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# Analysing Dynamics between Various Planning Bodies in Indian System of Governance, a case of Nagpur Metropolitan Area

Omkar Parishwad<sup>1</sup>, Amruta Kakirde<sup>2</sup> and Dhanashree Raut<sup>3</sup>

<sup>1,2,3</sup>College of Engineering, Pune Civil Dept., Town Planning Wellesely Rd, Pune (MH) E-mail: <sup>1</sup>ogp.civil@coep.ac.in, <sup>2</sup>ard.civil@coep.ac.in, <sup>3</sup>rautdd.planning@coep.ac.in

Abstract—The dynamic growth of Indian cities demands a robust administrative base. This hierarchy, of thusly evolved planning authorities aimed at decentralizing spatial and socio-economic planning, and was toned by the constitutional support and status by the 74<sup>th</sup> Amendment. Yet, this evolution of local government administration in India, is slow in adjusting itself to the current growth and change, and seems antiquated and ineffective. Proliferation of local bodies having little or no coordination/cooperation, and with overlapping jurisdictions, powers and functions has further eroded their effectiveness. This research paper aims at a thorough evaluation of this accusation, considering the case study of the planning authorities in Nagpur, India; by identifying and comparing their roles, functions and responsibilities as they impact the growth and development of the region.

Firstly, a clear picture of the present framework and working environment of various jurisdictions and governing bodies of various Indian governance systems, particularly Nagpur Metropolitan area (NMA) is presented; which dissects- overlaps and gaps in the system, and hindrances to the forward planning. This corroboration is with regards the different agencies for NMA, which have different levels of development rights.

Quantitative analysis based on the citizen surveys and expert interviews from different authorities were conducted, for canvassing the role of these authorities particular to the development in Nagpur metropolitan area. The paper also proffers some analysis on the basis of Analytical Hierarchy Process (APH) software and recommendations for planning authorities.

The research concludes how smooth administration can be achieved for these planning authorities, by listing out the lacunas in overall system, deliberating on results from the analysis. Lastly, recommendations on the basis of this study are founded for promoting the socio-economic change necessary for the town, resulting in the upliftment and avoiding an unplanned and non-coordinated development of Metropolitan areas, in Indian systems of Governance.

### 1. INTRODUCTION

India is urbanizing rapidly and about 377 million people live in 7935 towns across the country which constitutes about 31.2% of the total population at 1.21 billion (Census 2011). These usually are satellite cities, cater mostly to the metropolis' and are a part of a bigger Urban agglomeration.

Their development is categorized into varying jurisdictions by different organizations, which creates lacunas in administration and turns the development haphazard.

Hence, it's a budding necessity to provide proper administrative base for these centers of human development, enabling higher liveability. It could enable the country's transition to a less resource intensive development, with lower throughputs, footprints and environmental impacts, through controlled and planned development; that could reshape global trends because of India's demographic and economic size. Hard evidence indicates that the administrative management needs to be strengthened in order to achieve such aspirations.

### 2. ADMINISTRATIVE BODIES AND THEIR ROLES

The Indian Constitution provides for three administrative levels; specifically, the Union Government, the state governments, and the local governments (urban and rural). Further, different systems are employed for the urban areas and the agricultural areas, with the system for the latter comprising three internal administrative levels. The state organizations and institutions are divided by districts and blocks. The responsibilities of the different levels of government are also explained in detail by the constitution.

The Union Government has jurisdiction over national matters such as national defense, diplomacy, communications, currency, tariffs, and essential infrastructure (railways, national highways, electricity, main ports, etc.). Included in the jurisdiction of the states are the maintenance of legal order (public safety, police), public sanitation (water supply, sewer systems), health, legislative authority regarding agriculture, forestry, and fishery, transportation infrastructure development (state highways, ports other than main ports), and the development of agricultural, forestry, and infrastructures (irrigation, fishing ports). The Union Government and the state governments have co-jurisdiction over legislative powers concerning economic and social plans,

social security, education, trade, industry, electricity enterprises, etc.

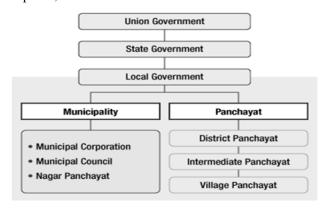


Fig. 1: Administrative hierarchy in Indian Constitution

The Eleventh and Twelfth schedule (Article 243G and 243W) of the constitution explain the jurisdiction of rural governments (called Panchayats) and Urban Governments. The jurisdiction of rural government includes Agriculture including Agricultural extension, Rural Housing and Poverty alleviation programmes, while the jurisdiction of urban governments includes urban planning including town planning, regulation of land use and construction of buildings, Water supply, sanitation and solid waste management, slum improvement and upgradation and urban poverty alleviation, and the like.

