

Annex III a

SOME QUICK VIEWS ON THE PROPOSED REVISED 'CDP' FOR THE 'BMA 2005-15'

Director AMDA

Director, AMDA was invited by the Government of Karnataka (GoK) to give views on the draft revised CDP for the Bangalore Metropolitan Area (BMA) (2005-15). The proposals were scrutinized on 29th January, 2005 in the office of the Director TP/GOK who kindly gave copies of the main reports for further study. The views on the draft revised CDP is as below.

A. PREAMBLE

1. SCE Creoccean (India) Pvt. Ltd. have assisted the BDA in proposing a revised CDP for the BMA for the period 2005-15. When processed, it would supercede the current revised CDP for the BMA for the period 1995-2011.
2. The draft proposals are through 5 volumes incorporating a Master Plan report for the BMA, existing and proposed land use maps, Land use Zonal Regulations and detailed proposals for 47 disaggregated Planning Districts.
3. The analysis and synthesis (proposals) have emerged through excellent base maps, mapped data and a consultative process. This consultative process has largely been through the BDA and who through an Authority approval have sent the proposals to GOK for their consideration.
4. Overall, the proposals effectively consider the current fast changing ground realities of Bangalore i.e. the IT Sector, Airport Development, etc. However, major determinants of broad Land uses like the MRTS and the Bangalore-Mysore corridor, yet cannot be fully programmed in the proposals. Accordingly, the participatory approval process as understood in Karnataka, may require that the draft CDP has greater flexibility to cater to the fast changing situations.

B. SOME GENERAL VIEWS

1. Karnataka has among the best legislations in India for spatial plans that facilitate investments. Recent amendments to the KTCP Act '61 indicate a move towards shortening of plan processing time. This could lead to a) the doing away with the ODP process in favour of just a draft and final CDP and b) treating the CDP as a broad brush perspective/strategy plan through a shortened consultative process and on which basis the TPS and like disaggregations of the perspective plan emerges as an action plan through a people's participatory process. Until then the instruments as currently operational have to be followed.
2. Perhaps under Sec 9 (ix) of the BMRDA Act'85, the CDP for the BMA requires being processed by the BMR Authority and on which Authority Chairman BDA is a member. This may be necessary as 'inter alia' water (a combination of ground and

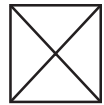


surface sources) is a scarce resource which would constrict population growth rate projections through synergetic hinterland growth centres and linkages. Ideally, an enunciated perspective for a Southern Karnataka Region and the BMR – would help in giving force to a revised CDP for the BMA.

3. In any event, proposals by the consultants may require being reformatted to fit into prescriptions of the KTCP Act'61, the BDA Act'76, the BMRDA Act'76 (as the BDA is declared as the LPA for the BMA within the BMR) and their updates. The proposals may also have to give credence to the KPA rules'65 and which inter alia stresses on the widely understood main land use groups as being “residential, commercial, public and semi-public, industrial, transport and communications, recreation, public utilities, agriculture and special areas”. The G.O. of 05.01.95 for zoning of land use and Regulations for CDP 95-2011/BMA recognizes this format. However, the greater consciousness in Bangalore of global based activities, changes in technology, etc could require variations in sub-group classifications provided terminologies are understood by a majority of stakeholders.
4. The term ‘Master Plan’ is not used in any of the GOK planning instruments nor the UPFPI guidelines. In general, this term is being phased out - in most States of the Union as being too biased towards just land use. In reality however, the submission by the consultants gives credence to land use in relation to services and transport and development in general. It also looks at the positive constraints on land in terms of ecology and heritage. There is therefore no need to introduce the term ‘Master Plan’ (In Delhi, the term is built into a Central Act but it would be changed when administratively feasible to do so).
5. If this submission for the CDP is to relate to the UDFPI guidelines, re-formatting could consider a) the term ‘perspective plan’ (in, lieu of ‘Master Plan’) b) the perspective should ideally be for 2005-25, or at least 2005-20- for 3 phases of 5-years each c) Also the term ‘district plans’ can be confused with State regional terminologies (the constitution now talks of ‘district development plans’). Could the term therefore be ‘Zonal Plans’ or ‘Zonal Development Plans – ZDP’s’ (as in Delhi) or ‘Sector Plans’ (as in Mumbai) ?
6. These 47 disaggregations apart from ‘form’ have given credence to boundaries of Ward/Wards, Panchayats and Panchayat/panchayats and are therefore innovative for public participation. Phasing (2005-10, 2010-15 and 2015-20) now becomes possible for each of the disaggregations for layouts/schemes/projects (as a related exercise) with full local government actions plans/participation.

C. SOME SPECIFIC VIEWS ON “MASTER PLAN”

1. It is suggested that the BMA/BDA/LPA boundary be adjusted to incorporate full LSG boundaries (CMC/TML/NP/RP) - rather than cutting through some jurisdictions of the edge LSG’s.
2. I understand that there is a draft structure plan for the BMR and perhaps for the SKR (?). Could the BMA plan be linked to these plans? (obviously this would be an iterative process).



