



Urban Development and Housing Department  
Government of Bihar

## City Development Plan (2010-30)

### **MUZAFFARPUR**



### EXECUTIVE SUMMARY

CDP Prepared By:



**Support Programme for Urban Reforms in Bihar**

(A Government of Bihar Initiative)

Supported by DFID, United Kingdom

**प्रेम कुमार**  
मंत्री  
नगर विकास एवं आवास विभाग  
बिहार, पटना



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)



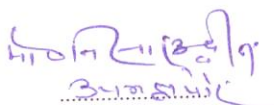
## संदेश

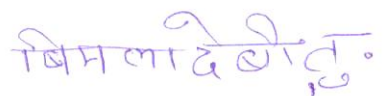


हमें यह घोषण करते हुए अति प्रसन्नता हो रही है कि मुजफ्फरपुर के दीर्घकालीन विकास के लिए समेकित दृष्टिकोण के साथ शहर की नगर विकास योजना (CDP) बन चुकी है। इस नगर विकास योजना में समेकित दीर्घकालीन कार्यनीति (दृष्टिकोण-2030) जो कि आगे अल्पकालीन, मध्यकालीन एवं अन्तकालीन कार्यनीति में विभाजित की गई है के साथ ही नगर निवेश योजना (CIP) का भी समावेश है। इस योजना के आधार पर मुजफ्फरपुर नगर निगम 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 निगम 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 मुजफ्फरपुर 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। मुजफ्फरपुर नगर निगम इस सहयोग के लिए DFID का आभारी है।

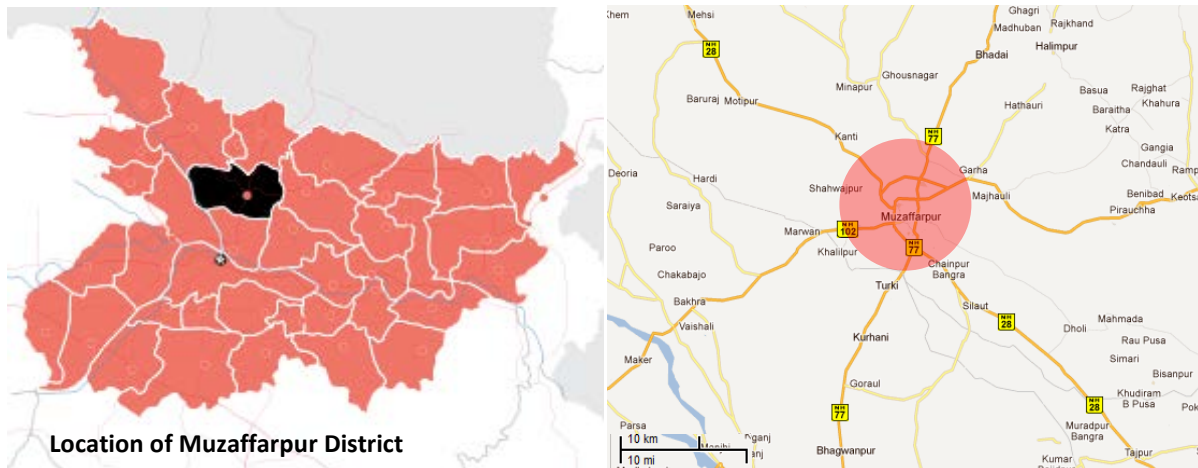
  
(उपमहापौर)  
मुजफ्फरपुर नगर निगम

  
(महापौर)  
मुजफ्फरपुर नगर निगम



## Overview

**Muzaffarpur** is the district administrative headquarters of Muzaffarpur District. The total area under the jurisdiction of Muzaffarpur Municipal Corporation (MMC) is about 26.68 Km<sup>2</sup> (2668.44 Ha). The town is divided into 49 wards.



Muzaffarpur lies between the Burhi Gandak River and Furdoo nallah. Future growth potential is towards north, west and southwest directions. Despite this and its good transport connectivity, the town has not developed as a major industrial centre. Only 19% units are functioning in the Industrial Area with 38 % units closed. Additionally, 23 % plots in the Bela Industrial Area and Estate Area have been allotted but not constructed and 17% plots are vacant. In addition, economic growth in the town has been affected by the poor power supply situation and water logging. The core commercial areas are overcrowded and unorganized contributing to the haphazard traffic situation on the roads.

### The competitive advantages of Muzaffarpur

lie in its excellent connectivity, strategic location and rich agricultural activity in the region. The district produces nearly one-third of the entire Lichi production of the country and 16% of banana production of the state. In horticulture as well, the district is the highest producer of roses, second highest producer of marigold and highest producer of jasmine in the state. It also produces 95% of total calf skins produced in the state. In addition, several industries are located in Muzaffarpur including the Bela Industrial Area spread over 389 acres - making the town a major trading center and appropriate to be developed as an agro-based industrial city.