In order to analyze the lacunas in the local systems of governance, we have considered various Urban agglomerations with multiple governing authorities. Kolkata Metropolitan Development Authority, the first regional authority formed under the West Bengal Town and Country Planning Act, 1979; Hyderabad Metropolitan Development Authority was formed by the merging of Hyderabad Urban Development Authority (HUDA), Hyderabad Airport Development Authority (HADA), Cyberabad Development Authority (CDA) and Buddha Poornima Project Authority (BPPA); set up for the purposes of planning, co-ordination, supervising, promoting, and securing the development. Taking learnings from the workings of these authorities as relative study, we could formulate guidelines for an upcoming and conclude for ideal working conditions from the analysis.

# 3. CASE OF LOCAL-LEVEL SPATIAL PLANNING SYSTEMS FOR NAGPUR METROPOLITAN REGION

Nagpur, has a significant historical and locational prominence being the central province and relegated to being the second capital of Maharashtra.

The Nagpur Metropolitan Area (NMA) was notified on 23<sup>rd</sup> July 1999. As per State government notification 726 villages

were included in the NMA notified area under 9 tehsils (5 full tehsils – Nagpur Rural, Hingna, Kamptee, Parshioni, Mauda and 4 part tehsils – Saoner, Umred, Kalmeshwar and Kuhi), comprising of 726 villages of the Nagpur District. NMA covers about 36 percent of the Nagpur District (9,892 km2) and is adjoined by Amravati and Wardha districts on the west, Bhandara District on the east and Chhinwada and Balaghat districts of Madhya Pradesh on its north-west.

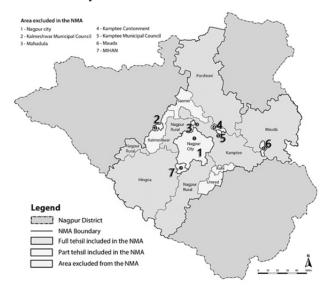


Fig. 2: Extent of Jurisdiction boundaries within Nagpur Metropolitan Area (NMA)

This study was oriented on the local level in administrative hierarchy, where the Planning and Development Department (under State Modal Act) is the body responsible for devising various plans in large cities, as well as for issuing development permits and implementing development among other things. The other sectors of development are under a particular hierarchy, which has no delineation of clear responsibilities in terms of these sectors of development.

### 4. METHODOLOGY

The research is conducted in three phases as shown in Fig. 3. Clear understanding of the role of each authority with respect to jurisdiction and planning initiatives and evolution, forms the first phase of research. Later on, this information is analyzed for judiciously in order to gain inferences regarding specific development perspectives.

The Inferences are based on this analysis and expert recommendations (survey). The paper concludes a forefront for interaction between authorities for planned development, specific to administrative authorities for Indian cities [1].

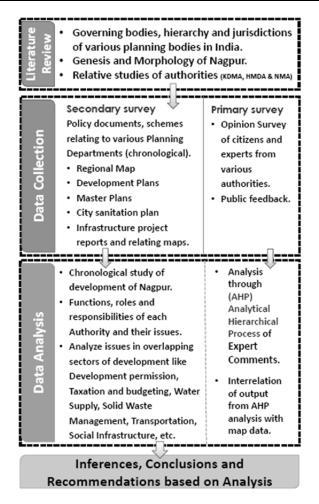


Fig. 3: Methodology for Research

## 5. PLANNING AUTHORITIES AND THEIR ROLE IN DEVELOPMENT OF NAGPUR

Nagpur district was considered as a region for this study, and major authorities responsible for development with varying jurisdictions and sectors, were considered. The research aims at understanding the changing role of planning bodies, such as Nagpur Municipal Corporation (NMC), Nagpur Improvement Trust (NIT), Maharashtra Industrial Development Corporation (MIDC), Kampthee Cantonment, Maharashtra Airport Development Corporation (MADC), Nagpur Metropolitan Regional Development Authority (NMRDA), etc. in the development of Nagpur region with a purpose of taking the physical and historical records illustrate to interrelationships between economic development, social changes and the physical environment in the evolution of the overall metropolis; and identifying overlapping within sectors of development with context to planning authorities. Authority specific roles and responsibilities which are also interrelated to workings of other authorities outside of their jurisdiction are specified.

