77 | | 42.20 | |
| 4. | Khurja | 0.67 | 0.78 | 230 | 160 | 70 | 5.46 | 0.88 | 0.24 | 0.10 | 0.34 | | 20.40 | |
| 5. | Palwal | 0.47 | 0.54 | 205 | 154 | 51 | 2.75 | 0.60 | 0.13 | 0.06 | 0.19 | | 11.40 | |
| 6. | Panipat | 1.38 | 1.73 | 208 | 190 | 18 | 3.11 | 2.08 | 0.15 | 0.35 | 0.50 | | 30.00 | |
| 7. | Rohtak | 1.68 | 1.93 | 236 | 199 | 37 | 7.14 | 2.19 | 0.30 | 0.26 | 0.56 | | 33.60 | |
| 8. | Rewari | 0.52 | 0.56 | 267 | 246 | 21 | 1.18 | 0.60 | 0.04 | 0.04 | 0.08 | | 4.80 | |
| 9. | Dharuhera | - | - | - | - | - | - | N.A. | - | - | N.A. | | - | |
| 10. | Bhiwadi | - | - | - | - | - | - | N.A. | - | - | N.A. | | - | |
| 11. | Alwar | 1.47 | 1.76 | 242 | 194 | 48 | 8.45 | 2.09 | 0.35 | 0.33 | 0.68 | | 40.80 | |
| Total | | 13.60 | 16.59 | - | - | - | 96.32 | 19.14 | 4.28 | 2.55 | 6.83 | | 405.80 | |
| D.M.A. TOWNS | | | | | | | | | | | | | | |
| 1. | Ghaziabad | 2.97 | 4.07 | 275 | 201 | 74 | 30.12 | 6.75 | 1.10 | 2.68 | 3.78 | | 226.80 | |
| 2. | NOIDA | 0.42 | - | 275 | N.A. | N.A. | N.A. | 2.00 | - | 2.00 | 2.00 | | 120.00 | |
| 3. | Faridabad Complex | 3.31 | 5.43 | 290 | 257 | 33 | 17.92 | 5.58 | 0.62 | 0.15 | 0.77 | | 46.20 | |
| 4. | Gurgaon | 1.01 | 1.11 | 180 | 144 | 36 | 3.10 | 1.70 | 0.22 | 0.59 | 0.81 | | 48.60 | |
| 5. | Bahadurgarh. | 0.37 | 0.45 | 267 | 120 | 147 | 6.62 | 0.52 | 0.25 | 0.07 | 0.32 | | 19.20 | |
| 6. | Kundli | - | - | - | - | - | - | - | - | - | - | | - | |
| Total | | 8.08 | 11.06 | - | - | - | 57.76 | 16.55 | 2.19 | 5.49 | 7.68 | | 460.80 | |

Table -9 : State Sector : Regional Roads

| State/ Region | Length (Km) | Total L.A(acres) | Cost for L.A(lakhs) | Cost for construction (Lakhs) | Cost for R.O.B's (Lakhs) | Total Cost (Lakhs) |
|------------------|----------------|---------------------|------------------------|-------------------------------------|--------------------------------|--------------------------|
| HARYANA | | | | | | |
| Water Grid | 295.03 | 2757.45 | 1829.61 | 3515.76 | 920.00 | 6265.37 |
| Inner Grid | 145.03 | 1275.00 | 841.32 | 1596.11 | 287.50 | 2724.93 |
| Total | 440.06 | 4032.45 | 2670.93 | 5111.87 | 1207.50 | 8990.30 |
| RAJASTHAN | | | | | | |
| Water Grid | 226.6 | 1537.00 | 1082.00 | 4890.00 | 1250.00 | 7222.00 |
| Inner Grid | 71.8 | 651.00 | 531.00 | 1496.00 | 200.00 | 2227.00 |
| Total | 298.4 | 2188.00 | 1613.00 | 6386.00 | 1450.00 | 9449.00 |
| GUJARAT | | | | | | |
| Water Grid | 90 | 1262.00 | 202.00 | 1826.00 | - | 2028.00 |
| Total | 90 | 1262.00 | 202.00 | 1826.00 | - | 2028.00 |
| AND TOTAL | 828.46 | 7482.45 | 4485.93 | 13323.87 | 2657.50 | 20467.30 |

say Rs.205 crores.