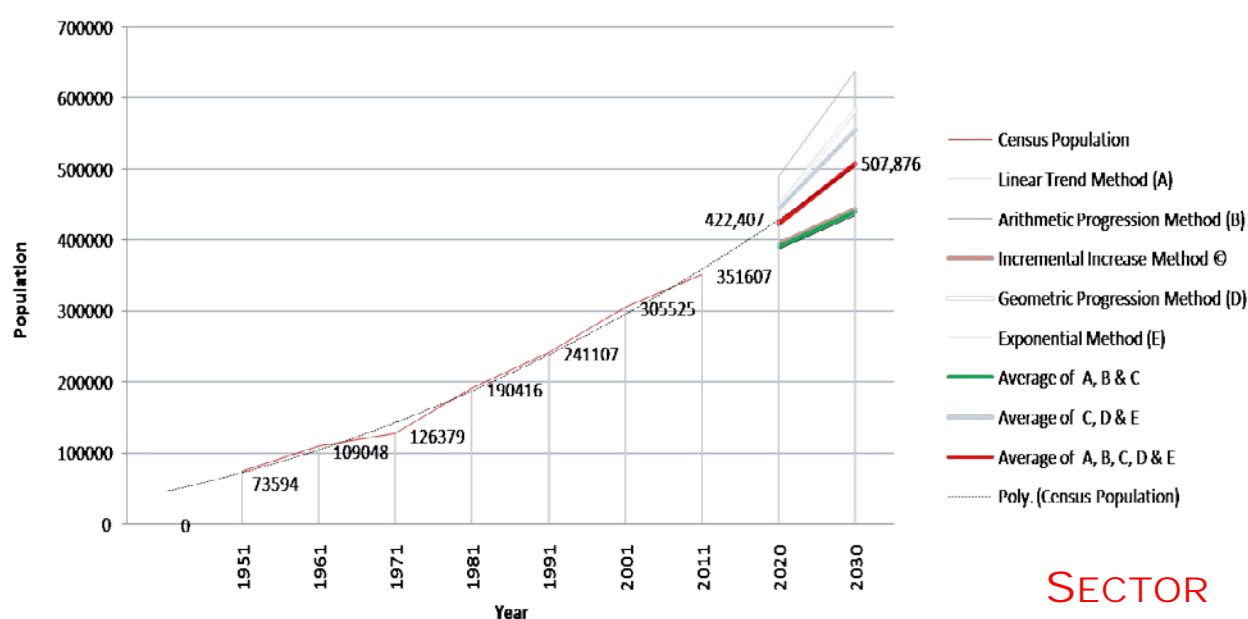


### CITY VISION

Based on the majority opinion emerging in the course of the discussions and the asset base, the Vision has been defined as follows: ***“To develop Muzaffarpur into a vibrant city based on agro based industrial development.”*** The significant factors that underlie this vision are (i) Highest Producer of agro-based Products, (ii) Strategic location and (iii) Strong Connectivity.

## Demography

The town has experienced rapid population growth in the last four decades - from 54139 in 1951 to 305,525 in 2001 and 351607 in 2011 as per provisional census figures. The average decadal growth rate has been 28%. There was a huge upsurge in the town's population growth in 1971-81 - 56% - thereafter, the growth has stabilized. The average population density is 114 pph according to 2001 census and according to Census 2011 provisional figures it is 131 pph, which is higher than the UDPI norms. The population has been projected up to the horizon year 2030. Different statistical methods have been used for forecasting the future population - linear trend method, arithmetic progression method, incremental increase method, geometric progression method and exponential method – as well as considering three different scenarios - high growth , stable growth , low growth - and finally matching with the trend line (Reference figure-1) of census population figures from 1951 to 2011. It is seen that the trend curve based on the average of all five methods best corresponds to the trend curve of population figures provided by census. The projected population year 2030 is 507876.



## SECTOR ASSESSMENTS & GROWTH STRATEGIES

### A) Water Supply

The water supply of the town is based on ground water since the water quality of the River Burhi Gandak and Furdoo Nallah are not potable. The water supply is decentralized with 7 overhead water tanks (OHTs) of which 5 are functional and 2 non-functional. In addition, there are 15 tube-wells installed for water supply but the pumping stations are in poor condition. Water is chlorinated prior to supply. About 26.28% of the town has access to piped supplies with the average supply being 77 LPCD. Considering the challenges related to water supply in the city, 100% water supply coverage and access to piped water supply is envisaged by 2015-16. Total projected water requirement is 71 MLD in 2030. The Muzaffarpur Municipal Corporation (MMC) and the Public Health Engineering Department (PHED) are the statutory authorities in charge of providing and maintaining water supply services in the municipal area. The 'Muzaffarpur Urban Water Supply Scheme' for the provision of piped water supply at a cost of Rs. 4 crore is under implementation (Phase-I, covering Ward No. 1, 2, 3 & 5). Water losses are estimated at 40% of total supply - low pressure and leakage/seepage of drain water due to aged network especially in the central areas are additional factors impacting the water supply system. Based on an analysis of the issues at sector level the interventions required have been shown in the table below.

PROJECTS	1st Yr. (11-12)	2nd Yr. (12-13)	3rd Yr. (13-14)	4th Yr. (14-15)	2016-21	2021-30
Implementation of Approved Central Govt. funded UIDSSMT SCHEME	DPR taken up: Estimated cost : Rs 9800 lakh ; Total Supply 64.8 MLD by 2040; projected population 480 lakh; supply 135 LPCD					
Augumentation of existing Water Supply Scheme	-	-	450.00	-	-	-
Water Conservation Awareness Programmes	20.00	-	-	-	-	-
<b>SUB TOTAL WATER SUPPLY</b>	<b>20.00</b>	<b>-</b>	<b>450.00</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Grand Total</b>	<b>Rs. 470.00 Lakhs</b>					

*All figures in Rupees Lakhs*

### B) Sewerage and Sanitation

The town does not have a sewerage system. About 62% households have access to toilets at home and rely on septic tanks and soak pits. Open defecation levels are high. The town has 12 public toilet blocks. Sewage flows through open drains and is discharged untreated into the Rive Burhi Gandak and Furdoo nallah. The estimated sewage generation by 2030 is 57 MLD. Accumulation of waste water especially in Balu Ghat, Gol Band Road, Islampur Road, in and around Bela Industrial Area and effluent from septic tank are factors affecting the sector. Based on an analysis of the issues at sector level the interventions required have been shown in the table below.

PROJECTS	1st Yr. (11-12)	2nd Yr. (12-13)	3rd Yr. (13-14)	4th Yr. (14-15)	2016-21	2021-30
Construction of Sewage Treatment Plant	-	855.00	2565.00	-	-	-
Laying down sewerage network (tentative calculation)	-	10000.00	15000.00	15000.00	-	-
Repair of existing public toilets (Male & Female toilets)	120.00	-	-	-	240.00	-
Construction of new public toilets (for male & female) near all identified 23 markets in the City	-	-	-	-	210.00	480.00
Sanitation Awareness Programmes	10.00	-	-	-	-	-
<b>SUB TOTAL SEWERAGE</b>	<b>130.00</b>	<b>10855.00</b>	<b>17565.00</b>	<b>15000.00</b>	<b>450.00</b>	<b>480.00</b>
<b>Grand Total</b>	<b>Rs. 44480.00 Lakhs</b>					

*All figures in Rupees Lakhs*

### C) Storm Water Drainage

The drainage system in the town was constructed in 1895 to address its flood proneness. Taking advantage of the topography, the drains were constructed to discharge into the River Burhi Gandak. The town has three trunk drains catering to the whole city and of approximately 137 km length. About 93% of drains within the corporation limits are open drains. There is no systematic maintenance of drains – it is mostly ‘reactive’ with the common practice being to de-silt drains and dump the sludge at the edge prior to lifting. The capacity of the trunk drains has reduced on account of encroachment, blocking on account of dumping of wastes. The town faces the threat of flood like situation every monsoon on account of the absence of storm water drains especially in Bela Industrial Area and northern part of the city. Muzaffarpur city being in the flood prone zone needs to have comprehensive drainage strategies and goals with immediate extension and augmentation of existing network of drainage especially in the areas near to Industrial Area and Zero Mile. The CDP recommends the preparation and implementation of a Drainage Master Plan as a first step. Strategies and Action plans are being formulated at state level and Muzaffarpur needs to take advantage of these. At state level there is thinking on ‘Interlinking of Rivers for Prevention of Floods’ to reduce the flood damages in the lower reaches of the River Burhi Gandak basin is in the pipeline.

