



Urban Development and Housing Department  
Government of Bihar

City Development Plan (2010-30)

**AURANGABAD**



**EXECUTIVE SUMMARY**

CDP Prepared By:



**Support Programme for Urban Reforms in Bihar**

(A Government of Bihar Initiative)

Supported by DFID, United Kingdom

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संदेश

मुझे यह घोषणा करते हुए अति प्रसन्नता हो रही है कि नगर विकास ने राज्य के प्रमुख 28 शहरों की नगर विकास योजना (CDP) तैयार की है। यह विभाग के लिए विशेष उपलब्धि है क्योंकि ये नगर विकास योजनाएँ (CDPs) राज्य में नगरीय आधारभूत संरचनाओं पर होने वाले व्यय के लिए मील का पत्थर साबित होगी।

समग्र विकास की धारणा से राज्य में नगरीय विकास में बड़ा लाभ मिलेगा। ये नगर विकास योजनाएँ (CDPs) विस्तृत विचार विमर्श के बाद वर्ष 2010 से 2030 तक के लिए बनाई गई हैं। विचार विमर्श द्वारा एक दृष्टिकोण परिभाषित हुआ है जिसे परियोजनाओं (Projects) के रूप में परिवर्तित किया जाएगा। नगर विकास योजनाओं (CDPs) में न केवल 20 वर्षों में आधारभूत संरचनाओं की जरूरतों को परिभाषित किया है बल्कि नगर सुधार की जरूरतों एवं परियोजनाओं के क्रियान्वयन के लिए धन राशि की उपलब्धता के लिए स्रोत को भी दर्शाया गया है। सभी नगर विकास योजनाओं (CDPs) में नगरीय स्तर पर वित्तीय सुधार पर जोर दिया है जो दीर्घ काल में न केवल विकास की जरूरतों को पूरा करने में लाभप्रद होगा बल्कि निजी क्षेत्र द्वारा निवेश को आकृष्ट करने में मदद करेगा। नगर विकास योजनाएँ (CDPs) राज्य को आर्थिक क्रिया कलापों के केन्द्र के रूप में नगरीय क्षेत्र के विकास के लिए पथप्रदर्शक होंगी।

ये नगर विकास योजनाएँ ब्रिटिश सरकार के अन्तराष्ट्रीय विकास विभाग (DFID) द्वारा वित्त पोषित संवर्धन परियोजना (SPUR) के तहत बनाई हैं। "संवर्धन" परियोजना वृहद आर्थिक क्रिया कलापों एवं सेवाओं जो गरीबों के विकास में सहायक हो सकती हैं को केन्द्र में रखते हुए आर्थिक वृद्धि एवं गरीबी उन्मूलन में विशिष्ट योगदान के लिए शहरी क्षेत्रों को मजबूती प्रदान करने पर केन्द्रित है।

जन प्रतिनिधि के रूप में मेरी हार्दिक इच्छा है कि बिहार अग्रणी राज्य की श्रेणी में खड़ा हो जैसे: प्राकृतिक एवं मानवीय संसाधन में अग्रणी, आर्थिक एवं मानवीय विकास में अग्रणी, ऐतिहासिक रूप से अग्रणी। अभी हम इस दिशा में एक छोटा सा कदम रख रहे हैं।

(प्रेम कुमार)



## संदेश



हमें यह घोषणा करते हुए अति प्रसन्नता हो रही है कि औरंगाबाद के दीर्घकालीन विकास के लिए समेकित दृष्टिकोण के साथ शहर की नगर विकास योजना (CDP) बन चुकी है। इस नगर विकास योजना में समेकित दीर्घकालीन कार्यनीति (दृष्टिकोण-2030) जो कि आगे अल्पकालीन, मध्यकालीन एवं अन्तकालीन कार्यनीति में विभाजित की गई है के साथ ही नगर निवेश योजना (CIP) का भी समावेश है। इस योजना के आधार पर औरंगाबाद नगर परिषद्, योजना में वर्णित प्राथमिकता आधारित चिन्हित परियोजनाओं के लिए भारत सरकार, राज्य सरकार, स्वयं के वित्तीय स्रोतों एवं अन्य वित्तीय स्रोतों से धन राशि प्राप्त कर सकेगा। नगर विकास योजना में विभिन्न क्षेत्रों की परिचालनीय कार्यनीति (Operational Strategy) एवं प्रत्येक व्यवहारिक क्षेत्र के क्रियान्वयन हेतु कार्य योजना शामिल है। इसके अतिरिक्त नगर विकास योजना (CDP) में शामिल वित्तीय क्रियान्वयन योजना (FOP) के अनुसार नगर परिषद् चिन्हित परियोजनाओं के क्रियान्वयन के लिए वित्तीय संसाधन उपलब्ध करा सकेगा।

यद्यपि नगर विकास योजना तैयार करने के लिए उच्च स्तरीय तकनीकी कार्य किया गया है तथापि नगर विकास योजना विस्तृत विचार विमर्श के बाद तैयार की गई है जिसमें शहर के सामाजिक एवं आर्थिक विकास में भागीदारी सुनिश्चित करने के लिए जन प्रतिनिधियों, नगर निकायों के पदाधिकारियों, सम्बन्धित संस्थाओं, नीति निर्धारकों, निजी क्षेत्र की संस्थाओं, नागरिक समितियों एवं जन साधारण के विचारों को शामिल किया गया है। नगर विकास योजना में औरंगाबाद शहर के भविष्य एवं विभिन्न क्षेत्र की परिचालनीय कार्यनीति (Operational Strategy) के बारे में एक दृष्टिकोण को प्रस्तुत किया गया है और क्रियान्वयन योग्य कार्य योजना को दर्शाया गया है।

यह नगर विकास योजना, ब्रिटिश सरकार के अन्तर्राष्ट्रीय विकास विभाग (DFID) द्वारा वित्त पोषित संवर्धन कार्यक्रम के तहत बनाई गई है। औरंगाबाद नगर परिषद् इस सहयोग के लिए DFID का आभारी है।

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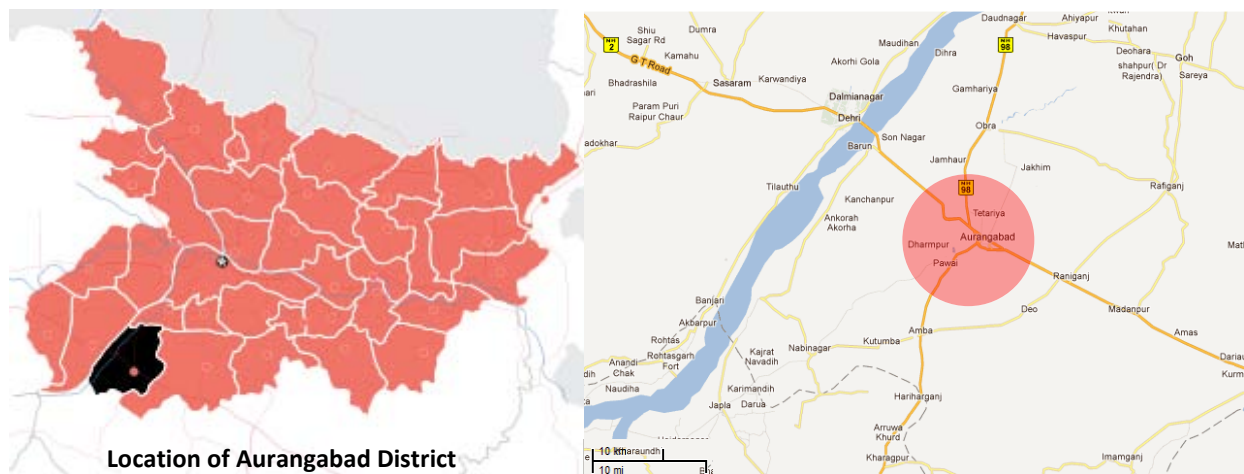
संगीता सिंह

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## Overview

**Aurangabad** derives its name from that of the Emperor Aurangzeb of the Mughal dynasty. Aurangabad is the district headquarters and the largest town of the district of the same name in terms of area and population. The town is a Municipal Council and is a major growth centre of the district. Aurangabad is the eighth largest town of Bihar in terms of area and the twenty fourth most populous city of the state.



Aurangabad is located between the towns of Gaya and Sasaram on the Gangetic plains. The town is located to the east of the River Sone, a tributary of River Ganga. The town is sanctified by both Hindu and the Muslim religions. It is surrounded by small rocky hills on three sides with the River Sone flowing to the west. Aurangabad is well connected with other cities in the district and state by road. The Grand Trunk Road (NH2) and NH98 pass through the town. The nearest railway station is located 16km from the town (Anugrah Narayan Road).

Aurangabad is a Nagar Parishad with an area of 21.33 sq km. It is divided into 33 wards and has an estimated population of 118900 (2011). The gross population density of the town is 37 PPH.

**The competitive advantage of Aurangabad** lies in its good connectivity. The town has several National and State Highways that support its connectivity to other parts of the state and region. The town is a district headquarter and the largest town in the district in terms of area and population.