### 6. KAMPTEE CANTONMENT AUTHORITY

Kamptee is one of the 62 Cantonments situated throughout India. The Cantonment Board is a local self-government and autonomous body governed under The Cantonment's Act, 2006; by the Ministry of Defense, Government of India. The Kamptee Cantonment Board caters to the civic needs of the population, both Army & Civil residing therein and is engaged in improving the quality of their life. This is the third largest land use after industrial land use. (Development Plan: Nagpur Metropolitan Region 2032). Refer Fig. 2 (4).

### 7. NAGPUR MUNICIPAL CORPORATION (NMC)

NMC is a advising body for NIT in the preparation of improvement scheme under the Nagpur Improvement Trust Act, 1936. NMC is responsible for the enforcement of the plans and the regulation of development as per the state byelaws. It also assists NIT in the preparation of development plans under CNC Act, 1948. Nagpur Municipal Corporation provides following services such as water purification and supply, hospital, street lighting, registration of birth and deaths, garbage disposal, maintenance of parks and gardens, sewerage treatment and disposal and urban development and city planning.

As NMC has a transfer policy, under which transfers take place within the department on regular basis. However, there is no handholding support and training to the staff on their new role and responsibilities. This results, to the poor performance of the staff. There is no review and appraisal process or discussion with the employee on their performance, which is one of major area of concern.

### 8. NAGPUR IMPROVEMENT TRUST

Functions of NIT include General Improvement Schemes, Rebuilding schemes, Re-housing scheme, Street scheme, Deferred street schemes, Development schemes, Housing accommodation schemes, Future expansion or Improvement schemes, Drainage or Drainage including sewage disposal schemes.

NIT is responsible for preparation of regional plan for Nagpur Metropolitan Region, established by notification under its jurisdiction; Preparation of development plan for area under jurisdiction; Preparation of town planning schemes; and implementation of plans/schemes is carried out with help of NMC under Nagpur Improvement Trust Act,1936. NIT has executed 45 development schemes whereby about 55% area of Nagpur City has been developed. As a Planning authority and Development authority for the entire Nagpur Metropolitan region, NIT's jurisdiction touches all the aspects of city's development. The State Government of Maharashtra (GR dated 24.12.2002) has extended the jurisdiction of NIT beyond the Municipal limits of Nagpur over an area that constitutes the Metro Region. Refer Fig. 4.

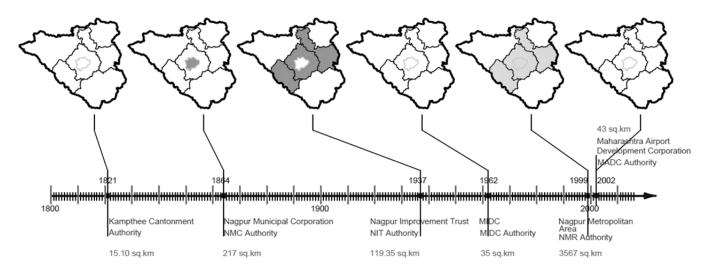


Fig. 4: Timeline of Planning authorities and their Jurisdiction

# 9. MAHARASHTRA INDUSTRIAL DEVELOPMENT CORPORATION (MIDC)

The MIDC has been declared as an agent of the state government for carrying out activities in the framework of the Maharashtra Industrial Development Act and Maharashtra Industrial Development Rules,1961. These activities are categorized in three broad categories, viz. acquisition and disposal of land; provision of infrastructure facilities; providing services, supply of potable water from MIDC's own water treatment plants, maintaining roads, street lights, drainage lines etc.

The major issues of MIDC are load shedding in rural areas; lack of coordination with other authorities- which has resulted in situations where sewerage and drainage pipelines are absent or inadequate for the load discharged; and water supply and paved roads, which are often not available at the time of commissioning an industrial estate for occupancy, industries locating closer to the city and along major transportation corridors. MIDC, Hingna has exhausted its capacity. MIDC, Butibori is not attractive for smaller units; whereas Kapsi (Kh) within MIDC jurisdiction area towards east of the city is emerging as an industrial hub. Refer Fig. 4.

