



Urban Development and Housing Department
Government of Bihar

City Development Plan (2010-30)

MUNGER



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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मंत्री
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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 घोषण करते हुए अति प्रसन्नता हो रही है कि मुर्गेर 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 मुर्गेर 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 मुर्गेर 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।

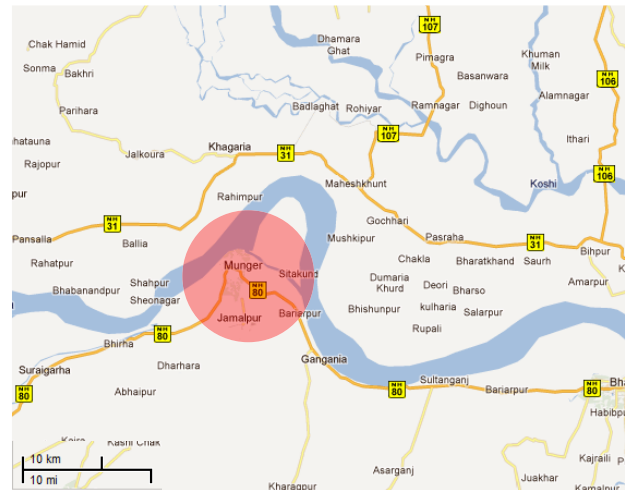
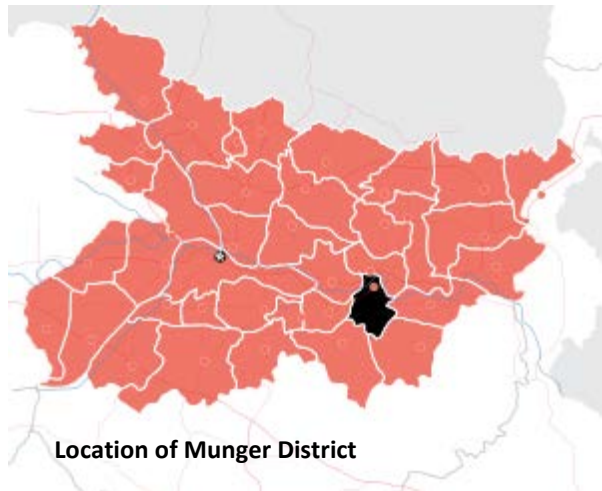
यह नगर विकास योजना, ब्रिटिश सरकार के अन्तर्राष्ट्रीय विकास विभाग (DFID) द्वारा वित्त पोषित सवर्धन कार्यक्रम के तहत बनाई गई है। मुर्गेर नगर निगम इस सहयोग के लिए DFID का आभारी है।


(उपमहापौर)
मुर्गेर नगर निगम


(महापौर)
मुर्गेर नगर निगम

Overview

Munger Municipal Corporation falls in Munger District. The total area under the jurisdiction of Munger Municipal Corporation (MMC) is about 17.5 Sq. Km (1750 Ha) and before 2007 MMC was divided in 33 wards presently it has 45 wards.



Munger town was destroyed in a major earthquake in 1934 following which the road and drainage networks were planned. Current development in the town is unplanned. Spatial growth is restricted by the River Ganga in the north. In the last five years, the town has grown towards Jamalpur in the south. Jamalpur is the main railhead for Munger. Concentration of commercial activities in the core area of the town has given rise to congestion and mixed land use. Most of the new residential areas are situated towards the south of city core and near the ITC factory. Potential spatial growth of Munger town has been considered on the basis of existing urban growth, the transportation lines and the potential economic activities. The past trends of development show growth in the southern direction, mainly along the transportation routes. Considering the upcoming Ganga Rail-Road Bridge, which is under-construction, growth potential is presumed towards the south-eastern side as well.