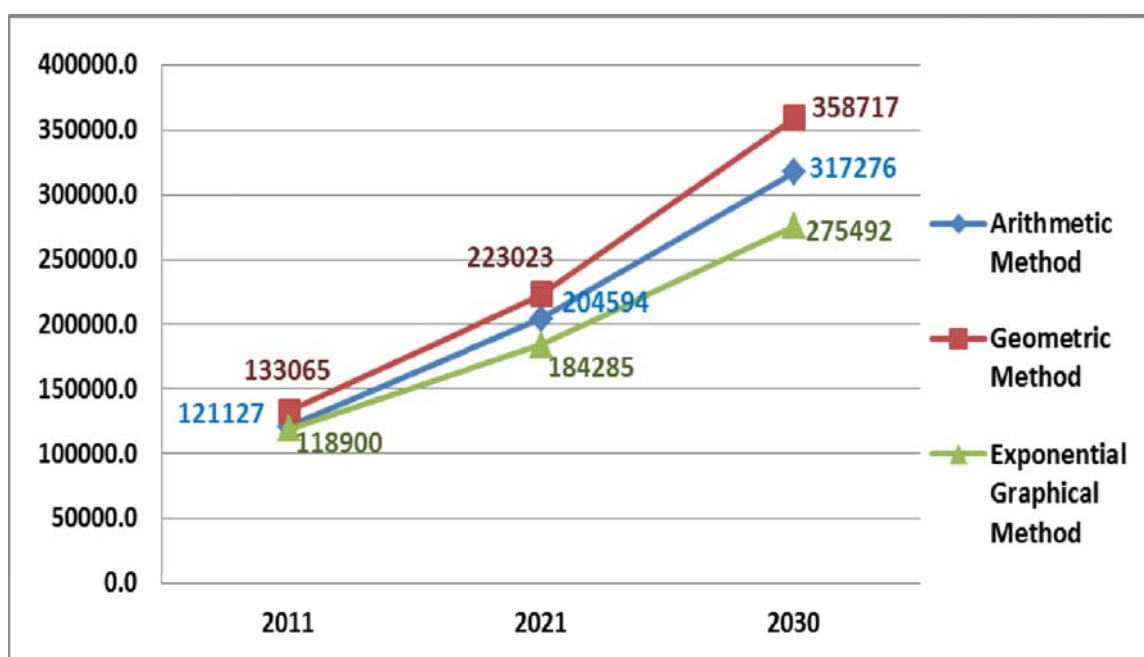
## CITY VISION

The vision for Aurangabad was derived on the basis of the status assessment of the city, stakeholder consultations and focused group discussions. Participatory consultations during the visioning process concluded that there is need to revive growth and improve the overall quality of life of its citizens. The identified Vision is as follows: ***“Aurangabad is visualized as a town with all basic physical and social amenities; as a regional growth centre with higher order administrative, economic and other service functions serving the entire region and supporting an economy based on wholesale trading, agro processing and manufacturing activities.”*** The identified vision forms the basis of sector-specific strategies adopted in framing the action plan.

## Demography

The population of Aurangabad city was about 79393 in 2001 and it has been steadily increasing over the years. The position of Aurangabad as a principle node has been driving the region’s economic, socio cultural and infrastructure development. The town also sees a large proportion of floating population that come to the town for a variety of reasons.

Based on population figures from Census 1961 to 2001, a population projection has been done using three different methods namely, Arithmetic Increase method, Geometric Method and Exponential Graphic Increase method that was found to be the most suitable in terms of trends identified through the census. The estimated projection shows that the population of Aurangabad will increase to about 2.76 lakhs (approx.) by year 2030.



## Sector Assessments & Growth Strategies

### A) Water Supply

Ground water is the main source of water in Aurangabad. Ground water is extracted through 11 functional high yielding tube-wells. The water supply system is decentralised and based on 2 overhead tanks (OHTs) with a combined capacity of 1.5 lakh gallons. The present demand is 11.89 MLD at the rate of 100 lpcd. The present supply is 4.5 MLD at 30 lpcd. The water supply system covers 6% of the town. The supply duration is for 1-3 hours a day. Chlorination is the only form of treatment practiced at present. The town is divided into seven water supply zones and the total length of the distribution system is only 2.5kms. The town has 35 public stand posts and 501 hand pumps of which 351 are functional. Water does not attract a separate charge – the municipality charges a flat fee of Rs. 700 as connection charges.

**Strategies:** The CDP suggests:

- The design of a comprehensive water supply augmentation scheme
- Achievement of target of 100 lpcd supply in Phase-I and 135 lpcd in Phase-II
- Minimisation of transmission losses
- Ground water recharging through rain water harvesting, conserving water bodies and controlling ground water extraction
- Recycling of treated waste water and promoting use through installation of dual pipelines
- Reduction of non-revenue water; introduction of metering and recovery of O & M costs through realistic user charges

| Detailed Project   | Phase-I (2011-16)       |                              | Phase-II (2016-21) |                              |
|--|-------------------------|------------------------------|--------------------|------------------------------|
|  | Quantity                | Investment<br>(in Rs. Crore) | Quantity           | Investment<br>(In Rs. Crore) |
| Main W/S pipeline  | 5km                     | 1.25                         |                    |                              |
| Fixtures and Fittings (20% of Main)  |                         | 0.25                         |                    |                              |
| Distribution W/S pipeline  | 33km                    | 4.95                         | 12km               | 1.80                         |
| Fixtures and Fittings (20% of Distribution Line)                                 |                         | 0.99                         |                    | 0.36                         |
| Construction of underground Tank, Pump house with 4 no. of pump sets (Raw Water) | 1                       | 1.40                         |                    |                              |
| Overhead reservoirs (20 lakh capacity each)                                      | 3                       | 7.50                         | 2                  | 5.00                         |
| Pumps and pumping station (20% of OHR)   |                         | 1.50                         |                    | 1.00                         |
| Fixtures and Fittings (20% OHT + Pumps)  |                         | 1.80                         |                    | 1.20                         |
| Underground reservoirs   | 1                       | 1.60                         | 1                  | 1.60                         |
| Filtration / treatment works (40 MLD capacity)                                   |                         | 9.92                         |                    | 7.04                         |
| Contingency Charges (10% )   |                         | 3.12                         |                    | 1.80                         |
| <b>Sub Total</b>   |                         | <b>34.28</b>                 |                    | <b>19.80</b>                 |
| <b>Grand Total</b>   | <b>Rs. 54.08 crores</b> |                              |                    |                              |

## B) Sewerage and Sanitation

Aurangabad has no organised sewerage system. The absence of a systematic wastewater disposal system has led to waste water and sullage into the rivers/storm water drains that are mostly open. It is estimated that 32% of households have septic tanks. Aurangabad town has 3 public conveniences. It is estimated that the current waste generation is about 9.51 MLD and this is projected to increase to 29.75 MLD. At present, waste water and sullage are discharged into the Shahpur Nallah and River Adri with the overflow of most of the septic tanks being connected to open drains. The present system is inadequate and poses a potential threat to overall health and hygiene.

**Strategies:** The key strategies in the CDP are:

- Provision of community and public toilets at appropriate locations through PPP wherever possible
- Design of an integrated 'city-wide' network that includes collection, treatment, disposal of waste water
- Integrated planning and implementation of water supply-drainage-sewerage-SWM to optimize the benefits including recycling and reuse
- Exploring incentives for use of recycled water

| Detailed Project                | Phase – I (2011 – 16)  |                               | Phase – II (2016 – 21) |                               |
|---------------------------------|------------------------|-------------------------------|------------------------|-------------------------------|
|                                 | Quantity               | Investment<br>(In Rs. Crores) | Quantity               | Investment<br>(In Rs. Crores) |
| Main Pipe line installation     | 7 Km                   | 7.00                          |                        |                               |
| Secondary & Collector line      | 38 km                  | 13.30                         | 5 km                   | 1.75                          |
| Treatment Plant (1 nos.,30 MLD) | -                      | -                             | 1 No.                  | 15.00                         |
| Community Toilet Blocks         | 3 No.                  | 0.09                          | 3 No.                  | 0.09                          |
| Public Toilets                  | 2 No.                  | 0.10                          | 2 No.                  | 0.10                          |
| <b>Sub Total</b>                |                        | <b>20.49</b>                  |                        | <b>16.94</b>                  |
| <b>Grand Total</b>              | <b>Rs. 37.43 crore</b> |                               |                        |                               |

## C) Storm Water Drainage

The drainage system in general is inadequate. Aurangabad town has only 12 kms of drains covering 20% of its area. All drains are open and carry mixed waste water and sullage. The drainage system is divided into two zones with the drainage of the Eastern Zone being discharged into the Shahpur Nallah and River Adri. The drainage in the Western Zone discharges into the Jasoia Nallah. The town has two main nallahs – the Jasoia Nallah and the Shahpur Nallah. Most of the drains are poorly maintained with limited carrying capacity arising from silting, disposal of solid wastes and encroachments. Water logging is a problem especially in the monsoons in the Shahpur Nallah. The core market areas of the town and the low lying areas along the M.G. Road and Old G.T. Road are especially flood prone.