PROJECTS	1st Yr. (11-12)	2nd Yr. (12-13)	3rd Yr. (13-14)	4th Yr. (14-15)	2016-20	2021-30
De-silting of existing drains	3.15	9.45	-	-	-	-
Repair & covering open pucca drains	582.75	1748.20	-	-	-	-
Construction of pucca drain over existing kuchha drain	70.38	211.13	-	-	-	-
Lining of main drains outfall in Furdoo and Budhi Gandak River	62.50	187.50	-	-	-	-
Construction of new drains	3000.00	4500.00	4500.00	-	-	-
Preparation of Comprehensive Drainage Master Plan	30.00	-	-	-	-	-
<b>SUB TOTAL DRAINAGE</b>	<b>3748.80</b>	<b>6656.30</b>	<b>4500.00</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Grand Total</b>	<b>Rs. 14905.10 Lakhs</b>					

*All figures in Rupees Lakhs*

#### D) Solid Waste Management

It is estimated that the town generates about 130 metric tonnes of waste daily. The corporation has outsourced collection and transportation of waste to a private NGO named NIDAN in 17 wards as of April 2010. At present the low lying area in Dadar (between Beria and zero miles) is used as the dumping site. The corporation records state that collection efficiency is 75%. Based on an analysis of the issues at sector level the interventions required have been shown in the table below.

PROJECTS	1st Yr. (11-12)	2nd Yr. (12-13)	3rd Yr. (13-14)	4th Yr. (14-15)	2016-21	2021-30
Development of Sanitary Landfill Site	20.00	60.00	-	-	-	-
Construction of compost plant at landfill site	25.00	75.00	-	-	-	-
<b>Purchase of Equipment</b>						
Containerized Handcarts	-	11.25	-	-	11.25	22.50
Containerized Tricycles	-	2.50	-	-	2.50	5.00
Community bins for Slums	-	3.75	-	-	3.75	7.50
Silt Removal machine	-	150.00	-	-	150.00	300.00
Small vehicles for direct collection of waste	-	2.50	-	-	2.50	5.00
Closed dumper placers containers 4.5 cu.mtr. Volume	-	125.00	-	-	125.00	250.00
Closed dumper placers containers of 7 cu. Mtr. Volume	-	122.50	-	-	122.50	245.00
Containers for domestic hazardous waste	-	2.03	-	-	1.74	3.48
4.5 cu. Mtr skips for construction waste	-	1.75	-	-	1.50	3.00
Construction Waste collection Vehicle	-	37.50	-	-	37.50	75.00
Small van for hospital waste collection	-	2.00	-	-	2.00	6.00
Bull Dozers/Wheel Dozers	-	-	-	-	-	40.00
Incineration Plant (BMW)	-	-	-	-	50.00	50.00
JCB Machine	-	10.00	-	-	-	10.00
Septic Tank Cleaning Machine	-	15.00	-	-	-	-
Street Sweeping Machines	-	0.021	-	-	-	0.021
SWM Awareness Generation Programmes	10.00	-	-	-	-	-
<b>SUB TOTAL SWM</b>	<b>55.00</b>	<b>620.80</b>	<b>-</b>	<b>-</b>	<b>510.20</b>	<b>1022.50</b>
<b>Grand Total</b>	<b>Rs. 2208.50 Lakhs</b>					

*All figures in Rupees Lakhs*

#### E) Roads, Traffic and Transportation

Muzaffarpur is connected by NH-28, NH-57, NH-77 and NH-102. The total road network of Muzaffarpur city is approximately 72.17 km jointly managed by Muzaffarpur Municipal Corporation (38 km), Public Works Department (17.12 km) and the District Council (16.69 km). Approximately 99% of the roads under the jurisdiction of the corporation are pucca roads. The town has two Inter-



city bus stands one under BSRTC and the other for privately owned buses. The key issues affecting the sector are heavy congestion of the existing road network, parking problems especially in the market areas and along the main thoroughfare. Newly developed outlying areas are not well connected with the other parts of the city. Congestion is observed mainly on four major roads within the city limits, namely, Katchari Road, Brahampura Road, Dak Banglow road and Sikandarpur Road, encroachment of roads for commercial activities and for residential use by slum dwellers, lack of parking places, no traffic signals and road signage and inefficient traffic management are some of the other issues. The situation worsens with water logging and overflow of drains in the rains.

The CDP recommends some immediate actions like a traffic circulation plan, identification and construction of parking areas and basic signages, installation of solar lights at critical road stretches. In the longer term, interventions like road widening, construction of new roads, refurbishment of ISBT with commercial complex, improvement and beautification of major intersections have been recommended in terms of specific projects.

PROJECTS	1st Yr. (11-12)	2nd Yr. (12-13)	3rd Yr. (13-14)	4th Yr. (14-15)	2016-21	2021-30
Parking development at Warsely Road major market near Jubba Sahani park	-	-	-	-	50.00	-
Parking development at Club Road Near MMC office complex	-	-	-	-	-	50.00
Parking development at Zero Miles near Baria Junction	-	-	-	-	-	50.00
Road Widening & Improvement with Street Lighting (72 km)	600.00	1800.00	-	-	-	-
Construction of Ring Road with street lighting	-	-	-	-	-	1800.00
Improvement of existing bus terminals (modernisation) to revamped and redesigned with regular Bus Bays with Commercial complex	-	-	-	-	4000.00	-
Construction of ISBT with Commercial Complexes	-	-	-	-	-	5000.00
Improvement & beautification of major intersections	-	-	-	-	250.00	600.00
<b>SUB TOTAL TRANSPORT</b>	<b>600.00</b>	<b>1800.00</b>	<b>-</b>	<b>-</b>	<b>6800.00</b>	<b>7500.00</b>
<b>Grand Total</b>	<b>Rs. 16700.00 Lakhs</b>					

*All figures in Rupees Lakhs*

#### **F) Street Lighting and Fire Fighting**

There is a shortage of street lights in the town – 1663 light poles with only 745 functional lights. Most of the peripheral areas have no provision for street lighting.