The competitive advantages of Munger lies in the district itself, which has a largely agriculture and livestock based economy. Munger district ranks 5th, 2nd & 4th in the production of cattle hides, buffalo hides and goat skins respectively. The district also has good potential for fish culture. In addition, Munger town also has some religious and historical importance. It is well known for the ITC factory and Gun Factory. The town is a trading centre for fruits, vegetables, textiles and readymade garments. The main market is located at the heart of the town at Bekapur. The town also has a large number of vendors although there are no planned and organized vending zones.



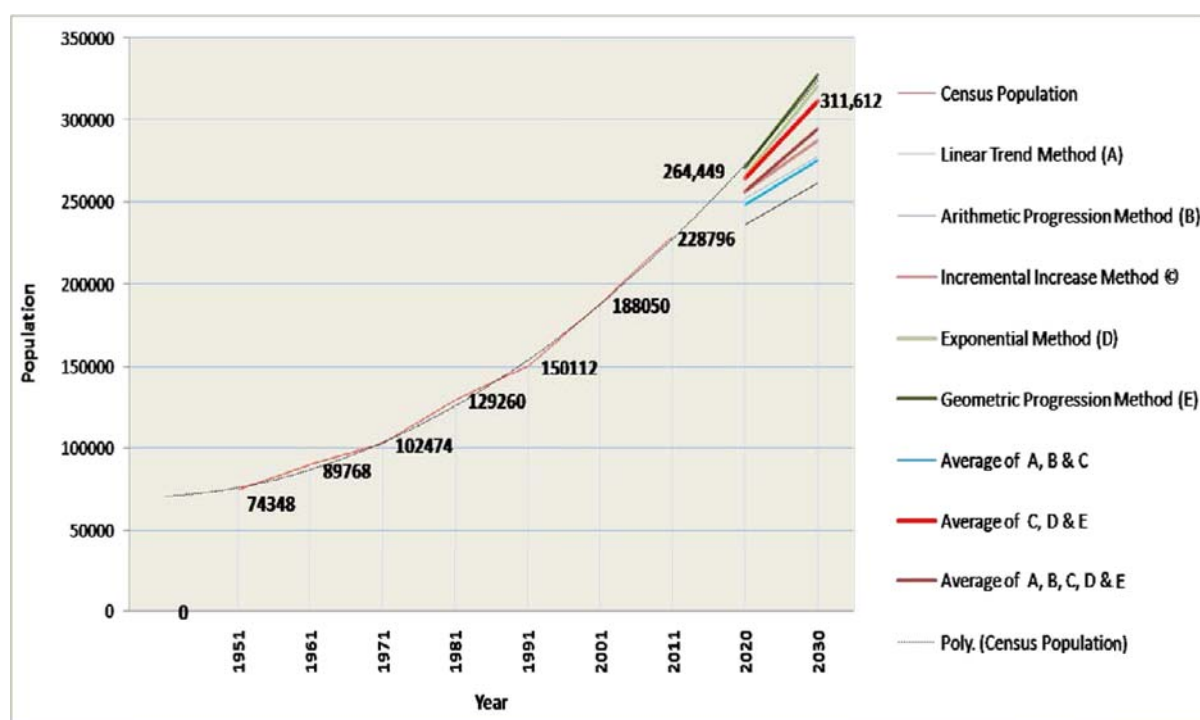
CITY VISION

The vision for Munger town has been developed through participatory processes and takes into account the existing situation. The vision forms the basis for identification of interventions and projects over the coming years. The vision identified is as follows: ***“Munger town to be developed as a multifunctional city offering tourism, health, medical education and industrial opportunities.”***

Demography

As per Census 2001, Munger Municipal Corporation (MMC) had a population of 188050. The provisional figures for Census 2011 put the population figure at 228796. The population density as per 2001 Census was 107 pph – this now stands at 131 pph as per provisional data of Census 2011. The average population density lies within the range of UDPFI standard.

Population projections for the town have been done on the basis of the provisional population figures in Census 2011 using five different methods viz. Linear trend Method, Arithmetic progression method, incremental increase method, geometric projection method and exponential growth method. The projected population for 2030 was arrived at on the basis of the average of three projection methods - Incremental Increase Method, Exponential Method and Geometric Progression Method. The trend curve of this method best approximates similar curves showing population data available with census. The projected population for the horizon year 2030 is about 311,612 persons rounded to 3.1 lakh.