**Strategies:** The key strategies in the CDP are:

- Design and implementation of an organized disposal system to protect the River Adri
- Construction of new drains, linking drains and strengthening existing drains on priority
- Conversion of open and kutchra drains into covered and pucca drains
- Managing water logging
- Installation of waste water treatment plant



| Detailed Project  | Phase-I (2011-16)      |                           | Phase-II (2016-21) |                           |
|---|------------------------|---------------------------|--------------------|---------------------------|
|   | Quantity               | Investment (In Rs. Crore) | Quantity           | Investment (In Rs. Crore) |
| Main line   | 14 km                  | 4.20                      | -                  | -                         |
| Secondary & Tertiary drains length                              | 64 km                  | 12.80                     | 10 km              | 2.00                      |
| Strengthening of existing drain                                 | 12 km                  | 0.60                      | -                  | -                         |
| Construction of Waste Water Treatment Plant 5 MLD capacity each | 1 Nos.                 | 0.25                      | 1 No.              | 0.25                      |
| Sub Total   |                        | 17.85                     |                    | 2.25                      |
| <b>Grand Total</b>  | <b>Rs. 20.10 crore</b> |                           |                    |                           |

#### **D) Solid Waste Management**

It is estimated that Aurangabad generates about 15 tonnes of garbage per day. Garbage generation is expected to increase to 69 tonnes per day by 2030. About 40% of the waste generated is collected while the rest is unattended. Collection of wastes is mainly through street sweepings and secondary collections from 15 dustbins in different parts of the city. The ULB uses 106 hand trolleys and 53 hand rickshaws for collection. The waste is manually loaded into open tractors for disposal. The ULB has 3 tractors, 17 tempos, 4 dumpers, 4 loaders and one roller to collect and transport garbage. The ULB has not identified any sites for disposal of wastes and most of it is dumped in low lying areas and along the River Adri.

**Strategies:** The key strategies in the CDP are:

- Introduction of door to door collection in phases
- Segregation of wastes with separate bins at major collection sites
- Mechanisation of waste handling
- Development of sanitary landfill
- Involvement of private sector in solid waste management
- Effective IEC campaigns to support interventions

| Identified Projects   | Phase-I (2011-16)      |                           | Phase-II (2016-21) |                           | Phase-III (2021-30) |                           |
|---|------------------------|---------------------------|--------------------|---------------------------|---------------------|---------------------------|
|   | Quantity               | Investment (In Rs. Crore) | Quantity           | Investment (In Rs. Crore) | Quantity            | Investment (In Rs. Crore) |
| Operational Cost from Collection to Disposal                                |                        | 11.71                     | -                  | -                         | -                   | -                         |
| Vehicles and Equipment's related to collection, transportation & disposal * | 1000 Nos.              | 3.84                      | 1000               | 3.84                      | 334                 | 1.21                      |
| Landfill Site Development   | 1                      | 0.04                      | -                  | -                         | -                   | -                         |
| Miscellaneous   |                        | 0.78                      |                    | 0.78                      |                     | 0.23                      |
| <b>Grand Total</b>  | <b>Rs. 22.50 crore</b> |                           |                    |                           |                     |                           |

\* Community bins, Containers, handcarts, tricycles, dumper, trailer, bulldozer, compacters, excavators etc.

#### **E) Roads, Traffic, and Transportation**

Aurangabad town is regionally connected via the NH 2 and NH 98. The town has a total road length of 38 kms of which 22km is surfaced. 39% is surfaced. The carriageway is narrow on account of encroachments and on-street parking. The major roads in the town run in an east-west direction with 80% of the traffic comprising cycles and pedestrians.

## City Development Plan for Aurangabad: EXECUTIVE SUMMARY

Some important junctions in the city are Ramesh Chowk, Madrasa Chowk, Nawadih Chowk, Karma More, Jasoia More, Shahpur Chowk, Patna More, Dharnidhar Chowk, Maharana Pratap Chowk, Sinha College More, Poiwan More. Aurangabad has two bus stands.

**Strategies:** The key strategies in the CDP are:

- Removal of encroachments to increase road width
- Conversion of existing kutchha road to pucca road; construction of new roads and construction of link roads where required
- Improvement and/or development of intersections
- Construction of new footpaths along all the major roads and secondary roads
- Organised parking
- Installation of street lights; signages
- Preparation of a Comprehensive Mobility Plan

| Detailed Project   | Phase-I (2011-16)       |                               | Phase-II (2016-21) |                               |
|--|-------------------------|-------------------------------|--------------------|-------------------------------|
|  | Quantity                | Investment<br>(In Rs. Crores) | Quantity           | Investment<br>(In Rs. Crores) |
| Upgradation of Bus Terminal  | 2 Nos.                  | 5.00                          | -                  | -                             |
| Truck Terminal   | 1 No.                   | 15                            |                    |                               |
| Footpaths (Rs. 1000 / sq. m.)  | 10 km                   | 1.50                          | 6 km               | 0.90                          |
| Parking lots   | 2 Nos.                  | 5.00                          | 2                  | 5.00                          |
| Construction of passenger sheds  | 6 Nos.                  | 0.6                           | 2                  | 0.20                          |
| Up gradation and Strengthening of roads within the city and for missing links. | 16 kms                  | 8.32                          | -                  | -                             |
| Construction of Ring Road  | -                       | -                             | 14kms              | 7.00                          |
| New Road Construction and linking  | -                       | -                             | 5kms               | 7.50                          |
| Repairing of the City Road   | 15kms                   | 7.50                          | 7 kms              | 3.50                          |
| Signage, Road Markings and Pedestrian Crossing etc. at various locations       | 5 Nos.                  | 0.10                          | 3 Nos.             | 0.06                          |
| Foot Over Bridge   | 1No.                    | 0.5                           | 1No.               | 0.5                           |
| Junction and Traffic Signal Improvement  | 5 Nos.                  | 2.00                          | 3 Nos.             | 1.20                          |
| Comprehensive Mobility Plan  |                         |                               | 1 Nos.             | 0.50                          |
| <b>Sub Total</b>   |                         | <b>45.52</b>                  |                    | <b>33.36</b>                  |
| Conventional Street Lights   | 800 Nos.                | 2.40                          | 299                | 0.89                          |
| Solar Lights   | 271 Nos.                | 1.08                          | 200                | 0.80                          |
| <b>Sub Total</b>   |                         | <b>3.48</b>                   |                    | <b>1.19</b>                   |
| <b>Grand Total</b>   | <b>Rs. 84.06 crores</b> |                               |                    |                               |

### F) Street Lighting and Fire Fighting

Street lighting is inadequate with only 100 street light points and 8 high mast light points.

### G) Housing and Urban Poverty

Aurangabad has 46 slums with a population of 36450 (SPUR Survey December 2010). Approximately 25% of the city's population reside in slums. Only 13% of slums have access to a toilet facility while

## City Development Plan for Aurangabad: EXECUTIVE SUMMARY

open defecation is the norm in the other slums. Water supply is mainly through private hand pumps (63%), public hand pumps (26%) and wells (11%). 52% slums have kutchra roads. None of the slums have organised solid waste. In general, access to infrastructure is poor leading to unhygienic conditions in slums.

**Strategies:** The key strategies in the CDP are:

- Access to basic infrastructure including housing
- Integrated development of slums with the town
- Provision of community toilets where individual toilets are not possible

| Detailed Project     | Phase-I (2011-16)      |                           | Phase-II (2016-21) |                           | Phase-III (2021-30) |                           |
|----------------------|------------------------|---------------------------|--------------------|---------------------------|---------------------|---------------------------|
|                      | Quantity               | Investment (In Rs. Crore) | Quantity           | Investment (In Rs. Crore) | Quantity            | Investment (In Rs. Crore) |
| Housing Construction | 2500 Nos.              | 25.00                     | 2000 Nos.          | 20.00                     | 1575 Nos.           | 15.75                     |
| <b>Grand Total</b>   | <b>Rs. 60.75 crore</b> |                           |                    |                           |                     |                           |

### H) Social Infrastructure

An assessment of social infrastructure in Aurangabad was done. The town has 1 Stadium, 2 Cinema Halls, 1 Social Club, 1 Public Library and 1 Reading Room. The town has only 12 kathas area under recreation, parks and gardens. Open spaces account for only 2.50 acres. Aurangabad has 4 colleges, 1 Medical College and 1 private Engineering College. The Civil Hospital is located in the town. There are limited facilities for specialized medical treatment in the town.

**Strategies:** The key strategies in the CDP are:

- Development of adequate recreational facilities
- Improvement of community facilities
- Installation of Entry and Exit Gates
- Skill upgradation and Vocational Training Centres

| Detailed Project            | Phase-I (2011-16)      |                           | Phase-II (2016-21) |                           | Phase-III (2021-30) |                           |
|-----------------------------|------------------------|---------------------------|--------------------|---------------------------|---------------------|---------------------------|
|                             | Quantity               | Investment (In Rs. Crore) | Quantity           | Investment (In Rs. Crore) | Quantity            | Investment (In Rs. Crore) |
| Multipurpose/Community Hall | 2 Nos.                 | 1.00                      | 1 Nos.             | 0.50                      | 1 Nos.              | 0.50                      |
| Neighborhood Parks          | 2 Nos.                 | 0.50                      | 1 Nos.             | 0.25                      | 1 Nos.              | 0.25                      |
| Recreational Centers        | 1 Nos.                 | 1.50                      | 1                  | 1.50                      | -                   | -                         |
| City Park                   | 1 Nos.                 | 0.40                      | -                  | -                         | -                   | -                         |
| Playgrounds                 | 1 Nos.                 | 0.20                      | 1 Nos.             | 0.20                      | -                   | -                         |
| Night Shelters              | 1 Nos.                 | 0.05                      | -                  | -                         | -                   | -                         |
| Welcome Gate                | 1 Nos.                 | 0.04                      | 1 Nos.             | 0.04                      | 1 Nos.              | 0.04                      |
| Fire Station                | 1 Nos.                 | 5.00                      | 1 Nos.             | 5.00                      | -                   | -                         |
| Cremation Ground            | 2 Nos.                 | 0.10                      | 1 Nos.             | 0.05                      | 1 Nos.              | 0.05                      |
| <b>Sub Total</b>            |                        | <b>8.78</b>               |                    | <b>7.53</b>               |                     | <b>0.83</b>               |
| <b>Grand Total</b>          | <b>Rs. 17.15 crore</b> |                           |                    |                           |                     |                           |



### **I) Local Economy**

It is estimated that the workforce participation in the town is 21.40%. Main workers account for 85% and marginal workers 15%. Services and business constitutes the main economic base with wholesale and retail being important in the Old City. Trade and commerce including commercial activities is concentrated in the Ramesh Chowk, Masjid Chowk, Shahpur Market and Nawadih Chowk. Aurangabad has 9 small and medium industrial units manufacturing wooden furniture materials, aluminum utensils, crockery, iron rods (gates, windows etc), carpet and blanket weaving. Most of these economic activities are unorganized adding to the overall haphazard development in the town.

