

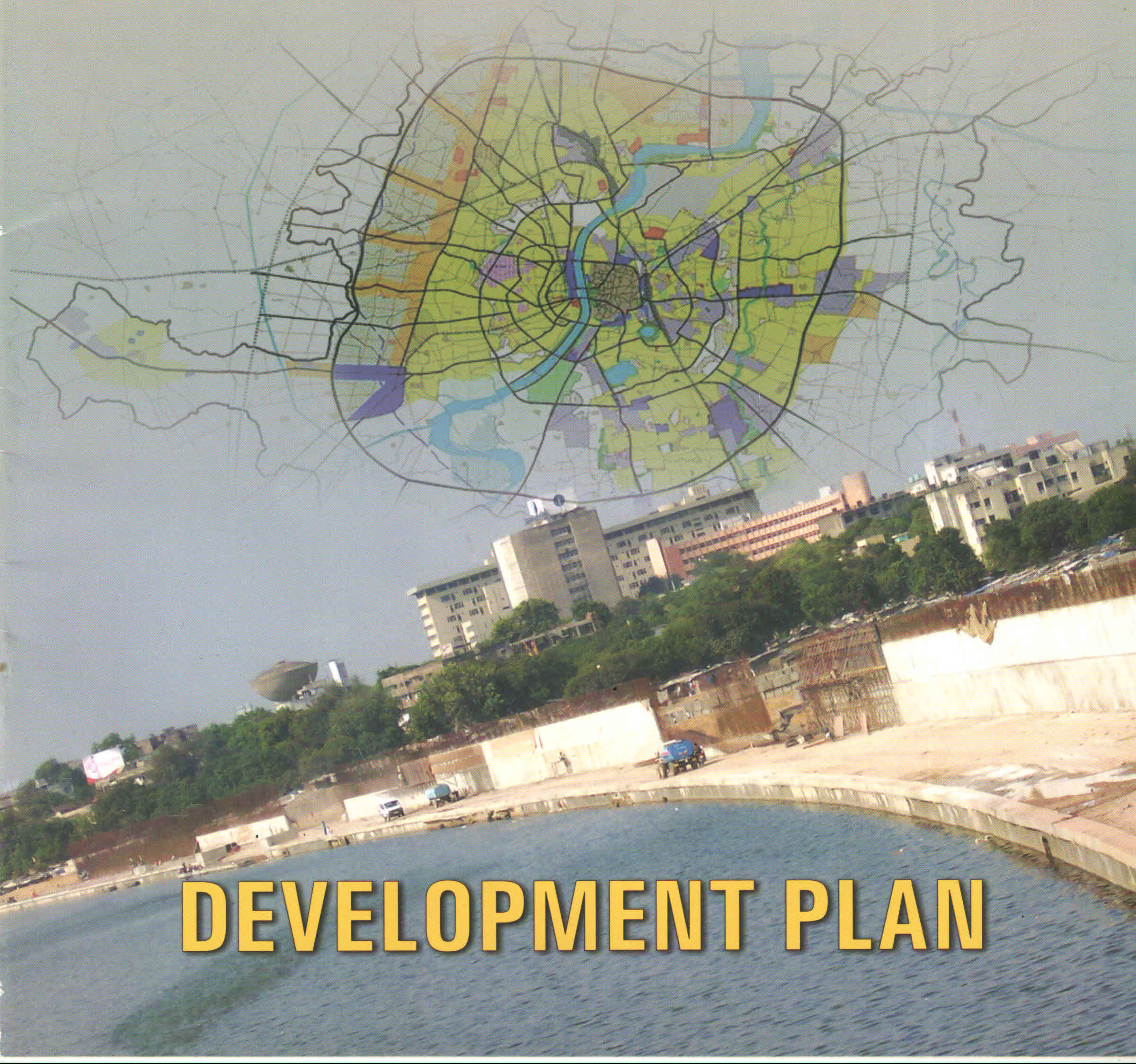


# GICEA

## NEWS

THE GUJARAT INSTITUTE OF CIVIL ENGINEERS & ARCHITECTS

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# DEVELOPMENT PLAN



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## President's Message

Dear Members,

It is my esteem honoured that I have been elected once again as president of year 2011-2012. On behalf of our more than 4300 members, I look forward to serving with our outstanding staff of office bearers in the coming year. We have come into this industry from a multitude of directions, with the common thread that we have each been influenced and inspired by many things along the way, especially at our beginning.

During last three months, we have organized a series of programs related to "Sustainable Solutions" in the field of environmental conservation and energy, Seminar on Ahmedabad as heritage city, Personality Development Week, Lecture on Enabling Administration through Technology & Academic Public Partnerships, Talent Evening, Lecture on Anti-aging skin & hair treatment.

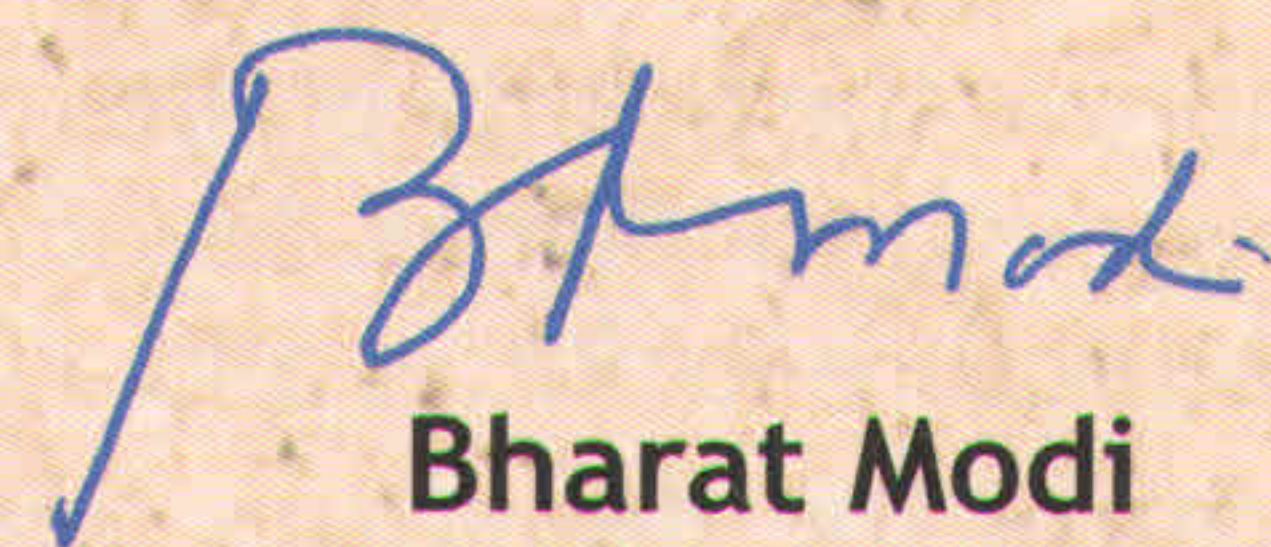
Industry and technology steadily grew into a comfortable leveling India during the last thirty years. To sustain its growth and enhance development, new knowledge is essential. The best source of information in this field is experience and expertise shared by eminent technological people. The Gujarat Institute of Civil Engineers & Architects (GICEA) grouped engineering professionals in fellowship and warm friendship and take advantage of the camaraderie to provide the needs of the country.

Ecological balance and sustainable energy, which is now an everyday concern is a challenge to everyone. Our Program endeavors to face this head-on with the pooled proficiency of our able members.

Our mission is "To build an open, flexible and global knowledge network supported by individuals, companies and institutions and facilitated by the GICEA and its members."

Since we have gigantic tasks ahead, we have to prepare ourselves, restudy and rework our non-functionals policies, guidelines and create more relevant directives.

We are committed to give the Institute a new image that would reflect its proficient capabilities as an important part of nation building let us all work together. "Excellence in any art of profession is attained only by hard and persistent work."



**Bharat Modi**  
President - GICEA



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# Ahmedabad

## DEVELOPMENT PLAN : 1983 - 2011

### Objectives of Development Plan, Ahmedabad

#### 1983:

1. Provision of minimum civic amenities to all the citizens of the city.
2. Raising the level of amenities and its even distribution in all areas of the city.
3. Removal of lop sided development including pulling out of population from densely populated areas to new areas.
4. Regulation of concentration of industry.
5. Taking special care of a weaker section including slum dwellers.
6. Optimum utilization of existing amenities.
7. Removal of marked disparities in amenities in parts of city & even special distribution of amenities.

#### 1987:

1. Identification through scientific studies, land-use & other surveys of the problems w.r.t. housing, industrial & commercial development, basic amenities & facilities, i.e. water supply, sewerage & drainage, education, public health & other services.
2. Evolving policies & Programmes for a systematic control of development activities.
3. To assess, project & forecast the future needs keeping in view the diverse nature of existing & likely development.
4. To improve the quality of life by providing for well distributed economic opportunities, congenial, social environment for human development and diversification of activities through appropriate placement of infrastructure facilities and allocations of functional role to the respective settlements.
5. To control the disparities between various areas and different sections of population in terms of distribution of urban amenities and services.
6. To evolve a physical structure regulating the land use pattern and road network.