3. The “natural spaces” map (pg 39) is an excellent infusion leading to “a protected and conservation land use” zoning. I suggest the term ‘conservation’ as the term ‘protection’ is related to preservation and does not offer scope for related/compatible uses.
4. Could the ‘Infrastructures’ zoning on map at pg 48 be split into ‘Transport and Communications’ and ‘Public Utilities’ (not shown on map at page 48).
5. The ‘transports map’ - page 41 is indicative of an emerging clarity in Bangalore’s multi-modal public-transport system. It accentuates clarity between the core belt (with 7 of the 47 disaggregated sections), the regular urban belt or planned extended belt (with 18 of the 47 disaggregated sections) and urban extension belt (with 22 of the 47 disaggregated sections).
 - a) the MRTS (BG/Double track) as shown would in the fullness of time be the dominant means of public transport. It could/would expand at surface in the urban extension area and beyond, along corridors - i.e. Mysore Road, Tumkar Road, Old Madras Road, Kanakpura Road+linked to airports + other viable locations (as is happening in Delhi and Kolkata), Stabling maintenance and related facilities (especially if standard guage is to be infused) would require a land use notation on the perspective plan just as “bus depots”.
 - b) Inter and intra settlement rail (electrified, B.G, double track) would perhaps run on separate tracks even if parallel to each other, (along with separate signalization, stabling, rake formation even if parallel to each other, maintenance and other facilities). If not, how effective would they be on the same tracks (even if inter settlement transfer of goods other than containers, is shifted to the periphery). Inter and intra settlement rail stations (nodes) should also be distinguished along with other public transport modes (MRTS, inter settlement rail, intra settlement rail, inter settlement road + airports.
 - c) I feel that roads are best shown on map at page 48 as Road right of ways (Road R/W's) rather than just roads. Thereby the 3 categories of roads could be arterial (60-75-90m R/W) primary, (36-45m R/W) and major 24-30 m R/W. (Not all ring roads are of the 1st level and certainly not all corridors are of the 2nd and 3rd level). This classification I feel would help in a better understanding of related land uses at the perspective plan level.
 - d) I feel that there should be a more popularly used term (in the Indian context) for ‘Logistic Centre’ – though apt and innovative. This zone houses some or all of wholesale markets distributive trade, storage, truck terminals and related facilities. On most other plans on India it is a sub-category of ‘commercial land use’.

Query - Why has Tumkur road to have so many truck terminals?

6. It has been good to define the core belt with an infused ring. This belt has 4 components - Petta/traditional, CBD, Government and urban renewal. Government is in reality elsewhere a sub-category of Public/Semi-public ; CBD is part of the commercial land use category and Petta/traditional is a mixed use zone ripe for urban renewal.

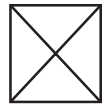


Query: Should urban renewal be a land use classification especially if it is a prescription for upgradation of varied use land zones i.e. residential (mixed or otherwise), petta/traditional, CBD, etc.

7. It is for consideration whether from the proposals by the consultants, residential use zone with differential gross densities could be prescribed. Mixed uses could be a sub use zone, whereas urban renewal areas could transcend this and other use zones.
8. The industrial use zones are well defined with credence to “High tech” zones and mixed industrial and activities corridors. My views on “logistic zones” is as above.
9. **Special zones:** This includes Defence lands, large PSU lands, etc. Between them they occupy a huge percentage of central and intermediate locations. I do not think that development of these lands should be left to these large land owners outside land use zoning regulations. ‘Operational uses’ are well-defined and only such lands should be outside the purview of the Plan. Concession could also be given to cantonments established under the 1924 Cantonments Act. All other lands which rely on metropolitan physical and social infrastructure should have a capped (2005-20) programmed land usage through a consultative process with these large land use owners, What if they decide to go high tech, high-density, high rise outside the integrated planned framework ?
10. Public utilities use zone : Only landfill sites have been shown. Sewage Treatment Plants, Water works, 400 MW/220 MW electrical distribution systems are also land intensive and may need being shown on map at page 48.

D. A FEW GENERAL VIEWS ON LAND USE ZONAL REGULATIONS

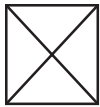
1. The term largely used in most plans is “Zoning and Sub-division regulations”. Perhaps it could be “Land Use Zoning and Sub-division regulations” for Karnataka. About 21 use zones have been prescribed i.e. R1-3, C1-7, L1-6, U1-4 + Special. Some minor views on R and U Zones have been stated above.
2. The main ingredients of zoning is a) maximum FAR, b) minimum parking and probably c) maximum height control. Maximum coverage is increasingly not so crucial (as it constricts Architects in their designs) and set-backs is generally required in the form of building lines (otherwise it is a municipal bye-law issue for air and light planes, etc.)
3. I feel that FAR in Bangalore has too many exemptions (eg. FAR 2.00 can easily lead to a building bulk or built area of FAR 3.00). Also it is often used as a promotional development tool. (In Delhi it is strictly capped with exemptions largely for only on-site parking). Promotional FAR in the form of TDR is understandable for heritage conservation and low income housing (as in Mumbai) but with limits. In my opinion, maximum FAR beyond 2.5 has to be viewed with abundant caution. At FAR’s of 4.50 to 5.00 in CBD’s and commercial corridors and at even prescribed norms would I feel lead to on-street parking and that too without considering parking for ‘the visiting force’ to such spaces.
4. It is for consideration whether differential FAR’s within use zones are required for different plot sizes. In Delhi, larger the plot, less the FAR. In Bangalore, it is interestingly, the reverse.



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5. The principles of idle parking require that parking by residents/workers/ visitors to each plot be taken care of within the plot itself. The prescribed parking norms in Bangalore seem to be on the low side. Even then, the prescribed FAR's would leave a portion of parking needs from the plot to 'on-street' parking.
 6. Conservation of the natural and manmade heritage required listing in the following format "listing of sites, remains, ruins and buildings of archaeological, historical, architectural, cultural and ecological significance". This encompasses the needs of the ASI/State Dept. of Archaeology (preservation), the Dept. of Environment (conservation) etc.
 7. As stated above, the 47 planned development disaggregations are very innovative. They are at an average of 3 sq.kms. in the core belt, 10 sq.kms in the regular urban belt and 50 sq.kms. in the expanding urban belt, giving an overall average of 28.5 sq.kms. per disaggregation. They cater for coordinated planning schemes and town planning schemes for 2 or more wards/panchayats in combination. Based on the zoning and sub-division regulations they should lead to participatory plans with LSG and State elected representatives, officials, NGO's, Citizens, etc. for projecting participatory disaggregated plans. Low income areas (Below poverty line) urbanized villages, heritage areas, etc. could all be part of this process.