**Strategies:** The key strategies in the CDP are:

- Development of organised market complexes
- Promotion of household and small scale units
- Development of agricultural produce processing units
- Establishment of permanent platforms for weekly vegetable market

| Detailed Project  | Phase-I (2011-16)      |                           | Phase-II (2016-21) |                           |
|---|------------------------|---------------------------|--------------------|---------------------------|
|   | Quantity               | Investment (In Rs. Crore) | Quantity           | Investment (In Rs. Crore) |
| Renovation of existing municipal Markets  | 2 Nos.                 | 0.80                      | 2 Nos.             | 0.80                      |
| Construction of Industrial Sheds / Promotion Zone to accommodate 250 household and small scale Units/ industries with storage | 75 Nos.                | 15.00                     | -                  | -                         |
| Shopping / Commercial Complex   | 2 Nos.                 | 10.00                     | 1 Nos.             | 5.00                      |
| Platforms for Weekly Market/ Vegetable  | 1 Nos.                 | 2.00                      | 1 Nos.             | 2.00                      |
| <b>Sub Total</b>  |                        | <b>27.80</b>              |                    | <b>7.80</b>               |
| <b>Grand Total</b>  | <b>Rs. 35.60 crore</b> |                           |                    |                           |

### **J) Heritage and Tourism**

Aurangabad has a historic past and has been home to stalwarts of the freedom struggle. Some of the places of tourist interest in and around the town include Deo (a Sun Temple located 10 km from the town), the Deo Kund located 10 km south east, Umga located 24 km to the east and a Vaishnav Temple. Other places include the Ajmer Sharif, Pawai, Mali and Chandangarh forts. The religious places are not well maintained.

**Strategies:** The key strategies in the CDP are:

- Conservation, preservation, restoration of religious and cultural places
- Conservation of water bodies including river front development of the River Adri
- Street scaping and landscaping
- Signages at tourist sites

| Detailed Project   | Phase – I (2011-16)                   | Phase – II (2016-21)                  |
|--|---------------------------------------|---------------------------------------|
|  | Investment Required<br>(In Rs. Crore) | Investment Required<br>(In Rs. Crore) |
| Conservation & preservation of Adri River & Shahpur Nallah (Bioremediation, landscaping, Pathways & Ghat Development ) | 3.00                                  | -                                     |
| <b>Sub Total</b>   | <b>3.00</b>                           | <b>-</b>                              |
| <b>Grand Total</b>   | <b>Rs. 3.00 crore</b>                 |                                       |

### **K) Financial Position of the Local Body**

The Aurangabad Nagar Parishad has been erratic ranging from Rs. 158.07 lakhs in 2008-09 to Rs. 7.00 lakhs in 2010-11. The average growth rate of 'own revenues' of the ULB (tax and non- tax) was 20.02%. The average share of tax component in total income is 6.55%; the share of the non-tax component is 22.57%. Expenditure on salaries and wages constitute the largest spend in fact; this has been increasing over the years – from Rs. 33.57 lakh in 2008-09 to Rs. 38 lakhs in 2010-11.

#### **Municipal Income**

| Year                     | Total Owned Income<br>(In Rs. Lakhs) | Assigned Rev, Rev Grants &<br>Other income (In Rs. Lakhs) | Total Revenue Income<br>(In Rs. Lakhs) | Capital Grants<br>(In Rs. Lakhs ) | Total Income<br>(Rs. Lakhs) |
|--------------------------|--------------------------------------|---|--|-----------------------------------|-----------------------------|
| 2008-09                  | 28.70                                | 129.37  | 158.07                                 | 12.5                              | 170.57                      |
| 2009-10                  | 31.72                                | 47.46   | 79.18                                  | 0                                 | 79.18                       |
| 2010-11*                 | 43.00                                | 91.00   | 134.00                                 | 7                                 | 141.00                      |
| *Growth Rate<br>(annual) | 20.02                                | -17.59  | -0.08                                  |                                   | -0.09                       |

#### **Municipal Expenditure**

| Year               | Non Development Expenses<br>(Rs. Lakhs) | Development Expenditure<br>(Rs. Lakhs) | Total Expenditure<br>(Rs. Lakhs) |
|--------------------|---|--|----------------------------------|
| 2008-09            | 35.41                                   | 1.52                                   | 36.93                            |
| 2009-10            | 51.73                                   | 7.21                                   | 58.94                            |
| 2010-11*           | 46.00                                   | 4.31                                   | 50.31                            |
| Annual Growth Rate | 13.07                                   | 27.18                                  | 52.11                            |

#### **Key Parameters**

| Year      | Total Income<br>(In Rs. Lakhs) | Total Expenditure<br>(In Rs. Lakhs) | Surplus /Deficit (In<br>Rs. Lakhs) | %     | Income from Own<br>Sources<br>(In Rs. Lakhs) | Financial<br>Sustainability (%) |
|-----------|--------------------------------|-------------------------------------|------------------------------------|-------|--|---------------------------------|
| 2008-09   | 158.07                         | 36.93                               | 121.14                             | 76.64 | 78.39  | -9.54                           |
| 2009-2010 | 79.18                          | 58.94                               | 20.24                              | 25.57 | 173.43                                       | 50.42                           |
| 2010-11   | 134.00                         | 50.31                               | 83.69                              | 62.46 | 117.00                                       | 76.92                           |
| Average   |                                |                                     |                                    | 54.89 |  | 39.27                           |

**Key Findings:** The key findings in municipal finance identified in the CDP are:

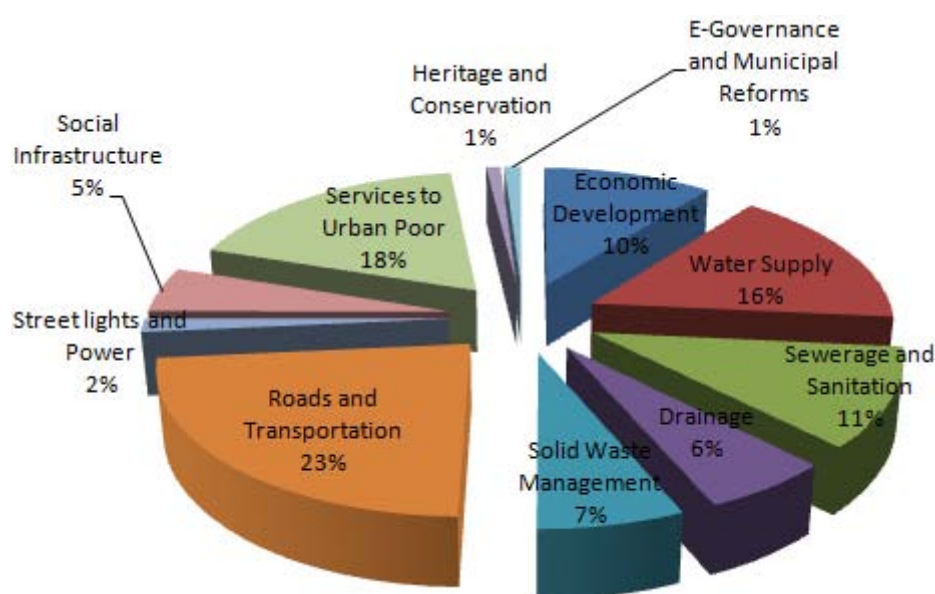
- 91.69% of expenditure is for 'non developmental' purposes and only 8.31% is for 'development' purposes
- Average surplus with the ULB is 54.89% in the last three decades
- The share of 'own resources' in total income is about 20.02%
- On an average 39.27% of expenditure is financed by own sources of the ULB

## Capital Investment Plan (CIP)

The total funding over the life of the CDP period, i.e. up to year 2030, is estimated at **Rs. 338.14 crores**. Sector-wise details of the investments have been defined for the entire period.