**1997-2011:**

1. To create a good environment & to minimize the environmental pollution with green spaces, open spaces and places of public activities with recreational areas.
2. Distribution of population in urban & rural area for 2011 A.D.
3. To provide for the comprehensive developed area for residential, industrial, commercial & recreational uses required for the city with public support & active involvement.
4. To provide effective road linkages in entire area.
5. To provide for the physical infrastructure & facilitate the social infrastructure at the city level.
6. Optimum use of land for compact urban development for the city.
7. To encourage and control the developmental activities in accordance and in the harmony with the development plan proposals which may promote healthy city development.
8. Mobilizing the land resource by virtue of the various planning proposals under the provision of the Act which can generate the required finance for the implementation of the development plan including the Town Planning Schemes.
9. To augment the financial resources as may be created by the proposals of the development plan.
10. To implement the various proposals by the various T.P. Schemes at appropriate time for appropriate areas as the T.P. Scheme has proved to be a sound & effective model for the urban development at the micro level planning.
11. To tap the potentials of private entrepreneurship with its positive involvement in & appropriate manner which may boost up the city development process in addition to the efforts of the Govt. & semi Govt. organization in the respective field.
12. Co-ordination of various developmental activities in the urban area.
13. To have a realistic approach

## Land-Use as per Development Plans

| Parameters                           | AMC1961     | %             | AMC1975   | AMC1997      | %             |
|--------------------------------------|-------------|---------------|-----------|--------------|---------------|
| Area (Ha.)                           | 9302        | ****          | 9826      | 19084        | ****          |
| Existing Population                  | 11.50 lac   | ****          | 15.85 lac | 28.76 lac    | ****          |
| Projected Population for Next 15 Yrs | 15.04 lac   | ****          | 26.50 lac | 46.39 lac    | ****          |
| Employment/Sq.Km                     | 2519.87     | ****          | 4861.09   | ****         | ****          |
| Proposal for Land Requirement        | 7451        | ****          | ****      | ****         | ****          |
| Existing Land Use                    | 5061        | ****          | ****      | 19084        | ****          |
| Residential                          | 2116        | 41.81         | ****      | 6664         | 34.92         |
| Commercial                           | 221         | 4.37          | ****      | 473          | 2.48          |
| Industrial                           | 559         | 11.05         | ****      | 2933         | 15.37         |
| Utility& Services                    | 53          | 1.05          | ****      |              |               |
| Public Use                           | 431         | 8.52          | ****      |              |               |
| Open Spaces& Vacant Land             | 690         | 13.63         | ****      | 4473         | 23.44         |
| Burial Ground & Cemeteries           | 44          | 0.87          | ****      | 87           | 0.46          |
| Railways                             | 303         | 5.99          | ****      | 372          | 1.95          |
| Village Site/Gamtal                  | ****        |               | ****      | 896          | 4.70          |
| AMC Plots                            | ****        |               | ****      | 467          | 2.45          |
| Hospitals                            | ****        |               | ****      | 98           | 0.51          |
| Educational Use                      | ****        |               | ****      | 344          | 1.80          |
| Water Body                           | ****        |               | ****      | 850          | 4.45          |
| Road & Streets                       | 644         | 12.72         | ****      | 1427         | 7.48          |
| <b>Total</b>                         | <b>5061</b> | <b>100.00</b> |           | <b>19084</b> | <b>100.00</b> |



## Proposed Land-use as per Development Plan

| Parameters                   | AMC1961     | %          | AMC1987     | %          | AMC1997      |
|------------------------------|-------------|------------|-------------|------------|--------------|
| <b>Proposal For Land Use</b> |             |            |             |            |              |
| Residential                  | 3418        | 45.87      | 3347        | 37.26      | 8340         |
| Commercial                   | 307         | 4.12       | 335         | 3.73       | 263          |
| Industrial                   | 1145        | 15.37      | 1075        | 11.97      | 2006         |
| Special Industrial           | ****        | ****       | ****        |            | 787          |
| Utility& Services            | 59          | 0.79       | 75          | 0.83       | ****         |
| Public Use                   | 446         | 5.99       | 321         | 3.57       | ****         |
| Open Spaces                  | 854         | 11.46      | 1371        | 15.26      | 1644         |
| Burial Ground & Cemeteries   | 65          | 0.87       | 82          | 0.91       | ****         |
| Railways                     | 331         | 4.44       | 333         | 3.71       | ****         |
| Road & Streets               | 826         | 11.09      | 1087        | 12.10      | 2118         |
| Village Site/Gamtal          | ****        | ****       | 603         | 6.71       | 646          |
| Reclamation Land             | ****        | ****       | 31          | 0.35       | ****         |
| Educational Use              | ****        | ****       | 324         | 3.61       | 387          |
| Water Body                   | ****        | ****       | ****        | ****       | 938          |
| Special Development Area     | ****        | ****       | ****        | ****       | 1955         |
| <b>Total</b>                 | <b>7451</b> | <b>100</b> | <b>8984</b> | <b>100</b> | <b>19084</b> |
| Agriculture                  | 1851        |            | 842         |            |              |
|                              | 9302        |            | 9826        |            | 19084        |

## Comparison of Development Plan (Existing 1997 - Proposed 1987)

| Parameters (Change)        | AMC 1997     | % (Existing) | AMC 1987    | %          | %     |
|----------------------------|--------------|--------------|-------------|------------|-------|
| Residential                | 6664         | 34.92        | 3347        | 37.26      | -2.34 |
| Commercial                 | 473          | 2.48         | 335         | 3.73       | -1.25 |
| Industrial                 | 2933         | 15.37        | 1075        | 11.97      | 3.40  |
| Special Industrial         | ****         | ****         | ****        | ****       | ****  |
| Utility& Services          | ****         | ****         | 75          | 0.83       | -0.32 |
| Public Use                 | ****         | ****         | 321         | 3.57       | -1.12 |
| Open Spaces& Vacant Land   | 4473         | 23.44        | 1371        | 15.26      | 8.18  |
| Burial Ground & Cemeteries | 87           | 0.46         | 82          | 0.91       | -0.45 |
| Railways                   | 372          | 1.95         | 333         | 3.71       | -1.76 |
| Village Site/ Gamtal       | 896          | 4.70         | 603         | 6.71       | -2.01 |
| AMC Plots                  | 467          | 2.45         | ****        | ****       | ****  |
| Hospitals                  | 98           | 0.51         | ****        | ****       | ****  |
| Educational Use            | 344          | 1.80         | 324         | 3.61       | -1.81 |
| Water Body                 | 850          | 4.45         |             |            | 4.45  |
| Road & Streets             | 1427         | 7.48         | 1087        | 12.10      | -4.62 |
| Reclamation Land           | ****         | ****         | 31          | 0.35       | -0.35 |
| Special Development Area   | ****         | ****         | ****        | ****       | ****  |
| <b>Total</b>               | <b>19084</b> | <b>100</b>   | <b>8984</b> | <b>100</b> |       |



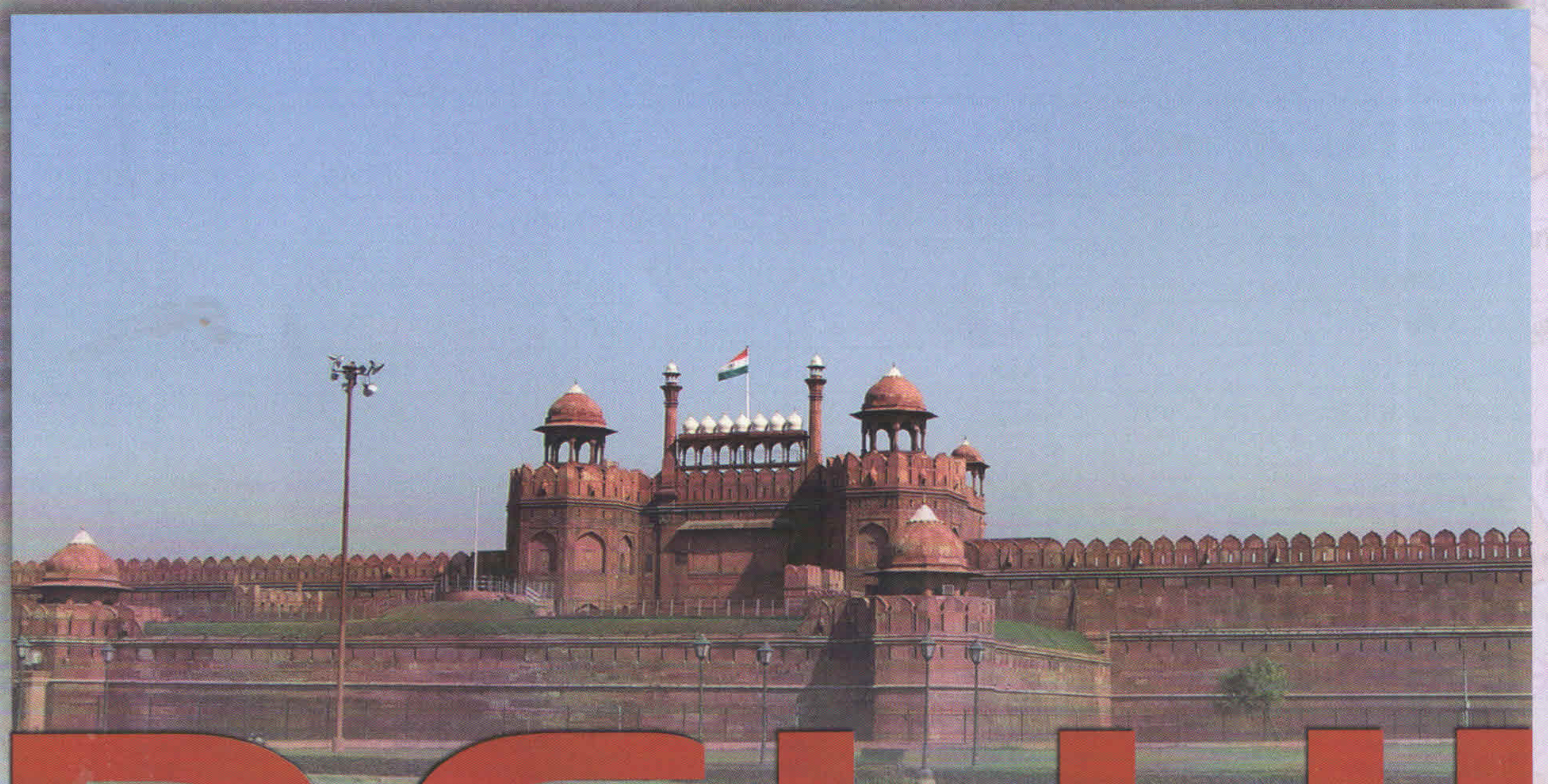
## Comparison of Development Plan (Proposed 2011 - Existing 1997)