E. CONCLUDING VIEWS

1. Overall, the draft CDP has been very well formulated and keeping with the prevailing practice of the BDA of presenting substantial details up-front. My views above are primarily to reformat the proposals within the framework of existing instruments and also to address some issues that emanate from the 74th C.A.A.
2. In processing for a public objectives and suggestions process however, it is for considering on how much of the submission is placed in the public domain. Quite clearly this should be the existing and proposed land use map of the perspective plan (and not to be called master plan) with proposed Zoning and Sub-division regulations and uses allowed/ disallowed in each land use zone. Separate support maps for open spaces, transport, services etc. would also be a help. This would lead to one set of public reactions for GOK's consideration.
3. As a related exercise, the 46 disaggregated plans for 47 sectors/zones with details as formulated by the Consultants should also be placed for public objections/ suggestions for a separate though related process for GOK's consideration.
4. There has been some criticism in the local press of lack of transparency in the formulation of the documents but the end product should be able to get good feedback, especially as all concerned governmental departments and parastatals have I understand been part of the Consultative process through the BDA.



A FEW PERSONAL REACTIONS TO THE DRAFT NCR REGIONAL PLAN – 2001-21

Prof. E.F.N. Ribeiro, Director AMDA

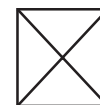
- 1 The draft regional plan for the NCR (2001-21) has been published for objections/ suggestions under Sec.12, Sub-Sec.1 of the NCRPB Act'85, read with rule 23 of the NCRPB Rules'85. The last date for receipt of objections was 9th March 2005.
- 2 The undersigned who is Director AMDA submits views as below to this draft Plan. The views may be considered as being in the undersigned's individual capacity. These views are not primarily in the form of objections but largely in the form of suggestions.

3A. FRAMEWORKS, GOVERNANCE AND RELATED ISSUES

- a. The boundaries of the NCR have been extended to incorporate entire districts – all 9 of the NCTD, 7 of Haryana, 5 of UP and one of Rajasthan. Thus 22 of the approx. 600 districts of India constitute the NCR with a projected 64 million people by 2021 (estimated at about 5 per cent of the total population of the nation at that time). The projections show seven settlements with over one million population by 2021 within this area, apart from the NCTD. These are Ghaziabad Complex, Faridabad Complex, Meerut, Gurgaon, NOIDA, Greater NOIDA Complex and Sonpet Complex.

Isn't it advantageous for an unique inter-State Planning Board like the NCRPB to reformat organization for planned development (2001-21) through Metropolitan Planning Committees' (MPCs) and District Planning Committees (DPCs) ? Isn't this a constitutional requirement ? Wouldn't it also be advantageous for synergizing planning framework terminologies with the NCRPB giving the lead towards i) Draft NCR Regional Perspective Plan 2001-21 with ii) 5-year investment programmes (based on annual budgets). This would enable a rolling plan updated every 5-years, so as to provide an NCR Perspective Regional Plan for 2001-21, 2006-26, 2011-31 and so on, through 5-yearly updates and a rapid consultative process.

- b. There is a table of a hierarchy of Metro centres, Regional and Sub-regional centres, service centres, central and basic villages. However, the emerging national hierarchy of an urban-rural continuum (approx. 40 per cent urban and 60 per cent rural by 2021) is being steered towards a hierarchy of megacities (5m and above), metrocities (1 to 5 m), medium cities (0.3 to 1m), small cities (0.1 to 0.3 m), medium towns (30,000 to 0.1 m), small towns (20,000 and below), central place villages and grouped villages. The NCR has all categories. This fits into emerging updates in terms of settlements classification by the Census of India as also into the emerging synergy between urban agglomerations and LSG units (Corporations, municipalities, nagar and rural panchayats) with three tiers of elected representatives (centre-state-local) and who cannot now be superceded.



Can planned formats therefore be restructured in the NCR through i) one megacity of the NCTD (with an MPC, 9 districts and LSG with wards), ii) 5 districts with a DPC and MPC each (Faridabad, Gurgaon, Sonapat, Meerut, Ghaziabad), iii) one district with 2 MPCs and one DPC (Gautam Budh Nagar with NOIDA/GNOIDA) and iv) 7 districts with just DPCs and non-metro urban agglomerations/settlements (Panipat, Rohtak, Jhaggar, Rewari, Alwar, Bhagpat and Bulandshahr). This could help in participatory planning (the LSG-State synergy) through the 4 sub-regions i.e. the NCTD with urban 9 districts, the Haryana sub-region with small districts (3 urb-rural and 4 rur-urban) the U.P. region with 5 districts in India's most populous State (3 urb-rural and 2 rur-urban) and the Rajasthan sub-region with one rur-urban district in India's geographically largest state. Also, it does not disrupt the integrated sustainable developmental objectives of functional plans through central and state parastatals and others and programmed funding mechanisms thereof. In the fullness of time this could precipitate the participatory planned development process in the other districts of U.P., Rajasthan and Haryana.

It is also for consideration whether reference could be made for updating legislation for Urban and Regional Planning as also for local governance in the NCTD and the sub-region States in empathy with the UDFPI guidelines and the 73rd and 74th CAA as endorsed and being propagated by the Min. of U.D./GOI.

- c. A common economic zone has been recommended.

This could work in terms of Water Management, Drainage, Power, Telecom, Pollution Control, Rail and Road Transport, Health and Education. How would it work in terms of Taxation, Industrial Location, Law and Order and Access to Land vis-a-vis State level policies of the participating States? What are the commitments on these crucial issues in the draft plan from the members of the participating States on the NCRPB.