Table 10 : Counter magnet Areas

A. National Highways

| Towns | Total Length in Km | Land Acq. (Hect) | Total cost in Lakhs @ Rs.150 Lakhs/KM |
|--|-----------------------|---------------------|---|
| 1. BAREILLY | | | |
| Construction of bypass 4 lane 100 m ROW on NH 24 connecting Rampur Road-Nanital Road- Philiphit Road-Lucknow Road | 28 | 280 | 4200.00 ----- 4200.00 ----- |
| 2. GWALIOR | | | |
| a) NH-3 Bypass 4 lane-100 m ROW Connecting Rairu- Girwai on NH-3.(New Link) | 25 | 250 | 3750.00 |
| b) NH-Bypass at Chatigaon | 5 | 50 | 750.00 |
| c) NH-3 Bypasses 4 lane-100 m ROW at Banhor on NH-3 (Gwalior Metro Area) | 5 | 50 | 750.00 ----- 5250.00 ----- |
| 3. PATIALA | | | |
| 1) Widening of Patiala Rajpura-Chandigarh Road Strategic Highway inclu- ded in the NH system in 8th Plan. | 63 | - | 4725.00 |
| 2) Southern Bypass for the above Road | 19.61 | 80 | 2940.00 ----- 7665.00 ----- |
| 4. HISSAR | | | |
| NH-10 from NCR boundary to Hissar | 62 | - | 4650.00 ----- 4650.00 ----- |

5. KOTA

| | | | |
|--|------|---|---------|
| 1) NH-12 Kota-Bundi | 37 | - | 2775.00 |
| 2) East-West bypass and a bridge accross Chambal at Kota | (15) | - | 2850.00 |
| | | | ----- |
| | | | 5625.00 |
| | | | ----- |
| Grand Total | | | 230.45 |
| | | | ----- |
| Say Rs. 230.crore | | | |

B. Railways

| Towns | Length in Km. | Total Cost in lakhs Rs. |
|-------|---------------|-------------------------|
|-------|---------------|-------------------------|

1. PATIALA

a) Feasibility study

| | | |
|---|----|-------|
| i) B.G. Rail link, Patiala-Rajpura-Chandigarh | 32 | 30.00 |
| ii) B.G. New Rail link Patiala-Jakhal | 85 | 70.00 |

b) Construction of Rail links

| | | |
|--|----|---------|
| i) B.G.new rail link from Patiala-Rajputa-Chandigarh | 32 | 3200.00 |
| ii) B.G.new rail link Patiala-Jakhal | 85 | 8500.00 |

c) Augmentation/improvement of Railways station facilities

- 40.00

Sub-total

11840.00

2. KOTA

a) Augmentation/improvement of Railway station facilities at Dhakania Talao and Dadh Devi

- 200.00

| | | |
|---|----------|--------------------|
| b) Two (flag station) Rail Over Bridges near Kota Railway station and at Industrial Area | | 1200.00 |
| c) A direct train from Kota to Delhi. | | |
| Sub-Total | | 1400.00 |
| ----- | | |
| 3. | HISSAR | |
| a) Director connection of Delhi- Rohtak link with Hissar along NH-10 single line without electrification. | | |
| | 80 | 8000.00 |
| b) Construction of Rail Over Bridges | | |
| | 4 Nos. | 3200.00 |
| Sub total | | 11200.00 |
| ----- | | |
| 4. | GWALIOR | |
| a) New Rail Link to connect Rathora (NG)-Rairu(B.G) including improvement of station facilities at Rairu and upgradation of Gwalior-Shanichra station from NG to BG | | |
| | 10 | 950.00 |
| b) R.O.B near Rairu, Dairy Farm and under paces at Sitholi | | |
| | 3 | 1800.00 |
| c) Augementation of facilities at Birla Nagar Station. | | |
| | | 100.00 |
| Sub-total: | | 2850.00 |
| ----- | | |
| 5. | BAREILLY | |
| a) Over bridges at clutter buckgan and Nagaria Parichhil. | | |
| | 2 Nos. | 1040.00 |
| b) Development of Ring Railway and including including station facilities | | |
| | 16 Km. | 1600.00 |
| Sub-total: | | 2640.00 |
| ----- | | |
| Grand Total: | | Rs 29931.00 crores |
| ----- | | |