| Parameters                  | AMC          | %          | AMC          | %          | %        |
|-----------------------------|--------------|------------|--------------|------------|----------|
|                             | 1997         | (Existing) | 2011         | (Prop.) .  | (Change) |
|                             | (Exit.)      |            | (Prop.)      |            |          |
| Residential                 | 6664         | 34.92      | 8340         | 43.70      | 8.78     |
| Commercial                  | 473          | 2.47       | 263          | 1.38       | -1.09    |
| Industrial                  | 2933         | 15.37      | 2793         | 14.63      | -0.74    |
| Open Spaces& Vacant Land    | 4473         | 23.44      | 1644         | 8.61       | -14.83   |
| Burial Ground & Crematorium | 87           | 0.45       | ****         | ****       | -0.45    |
| Railways                    | 372          | 1.96       | ****         | ****       | -1.96    |
| Village Site/ Gamtal        | 896          | 4.69       | 646          | 3.38       | -1.31    |
| AMC Plots                   | 467          | 2.45       | ****         | ****       | -2.45    |
| Hospitals                   | 98           | 0.52       | ****         | ****       | -0.52    |
| Educational Use             | 344          | 1.80       | 387          | 2.03       | 0.23     |
| Water Body                  | 850          | 4.46       | 938          | 4.92       | 0.46     |
| Road & Streets              | 1427         | 7.47       | 2118         | 11.10      | 3.53     |
| Special Development Area    |              |            | 1955         | 10.25      | 10.25    |
| <b>Total</b>                | <b>19084</b> | <b>100</b> | <b>19084</b> | <b>100</b> |          |

### Reasons for change in % in Development Plans

- Reservation for amenities, facilities and Roads & Streets has shown as per the provision of Gujarat Town Planning and Urban Development Act. 1976.
- Reservation has shown as per the current development and future need for development of city.
- In residential zone authority will permit commercial development as per connective T.P. road, so special commercial zone is not necessary as per G.D.C.R. (General Development Control Regulation)
- Near the river for safety purpose from flood & erosion, beautification and environment improvement purpose land use has been proposed.
- It has been mentioned in 1987 D.P. about reservation land for various purposes but not acquired due to Incapability of the concern land acquisition authority.
- Due to developed usage of land as per the site condition and Topography of land.
- The area situated at the boundary of the municipal corporation limit has not been given proper attention.
- Public interest was lacking.
- Multipurpose reservation instead of single specific purpose to delay and avoid conflict in procedure to change the land use.
- No variation in land use for adjacent land.
- Considering the future projections of required land for housing development, authority has never acquired land outside of their defined boundary.
- T.P. Scheme mechanism was successful to reserve land for amenities and facilities and plots were allotted to authority as per town planning scheme.





# DELHI

## Master Plan : 1962-1981

### 1. Master Plan of Delhi 1962-1981

#### Brief Background

It was the first step towards modern planning in India. It was prepared with the assistance of **Ford Foundation** team. It was promulgated on 1-9-1962. It was formulated as per the provision of Delhi Development Act, 1957.

#### Tools for achieving the objectives of MPD-1962

- Large scale land acquisition.
- Land development (about 25000 ha land was envisaged for development).
- Land disposal policy

#### Features

- Delhi's population to be 53 lacs by 1981.

- Planning in a regional context was introduced with ring town concepts like Narela, Gurgaon, Ghazi bad, Faridabad etc.

- Comprehensive planning for rural and urban areas earmarked 45,000 ha for urbanization.

- Segregated land-use for appropriate built environment.

- Elaborate zoning and sub-divisional regulations.

- Introduced poly-nodal hierarchical development i.e. the concept of District Center, Community Center and Local Shopping Center etc.

- Main unit of planning was conceived to be neighborhood having a population of 15000 with supporting facilities.



- Performance - based industrial development like Extensive, Light and Flatted Factory etc.
- Appropriate transportation network e.g. ring road, radial pattern and rail linkages were conceived.
- This plan provided for green belt on the periphery of the proposed urban area to control the spillover of urbanization.
- Extensive organized open spaces were planned (20% - highest in India)

### Experiences & Lessons

- Rapid population growth overshot plan projections by 15 lacs.
- Despite Landuse controls, mixed land use in residential areas continued.
- Land was put to extensive use resulting in overshooting of envisaged densities.
- The plan did not propose integration of the informal sector leading to their exponential growth which outstripped infrastructural facilities.
- Proposal for shifting of non-conforming industrial units did not yield desired results.

## 2. Master Plan of Delhi 1981-2001

### Brief Description

The MPD-1962 was prepared with a perspective of 20 years i.e. up to 1981. Based on the experience of the plan and to cater to the increasing population & changing requirements of the city up to year 2001, extensive modifications to MPD-1962 were made under Section 11-A of the DD Act and the Master Plan for Delhi - 2001 was prepared by in house professionals of DDA. The modified plan, MPD-2001 was approved by the GOI and promulgated on 1-8-90.

### Salient Features

- Delhi to be planned as an integral part of its region
- Ecological balance to be maintained.
- The central city area to be treated as "Special Area".
- Urban heritage of Delhi to be conserved.
- The city center to be decentralized.
- The urban development to be low rise-high density.
- Urban development to be hierarchical.

### Guiding Principles

- Effective development of NCR to contain the rapid population growth was proposed.
- Restricted mixed use was permitted.

- Selective densification of urban areas except Lutyens Bungalow Zone.
- Detailed industrial policy and parameters prescribed keeping in view of NCR framework.

### Attributes

- The Master Plan of Delhi - 2001 projected population of 128 lacs.
  - The plan proposed urbanization of further 18000 - 24000 ha. to accommodate the additional population in urban extension areas like Dwarka, Rohini and Narela sub cities.
  - In addition to above the holding capacity of MPD 1962 urban area was increased through the process of low rise high density development.
  - The central city area (walled city and its extension and Karol Bagh) to be treated as special areas with appropriate regulations.
  - The city center to be decentralized, development of district centers, freight complexes and directional terminals etc.
  - Mass Transportation System to be Multi Modal e.g. MRTS, Ring Rail and Road based public transportation system.
  - Urban development to be hierarchical containing essential facilities e.g. housing clusters, housing area, neighborhood, community and district.
- In addition, MPD-2001 introduced the following new concepts for further detailing at Zonal Plan Level.
- Mixed Use
  - Pedestrianization
  - Urban Design & Policy on Tall Buildings
  - Environment
  - Heritage Conservation

### Achievements

- Wider variety of housing types.
- Development of new urban integration projects such as Rohini, Dwarka and Narela.
- Shelter facilities to over 10.0 lacs families.
- About 2.8 lacs squatters families provided accommodation.
- 21 districts centers planned.
- About 2600 ha industrial area developed.
- MRTS network planned to bring much needed connectivity.
- About 5000 ha area under greens developed at various levels.
- Land fill sites converted into large greens such as Indraprastha Park.
- 14 sports centers developed for variety of sports activities.





# BOMBAY

## Regional Plan : 1996-2011

### Regional Plan for Bombay Metropolitan Region (1996-2011)

#### Introduction

After 20 years of BMRP (1970-1991), Greater Bombay continues to reel under increased demographic pressure, poor infrastructure, and high level of environment pollution. And its economy seems to be losing its edge. Fortunately, over the years, there has been a distinct change in the perception of the role of the large cities, and the problems faced by them. No longer are they regarded as over-grown, unmanageable, sick urban entities, but the ones that play an important role as generators of national wealth. Far from restricting their growth, the current approach is to facilitate their development through provision of infrastructure, and by removing any obstacles in the path of their economic progress.

#### Geography

The region lies between 18 33' & 19 31' north latitudes, and between 72 45' & 73 28' east longitudes. From the physiographic point of view the region can be divided into following divisions; 1) Hills & 2) Low Lands. The details of the important rivers in the region are as follows; 1) Ulhas @ 135 km. Long, 2) Tansa, 3) Panvel, 4) Patalganga, 5) Amba, 6) Bhogeshwari, 7) Bhogwati, & 8) Balganga. The entire north-south coastline along the mainland presents many interesting features. All along the coast, there are many small creeks. The coast has numerous islands off the shore. The geology of Bombay differs from that of the rest of the region. The types of rocks found in Bombay are; 1) Basalts, 2) Rhyolites, 3) Trachytes, 4) Volcanic breccias, 5) Ash beds, 6) Diorites & 7) Inter-trappen beds.