### G) Housing and Urban Poverty

The urban poor in Muzaffarpur are mainly migrants working as labourers and in informal trades like vending vegetables, fruits, etc or as cycle-rickshaw pullers etc. According to a survey conducted under the ongoing SPUR, there are 137 slum pockets identified in year 2011 in the city, having 77456 total population and 7035 BPL families. Most of the slums have developed along the bank of Burhi Gandak River. The slum dwellers have poor access to the basic services like sewage, drainage, water supply and sanitation facilities. Most slums depend on hand pumps for water and are practice of open defecation. Absence of drainage system and solid waste management in slums, results in unhealthy and unhygienic conditions. Special attention needs to be given to the provision of basic services and housing for slum dwellers.

PROJECTS	1st Yr. (11-12)	2nd Yr. (12-13)	3rd Yr. (13-14)	4th Yr. (14-15)	2016-21	2021-30
Redevelopment (as per DFID survey recommendation) of existing slums (7034 HH)	-	-	-	-	-	-
Construction of roads in slums (with road side drains)	2637.70	3956.60	3956.60	-	-	-
Provision of community taps in slums						
Street lighting in left out areas of slums						
Construction of community toilets						
Skill Development & Training for Slum dwellers	20.00	-	-	-	-	-
<b>SUB TOTAL HOUSING &amp; SLUMS</b>	<b>2657.80</b>	<b>3956.60</b>	<b>3956.60</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Grand Total</b>	<b>Rs. 10571.00 Lakhs</b>					

*All figures in Rupees Lakhs*

### H) Social Infrastructure

The first college in Muzaffarpur named Langat Singh College was opened in 1889 and got the status of Degree College in 1900. Around 1946, more colleges were established including Mahanta Darshan Das Mahila College. Also, there is Dr. B.R. Ambedkar Bihar University with nearly 5000 students enrolled. There are 35 Primary schools and around 20 Senior Secondary schools in city. Muzaffarpur has a number of health facilities including Medical College, hospitals, polyclinic, nursing homes and dispensaries. The corporation runs one Ayurvedic and one Homeopathic medicine shops and 3 Maternity centers.

PROJECTS	1st Yr. (11-12)	2nd Yr. (12-13)	3rd Yr. (13-14)	4th Yr. (14-15)	2016-20	2021-30
Construction of Primary Schools	-	-	-	-	400.00	800.00
Construction of Senior Secondary Schools	-	-	-	-	400.00	600.00
Construction of School fo Handicapped	-	-	-	-	-	300.00
Construction of College	-	-	-	-	-	1500.00

## City Development Plan for Muzaffarpur: EXECUTIVE SUMMARY

<b>SUB TOTAL EDUCATION</b>	-	-	-	-	<b>800.00</b>	<b>3200.00</b>
Construction of Intermediate Hospital (category-B, 80 beds)	325.00	975.00	-	-	2600.00	2600.00
Construction of Poly-clinic	10.00	30.00	-	-	-	40.00
<b>SUB TOTAL HEALTH</b>	<b>335.00</b>	<b>1005.00</b>	-	-	<b>2600.00</b>	<b>2640.00</b>
<b>Grand Total</b>	<b>Rs. 6580.00 Lakhs</b>					

*All figures in Rupees Lakhs*

### I) Environment

Muzaffarpur lacks open spaces with current levels estimated at 7.08% of the total area. The major parks and open spaces are Jubba Sahni Park, Sikandarpur Ground, Chakkar Maidan and City Park (under construction). Water bodies cover 2.84% of the total area of the city. The Brahmapura Lake (ox-bow lake) is the principle water body in the city. It is an L-shape lake with an area of about 76 ha; the depth ranges between 2 to 4m. Characteristically it is a 'Live Lake' as it connects with River Burhi Gandak through a channel. The lake is in a poor condition and has problems of eutrophication. This lake and other smaller water bodies are ill maintained and used for a variety of purposes like washing clothes, bathing, solid waste dumping etc. These water bodies also function as discharge points for waste water. The Brahmapura Lake and Burhi Gandak River receive the bulk of the city sewage and have the highest levels of human interferences. The lake also has 3 to 6 drainage outfalls.

The CDP recommends specific interventions for rejuvenation of the Brahmapura Lake and development for recreation.

PROJECTS	1st Yr. (11-12)	2nd Yr. (12-13)	3rd Yr. (13-14)	4th Yr. (14-15)	2016-21	2021-30
Plantation along Budhi Gandak River and Furdoo Nallah and to be developed as natural recreation	-	-	-	-	-	50.00
Rejuvenation of 10 ponds for Pisciculture / recreation	-	-	-	-	-	100.00
Redevelopment/ beautification of Recreational areas/parks	-	-	-	-	-	200.00
Mapping of Environmentally sensitive areas & data compilation	-	-	-	-	-	20.00
Preparation of a disaster management plan for the town	-	-	-	-	-	25.00
Community Awareness Programme for Rain Water Harvesting	15.00	-	-	-	-	-
<b>SUB TOTAL ENVIRONMENT</b>	<b>15.00</b>	-	-	-	-	<b>395.00</b>
<b>Grand Total</b>	<b>Rs. 410.00 Lakhs</b>					

*All figures in Rupees Lakhs*

**J) Urban Heritage and Tourism**

Muzaffarpur has few potential tourist sites like the Baba Garibnath Temple, Chaturbhujsthan Temple, Gola Durga Temple, Bangla Mukhi Temple, Pankha Toli Temple, Bishops' House Church and European Church apart from litchi plantation/orchards. Tourist footfalls are low and estimated at 7% of the total day tourists who come to Bihar. Peak months are in January- March period. There is one hotel operated by the Bihar State Tourism Development Corporation.