c. Telecommunications*

| Sl.No. | Town | Expected Capacity by 1995 | Expected Capacity by 1990 | Additional lines required during VIII Plan | Cost Rs. in crores including on telextransmission media required for inter connection |
|--------|----------|---------------------------|---------------------------|--|---|
| 1. | Hissar | 11000 | 5100 | 6000 | 20.58 |
| 2. | Patiala | 16000 | 9000 | 7000 | 26.07 |
| 3. | Bareilly | 17000 | 8000 | 9000 | 26.10 |
| 4. | Kota | 21000 | 8000 | 13000 | 48.50 ✓ |
| 5. | Gwalior | 19000 | 9000 | 9000 | 33.75 |
| Total: | | 84000 | 40000 | 44000 | 155.00 |

Source: Economic Research Unit Deptt. of Telecom.

WORKING GROUP OF EIGHTH FIVE YEAR PLAN INVESTMENT
PROPOSALS FOR THE NATIONAL CAPITAL REGION

Terms of reference:

1. To suggest approach and strategy for Investment during the Eighth Five Year Plan keeping in view the objectives and policies contained in the Regional Plan-2001 for the National Capital Region and the recommendations of the National Commission on Urbanisation.
2. To suggest specific outlays and programmes for investment during the Eighth Five Year Plan under the various Heads of Development for Centre and State Sectors taking into account the existing gaps in the physical and economic infrastructure and the requirements for the VIII Plan and 2001 AD perspective.
3. To suggest a mechanism for integrating Central and State investments and also the investments by the Board under various programmes.
4. To identify institutions at the national and international levels and the areas in which their financial assistance could be sought and suggest ways and means for tapping such assistance.
5. To examine critically the role of private sector for investment in the National Capital Region programmes.
6. Financing of Regional Roads programme.
7. To evaluate the impact of NCR Schemes taken up so far.

Composition of Working Group:

1. Member Secretary, NCR Planning Board - Chairman
Secretaries incharge of Urban Development of the participating States
2. Haryana - Member
3. Rajasthan - Member
4. Uttar Pradesh - Member
5. Delhi Union Territory - Member
- Representatives of Planning Department of each State-
6. Haryana - Member
7. Rajasthan - Member
8. Uttar Pradesh - Member
9. Delhi Union Territory - Member
- Heads of NCR Planning Cells in
10. Haryana - Member
11. Rajasthan - Member
12. Utar Pradesh - Member
13. Delhi Union Territory - Member
- Representatives of Central Ministries/
Planning Commission/Departments of-
14. Ministry of Surface Transport - Member
15. Ministry of Railways - Member
16. Department of Telecommunications - Member
17. Department of Power - Member
18. Planning Commission . - Member
19. Chief Regional Planner - Member-
NCR Planning Board Convenor

SUBJECT : SUB GROUP ON EMPLOYMENT

Composition

- | | | | |
|-----|---|---|-----------------|
| 1. | Member Secretary, NCR Planning Board. | - | Chairman |
| 2. | Chief Regional Planner, NCR Planning Board | - | Member |
| 3. | Shri B.D.Gulati, Chief Coordinator Planner(NCR), Govt. of Haryana, Sector-8 Pnachkula, District Ambala. | - | Member |
| 4. | Shri C.S.Mehta, Chief Town Planner, Government of Rajasthan, Rambagh Circle, Jaipur. | - | Member |
| 5. | Shri K.C.Saxena, Senior Planner, NCR Planning Cell, Town and Country Planning Department, U.P. Vikas Bhawan, Mohanpuri, Meerut. | - | Member |
| 6. | Shri J.C.Gambhir, Director PPW, Delhi Development Authority. | - | Member |
| 7. | Representatives of the State Industries Department | | |
| | (a) Haryana | - | Member |
| | (b) Rajasthan | - | Member |
| | (c) Uttar Pradesh | - | Member |
| | (d) Delhi | - | Member |
| 8. | Representative of Development Commissioner, Small Scale Industries, Department of Industrial Development, New Delhi. | - | Member |
| 9. | Representative of the Manpower Division-Planning commission, New Delhi | | Member |
| 10. | Representative of the Development Authorities of each States: | | |
| | (a) Haryana Urban Development Authority | - | Member |
| | (b) Secretary, Urban Improvement Trust, Alwar | - | Member |
| | (c) Uttar Pradesh | - | Member |
| | i) Meerut Development Authority | | |
| | ii) Municipal Board, Hapur | | |
| | iii) Bulandshahr-Khurja Devt. Authority | | |
| 11. | Representative of NABARD | - | Member |
| 12. | Representative of IDBI | - | Member |
| 13. | Shri V.K.Thakore, Senior Research Officer, NCR Planning Board. | - | Member-Convenor |

SUBJECT : SUB GROUP ON REGIONAL ROAD INVESTMENTS.