#### Goal

“To promote and sustain growth with social justice in a resource efficient manner”.



## Objectives

- To facilitate and promote economic growth of the region.
- To improve quality of life, particularly of the poor and deprived.
- To minimize adverse environmental impact that may occur in the process of economic growth.
- To improve the efficiency of existing methods of resource mobilization.
- Adopt innovative methods of resource mobilization, and facilitate, attract and guide private investment in desired direction.
- Promote effective citizen participation in the process of development through decentralization of institutions.

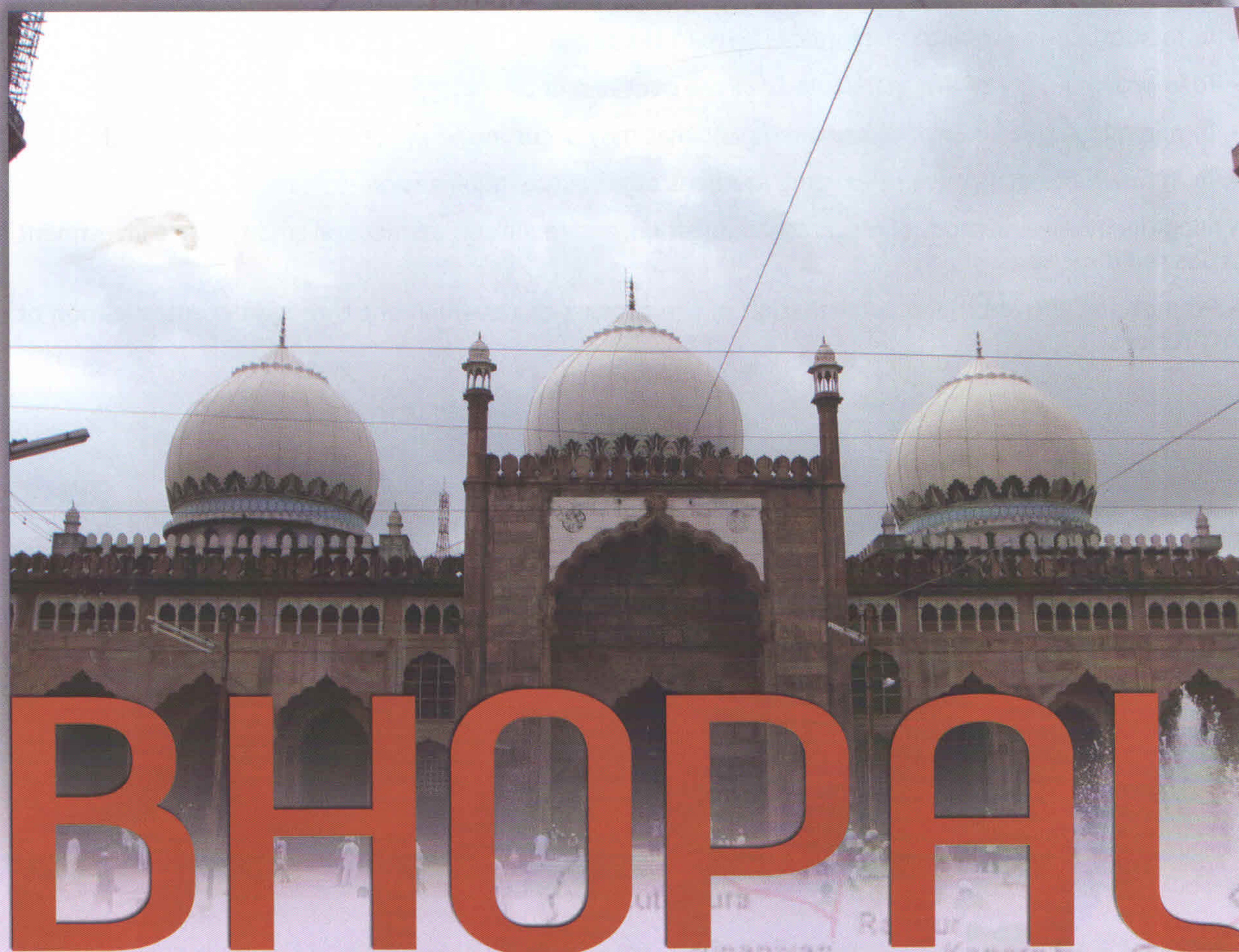


## Conclusion

Although the development efforts have consistently followed the strategic direction, the outcome has been far from intended, for example: Decentralization of economic activity and achieving inter regional parity of development. A target population of 21 lacs by 1991 for New

Bombay, has not grown as expected and has reached a population of 6 lacs only. Bombay's population growth was expected to stabilize around 70 lacs by 1991, it has reached 99 lacs. commercial centers outside island city, have achieved modest success. The new towns & many new communities envisaged in plan failed to come up. Effecting a general improvement in the condition of living of the population.





# BHOPAL

## Master Plan : 1975-1999

### The City

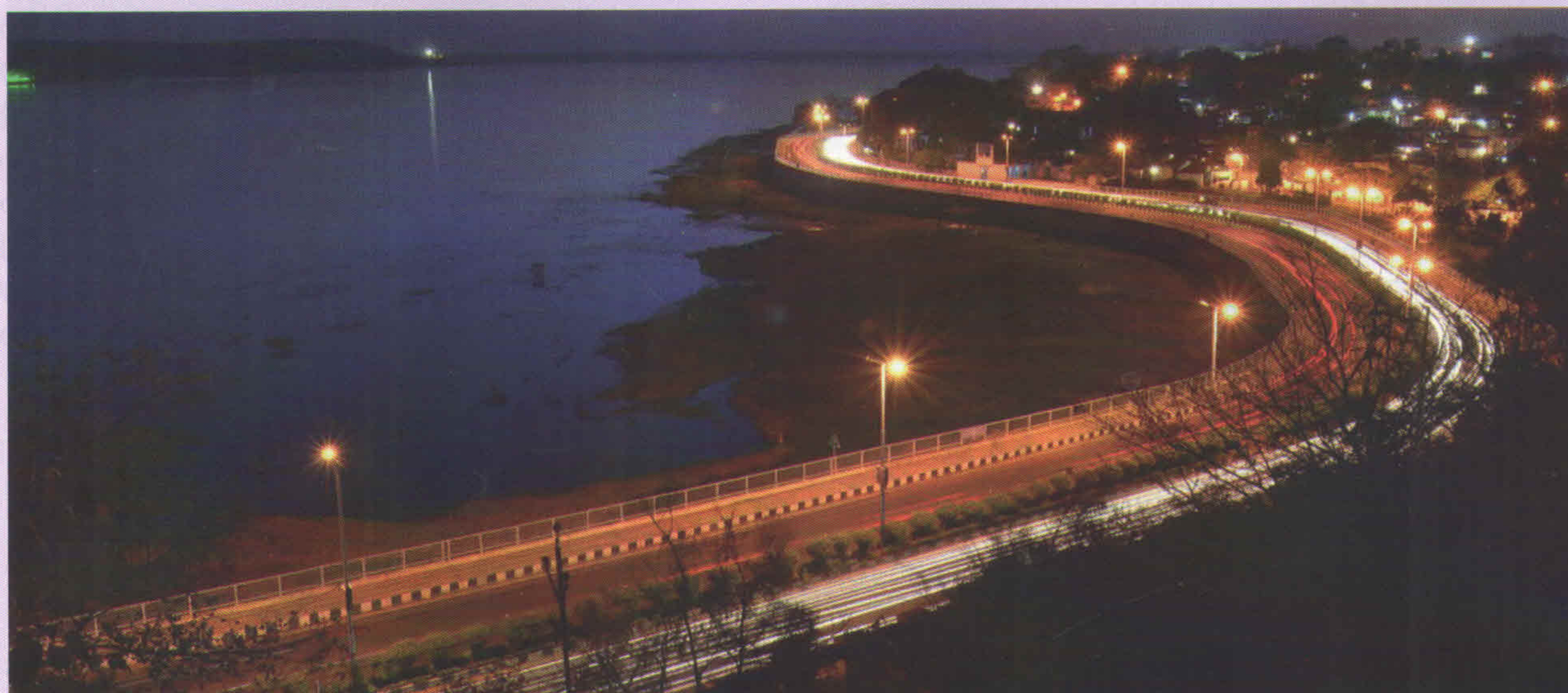
Bhopal, the capital of Madhya Pradesh, is a fascinating amalgam of scenic beauty, old historic city and modern urban planning. It is the 11th century city Bhojpal, founded by Raja Bhoj, but the present city was established by an Afghan soldier, Dost Mohammed (1707-1740). His descendants build Bhopal into a beautiful city. Industries in Bhopal include cotton, cloth weaving and painting, flour mills, manufacture of transformers, switchgears, traction motors, and other heavy electrical equipment.

|                   | Municipal Corporation | Municipal Corporation |
|-------------------|-----------------------|-----------------------|
|                   | 1991                  | 2001                  |
| Population        | 10.62 Lac             | 14.33 Lac             |
| Area in Sq.Km.    | 284.9                 | ****                  |
| No. of Households | 198057                | ****                  |
| No. of Wards      | ****                  | 66                    |



## Objectives

- The plan proposal have tried to avoid radical changes in existing city structure but leaving scope for future re-development
- To develop the core city so it becomes the living heart of the Bhopal Urban Complex
- To integrate the constituent unit of Bhopal so as to make the city one united habitation
- To fully develop the lakes and the hills surrounding them
- To provide evolutionary restructuring of the old city
- To provide multi-directional and balanced growth of the fast growing city.