PROJECTS	1st Yr. (11-12)	2nd Yr. (12-13)	3rd Yr. (13-14)	4th Yr. (14-15)	2016-21	2021-30
<b>Upgradation / beautification of areas around tourist spots (parking, shed, cafeteria, drinking water facility, toilet (male &amp; female) and wash room, etc.)</b>						
Baba Garibnath Temple	-	-	-	-	-	30.00
Chaturbhujsthan Temple	-	-	-	-	-	30.00
Gola Durga Temple	-	-	-	-	-	30.00
Bangla Mukhi Temple	-	-	-	-	-	30.00
Pankha Toli Temple	-	-	-	-	-	30.00
Bishops' House church and European church	-	-	-	-	-	30.00
Development of Bhramapura Lake as a tourist spot	-	-	-	-	-	50.00
Development of Water Park on Budi Gandak river	-	-	-	-	-	400.00
Development of Tourist Information Centre	-	-	-	-	-	100.00
Construction of a Dharmshala	-	-	-	-	-	500.00
<b>SUB TOTAL HERITAGE</b>	-	-	-	-	-	<b>1230.00</b>
<b>Grand Total</b>	<b>Rs. 1230.00 Lakhs</b>					

*All figures in Rupees Lakhs*

**K) Urban Economy**

The projects for rejuvenating the city economy are listed below.

PROJECTS	1st Yr. (11-12)	2nd Yr. (12-13)	3rd Yr. (13-14)	4th Yr. (14-15)	2016-21	2021-30
Development of planned vendor zones	25.00	75.00			3000	
Construction of Slaughter House					4500	4500
Development of a Commercial complexes/ shopping areas						13500
Construction of planned and modern Regional Level market						
Redevelopment/ renovation of CBD & city core areas						5000
<b>SUB TOTAL URBAN ECONOMY</b>	<b>25.00</b>	<b>75.00</b>	<b>-</b>	<b>-</b>	<b>7500.00</b>	<b>23000.00</b>
<b>Grand Total</b>	<b>Rs. 30600.00 Lakhs</b>					

*All figures in Rupees Lakhs*

### L) Urban Governance

The projects for improving municipal governance are listed below.

PROJECTS	1st Yr. (11-12)	2nd Yr. (12-13)	3rd Yr. (13-14)	4th Yr. (14-15)	2016-21	2021-30
Establishment of e-governance & Single Window System	125	375				
Establishment of Double Accounting System	12.5	37.5				
Capacity building of Municipal officials	25					
<b>SUB TOTAL HERITAGE</b>	<b>162.5</b>	<b>412.5</b>				
<b>Grand Total</b>	<b>Rs. 575.00 Lakhs</b>					

*All figures in Rupees Lakhs*

## Financial Position of the Local Body

The ULB has a high dependence on grants and loans from the state government. In 2008-09, and 2009-10, the maximum contribution (83.6%) of municipal income was from the revenue grants including salary and matching grants. Tax revenue income has increased from 9.1% to 17.6% in 2009-10. Non-tax revenue sources of the corporation accounted for 3.2% of the total revenue income in 2008-09 – this increased from 1.4% to 9.5% in 2009-10 and is estimated at 4.5% in 2010-11.

Establishment costs account for about 28% of the total budget; the repair and maintenance expenditure was just 3.3% in 2009, 4.7% in 2010 and is estimated at 3.6% in 2010-11. Programme expenditure accounted for 52.6% spend in 2008-09 but subsequently declined.

## Capital Investment Plan (CIP)

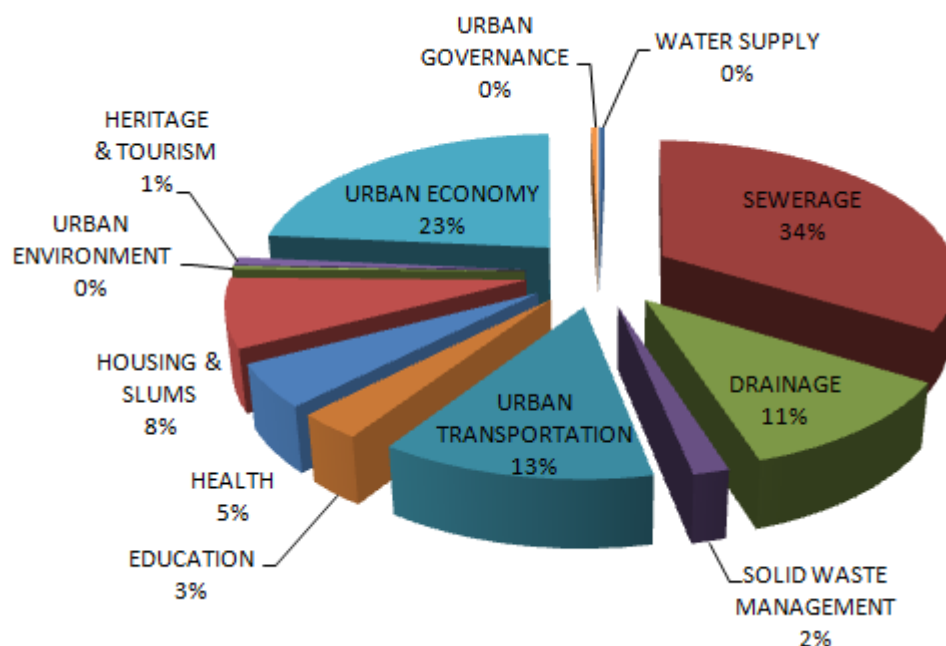
Projects have been identified on the basis of sector specific strategies. These are based on the corporation estimates and are aimed at ensuring optimal and efficient utilization of existing infrastructure. The total estimated capital investment required for providing efficient services to the population of Muzaffarpur by 2030 is **Rs. 1327.29 Crores**. The table below presents the summary of sector-wise investment requirements:

SN	Sector	Total Investment (Rs. Lakh)	Phase-I	Phase-II	Phase-III
			2011-15	2015-21	2021-30
1	WATER SUPPLY	470.00	470.00	-	-
2	SEWERAGE	44480.00	43550.00	450.00	480.00
3	DRAINAGE	14905.10	14905.10	-	-
4	SOLID WASTE MANAGEMENT	2208.54	675.80	510.24	1022.50
5	URBAN TRANSPORTATION	16700.00	2400.00	6800.00	7500.00
6	EDUCATION	4000.00	-	800.00	3200.00
7	HEALTH	6580.00	1340.00	2600.00	2640.00



## City Development Plan for Muzaffarpur: EXECUTIVE SUMMARY

8	HOUSING & SLUMS	10571.00	10571.00	-	-
9	URBAN ENVIRONMENT	410.00	15.00	-	395.00
10	HERITAGE & TOURISM	1230.00	0.00	-	1230.00
11	URBAN ECONOMY	30600.00	100.00	7500.00	23000.00
12	URBAN GOVERNANCE	575.00	575.00	-	-
	<b>TOTAL</b>	<b>132729.64</b>	<b>74601.90</b>	<b>18660.24</b>	<b>39467.50</b>



## Financial Operating Plan (FOP)

The FOP was generated to ensure sustainability of investment and taking into consideration additional O&M expenses to be incurred on the new capital assets to be created. On the basis of the estimated population for 2030 and need for associate infrastructure, the CDP concludes an investment need of Rs. 165384 lakhs (Rs. 1653.84Crore). The CDP has identified funding options for the planned development of the city in the next 20-25 years. It has been assumed that by enhancing the collection performance and widening the tax base of current taxes, the corporation will be able to sustain the whole projected investment requirement phased over a 20-year period from 2011 to 2030.