## 10. NAGPUR METROPOLITAN REGIONAL DEVELOPMENT AUTHORITY (NMRDA)

The role of NMRDA is to achieve balanced development within the region under Nagpur Improvement Trust. NIT has been notified as the Special Planning Authority (SPA) for the NMA and entrusted with preparation of a Statutory Development Plan as per provisions of the MRTP Act, 1966. Refer Fig. 4.

Objectives of NMR are-laying down broad policies and direction of growth in the principal zones, determining the

hierarchy of roads and access ways in co-ordination with existing roads proposed D.P roads, establishing zoning of land use, determining the standards for facilities like education, health and ensuring planned development in fringe areas. Also, many unauthorized layouts are cropped up in metro region. Out of 721 villages, few villages are under green zone belt.

## 11. MAHARASHTRA AIRPORT DEVELOPMENT COMPANY (MADC)

Government of Maharashtra has declared Maharashtra Airport Development Company Ltd. (MADC) as a SPA for MIHAN Project. MADC developed all necessary facilities like 3,4, and 6th lane roads, dual water supply system, sewage system, Electric transmission and Distribution Network, Telecom Network, Street Light, Water treatment and Sewage treatment plants. One of the key reasons being cited for the slow growth observed in MIHAN is that there have been administrative delays at various points during the implementation of MIHAN and general global economic slowdown which is impacting the expansion plans of various companies who have committed investments in MIHAN. (Development Plan-Nagpur Metropolitan Region 2032). Refer Fig. 4.

# 12. COMPARISON BETWEEN AUTHORITIES ON THE BASIS OF SERVICES (INFRASTRUCTURAL)

On the basis of understanding of functioning of various authorities and on the basis of surveys, the services facilitated by them, specific to their jurisdiction are evaluated.

### 13. DEVELOPMENT APPROVALS AND CONTROL

Although the Development Control Regulations (DCR) are the same, they are interpretation by architects and concerned engineer from NMC and NIT, differently. Amendments in parking rules are not practical, net buildable area on ground floor is very less. Documentations/procedure/delays in communication of requirement is ample. Permission is expected within 60 days but 'deemed to be sanctioned' provision is never invoked and hence take 2 yrs for sanctions in some cases. Unauthorized construction by NIT in north and central zone Nagpur city, create burden on NMC for providing services. These issues were analysed by authorities, on the basis of which an ICT system (AutoDCR) was implemented; which was a total failure due to inadequacy of software capability.

### 14. WATER SUPPLY

The existing water distribution system of Nagpur city consists of piped network of about 2100 km of which has been broadly divided in to three areas: North / east / south part of Nagpur city with water supply from Kanhan Head Works and WTP; North / west / south / central part of Nagpur city with water supply from Pench project and WTP at Gorewada; and North / central part of Nagpur city with water supply from both the sources i.e. Pench and Kanhan.

There is no other potential water source available in the region to provide fresh water to the NMC or NMA. NIT/NMC has to be dependent either on the proposed schemes or has to develop new sources for long term development of the NMA.

There are certain issues like Institutional complexity: involvement of multiple agencies such as MJP / NIT / MHADA / State government, resulting in lack of clarity of roles and accountability, unequal water distribution, high NRW; both commercial & physical losses, low tariff & cost recovery and lack of consumer orientation, inadequate network coverage (No Connectivity in localities developing in Fringe Areas, High Tanker Water Supply Cost). The NMC Water Sector is presently caught in a low level equilibrium trap resulting in poor sustainability of the system, The SCADA Systems haven't been introduced for management of water quality / quantity in WTP, Transmission & Distribution System.

## 15. MUNICIPAL SOLID WASTE MANAGEMENT

Garbage in the city is increasing rapidly and requires a lot of land for disposal, which is not possible because of issues between NIT and NMC. The basic concept of waste collection bin free project, is to make city free/ reduce the bins to minimum number; and this can only be done by daily primary door to door collection of MSW. Although NIT had identified alternative lands in metro region. It is the responsibility of NMC to acquire those lands and construct dumping ground. Other than the existing landfill site at Bhandewadi primarily

planned for the management of MSW for the NMC area, there are no organized land fill sites within the project area. The current efforts to manage municipal solid waste through City Sanitation Plan (CSP) within NMC may be extended. NMA has supported NMC with a comprehensive solid waste management plan to include collection, segregation and transportation of waste at various stages. (Source-City Sanitation Plan 2011 NMC, Development plan for the Nagpur Metropolitan Area 2032, Page no-8-41).