It is also for consideration whether the CNCR can be extended to incorporate the entire Sonapat-Kundli complex (rather than just Kundli) and Greater NOIDA, - both of which are emerging as part of an emerging continuous urban spread.

B. TRANSPORTATION

- a. The road and rail maps give a clear indication of the proposed road and rail system envisaged for the NCR. It has also been reported in the media that the Hon. Supreme Court has cleared the construction of the Western and Eastern peripheral expressway.

However, can the following be considered through text and/or maps :-

- i) location of existing international/national airport and the approximate location of the proposed second international/national airport south of Greater NOIDA and which is already pushing up land values in that area for locating both-activities and people ;
- ii) the need for tertiary airports i.e. STOL/VTOL airstrips/helipads at Meerut, Alwar etc. ;



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- iii) Expressway notation (in lieu of primary road notation) to NH1, NH2, NH8 and NH24 on the map. Correspondingly, the implications/impact of linear growth along expressways (NE's) vis-à-vis highways (NH-SH) need being stated ;
 - iv) The Taj Expressway Industrial Development Corridor linking GNOIDA to Agra, east of Yamuna with linear industries in selective stretches as proposed by the UP Government.
 - v) The timeframe for phasing out Meter gauge from Shakur Basti to Rewari so as to place the NCR totally on the BG double-track electric traction for both inter and intra rail transport of goods and people ;
 - vi) The completion of the Bhiwadi-Palwal-Khurja and the Panipat-Baraut_Meerut rail links for a regional GAL in lieu of the present GAL/DAL (If so, could the rail orbital corridor be for only movement of people i.e. orbital EMU/RRTS plus for inter-State passengers ?)
 - vii) W.P. Expressway to incorporate Sonapat and EP Expressway to incorporate GNOIDA so as to better define an emerging extended CNCR.
- b. The plan mentions of a hierarchy of regional roads as comprising of Primary (expressways, NH + grid roads) ; Secondary (major district roads) and Tertiary (urban and village intra-settlement connectors). It also talks of modes like Light Rail Transit (LRTS) and High Speed Transit Systems (HSTS) apart from Trolley Buses and Sky Tram systems.

More the public transport modes, higher the modal split. However, Sky Tram systems which are suspended may be psychologically difficult to provide in India. Would a mono-rail be a better alternative.

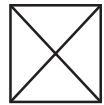
Regarding the regional hierarchy of roads, no mention is made in the proposals of State Highways. Could it be shown in the Secondary network along with other district roads ?

Tertiary roads are perhaps not required to be indicated on regional maps/proposals.

- c. An Unified Metropolitan Transport Authorities (UMTA) is proposed for the NCR.

Shouldn't it be an Unified Regional Transport Authority for the NCR – (URTA) ? Should it be for unifying movements of both goods and people or only for unifying transportation of people ? Is it possible to have a single URTA and several UMTA's – especially an overdue one for the NCTD ? The views of experts on this provision could be elaborated in the report.

An UMTA for the NCTD was proposed as a 'one-liner' policy statement, 2 to 3 decades ago; this has remained on paper ever since. Perhaps the plan for the NCTD 2001-21 could elaborate on an operational mechanism for URTA/UMTA as otherwise high capacity systems like the MRTS would make integrated transportation difficult and in favour of closing gaps in their respective operational costs (often through real estate outside prescribed frameworks).



C. WATER MANAGEMENT

There is a Map indicates that except for the NCTD and the belt along Gurgaon upto Alwar, the rest of the NCR has good water prospects. Also Map 8.2 indicates a tehsilwise usage of ground water. This shows over-exploitation in the NCTD, most of South and South-West Haryana, the total Alwar District and a few pockets in UP.

Water management is a crucial issue in capping projected concentration of population and activities. This has been well addressed in the draft plan. In the U.P. sub-region with water from the Ganges now tapped, a balancing of ground and surface water is on the anvil, especially in the Ghaziabad – NOIDA belt – (20% surface by 2021). Is there scope to elaborated in the final report on this interplay between ground and surface regulated drawal.

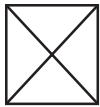
D. COUNTER-MAGNETS

5 counter-magnets have been identified and several proposals for their development have been made.

In view of the larger rush to the NCR by 2021, than anticipated, especially to the CNCR, it is suggested that the scope of counter-magnets be expanded. In the national urbanization scenario, metro-cities are expected to act as counter-magnets to mega cities, just as medium and small cities are to serve as counter-magnets to metrocities. Therefore, couldn't Jaipur, Chandigarh and Dehra Dun be introduced as counter magnets to the CNCR/NCR ?

4. GENERAL VIEWS

The draft plan in general has been well conceived and has gone through a well involved consultative process. With comments, objections and suggestions considered to the extend feasible, it should in principal be committed to by the main players who constitute the high-powered Board. In particular, the plan offers guidance to the various disaggregated plans of the sub-regions.



PROPOSED GUIDELINES FOR FORMULATING REVISED PLAN FOR MYSORE

By AMDA

PREAMBLE

Mysore is one of the six Municipal Corporation of Karnataka State. It has an established Urban Development Authority, who are now in the process of preparing their revised Comprehensive Development Plan for a 20 year perspective (2005-25).

The Authority recently had a brain storming session at Mysore where they sought advice from several professional from within and outside the state and also from a very committed citizen group. They also had before them the experiences of Bangalore and where the Comprehensive Development Plan is now under debate for a 20 year perspective.

Several views emerged at this conference. A few of the ideas proposed by AMDA is enclosed. It is envisaged that these would be looked at in the exercise to now commence by Mysore Urban Development Authority in the update of their Comprehensive Development Plan.