The scheduling or phasing of the CIP is based on the analysis of fiscal resources for new investments and O&M, technical capacity for construction and the choice of specific improvements to be taken up over the CDP period. About 23% of the capital investment estimate is envisaged for roads and transportation; 16% for water supply and 12% for sewerage and sanitation.

| Sectors  | Investment Required<br>(In Rs. Crores) |                       |                        | Total         | Sectoral<br>Distribution<br>(%) |
|--|--|-----------------------|------------------------|---------------|---------------------------------|
|  | Phase I<br>2011-2016                   | Phase II<br>2016-2021 | Phase III<br>2021-2030 |               |                                 |
| Economic Development                               | 27.80                                  | 7.80                  | -                      | 35.60         | 10.53                           |
| Water Supply                                       | 34.28                                  | 19.80                 | -                      | 54.08         | 15.99                           |
| Sewerage and Sanitation                            | 20.49                                  | 16.94                 | -                      | 37.43         | 11.07                           |
| Drainage   | 17.85                                  | 2.25                  | -                      | 20.10         | 5.94                            |
| Solid Waste Management                             | 16.36                                  | 4.61                  | 1.54                   | 22.50         | 6.65                            |
| Roads and Transportation                           | 45.52                                  | 33.36                 | -                      | 78.88         | 23.33                           |
| Street lights and Power                            | 3.49                                   | 1.70                  | -                      | 5.18          | 1.53                            |
| Social Infrastructure                              | 8.79                                   | 7.54                  | 0.84                   | 17.16         | 5.07                            |
| Services to Urban Poor                             | 25.00                                  | 20.00                 | 15.75                  | 60.75         | 17.97                           |
| Heritage and Conservation                          | 3.00                                   | -                     | -                      | 3.00          | 0.89                            |
| E-Governance and Municipal Reforms                 | 3.47                                   | -                     | -                      | 3.47          | 1.03                            |
| <b>TOTAL</b>                                       | <b>206.03</b>                          | <b>113.99</b>         | <b>18.12</b>           | <b>338.14</b> | <b>100</b>                      |
| <b>Phase-wise Distribution<br/>(In percentage)</b> | <b>60.93</b>                           | <b>33.71</b>          | <b>5.36</b>            | <b>100</b>    |                                 |





## Financial Operating Plan (FOP)

The investment capacity of the Aurangabad Nagar Parishad is assessed through a Financial Operating Plan (FOP) that gives a multi-year forecast of finances of the local body for the short term period. The FOP is generated to assess the investment-sustaining capacity of the ULB, if it adopts a project funding structure comprising grants with internal resources and loans accounting for the rest. The level of investment that the ULB can sustain is then determined by studying the overall surpluses/year-to-year opening balance and debt service coverage ratio (DSCR).

An important aspect that needs to be considered in raising financial resources is beneficiary contribution. This practice has to be promoted and the concept of PPP also needs to be introduced to make the services sustainable. Thus a total investment of Rs. 206 crores in the short-term (2011-12 – 2015-16) can be pooled by implementing PPP – this further decreases the financial burden of the ULB in the next five years.

| Sector                    | Amount<br>(Rs Crore) | Funding Pattern (Rs. Crore)            |                         |                         |                         |
|---------------------------|----------------------|--|-------------------------|-------------------------|-------------------------|
|                           |                      | Other funding sources<br>including GoI | GoB                     | ULB                     | PPP                     |
| Water Supply              | 34.3                 | 27.4                                   | 3.4                     | 3.4                     | 0.0                     |
| Sewerage and Sanitation   | 20.5                 | 16.3                                   | 2.0                     | 2.0                     | 0.1                     |
| Drainage                  | 17.9                 | 14.3                                   | 1.8                     | 1.8                     | 0.0                     |
| Solid Waste Management    | 16.4                 | 10.0                                   | 1.3                     | 1.3                     | 3.8                     |
| Transport                 | 45.5                 | 2.1                                    | 16.4                    | 2.1                     | 25.0                    |
| Social Infrastructure     | 8.8                  | 0.0                                    | 6.6                     | 0.7                     | 1.5                     |
| Urban Poor                | 25.0                 | 20.0                                   | 2.5                     | 2.5                     | 0.0                     |
| E-Governance              | 3.5                  | 0.0                                    | 3.1                     | 0.3                     | 0.0                     |
| Economic Development      | 27.8                 | 9.0                                    | 4.5                     | 12.8                    | 1.5                     |
| Street Light              | 3.5                  | 0.0                                    | 3.1                     | 0.3                     | 0.0                     |
| Heritage and conservation | 3.0                  | 2.4                                    | 0.3                     | 0.3                     | 0.0                     |
| <b>Total</b>              | <b>206.0</b>         | <b>101.5<br/>(49.3%)</b>               | <b>45.0<br/>(21.8%)</b> | <b>27.6<br/>(13.4%)</b> | <b>31.9<br/>(15.5%)</b> |

The FOP assumes that in the short term:

- At least 10% contribution of the overall fund requirement will be from the ULB
- Rs. 0.10 crores (Sewerage and Sanitation) for public toilets will be through PPP
- Rs. 3.80 crores (Solid Waste Management) towards vehicles and equipments will be through PPP
- Rs. 25.00 crores (Roads and Transportation) towards up-gradation of bus terminal, construction of truck terminal and parking lots will be through PPP

The key considerations for the FOP are:

- At least 10% of the overall fund requirement will be from the ULB therefore, stringent steps and interventions are required to enhance its 'own' resource base
- It is assumed that in cases where funding other than state government will be available (could be loans from financial institutions, central government, other funded programmes), there will be part contribution from the state government and the ULB will contribute at least 10%
- Emphasis to be on developing projects on PPP wherever possible

## Overall Assessment

An overall assessment of the existing service delivery levels on various indicators. It is observed that in Aurangabad town most of the service levels are Alarming.

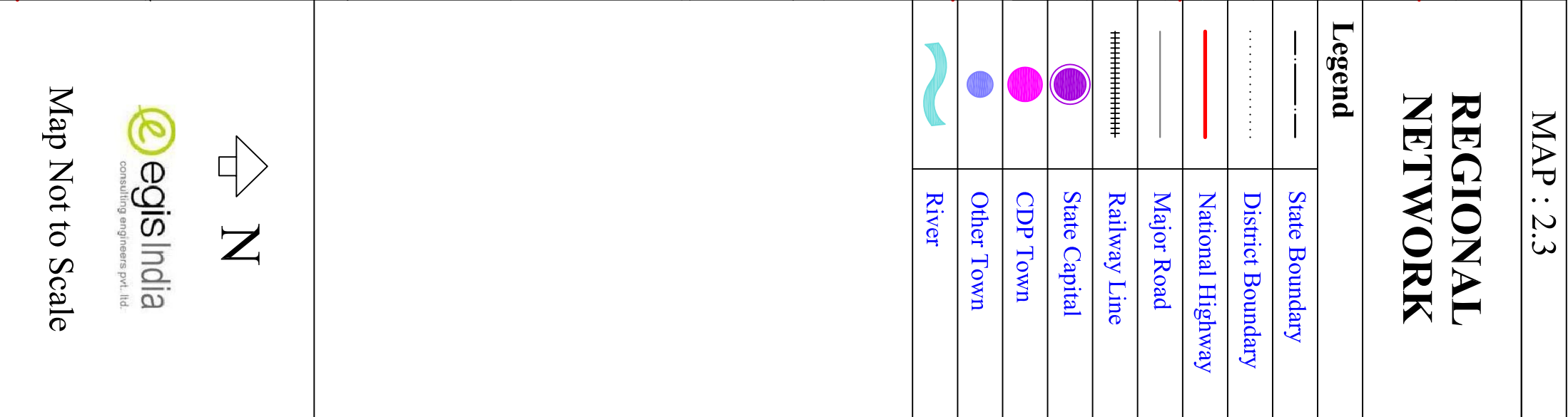
|   | Parameter  | Indicators  | Category                     | Colour Code for Status |
|---|--|---|------------------------------|------------------------|
| 1 | Status of Infrastructure and Service Delivery Levels | Coverage of Water Supply Connections  | 6.29%                        |                        |
|   |  | Per Capita Availability of Water  | 30 LPCD                      |                        |
|   |  | Continuity of Water Supply  | 1-3 HRs                      |                        |
|   |  | Coverage of Individual Toilets  | 62%                          |                        |
|   |  | Door to Door Collection of SWM  | 0%                           |                        |
|   |  | Collection Efficiency of Solid Waste  | 40%                          |                        |
| 2 | Financial Management                                 | Operating Ratio   | > 1                          |                        |
|   |  | Growth in Revenue Income  | -0.09%                       |                        |
| 3 | Poverty Level  | % of Below Poverty Line (BPL) Population  | 19.12%                       |                        |
| 4 | Organization Structure                               | Staffing pattern, availability of sufficient staff, competency level of existing staff for implementing proposed projects   | <i>Observation Based</i>     |                        |
| 5 | Leadership   | Leadership quality, awareness and understanding regarding urban sector, proactive approach for implementing reform measures | <i>Observation Based</i>     |                        |
| 6 | Economic Development Potential                       | Potential for Development, linkages to the state capital and other cities, status of existing infrastructure                | <i>Observation Based</i>     |                        |
| 7 | Environment Sustainability                           | Status of Environment, quality of water, air  | <i>Observation Based</i>     |                        |
| 8 | Participation  | Level of Participation from Citizen/Citizen Forums/Welfare Association in municipal affairs                                 | <i>Observation Based</i>     |                        |
| 9 | Compliance with Reforms                              | Status of reform implementation and preparedness for implementation   | <i>Consultant's Analysis</i> |                        |