The FOP is based on a range of assumptions related to income and expenditure. The assumptions are critical to ascertain the investment sustenance and would provide a tool to test certain specific policy decisions regarding revenue and expenditure drivers on the overall ULB fiscal situation. The growth rates for the various heads of income and expenditure are based on the past growth rates and the future estimated population growth. Improvements to the current and arrears collection percentages have been assumed for the various revenues directly collected by the ULB – this implies that the ULB will have to improve its collection efficiency to sustain full investments. Muzaffarpur's

ability to improve on its financial performance hinges primarily on its ability to sustain and improve on the revenue growth noticeable in recent years.

Specific interventions with respect to revenue realization and cost management are given under financial reforms to be carried out by the Municipality. On 'Full Project Investment Scenario' basis, Muzaffarpur's own revenues (comprising taxes, user charges and other income) could grow from Rs. 905 lakhs in FY 2011-12 to Rs. 16270 lakhs by FY 2039-40, implying an absolute growth of 10.1%. Muzaffarpur has vast potential for increasing its own income given the growth achieved in the last few years and the projected growth in population of around 1.9%. Areas for enhancement of own revenue includes:

- Property Tax – through an enhanced revision in ARV, widening assessee base and closer scrutiny. Besides periodic increase (every 5 years) in property tax rates.
- Professional Tax – sustaining a higher assessment growth.
- User Charges – periodic increases in user charges for water connections, sewerage connections and solid waste management. The Municipality could generate additional Rs. 4100 lakhs of income per annum by FY 2039-40 by providing water and sewerage connections to 90% of property tax assessments and sewerage connections to 80% of property tax assessments.
- Income from other remunerative projects and periodical increase in user charges.

Muzaffarpur also needs to explore scope for private sector participation and corporate involvement for development of remunerative projects and city beautification projects that have been identified in the FOP thereby reducing the municipality's financial burden.

While there is potential for expenditure control in certain areas (energy costs and leakages in water supply), the focus of cost management should be to shift expenditure from administration to better asset management and service levels. The FOP has not factored in any cost reduction and has assumed that any savings generated from cost reduction would go into augmenting service levels and better asset management.

A comprehensive energy audit is required, given that 60-70% of its operations and maintenance expenditure is spent on electricity charges. Plugging leakages in the water supply network and installation of timers and energy savers on the street light network are important interventions needed to tackle the high power costs of the corporation.

Three scenarios have been worked out to check financial sustainability of the ULB under different assumptions. The scenarios considered are:

1. **Scenario I** - Estimation of Investment Capacity by considering all projects and all financial reforms
2. **Scenario II** - Estimation of Investment Capacity by considering all projects excluding Education & Health and all financial reforms
3. **Scenario III** - Estimation of Borrowing and Investment Capacity by considering all Projects without Financial Reforms.

The borrowing capacity of municipality was taken as the minimum of the (i) 30% of revenue projections and (ii) Primary Operating Surplus (Surplus before Interest & Depreciation).

The net present value (NPV) of the least of the above has been estimated to determine the borrowing capacity of the municipality. The Investment Capacity has been estimated on dividing the borrowing capacity by loan component percentage.

Summary of Borrowing and Investment Capacity			
	Scenario - I	Scenario - II	Scenario - III
Borrowing Capacity (in Rs. Lakhs)	27700	38000	7400
Investment Capacity (BC/0.083) (in Rs. Lakhs)	277000	173000	74000
Investment Requirement (in Rs. Lacs)	150000	150000	150000
Sustainable Investment Capacity % - IC / IR	185%	115%	49%

## Overall Assessment

The table below summarises the assessment of the existing service delivery levels in Muzaffarpur. The table shows that status of physical infrastructure except coverage of water supply and SWM door to door collection, leadership, economic development potential and organization structure are either average or good, financial management is poor as is population below poverty line.

SN	Parameter	Indicators	Muzaffarpur
1	Status of Infrastructure and Service Delivery Levels		
	a.	Coverage of Water Supply	
	b.	Per Capita Availability of Water	
	c.	Continuity of Water Supply	
	d.	Coverage of Individual Toilets	
	e.	Door to Door Collection	
	f.	Collection Efficiency of Solid Waste	
2	Financial Management		
	a.	Operating Ratio	
	b.	Growth in Revenue Income	
3	Poverty Level		
	a.	Population Below Poverty Line (BPL)	
4	Organization Structure		
	a.	Staffing pattern, availability of sufficient staff, competency level of existing staff for implementing proposed projects	
5	Leadership		
	a.	Leadership quality, awareness and understanding regarding urban sector, proactive approach for implementing reform measures	
6	Economic Development Potential		
	a.	Potential for Development, linkages to the state capital and other cities, status of existing infrastructure	
7	Environment Sustainability		
	a.	Status of Environment, quality of water, air	
8	Participation		
	a.	Level of Participation from Citizen/Citizen Forums/Welfare Association in municipal affairs	
9	Compliance with Reforms		
	a.	Status of reform implementation and preparedness for implementation	