MYSORE 2021

I. In the Context of India - 2051

DEMOGRAPHY

| | 1951 | 2001 | 2051 |
|--------------------------|-------------|---------------|---------------|
| a) Population | 350 million | 1,030 million | 1,600 million |
| b) Urban : Rural (ratio) | 1:6 | 1:3 | 1:1 |
| c) Urban Population | 60 million | 330 million | 800 million |
| d) Urban Settlements | 4,000+ | 5,000+ | 6,000+ |
| e) Urban : Average size | 15,00 | 60,000 | 1,30,000 |

LAND

| | | | |
|--|-------------|-------------|-------------|
| a) Land: Man ratio (hectares per capita) | 1951 | 2001 | 2051 |
| INDIA | 0.90 | 0.33 | 0.19 |
| CHINA | 1.70 | 0.95 | 0.45 |
| b) In settlements and linkages | 6% | 8% | 10% |

THE SCENARIO 2051

LAND IN SHORT SUPPLY
Therefore Redevelop / redensify at **high density**
+
Spread out sparingly but also at **high density**



THE EMERGING SETTLEMENTS HEIRARCHY

| Urban Settlement | Population | Census grade | Local government |
|------------------------|--------------------------------------|--------------|-----------------------------|
| Megacities | a. 10 million + b. 5 –10 million | I I | Municipal Corporations (MC) |
| Metrocities | a. 2 – 5 million b. 1 – 2 million | I I | |
| Medium cities | 0.3 – 1 million | I | |
| Small cities | 0.1 – 0.3 million | I | Municipal Councils(M.Cl.) |
| Large towns | 50,000 – 0.1 million | II | |
| Medium towns | 20 to 50,000 | III | |
| Small towns | < 20,000 | IV,V, VI | Nagar Panchayats (N.P.) |
| Central place villages | 5 to 20,000 | - | Single Panchayat (RP) |
| Grouped villages | 5000 | - | Grouped Panchayats (RP) |

In 2001 - Mysore was a **Medium City** Class I with an M.C.

In 2011 - Mysore would be a **Metro City** Class I with an M.C.







THE MEGA AND METRO CITIES OF INDIA

| Cities | 1971 | 1981 | 1991 | 2001 | 2011 | 2021 |
|-------------|------|------|------|------|------|------|
| Megacities | 3 | 4 | 4 | 6 | 7 | 9 |
| Metrocities | 6 | 8 | 19 | 29 | 41 | 51 |

By 2001, Bangalore was one of the six megacities of India.

By 2021, Mysore would be one of the 48 (41) metrocities of India along with Hubli-Dharwad, Mangalore and Belgaum

TRANSPORTATION OF GOODS + PEOPLE + LAND USE

- Railways  Double track, BG, electrified traction  LINEAR
- Roads  National expressways, NH+SH  NODAL
- Airports  International, national, regional
- Seaports  Major & minor



MYSORE IS ON THE EMERGING URBAN CORRIDORS MAP OF INDIA

Required for Mysore-2021

- airport upgradation to national
- Madurai rail link
- BG double track electrified
- Expressways & NH level roads.

MYSORE AS A COUNTER-MAGNET TO BANGALORE?

AN ISSUE: - Reduced growth or Normal growth or Induced growth

Development opportunities for MYSORE

- Suited for NEW major investments in the State
- As an alternative for investments to Bangalore
- Mysore is classified as an Industries-cum-services Settlement by the census
 - Mysore is planned as an Urban Agglomeration (UA) with the Municipal Corporation at the hub + Nanjangud TMC + a few panchayats (rural and urban). This UA is planned by MUDA.

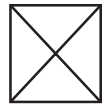
The 73rd & 74th C.A.A. '92 requires/entails

- Investments on the basis of a plan
- The planning process comprises of
 - a. STATE VISION DOCUMENT - 2001-21
 - b. A DISTRICT (DEVELOPMENT) PERSPECTIVE PLAN - 2001-21
(with 5 yearly programmes)
 - c. A 'MUDA' PERSPECTIVE PLAN - 2001-21
(with 5 yearly programmes + disaggregated into Sector/Zonal Plans with boundaries co-terminus with LSG)

The stress has to shift to a

STATE – LSG interface

Therefore: Each MUDA Sector should comprise of:
5 or 6 within the M.C.C
and 1 each for CMC's/TMC's
and combined for NP's / RP's



THIS WOULD FACILITATE THE WARD PLANS BY LSG

COULD THE MUDA PLANS BE **CONSULTATIVE**

+

+

LSG WARD PLANS BE

PARTICIPATORY







Public objections

+

Suggestions

**COULD THE 'ODP' PROCESS BE ABANDONED
and
ONLY THE DRAFT & FINAL 'CDP' PROCESS BE IN PLACE**

In transition we have

- The Master Plan  Land use
- The Development Plan  Services-cum-transport -cum – Land use (opportunities + use of waste land)
- The eco management Plan  governance-opportunities/constraints

natural + manmade heritage, Forests, Water sheds, multi-cropped agriculture

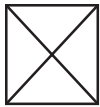
In MYSORE-NANJANGUD – UDA, Linkages is excellent and there are prospects for induced growth is VERY HIGH mainly in industries, administration, education, health, culture and tourism

MYSORE -2021 requires:

- Mysore District Planning Committee (MDPC) for District Perspective Plan, Development Plan 2006-26 with phasing of 5 yearly
- Mysore Metropolitan Planning Committee (MMPC) for Metropolitan Perspective Development Plan 2006-21 with phasing of 5 yearly with MUDA as its technical secretariat, and
- similar Zonal/Sector Plans

A population assessment for the MUDA Area – i.e. MMPC (including Nanjangud)
(Population in lakhs)

| | 1996 | 2001 | 2006 | 2011 |
|---------------------------|-------------|-------------|--------------|--------------|
| MUDA Normal Growth | 7.63 | 8.99 | 10.69 | 12.83 |
| Additional Induced Growth | | 0.42 | 1.24 | 2.04 |
| TOTAL | 7.63 | 9.41 | 11.93 | 14.87 |



PROPOSED VISION TO UPDATING THE JAIPUR MASTER DEVELOPMENT PLAN FOR THE PERIOD 2005-2025

E.F.N. Ribeiro, Director AMDA

PREAMBLE

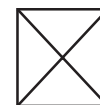
In the State of Rajasthan the capital city of Jaipur and its environs is being developed through a Master Development Plan being prepared under the Jaipur Development Authority Act 1982. No other urban areas or districts of India's largest state (geographically) have such a comprehensive umbrella.