### Legend

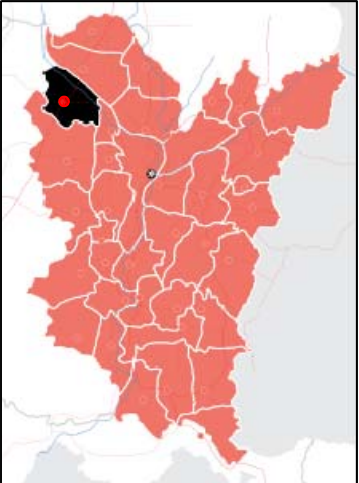
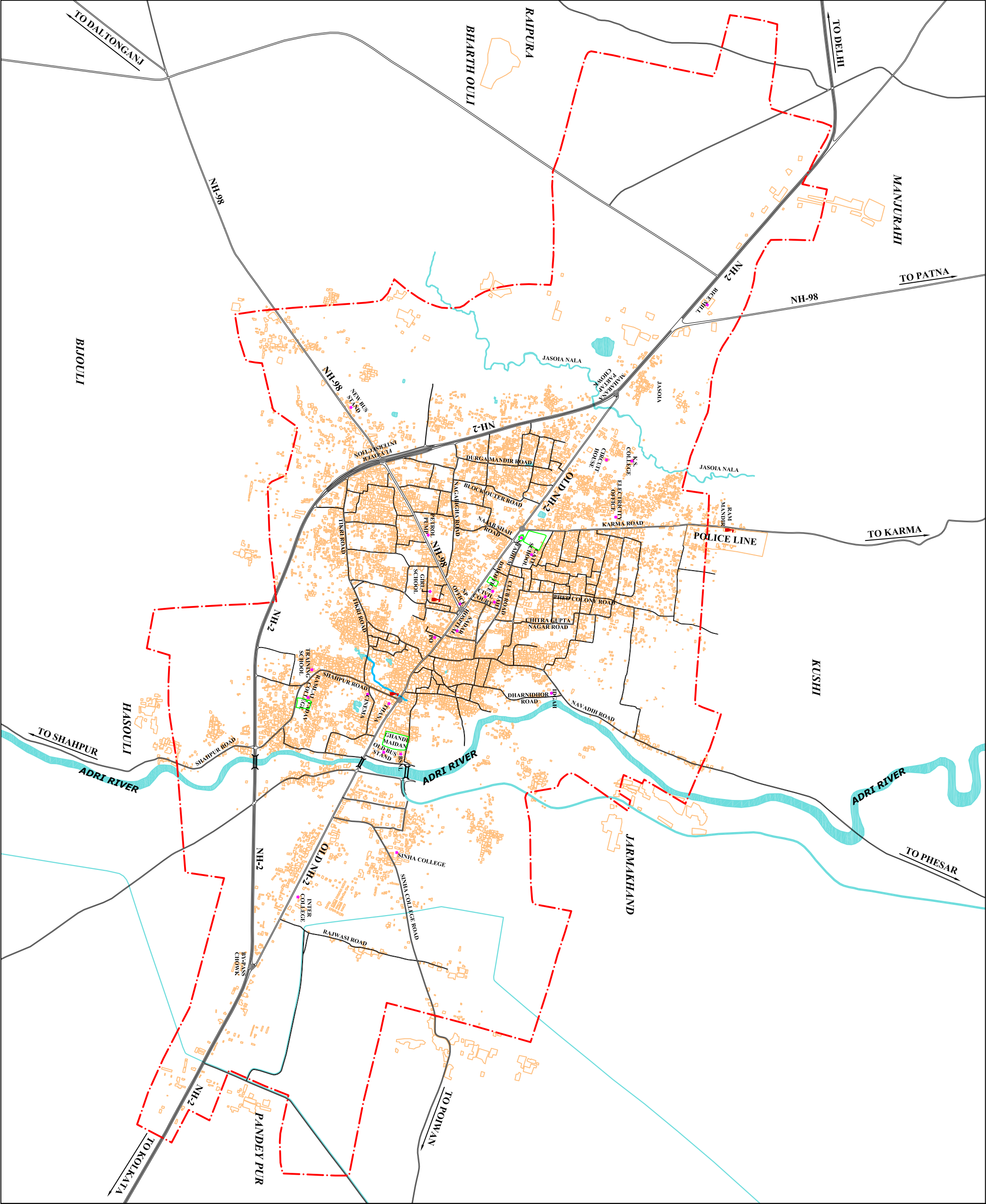
Alarming  Average  Below Average  Good

## MAP : 2.3

## Legend







# AURANGABAD

## BIHAR

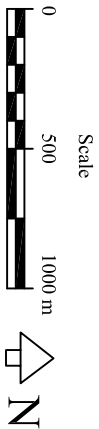
### KEY MAP

### Legend

|  |                          |
|--|--------------------------|
|  | Road                     |
|  | Built-up                 |
|  | Park/Playground/Stadium  |
|  | Bridge                   |
|  | River/Canal/Water Bodies |
|  | Drain                    |
|  | Municipal Boundary       |
|  | Major Landmark           |
|  | Major Intersection       |
|  | Temple                   |

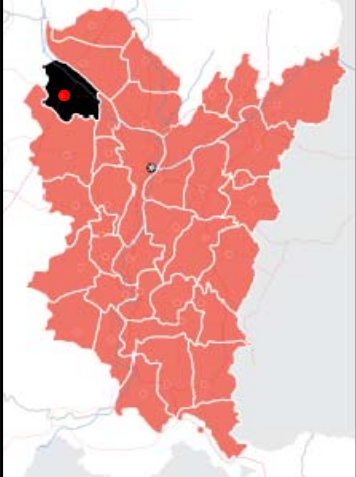
### MAP : 2.4

## CITY MAP



# AURANGABAD

## BIHAR



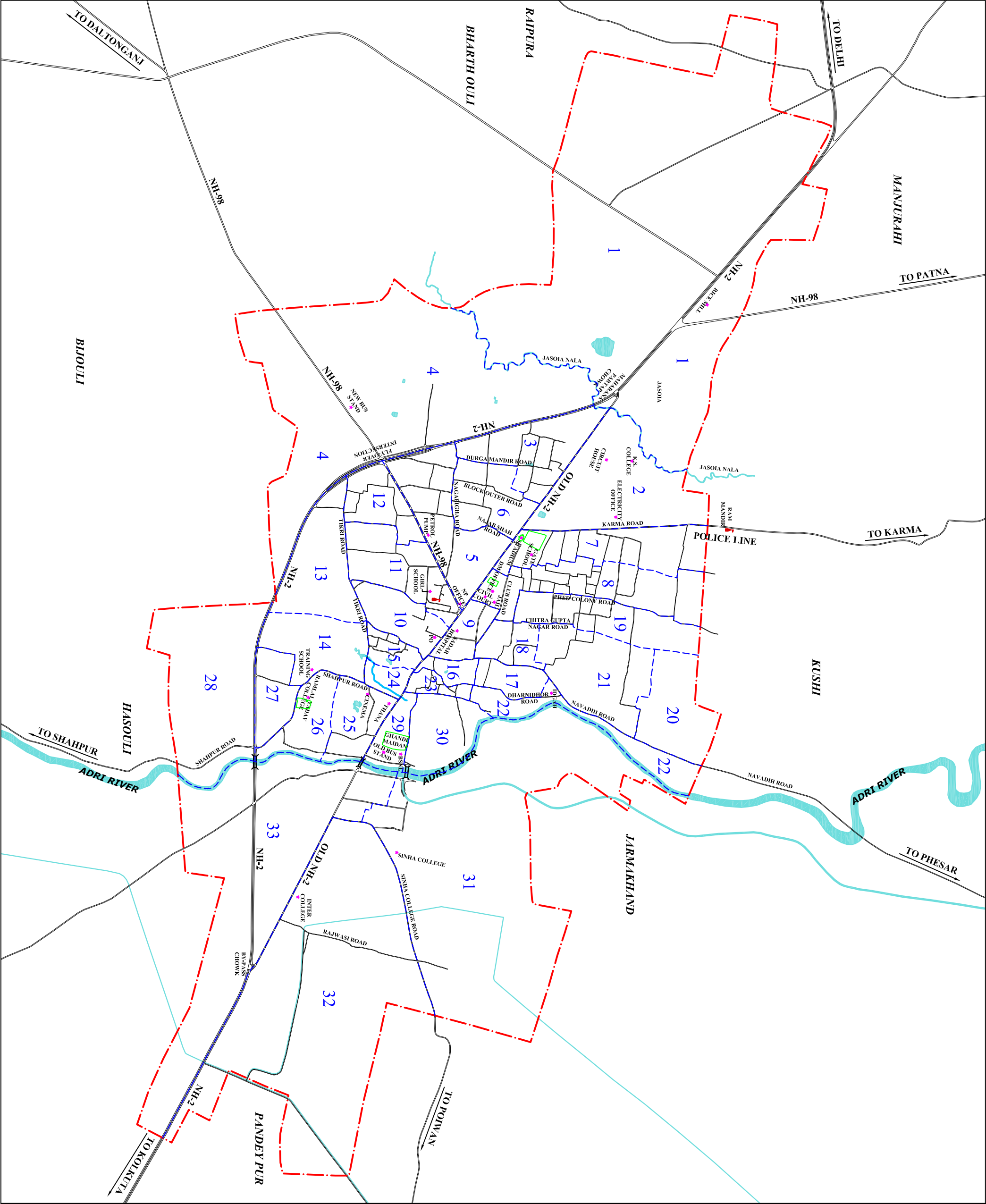
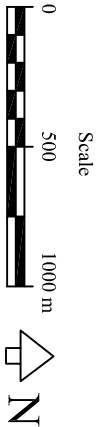
### KEY MAP

### Legend

|  |                          |
|--|--------------------------|
|  | Municipal Boundary       |
|  | Ward Boundary            |
|  | Road                     |
|  | Bridge                   |
|  | River/Canal/Water Bodies |
|  | Drain                    |
|  | Major Landmark           |
|  | Temple                   |