SECTOR ASSESSMENTS & GROWTH STRATEGIES

A) Water Supply

The water supply system for Munger town was designed in 1909. The Kasturba Water Works (KWW) (previously known as Victoria Water Works) was established in 1909. The municipal corporation and the Public Health Engineering Department (PHED) are statutory authorities responsible for water supply and maintenance of systems. Water supply is based on surface sources from the River Ganga. The existing system is decentralized with seven OHTs supplying 57 LPCD water and covering 46.23% of households. The average duration of supply is about 6 hours per day. The population also rely on other water sources like hand pumps, wells and tube wells. It is estimated that about 50% of water supply in the town is non-revenue water; cost recovery is only 30%. The Kasturba Water Works has a treatment plant where sedimentation and chlorination is done prior to supply. To address the rising demand, the 'Munger Urban Water Supply Scheme-2039' (MUWSS) has been designed and will supply 7.15 MGD that is 27 MLD by year 2039 at an estimated cost of Rs. 3478.86 Lakh.

The absence of systematic water quality monitoring is one of the main issues in this sector. The absence of regular testing increases risks especially since ground water has fluoride and iron. The piped water supply is inadequate therefore there is dependence on ground water. The efficiency of the system is further impacted by erratic power supply. The corporation does not have tanker water supplies to meet shortfalls. Although the MUWSS will increase supply to the town, this will be inadequate for the population projected in the CDP horizon year of 2030. Based on an analysis of the issues at sector level the interventions required have been shown in the table below.

PROJECTS	1 st Yr. (11-12)	2 nd Yr. (12-13)	3 rd Yr. (13-14)	4 th Yr. (14-15)	2016-21	2021-30
Construction of water treatment plant near Mai	85.00	255.00	-	-	-	-
Construction of an Intake well near river Ganga	-	25.00	-	-	-	-
Construction of a Pump house	-	50.00	-	-	-	-
Construction of Reservoir over Peer Pahar	297.50	892.50	-	-	-	-
Distribution pipeline (CI) (tentative calculation)	250.00	375.00	375.00	-	-	-
Water Conservation awareness programmes	20.00	-	-	-	-	-
SUB TOTAL WATER SUPPLY	653.00	1598.00	375.00	-	-	-
Grand Total	Rs. 2626.00 Lakhs					

All figures in Rupees Lakhs

B) Sewerage and Sanitation

Munger town does not have a sewerage system. About 46.34% of households have access to toilets that are connected to septic tanks. The town has 13 public toilet blocks that are poorly maintained. The absence of systematic treatment and disposal of sewage results in intermixing of sewage with drainage. The wastes are then discharged into the River Ganga. In the absence of access to toilets,

open defecation levels are high. Based on an analysis of the issues at sector level the interventions required have been shown in the table below.

PROJECTS	1 st Yr. (11-12)	2 nd Yr. (12-13)	3 rd Yr. (13-14)	4 th Yr. (14-15)	2016-21	2021-30
Re-construction of existing public toilets	60.00	100.00	100.00	-	-	-
Construction of new public toilets (for male & female)	-	-	-	-	120.00	120.00
Sanitation Awareness Programmes	10.00	-	-	-	-	-
SUB TOTAL SEWERAGE	70.00	100.00	100.00	-	120.00	120.00
Grand Total	Rs. 510.00 Lakhs					

All figures in Rupees Lakhs

C) Storm Water Drainage

Munger town's terrain is hilly to the south so all drains flow from south to north and discharge into the River Ganga that forms the western and northern boundaries of the town. The topography helps the drainage into the river. The town has approximately 340 km of drains including four main out fall drains – about 50% of the city is covered under the drainage network. The intermixing of sewage and storm water is one of the most critical issues – the fact that this untreated waste is discharged into the River Ganga adds to the problems. The carrying capacity of the drains is further impacted by the indiscriminate disposal of solid waste in the drains. All these factors together contribute to unhealthy and unhygienic conditions in the town. Based on an analysis of the issues at sector level the interventions required have been shown in the table below.