Composition :

- | | | |
|-----|---|----------------------|
| 1. | Member Secretary, NCR Planning Board. | -Chairman |
| 2. | Chief Regional Planner, NCR Planning Board. | -Member |
| 3. | Chief Coordinator Planner - NCR, Government of Haryana, Panchkula. | -Member |
| 4. | Chief Town Planner, Government of Rajasthan, Jaipur. | -Member |
| 5. | Senior Planner, NCR Technical Planning Cell, Town & Country Planning Department, U.P., Vikas Vihar Mohanpuri, Meerut. | -Member |
| 6. | Director(PPW), Delhi Development Authority, Vikas Minar, I.P.Estate, New Delhi. | -Member |
| 7. | Shri D.P.Gupta, Chief Engineer (Planning), Ministry of Surface Transport, New Delhi. | -Member |
| 8. | Chief Engineer (Buildings & Roads), Haryana. | -Member |
| 9. | Chief Engineer (Roads), Government of Rajasthan. | -Member |
| 10. | Chief Engineer (Roads), Uttar Pradesh. | -Member |
| 11. | Shri O.P.Goel, Chief Engineer(DA), Delhi Administration, Zone-I, I-27-A Block, Kasturba Gandhi Marg, New Delhi. | -Member |
| 12. | Shri R.P.Rastogi, Regional Planner, NCR Planning Board. | - Member Convenor |

SUBJECT: SUB-GROUP ON CENTRAL SECTOR INVESTMENTS

Composition :

1. Member Secretary, NCR Planning Board. -Chairman
2. Shri B.N. Singh, Chief Regional Planner, NCR Planning Board. -Member
3. Shri S.M. Mital, Executive Director (MTP), Railway Board, Rail Bhawan, New Delhi. -Member
4. Shri S.M. Prasad, Dy. Director General (TP), Department of Telecommunications, New Delhi. -Member
5. Shri D.P. Gupta, Chief Engineer (Road Wing), Ministry of Surface Transport, New Delhi. -Member
6. Shri Atul Gupta, Director (Planning) Department of Power, Ministry of Energy, New Delhi. -Member
7. Representative of Planning Commission. -Member
8. Shri S. Arunachalam, Senior Planning Engineer, NCR Planning Board. -Member
Convenor

SUBJECT : SUB GROUP ON INVOLVEMENT OF PRIVATE SECTOR

Composition:

1. Shri P.S.A.Sundaram, Joint Secretary,
Ministry of Urban Development. - Chairman
2. Secretary, Town & Country Planning and
Urban Estate, Government of Haryana,
Chandigarh. - Member
3. Secretary, Housing & Urban Development
Department, Government of Rajasthan,
Jaipur. - Member
4. Secretary, Housing & Urban Development
Department, Government of Uttar Pradesh
Lucknow. - Member
5. Secretary (L & B), Delhi Administra-
tion, I.P.Estate, New Delhi. - Member
6. Vice Chairman, Delhi Development
Authority or his nominee, Vikas Sadan,
INA Colony, New Delhi. - Member
7. Representative of PHD Chamber of
Commerce. - Member
8. Shri Vinay D.Lall, Society for Develop-
ment Studies, B-7, Extension/5, Safdar-
jang Enclave, New Delhi-110029. - Member
9. Shri C.S.Chandrasekhara, Chief Planner
(Retd.) Town & Country Planning Organi-
sation, E-255, East of Kailash, New
Delhi-110065. - Member
10. Dr. V. Nath, Centre for Policy Research
Dharma Marg, Chanakyapuri,
New Delhi-110021. - Member
11. Shri B.N.Singh, Chief Regional Planner - Member
NCR Planning Board. Convenor