With Jaipur being one of the fastest growing metro agglomerations of India, the Hon'ble Chief Minister of the State has asked for updating the planned development framework so as to encouraging investments in Jaipur in an organised manner.

As part of this exercise and through a request from the Jaipur Development Authority, AMDA have been providing inputs and which would hopefully help the Jaipur Development Authority to have a planned development framework that takes into account the new thinking in encouraging urban growth in India in general and the state of Rajasthan in particular. The preliminary observations as sent by AMDA to the JDA are enclosed.

A. THE EMERGING CONTEXT

1. Jaipur is the capital of Rajasthan – a state formed largely of erstwhile princely states. Today it is the largest state of the Union (3.42 lakh sq km). The state is disaggregated into 32 districts.
2. In 2001, Rajasthan had 56.48 million inhabitants giving an average density of 165 pp sq. km against a national average of 270 pp. sq. km.
3. Despite its modest overall density (as a part “desert area”), Rajasthan is one of the fastest developing states of the Union. Among its rapidly diversifying projects and programmes, the tourism industry is a prime activity with the national objective being to double both – international and domestic tourism. Rajasthan would thus be a major player in this national process.
4. Jaipur, the state capital is a major destination for both investments and tourism. Its population has grown steadily from 1.52 million in 1991 to 2.32 million in 2001 with a high decadal growth rate of 60 percent.
5. In 1981, Jaipur joined the metropolitan club of India (population one million and above) along with 11 other metropolises. In 1991, with 23 such settlements, Jaipur was the 11th largest among them. In 2001 with 35 such settlements, Jaipur continued as the 11th largest, with decennial growth rates well above the national average. It is destined to be the 10th largest among 47 other metropolises in 2011 and around 60 other metropolises by 2021.



6. Until 2001, it was the only metropolitan area in the State; but by 2011 it would be joined by Jodhpur and Kota.
7. In the national scenario, there is an intrinsic relationship between mega cities (5 million plus population) and other metro cities.
8. In North India, the equation between Delhi as a mega city and other metros is fast emerging. This is largely along major rail and road routes. The Delhi-Jaipur-Ahmedabad BG rail track would have to be doubled and electrified.
9. International airports are a major driving force of global cities for the movement of both – goods and people. Jaipur has to start reserving substantial lands around its airport for runway extension, air funnels, enhanced goods and passenger facilities, sanitized manufacture (EPZ's), quality hotels, convention centres, golf and recreation facilities, information technology etc. The global player is very demanding.
10. The NCR counter-magnets as identified are not taking off. The multi-functional character and promotional driving force of Jaipur is fast emerging.
11. In the national scenario, the Delhi-Mumbai rapid investment corridor is upsetting the regulated settlements profile of India. Jaipur is thus destined for accelerated growth.
12. If Jaipur is to be a mega city, quite clearly its continuing land use spread at low to modest densities is a deterrent, especially in terms of transport and other services.
13. Adding to growth in concentric rings has serious limitations in metro cities, leave alone mega cities. Linear growth offers more workable options in terms of services, transport and land use provided in tandem. Accordingly a combination of radial at the core and linear at the periphery appears as the only option.
14. Radial growth at mega/metro level makes it difficult to infuse a viable mass public transport system – especially rail based. Vision 2021 has to bear this in mind.

B. EMERGING TRANSPORT STRUCTURE OF JAIPUR REGION 2005

1. Railways

- (i) The Delhi-Ahmedabad line through Jaipur was converted from MG to BG. It is now programmed to be double track and electrified so as to be part of the high capacity rapid rail trunk corridors of India for movement of goods and people. Along with this, land for stabling and maintenance of prime movers and for rake formations is to be reserved.
- (ii) The Jaipur-Sawai Modhpur line is a single track BG. Also, the Jaipur Sikkar MG line would be a single track BG line by 2011.
- (iii) Jaipur would thus totally be on the BG map of India for movement of goods and people.

2. Roads

- (i) NH 8 from Delhi to Ahmedabad via Jaipur is already part of the “golden quadrilateral” and is therefore redesignated as a national expressway, requiring bypasses to Jaipur.



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- (ii) NH 11 from Agra to Sikkar is to be upgraded to 4 lanes as a continuing NH but with bypasses to Jaipur. Likewise NH12 between Jaipur and Sawai Modhpur is to be upgraded to 4 lanes.
 - (iii) State highways to Ramgarh and Diggi from Jaipur are to be upgraded from 2 to 3 lanes
 - (iv) Jaipur is thus to have a hierarchy of 3 major R/W's i.e. Expressways cum bypasses; national highways-cum-ring roads and state highways and other major roads.

3. Airports

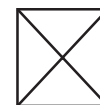
- (i) Jaipur airport is already international but it requires similar standards as Delhi in respect of runway length and increased capacity for handling of goods and people.
- (ii) Land needs being reserved near the airport for Export Promotion Zones and other facilities.
- (iii) No development and low rise development zones are required for air funnels, etc, for international aircrafts.