PROJECTS	1 st Yr. (11-12)	2 nd Yr. (12-13)	3 rd Yr. (13-14)	4 th Yr. (14-15)	2016-21	2021-30
De-silting of Discharge Drains	0.40	-	-	-	-	-
Repair & covering all open pucca drains (240 km)	1200.00	3600.00	-	-	-	-
Construction of pucca drain over kutchra drain (100 km)	625.00	1875.00	-	-	-	-
Construction of new drains	625.00	937.50	937.50	-	-	-
SUB TOTAL DRAINAGE	2450.40	6412.50	937.50	-	-	-
Grand Total	Rs. 9800.40 Lakhs					

All figures in Rupees Lakhs

D) Solid Waste Management

Munger town generates about 57 MT/per day. Garbage is collected by municipal sweepers from road sides in hand-trolleys and dumped in bins provided at a few locations. By and large, wastes are dumped at every available space. About 50% of the waste generated is collected. The absence of organized garbage collection and disposal results in indiscriminate dumping at all available spaces including in drains – factors that promote unhygienic conditions. The CDP proposes a combined system for garbage collection and disposal with Jamalpur. Munger will benefit from organized solid

waste management and sewerage interventions under the ongoing National Ganga River Basin Authority (NGRBA) project. Based on an analysis of the issues at sector level the interventions required have been shown in the table below.

PROJECTS	1 st Yr. (11-12)	2 nd Yr. (12-13)	3 rd Yr. (13-14)	4 th Yr. (14-15)	2016-21	2021-30
Implementation of INTEGRATED SOLID WASTE MANAGEMENT PROJECT under National Ganga River Basin Authority (NGRBA) (An initiative for SWM by UDHD, GoB).	The project includes the following items: <ul style="list-style-type: none"> • Preparation of DPR • Contract for Collection & Transportation of waste (SPUR support for 75% O&M in year one; 'in principle' approval for support upto Rs. 24.88 crores towards O&M) • Compost Plant & Landfill Site (Grants on PPP basis under 13th FC) • Identification of Regional Landfill Site Equipment for collection & transportation of waste (as per MSW rules 2000; to be provided to ULB under 13th FC)					
Awareness generation programmes	-	10.00	-	-	-	-
SUB TOTAL SEWERAGE	-	10.00	-	-	-	-
Grand Total	Rs. 10.00 Lakhs					

All figures in Rupees Lakhs

E) Roads, Traffic and Transportation

Munger town can be entered by the NH-80 that passes through the centre of the town. There are three major district roads - Munger-Jamalpur road; Munger-Bariyarpur link road and Munger-Dakranala road – that fall within the municipal limits with all the roads being under the jurisdiction of the PWD. The total length of PWD roads is 17.5 km. The total length of roads within the municipal corporation limites is 170 Km – about 50km kutchha and 120km pucca. The major roads in the town are Bekapur Road, DJ College Road, Konark Road, Jamalpur Road, Hasanganj Road, Sadipur Road, Purabsarai Road, Sitakund Road, Station Road and Lal Darwaza Road. Autos, taxis, Vikrams, trackers and rickshaws are the main modes of public transport. The available road length in the town is only about 2% that is far below the UDPFI Guidelines at 15-20%. There is no system of traffic management and the problems are aggravated by the absence of organized parking and overall infrastructure. The CDP has proposed specific interventions for overall improvement of roads and transportation including road widening, relaying roads, improvement of infrastructure, traffic management and redesign of junctions.