MAP : 3.1

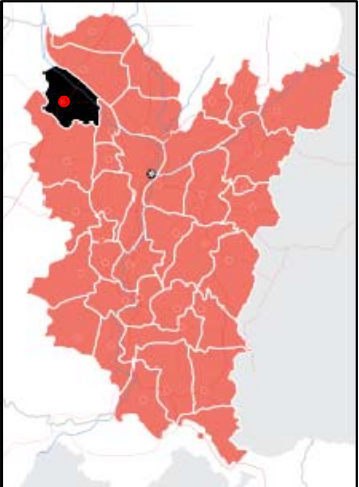
## WARD MAP





# AURANGABAD

## BIHAR



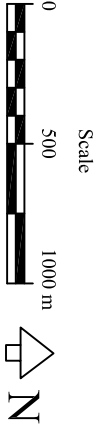
### KEY MAP

### Legend

|  |                          |
|--|--------------------------|
|  | High Density             |
|  | Medium Density           |
|  | Low Density              |
|  | Park/Playground/Stadium  |
|  | Municipal Boundary       |
|  | Ward Boundary            |
|  | Road                     |
|  | Bridge                   |
|  | River/Canal/Water Bodies |
|  | Drain                    |
|  | Major Landmark           |
|  | Temple                   |

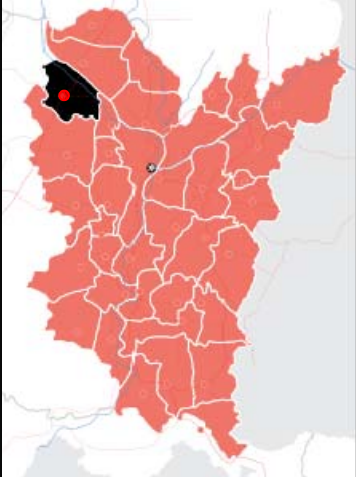
MAP : 3.2

### WARD WISE POPULATION DENSITY



# AURANGABAD

## BIHAR



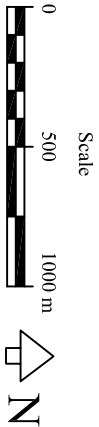
### KEY MAP

### Legend

|  |                          |
|--|--------------------------|
|  | Commercial               |
|  | Road                     |
|  | Park/Playground/Stadium  |
|  | Bridge                   |
|  | River/Canal/Water Bodies |
|  | Drain                    |
|  | Municipal Boundary       |
|  | Major Landmark           |
|  | Major Intersection       |
|  | Temple                   |

MAP : 4.1

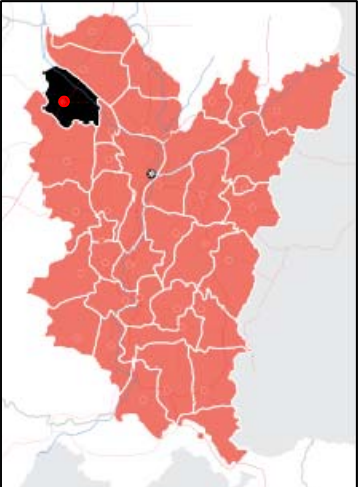
## COMMERCIAL ACTIVITIES





# AURANGABAD

## BIHAR



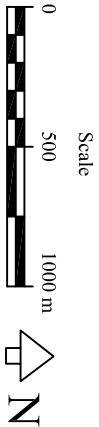
### KEY MAP

### Legend

|                    |                          |
|--------------------|--------------------------|
|                    | Major Road               |
|                    | Other Road               |
|                    | Transport Infrastructure |
|                    | Bridge                   |
|                    | River/Canal/Water Bodies |
|                    | Drain                    |
|                    | Municipal Boundary       |
|                    | Major Landmark           |
|                    | Temple                   |
| MAJOR INTERSECTION |                          |
|                    | 1 Maharana Partap Chowk  |
|                    | 2 Karma Mod              |
|                    | 3 Ramesh Chowk           |
|                    | 4 Shahpur Chowk          |
|                    | 5 By-Pass Chowk          |
|                    | 6 Fly-Over Intersection  |
|                    | 7 Tikari Mod             |

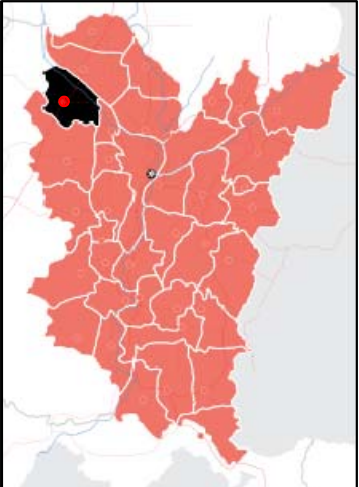
### MAP : 10.1

### EXISTING ROAD & TRANSPORTATION



# AURANGABAD

## BIHAR



### KEY MAP

| Legend |                           |
|--------|---------------------------|
|        | Proposed Ring Road        |
|        | Proposed Parking Lot      |
|        | Proposed Passenger Shld   |
|        | Proposed Foot Over Bridge |
|        | Proposed Truck Terminal   |
|        | Road                      |
|        | Bridge                    |
|        | River/Canal/Water Bodies  |
|        | Drain                     |
|        | Municipal Boundary        |
|        | Major Landmark            |
|        | Major Intersection        |
|        | Temple                    |

MAP : 10.2

### PROPOSED ROAD & TRANSPORTATION INFRASTRUCTURE

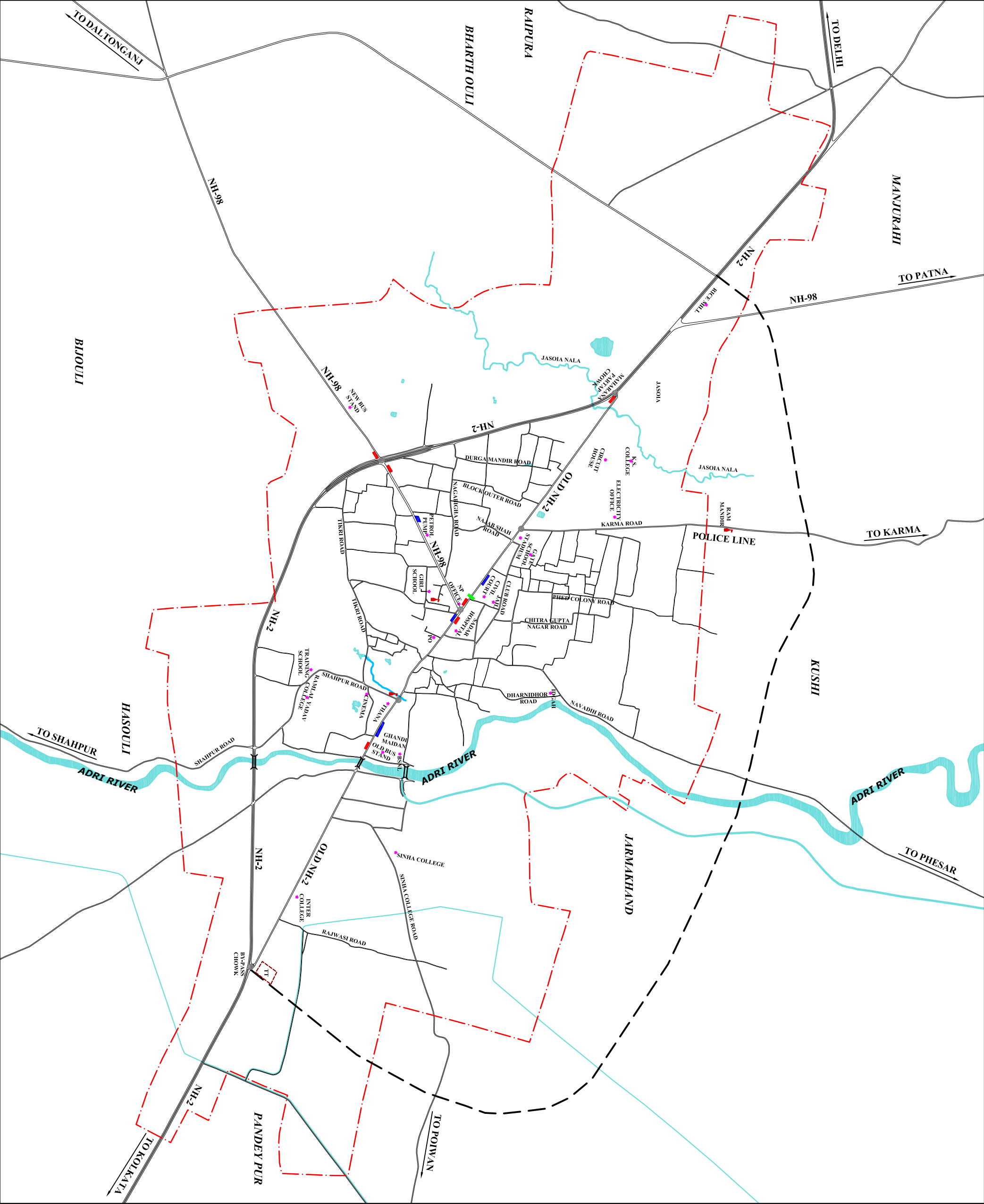
Scale

0 500 1000 m

N

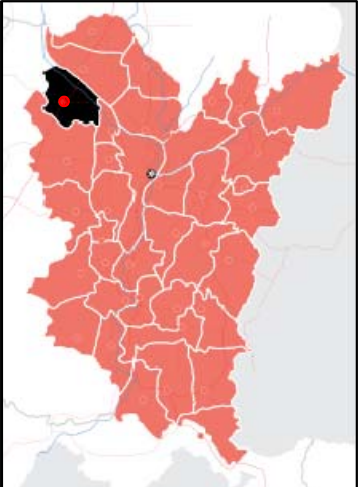
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consulting engineers pvt. ltd.