4. General

A combination of air, rail and basic road transport is explained in figure B. This would enable the creation of ISBT's, truck terminals, wholesale markets and warehousing at selected locations on the periphery so as to prevent non-destined traffic from entering the central and intermediate areas of Jaipur region.

C. EMERGING LAND UTILIZATION (DEVELOPMENT) STRUCTURE OF JAIPUR

1. Jaipur has grown at the foothills of the Aravali range and in relation to the water system related to the Dhond river. The 2.5 sq, km planned walled city of Jaipur of the 18th century is now in contention of being declared a world heritage site.
2. The city grew south of the heritage core through the Improvement Trust and otherwise in a planned manner mixed with spontaneous colonies.
3. These have all been incorporated in the UIT Master Plan 1971-91
4. The plan by the JDA for 1991-2011 protects the Aravali ranges and forest areas and shows expansion in western arch between the road to Sikkar and the road to Agra.
5. The current vision proposals for 2025 is to have a further expansion of this arch and also to develop along the corridors of National highways as shown on Plan C. This would also incorporate the 5 satellite towns. In addition, it would infuse special areas known as the educational corridor, the film city, the sports city, the rustic arts centre and the IT corridor.
6. It would be important to protect the remaining agriculture land within Jaipur region and which is totally within Jaipur District. The JDA jurisdiction should not be expanded outside Jaipur District.



D. EMERGING ECOLOGICAL AND SERVICES STRUCTURE OF JAIPUR REGION

1. Ecology

- a. Reserved and protected forests are mapped. However national policy requires that all forest owned lands be also mapped and preserved. Such lands should not be availed of by government for other development programmes other than forestation.
- b. Lands in agriculture and allied uses is generally changed easily for non-agriculture purposes. National policy entails that double and multi-cropped lands and orchards be mapped and preserved. On other such lands, agriculture/green belt development control (DC) policies and rules should be followed. Outside JDA jurisdiction, the District Planning Committee (DPC) when constituted should direct DC policies rather than panchayats per se in areas other than those having settlements plans approved by the DPC (within Lal dora's).
- c. Wastelands should be mapped from the 1:50,000 scale National Wastelands Board Map of India. These could be considered as developmental opportunities within the context of plan for Jaipur District and Jaipur region.

2. Heritage

- a. If the walled city of Jaipur is to emerge as 'a World Heritage City', listing of "sites, remains, ruins and buildings of archaeological, historical, architectural, cultural and ecological significance" should be expedited and mapped by the JDA and DPC. This would enable the identification of heritage conservation areas, precincts and buildings. It would include precincts and buildings to be preserved under the national (ASI) and State Preservation Acts as also areas to be conserved under the national and state environment protection acts.
- b. As a fillip to this exercise, both the walled city and Amer as 'Heritage Conservation precincts should have conservation plans under the JDA Act, as a basis for conservation dictated investments and finances thereof from international, national, state, trust and individual funds.

3. Power

A 400 MW distribution station along NH 8 to Ajmere, ensures current sufficiency. For a megacity with global investments in focus, additional sources of power are required.

4. Water

The surface water channels were sufficient for the walled city and Amer developments as also for the Mirza Ismail pre-independence expansion plans through the UIT's. Ever since, ground water has taken over and today there is no control of drawal of ground water. To be a megacity, Jaipur needs to expedite the new



surface water source from the Chambal valley system. In such an event, the balance between ground and surface drawal could be regulated and enforced as an integrated water system incorporating mandatory plot level water harvesting, reduction of evaporation losses and rational user charges that ensure cost recovery for the operation and maintenance of the system.

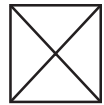
5. Waste Disposal

- a. 2 STPs are operational and 2 more are planned in the Amer area. The present system is over strained and choked drains are common. Developments in the western arc rely on septic tanks and perhaps oxidation ponds. New sullage disposal plans are required as part of land use accretions. In particular the issue of discharge of polluting wastes are to be addressed holistically. This requires dedicated treatments (CETP's) at industrial estate levels at the cost of beneficiaries. Sewerage systems are not only expensive to provide but even more expensive to maintain. Some forms of cost recovery for maintenance may be necessary.
- b. Solid waste management - A solid waste management plan is overdue. This is required if privatisation and neighbourhood citizen participation is required. Safai Karamchari Union's increasingly act as deterrents in rationalising processes and reducing local government manpower expenditure.

E. PLANNING, IMPLEMENTATION AND GOVERNANCE IN JAIPUR REGION WITHIN JAIPUR DISTRICT

1. Planning

- a. Jaipur had a Master Plan 1971-91, under the Rajasthan Urban Improvement Trust Act 1959. This was primarily a Land use plan.
- b. The JDA which was created under the Jaipur Development Authority Act 1982 prepared the "Master Development Plan 1998-2011" for Jaipur Region comprising of Jaipur Municipal Corporation, 5 municipalities and 314 contiguous villages. This plan as in force is primarily a Land-use-cum-transportation plan for the 1464 sq. km Jaipur Region declared as a Local Planning Area (LPA) of which 171 sq. km is the Municipal Corporation area.
- c. Though the density of the walled city is over 740 pph, the overall density of the Municipal Corporation area is only 48 pph. It is not even 20 pph for Jaipur region – as a whole. The stress appears to be on a density land use spread.
- d. A perspective plan (2005-25) with a 20-year vision is therefore recommended. This could be supported by 5-yearly programmes. This plan would continue being disaggregated into Zonal Development Plans.
- e. The strategy should be to control radial spread, encourage linear growth along identified corridors and otherwise enhance the densities so as to enable services, transport and land-use to operate in tandem.