PROJECTS	1 st Yr. (11-12)	2 nd Yr. (12-13)	3 rd Yr. (13-14)	4 th Yr. (14-15)	2016-20	2021-25
Development of Transport Nagar	-	-	-	-	-	2500.00
Development of Parking spaces	-	-	-	-	100.00	200.00
Road Improvement	-	-	-	-	-	-
Kotwali road to Shitla Mandir chowk (100m, width 7m)	1.80	5.50	-	-	-	-
Shitla Mandir chowk to Zila	3.70	11.00	-	-	-	-

City Development Plan for Munger: EXECUTIVE SUMMARY

school gate (200m, width 7m)						
Kotwali road to Hospital chowk (650m, width 15m)	24.90	74.75	-	-	-	-
Traffic No. 1 to Town Hall chowk (300m, width 15m)	11.50	34.50	-	-	-	-
Bhagat Singh chowk to Kauda Maidan chowk (700m, width 9m)	16.30	49.00	-	-	-	-
Kauda Maidan chowk to Purani Ganj chauraha (1km, width 9m)	23.30	70.00	-	-	-	-
Kauda Maidan chowk to Ambey chowk (400m, width 9m)	9.30	28.00	-	-	-	-
Ambey chowk to road joining Jamalpur road (350m, width 9m)	8.20	24.50	-	-	-	-
Shifting of existing BSRTC bus stand near proposed location of New Munger Railway Station (near Purabsarai) + Construction of Commercial Complexes	-	-	750.00	2250.00	-	-
Improvement of existing Taxi stand	-	-	250.00	750.00	-	-
Establishment of city bus based public transport system	-	-	-	-	2500.00	-
Improvement & beautification of major intersections	-	-	-	-	90.00	210.00
SUB TOTAL TRANSPORT	99.08	297.25	1000.00	3000.00	2690.00	2910.00
Grand Total	Rs. 9996.33 Lakhs					

All figures in Rupees Lakhs

F) Street Lighting and Fire Fighting

There is inadequate street lighting in the town. It is suggested that solar powered lights are used.

G) Housing and Urban Poverty

As per Census 2001, Munger town had 29148 households of which about 53% of units under residential use were in good condition. The Census also estimated that about 8% of houses were in a dilapidated condition. 77% of houses in the corporation are permanent structures, 20% are semi-permanent and 3% are temporary structures.

It is estimated that about 13,094 households live in 58 slums that are located along the railway track or the banks of River Ganga. In general slums are lacking in infrastructure facilities with most depending on hand pumps for water supply and practicing open defecation. Interventions for slum improvement will necessarily emanate from policy decisions at state level. While the CDP does recommend specific infrastructure improvements, large scale interventions will have to be guided by the state.

PROJECTS	1 st Yr. (11-12)	2 nd Yr. (12-13)	3 rd Yr. (13-14)	4 th Yr. (14-15)	2016-20	2021-30
Redevelopment (as per DFID survey recommendation) of existing slums (13,094 HH)	-	-	-	-	-	-
Construction of roads in slums (with road side drains)	4910.25	7365.37	7365.37	-	-	-
Provision of community taps						
Street lighting in left out areas of slums						
Construction of community toilets						
Skill Development & Training for Slum Dwellers	20.00	-	-	-	-	-
SUB TOTAL HOUSING	4930.25	7365.37	7365.38	-	-	-
Grand Total	Rs. 19661.00 Lakhs					

All figures in Rupees Lakhs

H) Social Infrastructure

Munger town has high class educational and health institutions. The Bihar School of Yoga is the world's first Yoga University founded in 1964 is located here and attracts students from all over the world. Around 400 Australians, Americans and others foreigners register for the yoga course every year. The Jamia Rahmani University is a renowned institution established by Hazrat Maulana Mohammad Ali Mungeri in 1927 and many national and international students come here for Islamic studies. The town also has 2 colleges, 1 polytechnic and 5 training institutions. The town is however lacking in lower level educational institutions like primary and senior secondary schools. The town has 2 intermediate hospitals (200 beds), 1 nursing home and 2 dispensaries. The Bihar School of Yoga also provides international healthcare facilities. The quality of facilities in the lower level health institutions is poor.