## Comparision of Landuse with UDPFI Guidelines

| Landuse                | Residential | Commercial | Industrial | Public & Semi Public | Recreational | Transport & Communication |
|------------------------|-------------|------------|------------|----------------------|--------------|---------------------------|
| Proposed In D.P.       | 40          | 4          | 11.2       | 14.8                 | 14           | 16                        |
| UDPFI Standards (Min.) | 35          | 4          | 10         | 12                   | 18           | 12                        |
| UDPFI Standards (Max.) | 40          | 5          | 12         | 14                   | 20           | 14                        |

## Conclusion:

Aim of the Bhopal Development plan was: “An effort to evolve scientific and rational policies which will meet functional needs of the city and satisfy aesthetic and emotional aspirations of its citizens within the limitations of population projections, Plan period and estimates of various needs of the city particularly during the plan period”. At first glance seems a dream of an utopian city about if one will see today what the Bhopal is could understand that it is not enough to prepare a development plan but it is also important to implement it. That depends upon the abilities of implementation body and obviously upon the merits of Development itself. If one compares the DP of Bhopal, with UDPFI guidelines one will find it is excellent and had ever described in it. But the local need, issues and socio-economic and political factors are also contributes a significant role in a sustainable development.





# EFFECT OF INAPPROPRIATE CLAUSES IN -THE CONTRACT

1. An agreement is a bundle of promises and reciprocal promises to be performed by each party in the sequence prescribed therein or in the manner as per the nature of transaction requires. When such agreement is enforceable by law, it constitutes a contract. A contract may be between two or more than two parties depending on the nature of transaction.

2. Contract documents once executed and inked by the parties, the conditions become binding on them and as such the terms and conditions of the contract are treated as sacrosanct and fair for the interest of equity and justice.

3. Generally, standard printed contract forms are followed by various departments of the Government, be it Central or State Government or Government undertakings. There is no scope for any change or modification of any of the clauses in such contract forms, and even different types of contract forms are followed by different Departments of the same Government.

4. However, this may not be the case with contracts inked by many private / public companies / organizations as conditions of the contract can be discussed mutually by the parties for amendments / modifications, if any, as per the requirement of business. Even international contracts are drawn after careful considerations of various clauses and if required, many of the terms and condition are modified after due deliberations by the expert committee to avoid future complications or disputes.

5. Now, after dealing with several contract forms for various departments and undertakings, it is revealed that although most clauses are identical in nature but certain clauses change the fabric of contract to an extent in favor of the Employer ignoring the principle of equity. Some of such unfair clauses are discussed herein after to illustrate how the other party is deprived of his right under lawful consideration.

5.1 In printed form of a Government Department, it is stated under clause no. 11 of the Contract as below:-

“Clause 11 Time, delay and extension



**(A) Time is the essence of the contract and is specified in the contract documents or in each individual work order.**

As soon as possible, after contract is let or any substantial work order is placed and before work under it is begun, the GE and the contractor shall agree upon the time and progress chart. The chart shall be prepared in direct relation to the time stated in the contract documents or the work order for completion of the individual items thereof and / or the contract work order as a whole. It shall include in forecast of the date for commencement and completion of various trades , process or sections of the work, and shall be amended or may be required by agreement between the GE and the contractor within the limitation imposed in the contract documents or work order. If the work be delayed:-

- i) by force majeure  
or
- ii) by reason of abnormally bad weather or
- iii) by reason of serious loss and damage by fire  
or
- iv) by reason of civil commotion, local commotion of workmen, strike, or lockout, affecting any of the tradesman employed on the work  
or
- v) by reason of delay on part of nominated sub-contractors or nominated suppliers which the contractor has, in the opinion of GE, taken all practicable steps to avoid or reduce  
or
- vi) by reason of delay on the part of contractors or tradesman engaged by the Government in executing work not forming part of the contract  
or
- vii) by reason of any other cause, which in absolute discretion of the accepting officer is beyond the contractor's control; then in any such case, the officer hereinafter mentioned may make fair and

**(B) If the work be delayed:**

a) by reason of non availability of government stores in schedule B or

b) by reason of non availability or breakdown of government tools and plants listed in schedule C, then, in any such event, notwithstanding the provisions hereinafter contained, the accepting officer may in his discretion, grant such extension of time as may appear reasonable to him and the same shall be communicated the contractor by the GE in writing. The decision shall be final and binding and the contractor shall be bound to complete the works within such extended time.

(C) No claim in respect of compensation or otherwise howsoever arising, as a result of extensions granted under condition (A) and (B) above shall be admitted..."

6. Any contract for construction projects executed by the parties, defines the major parameters such as rates of item, be it percentage rate contract, item rate contract or Lump sum contract and the time period including delivery of site and all drawings / instructions etc. For completion of the project within schedule time and those conditions form the basis of contract. Parties are bound to perform their requisite obligations under the contract accordingly and in the prescribed sequence or by which the nature of business demands.

7. In view of the set terms and condition of the contract, it is mandatory to deliver / perform the obligation under the contract by each party accordingly and as such any clause contrary to fulfilling obligations under the contract or denial of such performance or delayed performance cannot be accepted under law and such clauses which are contrary to law, and equity are avoidable to that extent. Clause no. 11 interalia disowns the responsibility of supply of Government materials and machineries in time, in addition to other reasons stated under (A) where the other party has no control.

Over and above, the employer does not allow any payment of damage to the contractor, even when there is partial breach of contract on the part of the Employer .Granting extension of time alone cannot be in. satisfaction of his claims for delays and defaults



on the part of the Employer or for reasons which are beyond control of the contractor.

8. The law relating to damages arising out of breach of Contract has been incorporated in Section 73 of the Indian contract Act 1872.

9. Invariably in Building Contracts, there is provision of extension of time according to which either party may extend time for the completion of work mutually or power is given to the Architect or employer-in-charge to sanction extension of time according to his judgment. The existence of such a clause, it is submitted, will not defeat the right of the contractor to claim damages suffered by him due to the delay by the employer. This contention was held in the case of *Rawla Construction Co. Vs U.O.1*. Reported in ILR (1982) 1 Delhi 440.

10. The contractor is entitled to claim damages on account of increase in the cost of construction material or extra expenditure on overhead and establishment charges because these are the damages which the contractor suffers because of the breach of the contract by the employer due to which the period of performance is lengthened and extended beyond the time limit originally fixed in the contract for the completion of work- Relied on case of *Rawla construction Vs DDA* AIR 1980 Delhi 266 extract from Page 639 Law relating to Building & Engineering Contracts in India by G.T.Gajaria.

11. In *AsianTechs Ltd Vs U.O.I*, the Supreme court held asunder,

“Apart from the above, it has been held by this court in *Port of Calcutta Vs Engineer de Space Age* (1996) 1 sec 516, that a clause like clause 11 only prohibits the Department from entertaining the claim, but it did not prohibit the Arbitrator from entertaining it. This view has been followed by another Bench of this court in *Bharat Drilling & Treatment (P) Ltd. Vs State of Jharkhand*, (2009) 165 SCC705.

12. The Delhi High Court relied upon a judgment of the Supreme Court reported as *M.G.Brothers Lorry Service Vs M/s Prasad Textile*, (1983) SCC 61 AIR 1984 SC15, wherein it was held that a contractual clause which furthers the intendment of a statute, has to give way and such a clause becomes void and inoperative

by virtue of section 23 of the Indian Contract Act. The High Court summed up the position as follows:-

“Provision of the contract which will set at naught the legislative intendment of the Contract Act, I would hold the same to be void being against public interest and public policy. Such clauses are also void because it would defeat the provisions of law which are surely not in public interest to ensure smooth operation of commercial relations. I therefore hold that the contractual clauses such as clause 11 (A) to 11 (C), on their interpretation to disentitle the aggrieved party to the benefits of section 55 and 73, would be void being violative of section 23 of the Contract Act.”

13. In summarizing the above discussion, it can only be said that the Employer should be careful to cause any delay in execution of work which would affect the cost of the project for prolongation and should plan all activities well in advance to avoid any delay on their part. It is important to note that in every contract form, there is a standing clause for imposition of liquidated damages or penalty for delay on the part of the contractor. Any Employer, be it a government, organization or private / public Ltd company cannot either deceive or enrich at the cost of the other party.

By virtue of the clause for extension of time, time is no longer the essence of the contract and the parties to contract are aware of extension of time in case of delay caused by any of the parties or by both and as such repercussion of such delayed performance is to be shared by the department to the extent the department is responsible.