-
-
- f. The flexible perspective plan rather than a land use per se should provide an integrated mapped framework for socio-economic investment. It should therefore be an exercise in sustainable opportunities and constraints on the use of land.
- g. The three major CONSTRAINTS as positive objectives are the ensuring of:-
- increase in forest covers (hopefully to be 30 percent of all lands);
 - increase in multi-cropped agriculture lands-including orchards and market gardens;
 - retention and enhancement of wetlands and water courses ;
 - Conservation of the natural and manmade heritage – both urban and rural.

The three major OPPORTUNITIES are :

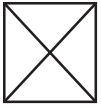
- the imposition of transport linkages for the inter and intra settlement movement of goods and people;
- facilitating the supply of adequate services and the proper disposal of waste; and
- making the best use of wastelands for development.

Thus the Master Development Plan is better considered as the Perspective Development Plan.

- h. Jaipur like any other mega city (a megacity in the making) comprises of:
- a. An inner city and it could comprise of all three 1998 developments incorporating the World Heritage City UIT programmes and other mixed use or Planned Development Projects therein.
 - b. An intermediate city as a result of planned intonation from 1998 onwards largely comprising of new growth and now ripe for higher density redevelopment.
 - c. A city at the periphery as a result of a perspective of 2025 but at high density largely linear growth and where limited land is taken over.
 - d. It is recommended that the perspective plan policy should be to optimize the use of unused or unutilized urban land within the existing urban fence and only then to extend the urban fence at high density so for a minimum of prime agriculture land is taken.
- i. The perspective plan policy should be to optimize the use of unused and unutilized land within the existing urban fence and only then to extend the urban fence at high density so that a minimum of prime agriculture land is taken for development.

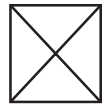
2. Governance

- a. The Jaipur region has to be developed within the context of the state of Rajasthan. The interplay between the JDA Act 82 and the UIT Act'59 as in



force outside Jaipur Region is inadequate to address the fast changing ground realities of a rapidly developing State. The time is opportune to take advantage of the 73rd and 74th C.A. Acts'92 to upgrade the state planned development legislation, just as the urban and rural local government Acts.

- b. A new Rajasthan Urban and Regional Planning and Development Act could ideally ensure Rajasthan in mainstream India through :-
- c.
 - i. A 20-year State Vision Plan, updated every 5 years;
 - ii. Megacity UA's and metro city UA's to have Metropolitan Planning Committees (MPC's) that formulate 20-year Metropolitan Region Perspective Development Plans updated every 5-years (based on the State Vision Plan) ;
 - iii. Likewise Districts have District Planning Committees (DPCs) that formulate 20-year District Perspective Development Plans updated every 5-years (based on the Vision Plan) and incorporating all non-MPC settlements therein (from medium and small cities, large, medium and small towns, central place village and other rural settlements) ;
 - iv. LSG – as a third tier of government (Municipal Corporations, Municipal Councils, Nagar (town) Panchayats and Rural Panchayats) then take over from the State processed flexible canvas for preparing their Settlement Plans disaggregated into Ward Plans and for facilitating sectoral projects/schemes/local area plans/action area plans.
- d. In any event, it is necessary that for the Jaipur Region, a down-top process involving change in scarce and competing use of land is through an LSG-State interface rather than the present Federal-State interface, especially as local government have a mandate for participatory planned development and which could be restricted to municipal ward and panchayat lal dora levels within the overall perspective.
- e.
 - i. Until the legislative changes are processed, the State Department of Town Planning can be asked to prepare the State Vision Document (2006-25) as a guide to planned investments.
 - ii. They can also commence draft district development plans (DDP) for its 32 districts for processing through the DPC's when these are in place. As a priority this could be done for Alwar District (as part of NCR) and Jaipur District and within which an MPC would have to be in place.
 - iii. It would be useful if the Jaipur DDP and the JDA plan work in tandem.
- f. In 2001, Rajasthan had 56.47 million people with a decadal growth rate of 28.33 per cent. This was higher than the national average. Its sex ratio of 922 was near the national average. Jaipur District had 5.25 million people in 2001 (about 9 per cent of the State's population). Its decadal growth rate was 35.10 per cent and its sex ratio was 897 due to rural-urban immigration. The District is disaggregated into 13 tehsils of which 5 (Kotgutli, Viratnagar, Shahpura in the north and Phulera and Dudu in the east) are not covered



by the Jaipur Region (JDA) declared as a local authority under the Rajasthan General Clauses Act 1955. Another 5 tehsils (Chomu, Jamwa, Bassi, Chakau and Phagi) are partly covered. The 2 central tehsils of Amber and Sanganer are largely covered. Only Jaipur Tehsil is fully covered by the JDA region..

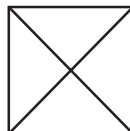
- g. Tehsils partially lose their significance in the JDA area. In the rest of the District, the District-Tehsil-Panchayat equations strengthen. It is therefore recommended that the JDA boundary be co-terminus with the contiguous Municipal Corporation, Council and Urban Panchayat and rural Panchayat boundaries of the JDA. Also, there is no need to extend the JDA jurisdiction except, if required, only along national highways but within the district.
- h. The boundaries of the ZDP's of the Jaipur Perspective Plan 2005-25 be also adjusted so as to avoid overlaps with Ward and other local government boundaries.
- i. In stages, the JDA functions should be to (i) prepare and update a perspective plan and its disaggregated ZDP's, (ii) formulate and execute projects/schemes in development areas and (iii) otherwise give development permission (through DC and sub-division rules) in the Jaipur Region and (iv) monitor growth-through enhanced policing and deterrent punitive measures.
- j. In due course, the JDA with only 7 nominated non-official members could be the technical Secretariat to the MPC with 2/3rd of the Committee from within the elected central, state and local constituencies.
- k. The ward plans should be prepared by the JMC and other settlement plans especially the growth centres/satellites by the respective local bodies. Unified building bye-laws are required as distinct from DC rules. The MPC would be the overall appellant to planned growth.



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