# AURANGABAD

## BIHAR



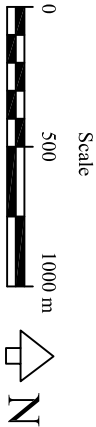
### KEY MAP

### Legend

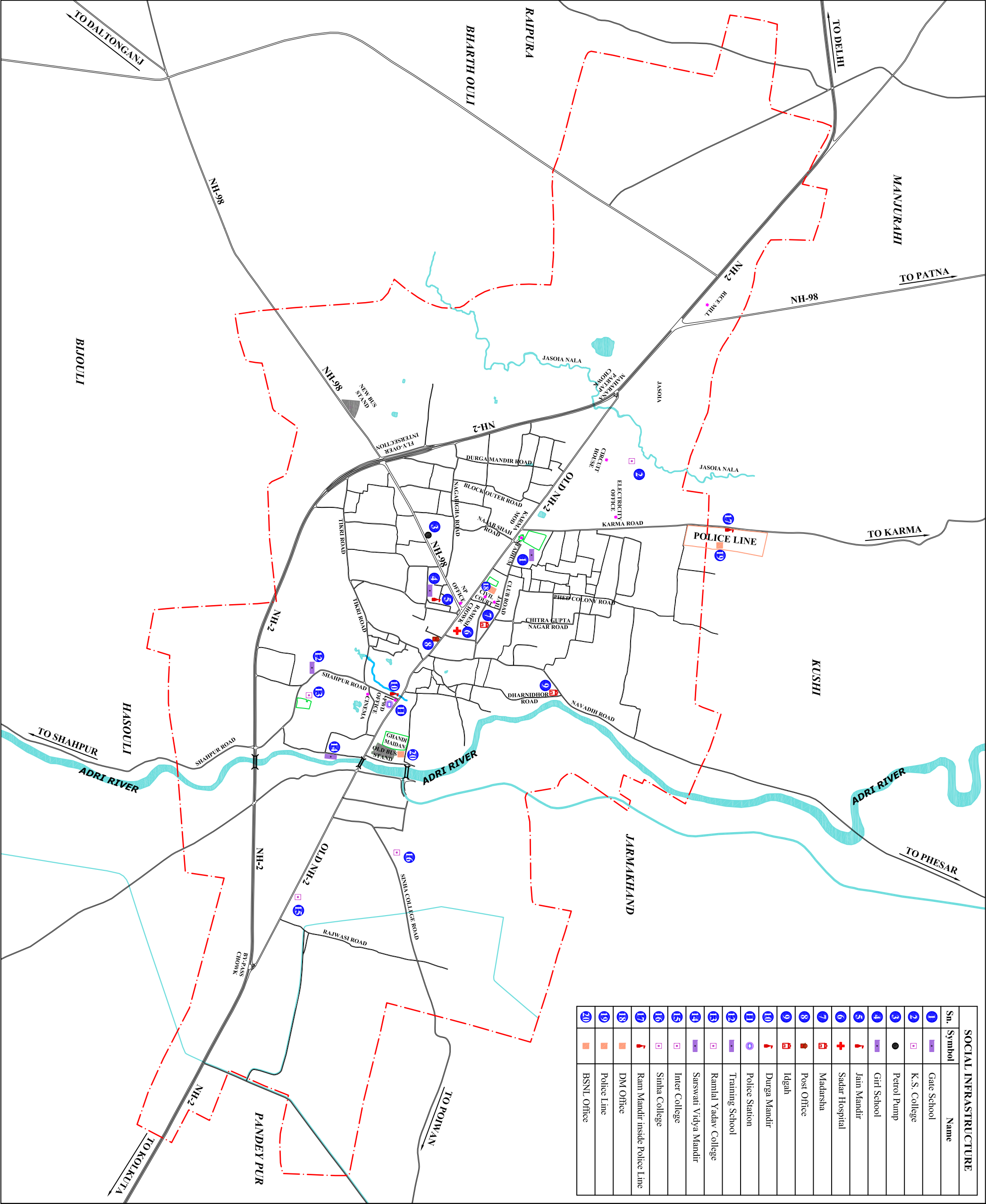
|  |                          |
|--|--------------------------|
|  | Road                     |
|  | Park/Stadium/Playground  |
|  | Transport Facilities     |
|  | Bridge                   |
|  | River/Canal/Water Bodies |
|  | Drain                    |
|  | Municipal Boundary       |
|  | Major Landmark           |

MAP : 11.1

### SOCIAL INFRASTRUCTURE



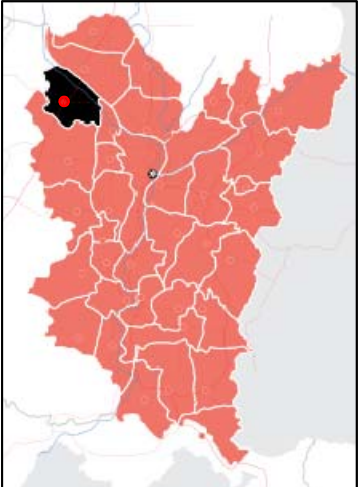
| SOCIAL INFRASTRUCTURE |                               |
|-----------------------|-------------------------------|
| Sn.                   | Symbol      Name              |
| 1                     | Gate School                   |
| 2                     | K.S. College                  |
| 3                     | Petrol Pump                   |
| 4                     | Girl School                   |
| 5                     | Jain Mandir                   |
| 6                     | Sadar Hospital                |
| 7                     | Madarsha                      |
| 8                     | Post Office                   |
| 9                     | Idgah                         |
| 10                    | Durga Mandir                  |
| 11                    | Police Station                |
| 12                    | Training School               |
| 13                    | Ramlal Yadav College          |
| 14                    | Saraswati Vidya Mandir        |
| 15                    | Inter College                 |
| 16                    | Sinha College                 |
| 17                    | Ram Mandir inside Police Line |
| 18                    | DM Office                     |
| 19                    | Police Line                   |
| 20                    | BSNL Office                   |





# AURANGABAD

## BIHAR



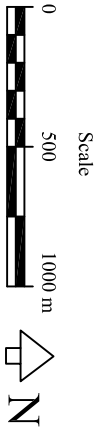
### KEY MAP

### Legend

|  |                          |
|--|--------------------------|
|  | Municipal Boundary       |
|  | Ward Boundary            |
|  | Notified Slums           |
|  | Road                     |
|  | Bridge                   |
|  | River/Canal/Water Bodies |
|  | Drain                    |
|  | Major Landmark           |
|  | Temple                   |

MAP : 12.1

## SLUM MAP



| Slr | Ward No. | Slum Name                           |
|-----|----------|-------------------------------------|
| 1   | 1        | Jagdeo Nagar (Indira Awasas Colony) |
| 2   | 1        | Rama Banth Harijan Toi              |
| 3   | 1        | Rama Banth Taul                     |
| 4   | 1        | Rama Banth Bangla Par               |
| 5   | 1        | Kamhai Bigha                        |
| 6   | 1        | Mishra Bigha                        |
| 7   | 2        | Dani Bigha                          |
| 8   | 2        | Malhotra Nagar                      |
| 9   | 3        | Dani Bigha                          |
| 10  | 3        | Sastendra Nagar                     |
| 11  | 3.4      | Naga Bigha                          |
| 12  | 4        | Lakshman Bigha                      |
| 13  | 4        | Durga Ganage Harijan Toi            |
| 14  | 5        | Gani Mohalla                        |
| 15  | 6.2      | Banpur Atri                         |
| 16  | 7.8      | Naradhi (Harijan Toi)               |
| 17  | 9        | Naradhi                             |
| 18  | 9        | Jaggiwan Nagar                      |
| 19  | 9        | Kabir Mohalla                       |
| 20  | 9        | Koari Bigha                         |
| 21  | 9        | Kesari Toi                          |
| 22  | 10       | Kari Mohalla                        |
| 23  | 11       | New Kari Mohalla                    |
| 24  | 12       | Isani Toi                           |
| 25  | 12.13    | Shahganj                            |
| 26  | 13       | Kurush Mohalla, Pathan Toi          |
| 27  | 13.14    | Kurush Mohalla                      |
| 28  | 14       | Durga Ganage Harijan Toi            |
| 29  | 14.15    | Miri Bigha                          |
| 30  | 15       | Tikri Bigha                         |
| 31  | 15       | Shahpur                             |
| 32  | 16       | Yarman Nagar                        |
| 33  | 16.17    | Shahpur, Polka Par                  |
| 34  | 18       | Meister Toi                         |
| 35  | 18       | Bus Stop (Harijan Toi), Banat Par   |
| 36  | 18       | Bus Stop (Bhumian Toi)              |
| 37  | 18       | Malau Shahid                        |
| 38  | 19       | Durga Mohalla                       |
| 39  | 20       | Banpur Bigha                        |
| 40  | 20       | Tiwari Bigha                        |
| 41  | 20       | Banpur Ahopra                       |
| 42  | 20.21    | Kamodha                             |
| 43  | 21       | Kaywan                              |
| 44  | 21       | Piparahi                            |
| 45  | 22       | Shahpur Harijan Toi                 |
| 46  | 22       | Kama Bigha Harijan Toi              |