14. In some of the contracts, a clause is incorporated for “No claim certificate” before final bill is paid. Although such certificate is to prevent the contractor for claiming unreasonable claim in future but in most of the cases, such clause is misused by the employer to take advantage to avoid even genuine claim of the other party. In normal cases, such certificate is generally furnished by the willing contractor, who has no grievance or claim or for the sake of maintaining good relation with the Department, but in those cases, where the contractor has suffered loss on account of various reasons, and/or eligible for compensation under law are unduly pressed to furnish such certificate to receive due payments under final bill /securely deposit. The question whether such certificate is



furnished under duress is a matter of fact under specified circumstances.

15. In the case of Ambica Construction Vs U.O.I 2006 (4) Arb L.R 288(SC), it is stated that notwithstanding the clause of G.C.C and the submission of "No claim Certificate" by the contractor, the contractor was entitled to claim on reference under the contract.

Further, it was held in the case of Tiwari Engineering works {P} Ltd. Vs U.O.I, that the question whether there is no claim certificate or not, itself is a dispute which was referred to arbitration clause. The Arbitrator has jurisdiction to decide the same. It is so well known and a notorious fact that unless no claim certificate is issued by the contractor, payment of Final bill will not be made".

Therefore, for the interest of Justice and equity, it is essential to ascertain whether such no claim certificate is signed under free consent or under duress. Facts and circumstances of the case require close scrutiny and relevant points are to be gathered on the merit of the case.

16. Reference is invited to a clause in some contract of Road project in the state of Bihar, wherein a clause under the head "Early warning" is incorporated as stated below:-

"The contractor is to warn the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the contract price or delay in execution of works. The engineer may require the contract or to provide an estimate of the expected effect of the future event or circumstances on the contract price and completion date. The estimate is to be provided by the contractor as soon as reasonably possible"-

Such a clause gives clear signal of the balanced view of the situations and takes into account on its effect.

17. This paper is an attempt to discuss such clauses which are controversial and may invite disputes in future. It is therefore desirable that a contract should be fair, balanced and takes into consideration all the issues to Safeguard the interest of both parties.





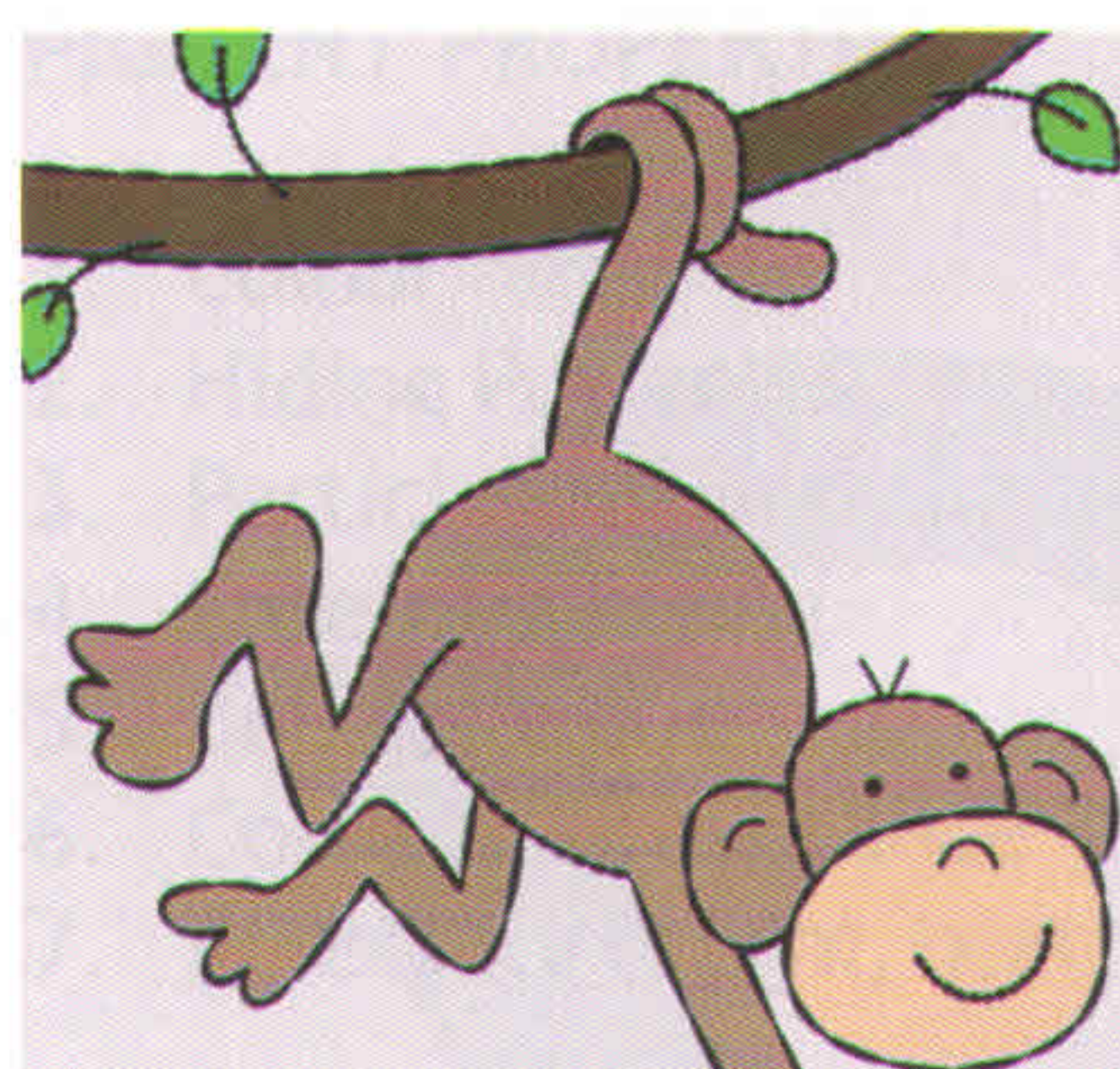
# GICEA-VISION For Future AHMEDABAD

## Recommendation for Revised Development Plan of AUDA

1. AUDA has never precisely calculated the residential density of a local house types which resulted in lesser supply of residential zone for the future development which increases the land price.
2. AUDA has never calculated the real developable land supply of the urbanized area. Generally the land under litigations, land under restricted tenure, was never considered which is approximately @ 18%.
3. Looking to the last 5 years land prices hike was also a result of speculative holding of land by various segment of the society which is to be considered while formulating proposal of future land uses.
4. Land under the present residential zone II there are huge chunk of land in prime locality of S G Highway in which only low rise, low dense development with lower FSI is permissible. Since urban land being a scarce commodity we feel that it is discriminal waste of land commodity.
5. In existing sanctioned development plan of AUDA, AUDA has accepted a pattern of sprawl but looking to huge land requirement for judicial use and looking to weaknesses of public transport and looking to all directional growth of the city, A new vision of smart development shall be proposed.
6. Recently 69 villages of western side of AUDA limit has been amalgamated in AUDA jurisdiction. In this area huge chunk of non agricultural small plots own by the co. op. soc. is in existence. So a clear cut and transparent policy shall be chock out for future plan development of all such 69 villages.
7. At present public transportation is one of the weakest points of our city planning. Also at present generally an artilier roads of more than 30 mt. wide are proposed at a distance of more than 3 km. But looking to the automobile growth, parking conjunction etc. there should be at least 40 mt. wide road at an interval of 2 km for future easier mobility.
8. The shelter cost particularly for middle income group is touching the sky heights. This cost is non affordable to this middle income sector. So a special regulation shall be framed out with less margin, more FSI and up to 8 floors shall be proposed to lower down the cost of a house.
9. Environment is a primary concern, so for recycling of water, rain water harvesting, green building and special FSI package shall be offered to such project tq act as a catalyst.
10. Lower middle area like jivraj park, nikol, lambha, vatva, gota, ioc road etc. where at present lower middle income people group are staying such areas shall be earmarked for residential (affordable). In such area having maximum size of 75 sq. mt. built up or less than that on FSI of 3 without any payment FSI shall be allowed and such building shall be allowed up to 8 floors. Such provision may reduce the shelter cost more than 25% which will benefit at large.
11. Building bylaws shall be simple and transparent to avoid loop holes and right or wrong interpretation.

Compile by :- N.K.Patel, Ex. President GICEA





# MANAGEMENT 8 MONKEYS

(This is based on an actual experiment conducted in UK)

- Put eight monkeys in a room. In the middle of the room is a ladder, leading to a bunch of bananas hanging from a hook on the ceiling.
- Each time a monkey tries to climb the ladder, all the monkeys are sprayed with ice water, which makes them miserable.
- Soon enough, whenever a monkey attempts to climb the ladder, all of the other monkeys, not wanting to be sprayed, set upon him and beat him up. Soon none of the eight monkeys ever attempts to climb the ladder.
- One of the original monkeys is then removed, and a new monkey is put in the room. Seeing the bananas and the ladder, he wonders why none of the other monkeys are doing the obvious. But undaunted, he immediately begins to climb the ladder.
- All the other monkeys fall upon him and beat him silly. He has no idea why. However, he no longer attempts to climb the ladder.
- A second original monkey is removed and replaced. The newcomer again attempts to climb the ladder, but all the other monkeys hammer the crap out of him. This includes the previous new monkey, who, grateful that he's not on the receiving end this time, participates in the beating because all the other monkeys are doing it. However, he has no idea why he's attacking the new monkey.
- One by one, all the original monkeys are replaced. Eight new monkeys are now in the room. None of them have ever been sprayed by ice water. None of them attempt to climb the ladder. All of them will enthusiastically beat up any new monkeys who try, without having any idea why.
- That's how any company's policies get established.