#### 16. SEWERAGE AND SANITATION

About 70 percent of Nagpur city is covered with a sewerage system and the total waste water generation from the city is about 345 mld (as per estimate by NMC) which increases to 600 mld in the peak season. NMC has constructed only one plant for the city which has a capacity of 100 mld. Based on its topography the city has been divided into three sewerage zones viz. North Sewerage Zone (NSZ); Central Sewerage Zone (CSZ) and South Sewerage Zone (SSZ).

The pumping and treatment conditions of the sewerage system are poor and inadequate and as noted, out of 345 mld of sewage generated about 40 percent that is 80 mld is collected and treated at the Bhandewadi sewage treatment plant.

The sewage generated from the central sewerage zone is tapped and treated. The sewage from the northern and southern zones and the remaining sewage from the central zone flow into the nallahs and ultimately to the river Nag, river Pilli, constructed drains and local water bodies without any treatment. This leads to extremely high levels of pollution in the water bodies of Nagpur.

## 17. TRANSPORTATION SECTOR

The state highways SH-261 and SH-262 are in poor condition with no shoulders which results in high travel time and wear and tear of vehicles. There is the necessity of improving condition of roads or providing regular maintenance in order to ensure better level of service to the road users. Road condition of SH 250 and SH255 is in bad condition. A two lane bridge on NH-7 north near Kanhan railway crossing is a major bottleneck point and causes the traffic jam of about 1 km each way.

### 18. SOCIAL INFRASTRUCTURE SECTOR

Private hospitals health facility is good, but government hospitals are not providing much facilities to the economically weaker sections. NMC's Government hospitals lack infrastructure and should be maintained. There is the lack of proper education and skill development. City has all levels of schools such as CBSE, ICSE but lack development in Corporation and ZP schools. RTM University failed to monitor progress of technical courses. DTE/Joint Director are not insisting on quality of education. AICTE/AIAMS/Architecture and other bodies did not take

stringent action against non-performing institutions. (Source: Primary survey, Analytical hierarchy process, Development Plan for Nagpur Metropolitan area 2012-2032).

### 19. INFERENCES AND RECOMMENDATIONS

The administrative governance of cities in India is overall jurisdiction oriented. This paper evaluates the activities of the planning authorities in Nagpur Metropolitan Area by identifying and comparing their roles and responsibility as they impact growth and development in the region. Though NMC, MIDC, MADC, Kampthee Cantonment, Mahadula, Kampthee Council, Kalmeshwar council are excluded from Nagpur Metropolitan area, there are conflicts in sectors hampering the overall growth of Nagpur region.

Analytical Hierarchy Process (AHP) forms the base for our analysis for comparison between authorities for development potential, in terms of hierarchy and functioning. The hierarchy was established through our survey questionnaire; the participants analyzed it through a series of pairwise comparisons that derived numerical scales of measurement for the nodes. The criteria were pairwise compared against the goal for importance and against each of the criteria for preference. [5]

Each planning authorities has a clear role, function and responsibility given by the GoM; but the roles are not clear, functions are overlapping, and responsibilities are not fully discharged. There is no affiliation in similar department and sections, based on this there are always conflicts. There is a lack of coordination between the authorities regarding implementation of the development plan. About 725 villages come under metro region, out of which, some have been considered to be under green zone belt by NIT. Urban planning function is carried out by NIT without any consultation with NMC.

Conflicts are bound to arise between planning authorities and they need to be resolved. A proper hierarchy needs to be maintained for proper coordination. There should be better coordination between related departments and sections. Through analytical hierarchy process, we analyzed that Nagpur Municipal Corporation is an apex body for maintenance of Nagpur city and NIT, which is now NMRDA, and is a special purpose body for overall development of

Nagpur region. Support is required in preparation of investment plan for implementation of master plan and identification of projects required for development of city. Upkeep required in phasing out the intervention required and for implementation of identified projects. Support required in developing of a framework for monitoring of the implementation of town planning reforms/schemes and related projects. Support required in revising building bye laws and fees. State government should extend funding support to NMC and NIT for effective implementation of the various urban master plan and projects. Organize investor meets in Nagpur to support industrial development in the region. There should be updating in plans and approach to spatial planning. In development of Metro region much improvement has been done outside municipal limit where suggestions and objections are considered in public hearing. The authorities should keep balance in delivering services in their jurisdictions.

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