### Legend

Alarming



Average

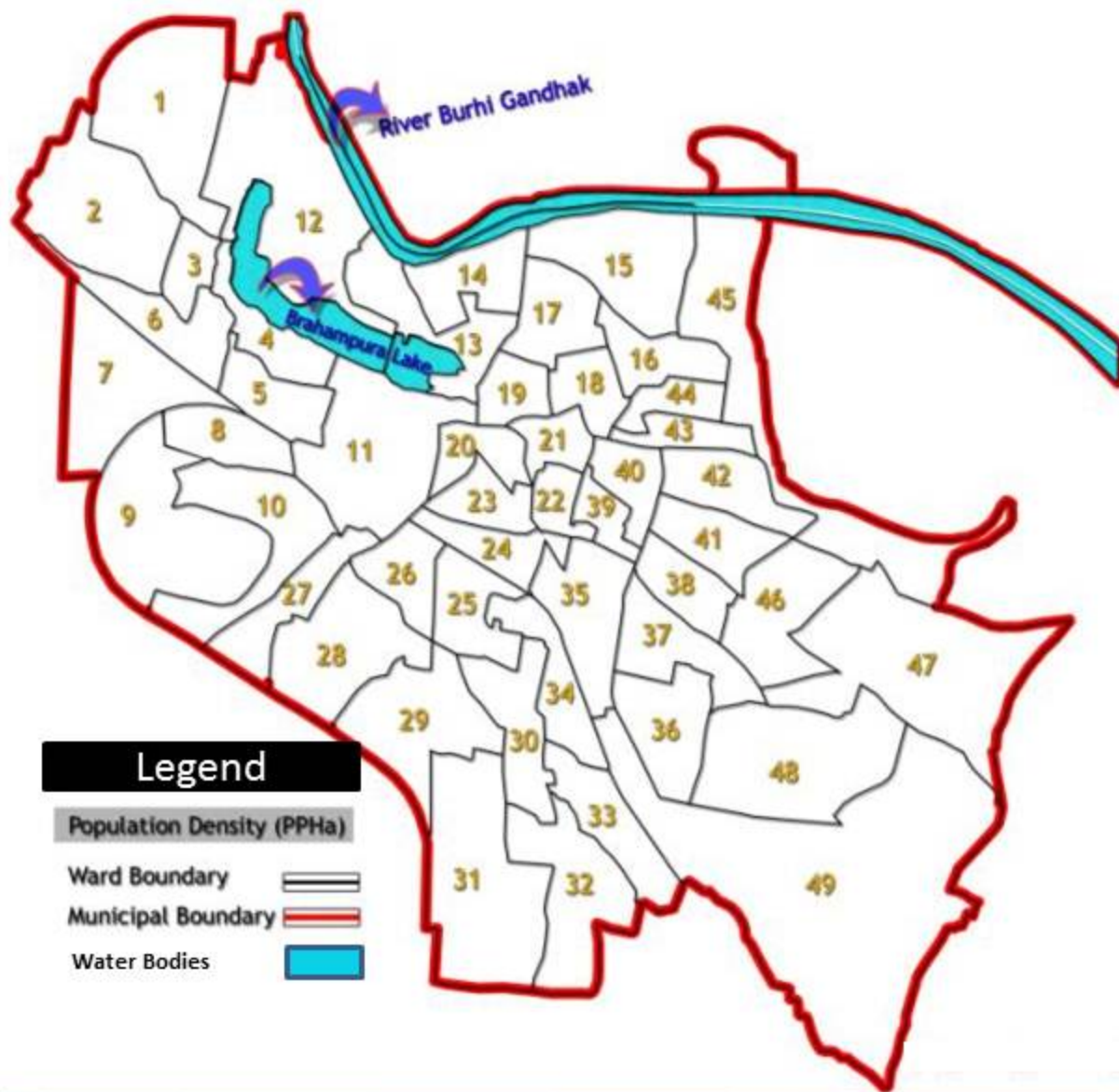


Below Average



Good





## Legend

Population Density (PPHa)

Ward Boundary



Municipal Boundary



Water Bodies



SCALE:

500 250 0 0.5 1.0KM

Source:

: MMC 2010



MUZAFFARPUR MUNICIPAL CORPORATION  
Ward Map



Voyants Solutions Pvt. Ltd, Gurgaon



Submitted to:  
Urban Development and Housing Department,  
Government of Bihar  
Project Co-ordination:  
Support Programme For Urban Reforms in Bihar (SPUR)





# LEGEND

- Municipal Boundary
- Main drains
- Pacca Drains
- Katcha Drains
- Rivers
- Flow of drains