# What is Paint?

Paint is a mechanical mixture or dispersion or powders of pigments with a liquid or medium known as vehicle. Normally a liquid composition, which after application converts to a solid opaque film. It performs the function for which it is being used:

Decorative, Protective or a special functional job.





## PIGMENT PROPERTIES

1. Colour
2. Hiding Power
3. Particle size and shape
4. Ease of wetting
5. Bulking value
6. Corrosion resistance
7. Resistance to light, heat, water, solvents, chemicals.

## VEHICLE PROPERTIES

1. Non volatile
2. Viscosity and flow properties
3. Acid value
4. Pigment wetting
5. Colour retention
6. Drying rate
7. Durability
8. Resistance to light, heat, water and chemicals.

## PROPERTIES OF THE DRIED - COATING

- A. Appearance
  - Colour
  - Opacity
  - Gloss level
  - Surface smoothness
- B. Performance
  - Hardness
  - Flexibility
  - Impact resistance
  - Abrasion resistance
  - Adhesion
  - Exterior durability
  - Corrosion resistance
  - Resistance to light, heat, water and chemicals

## ELEMENTS OF A GOOD PAINTING JOB

Correct surface preparation  
Choice of the proper paint system  
Good application with right application and tools  
Correct drying or curing cycle

## SURFACE PREPARATION

Paint must adhere to the surface. This can only happen if surface preparation is right.  
Features of a good surface preparation:  
Surface integrity - tightly knit surface to resist shrinkage during curing  
Surface cleanness - clean of foreign matter to

improve surface flow and wetting

Surface smoothness - a) film reproduces the surface contours, hence film smoothness or finish is affected. b) at times anchorage is determined

Surface porosity - porous surface sucks the coating, affecting the film continuity and other characteristics

Substrate protection - protect substrate being attacked by solvents of the paint

## PROPER PAINT SYSTEM (NOT ONE COAT OF PAINT)

Desired function

New painting

Repairing - old film to be accounted

Bind the surface

Fill the surface

Seal the substrate

Change the substrate to improve adhesion

Right colour

Right level of gloss

## GOOD APPLICATION

Good application ensures paint to perform the job it is formulated for.

Guidelines to follow are:

Uniform wet and dry film thickness

Application at right viscosity

Correct number and sequence of application

Proper tools for surface application

Proper instruments

Proper application tools - rheological property of the paint and the film characteristic determines the method of application

## ARCHITECTURAL PAINTS

Coating for wood (exterior & interior)

Interior paint for plaster

Exterior paint for masonry

Floor painting for wood and masonry

Coating on metals

Special coatings for specific end uses

## COATING FOR WOOD

Type of coating is determined by the type of wood, end use and the climatic condition

## TYPE OF WOOD

Hardwood e.g. mahogany, walnut, oak

Softwood e.g. pine, cedar

Open grained oak, mahogany, cedar

Close grained walnut, segun, teak





## End use

Doors and window frames  
Doors and windows  
Interior furniture  
Lawn furniture  
Porch and decks  
Marine boats

## CLIMATIC CONDITION

Moisture or humidity  
UV rays  
Infra red radiation  
Mechanical forces  
Chemical factors  
Microbiological factors  
Physical and thermal shocks

## WOOD COATINGS

French polish  
Alkyd enamel - gloss/semi-glossy/flat  
Water based enamel  
Stains  
Wood preservatives  
Wood primers  
Melamine coating  
Polyurethane coating  
Epoxy coating

## INTERIOR PAINT FOR PLASTER

|                 |                                |
|-----------------|--------------------------------|
| White wash      | lime + wash + (colour)         |
| Caleimine       | whiting and glue               |
| Dry distemper   | lime + casein + pigment        |
| Paste distemper | casein + alkyd (oil) + pigment |

|                |   |
|----------------|---|
| Alkyd paint    | flat or glossy  |
| Emulsion paint | emulsifiable alkyd or latex emulsion (acrylic emulsion) |

## SURFACE PREPARATION INTERIOR

### New Walls

1. Allow the plaster to age for min. 90 days in humid environment and 30 days in dry climate
2. Sand paper and wire brush to remove loose particles
3. Apply thin coat of Alkali resisting cement primer.
4. Fill all cracks with patching compound and sand smooth.
5. Apply putty to smoothen the surface.
6. Dry cut the putty.
7. Apply 1 coat of cement primer (alkali resistant).
8. Apply putty and dry cut
9. Spot prime

## OLD WALLS

Sand paper and remove all loose particles  
If old paint is alkyd and intact - mild detergent wash  
Spot prime for alkyd  
For OBD and emulsion - apply primer  
Fill dents with putty

## EXTERIOR FINISHES

Exposed concrete  
Exposed brick  
White cement plaster  
Marble  
Granite  
Stones  
Glass/Ceramic tiles  
Stone Crete plaster  
Vineratex  
Renvo-Plast  
Cement Paint  
Textured coating  
Tartaruga

## EXTERIOR FINISH - SURFACE PREPARATION

### Concrete

1. Make the surface clean, dry and dust free.
2. If alkaline etch with 10% dilute HCl and rinse.
3. Remove any mildew with Sodium hypochlorite solution.
4. If smooth finish is required then remove sharp projection and apply 1:2 mortar in pores, pits, etc.
5. Water blasting/sand blasting not used in India



## LATEX EMULSION PAINTS

Types - high molecular weight polymers from monomers are polymerized in emulsion from:

1. Styrene - Butadiene
2. Poly Vinyl Acetate
3. Poly acrylic
4. Interpolymer

## ADVANTAGES OF LATEX EMULSION PAINT

1. Good colour uniformity over surfaces of uneven porosity
2. Two coats can be applied in one day
3. The dried film can be later on touched up
4. Ease of application and easy cleaning of spatters on adjacent surfaces
5. No environmental problems
6. Excellent washability
7. Can be applied over flat oil paint, OBD, other water based coatings
8. Allows moisture to breathe out and hence blisters are not formed.

## PAINTS FOR SPECIFIC END USES

1. Drinking water tank
2. Laboratory/ Bar tables
3. Bathroom floors
4. Bath tubs
5. Wooden/concrete floors
6. Swimming pools
7. Fire resistant coatings

## PAINT DEFECTS

1. Poor hiding  
Thin film formation due to over brushing  
Over thinning of paint

Improper stirrings

Poor brushing

Poor formulation

2. Floatation
3. Flocculation
4. Runs or sags application of too much paint  
Application of too much paint  
Insufficient brushing  
Application at too high or low viscosity
5. Poor flow  
Flow characteristics  
Painters skill
6. Gritty or dirty coats
7. Cissing
8. Excessive drying time
9. Pinholing
10. Lifting of previous coat
11. Wrinkling
12. Dulling (lack of gloss)  
Formulation defect  
Environment  
Partial (uneven)
13. Flaking
14. Loss of adhesion after application
15. Alligatoring
16. Bleeding over tar
17. Discolouration
18. Blushing or milkiness
19. Blooming
20. Yellowing
21. Mildew formation
22. Corrosion
23. Cracking - substrate cracking
24. Blistering
25. Peeling
26. Knotty siding
27. Efflorescence

Compiled by : AR. GIRISH MISTRY



## CONGRATULATIONS

N.K.Patel, our Ex. President GICEA has 9<sup>th</sup> time won the election as a "Council Member" (Director) for the year 2011-12 in Institute of Town Planners (India), New Delhi which is a national level organisation of having more than four thousands qualified town planners.



# GLIMPSES OF GICEA EVENTS



Technical Lecture on Sustainable Cements & Concrete for the Structures in the Climate Change Era. By P. Kumar Mehta



Technical Lecture on Sustainable Cements & Concrete for the Structures in the Climate Change Era. By P. Kumar Mehta



Gujarati Drama "Welcome Jindagi" at Jaishankar Sundari Natya Gruh, Raikhad



Seminar on Recent Advances in Endoscopy and Laparoscopic Surgery. By Dr. Sunil D. Popat.



Seminar on Recent Advances in Endoscopy and Laparoscopic Surgery. By Dr. Sunil D. Popat.



Seminar on Confined Masonry by Dr. Sudhir K. Jain



Seminar on Fast Pain Relief. By Kathy Howard & Her Team.



Seminar on How to Boost your Mind Power. By Dr. Hansal Bhachech



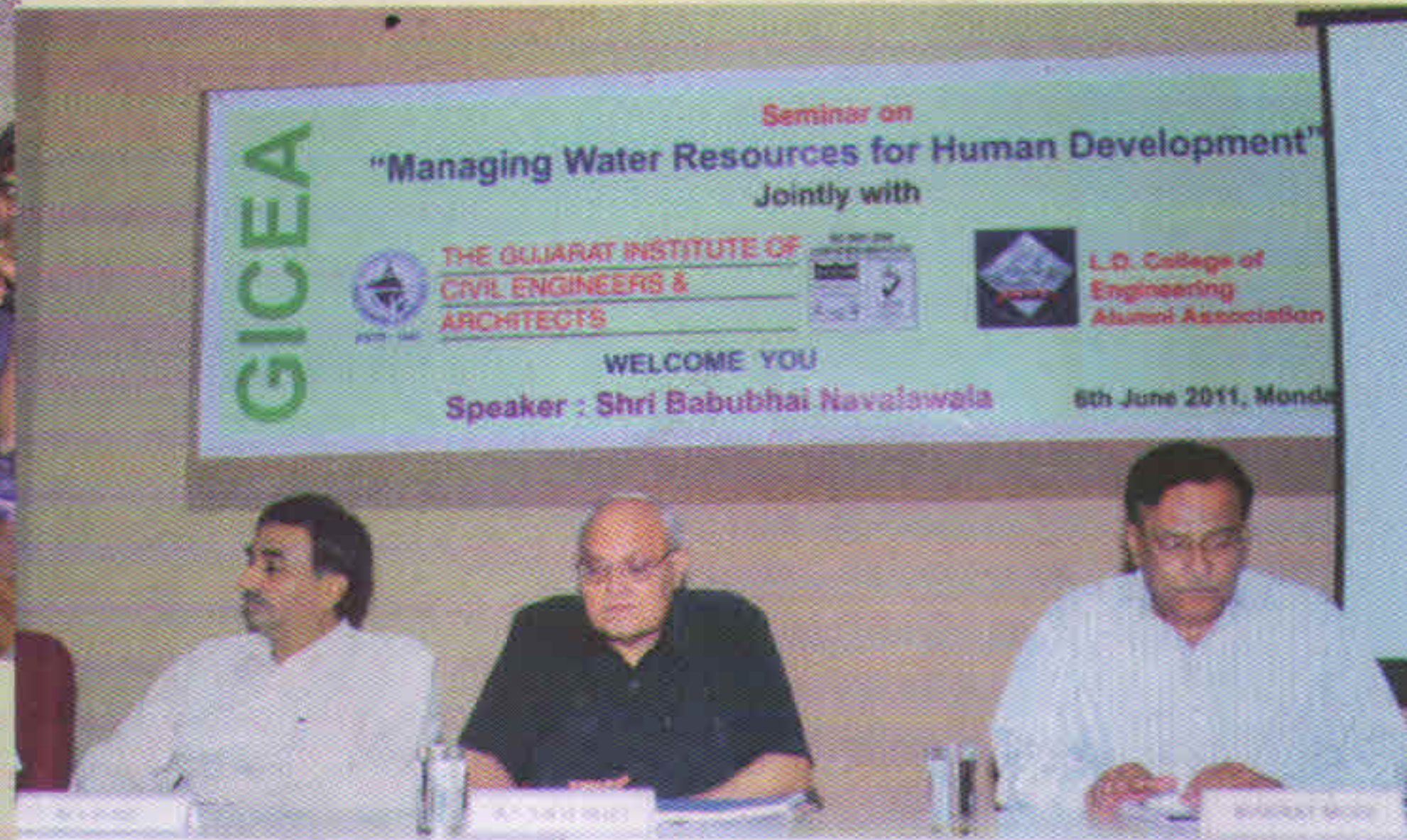
Seminar on How to Boost your Mind Power. By Hansal Bhachech



# GLIMPSES OF GICEA EVENTS



Presentation of Mr. Claudio Gariglio, Rockperl Industries, Italy on Various Italian & other Countries Stone & Marbal Materials.



Seminar on Managing Water Resources for Human Development by Shri. Babubhai Navlawala



Seminar on Ahmedabad as Heritage City by Shri P. K. Ghosh



Annual General Meeting [AGM] Of The GICEA 2010-2011.



Annual General Meeting [AGM] Of The GICEA 2010-2011.



Personality Development Week: Lead More Manage Less. By Dr. Shailesh Thaker.



Personality Development Week: Empower Your Inner Power. By Jc. Sanjeev Chhajed.



Personality Development Week: Public Speaking. By Prof. R. K. Chopra.



Personality Development Week: Ettiquete & Mannerism. By Ms. Anjali Bhatt.



# GLIMPSES OF GICEA EVENTS



Personality Development Week: Personality Development. By Prof. R. K. Chopra.



Lecture on Enabling Public Administration through Technology & Academic Public Partnerships. By Dr. Ashwin Mahesh & Mr. A. Ravindra.



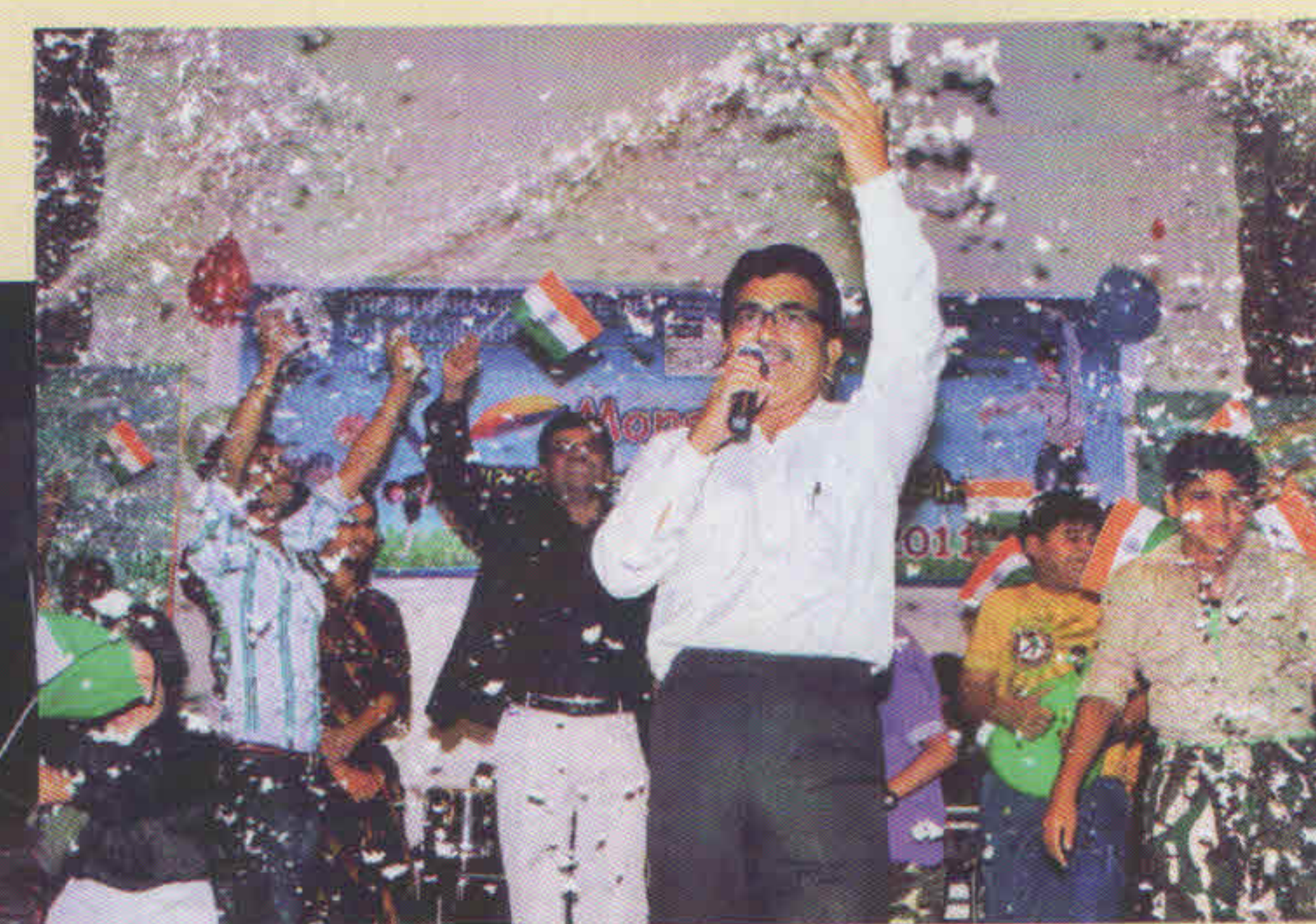
Lecture on Enabling Public Administration through Technology & Academic Public Partnerships. By Dr. Ashwin Mahesh & Mr. A. Ravindra.



Talent Evening



Talent Evening



Talent Evening



Talent Evening



Lecture on Anti-aging Skin & Hair Treatment. By Dr. Kuldeep Singh Rohria



Senior Citizen Meet at Patel Hall  
Lecture By Shri. Mukesh M. Patel



# GLIMPSES OF GICEA EVENTS



Senior Citizen Meet at Patel Hall Lecture  
by Shri. Mukesh M. Patel



Voluntary Blood Donation Camp at Gajjar Hall



Voluntary Blood Donation Camp at Gajjar hall



Flag Hosting at Gajjar hall



Seminar on Traffic & Parking Issues & Solutions for  
Ahmedabad City at Bhaikaka Bhavan By Dr. Shivanand  
Swami, Shri Nilesh Jhajadia, Shri N. K. Patel, Ar.  
Anand Tatu & Shri Atul Patel



Seminar on Hyderabad Development plan  
by Prof. Utpal Sharma



Seminar on High Density Housing by Ar. S.K.Das





**Dineshchandra R. Agrawal**

**Infracon Pvt. Ltd.**

## Building Future....Reaching Heights

As a pre-eminent Indian infrastructure company, established in 1972, DRAIPL has, over the years, strongly anchored itself to India's development effort. Today it is acknowledged as a company that continues to empower India, enabling the nation to surge ahead in different core sectors. We specialize in large-scale civil constructions. We build Roads, highways, airports, dams, canals, bridges and flyovers.

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