SCALE:  
500 250 0 0.5 1.0KM

Source: Google Image & MMC 2010

**MUZAFFARPUR MUNICIPAL CORPORATION**

Existing Drainage Network



**VOYANTS**  
PARTNERING VISION

Voyants Solutions Pvt. Ltd, Gurgaon



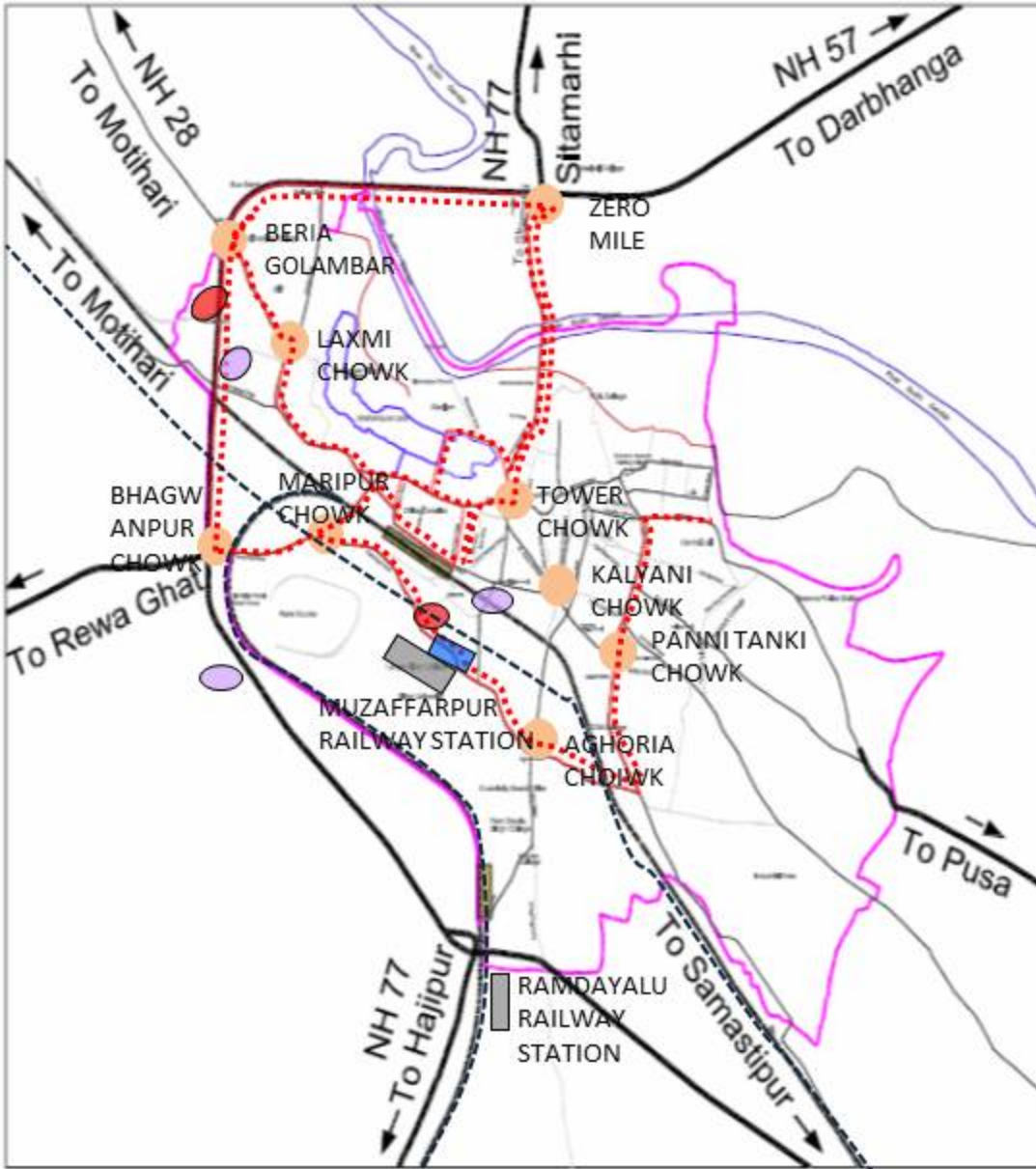
**Submitted to:**

Urban Development and Housing Department,

Government of Bihar

Project Co-ordination:

Support Programme For Urban Reforms in Bihar (SPUR)



# LEGEND

- Major roads
- Railway Stations
- Bus terminals
- Un-Organized parking
- Organized parking
- Major junctions
- Auto routes
- Other city roads
- NH
- Municipal Boundary

SCALE:  
500 250 0 0.5 1.0KM

Source: Google Image & MMC 2010

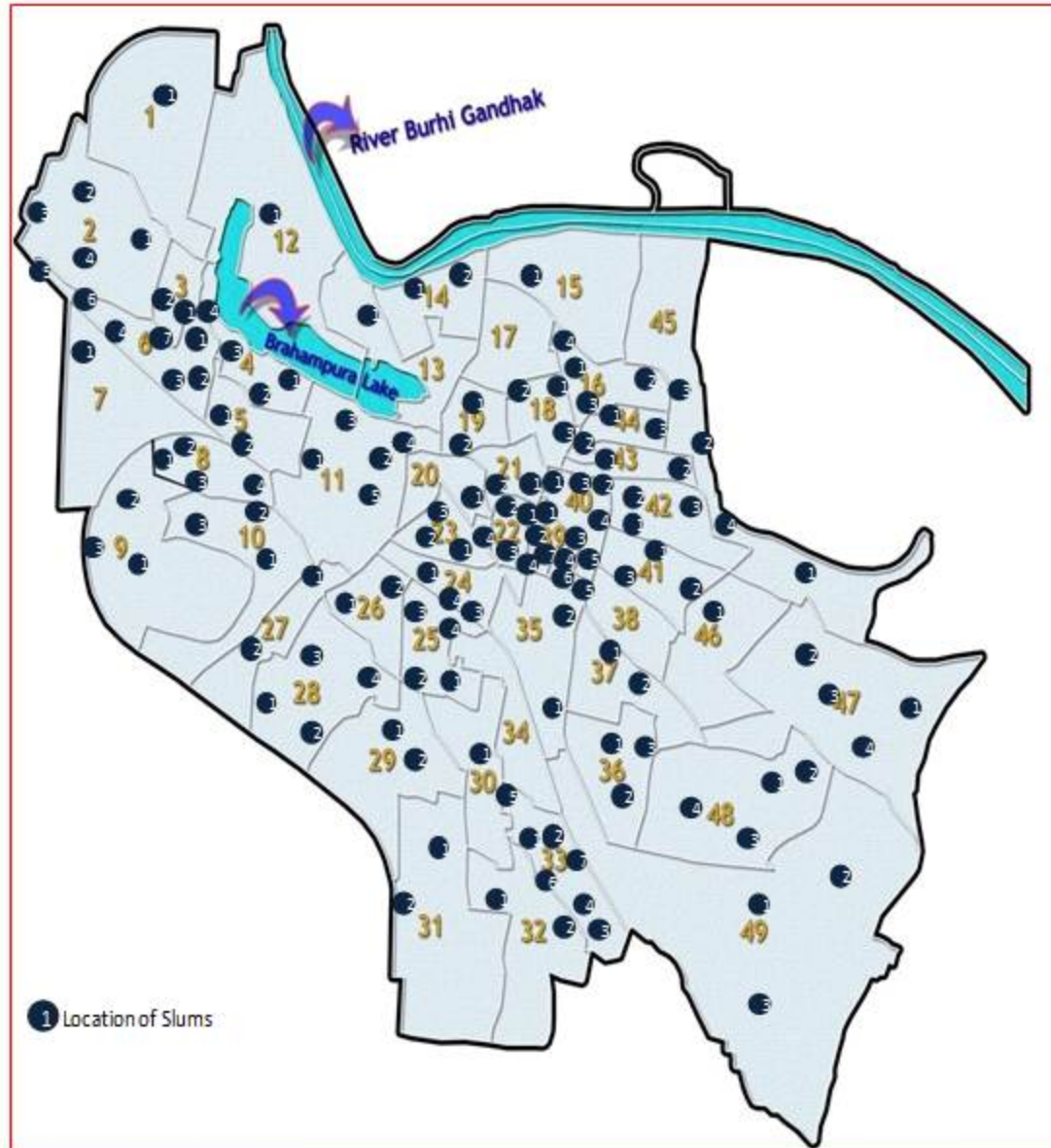
MUZAFFARPUR MUNICIPAL CORPORATION  
Road Network of Muzaffarpur town



Voyants Solutions Pvt. Ltd. (Scale



Submitted to:  
Urban Development and Housing Department,  
Government of Bihar  
Project Co-ordination:  
Support Programme For Urban Reforms in Bihar (SPUR)



MUZAFFARPUR MUNICIPAL CORPORATION  
Slums Location Map