PROJECTS	1 st Yr. (11-12)	2 nd Yr. (12-13)	3 rd Yr. (13-14)	4 th Yr. (14-15)	2016-20	2021-25
Construction of Senior Secondary Schools	-	-	-	-	600.00	1000.00
Construction of School for Handicapped	-	-	-	-	-	150.00
SUB TOTAL EDUCATION	-	-	-	-	600.00	1150.00
Construction of Intermediate Hospital (category-A, 200 beds)	-	-	-	-	-	5000.00
Construction of Intermediate Hospital (category-B, 80 beds)	-	-	-	-	1300.00	2600.00
Construction of Poly-clinic	-	-	-	-	40.00	80.00
Construction of Nursing home	-	-	-	-	40.00	80.00
Construction of Dispensary	-	-	15.00	45.00	75.00	150.00
SUB TOTAL HEALTH	-	-	15.00	45.00	1455.00	7910.00
Grand Total	Rs. 9425.00 Lakhs					

All figures in Rupees Lakhs

I) Environment

The River Ganga is the main water body adjoining the city, acting as the main out fall for domestic waste and storm water. The surface water quality reveals that the BOD level is below the designated limits while the quantity of dissolved oxygen is higher than the designated limit. The faecal coliform at Munger in the River Ganga is above the permissible limits – all indicators pointing to the non potability of this key drinking water source. Munger also has few open spaces and parks - Polo ground, open space adjoining town hall etc. but all these are ill-maintained. Specific interventions include the need for policies and development control norms at state level and strict enforcement at municipal levels. There is also need for bye laws since the area is earthquake and cyclone prone.

PROJECTS	1 st Yr. (11-12)	2 nd Yr. (12-13)	3 rd Yr. (13-14)	4 th Yr. (14-15)	2016-20	2021-25
River front development	-	-	-	-	-	100.00
Rejuvenation of 7 ponds	-	-	-	-	-	70.00
Beautification of Recreational areas/ parks	-	-	-	-	-	200.00
Mapping of Environmentally sensitive areas	-	-	-	-	-	20.00
Preparation of a disaster management plan	-	-	-	-	-	25.00
Electric Crematorium at Kashtaharni Ghat	-	-	-	-	-	20.00
Awareness Programme for Rain Water Harvesting	15.00	-	-	-	-	-
SUB TOTAL ENVIRONMENT	15.00	-	-	-	-	435.00
Grand Total	Rs. 450.00 Lakhs					

All figures in Rupees Lakhs

J) Urban Heritage and Tourism

Munger town has a lot of potential for tourism. Some of the potential sites include the Munger Chamber of Commerce building, State Bank of India building, the Ganga Temple at Kashtaharni Ghat, Old Temples at Sojhi Ghat, Munger Fort Gate. There is potential to promote Munger as a tourist spot on account of the presence of the following sites in and around the town - the River Ganga itself that attracts a large number of devotees from the surrounding areas for *Ganga Snan*; the Kashtaharni Ghat, the Meer Kasim Tunnel, Jail Ghat, Babua Ghat, Sojhi Ghat, Kankad Ghat, Machhli Talab, Karnchaura/ Yoga Ashram, Chandi Sthan, etc. At present, the town has seven privately owned hotels. The Yoga Ashram and Chandiasthan also provide limited lodging and boarding facilities. It is recommended that Munger be included under the overall state strategy for tourism development. The CDP recommends that a data base and inventory of the tourists and tourist's places be done together with assessment of infrastructure requirements as a step to linking with state level plans.

PROJECTS	1 st Yr. (11-12)	2 nd Yr. (12-13)	3 rd Yr. (13-14)	4 th Yr. (14-15)	2016-21	2021-30
Development of a Mini Golf Course (Private Investment)	-	-	-	-	-	-

City Development Plan for Munger: EXECUTIVE SUMMARY

Meditation centre	-	-	-	-	-	500.00
Resort (on PPP basis)	-	-	-	-	-	1000.00
Resort near Sita Kund	-	-	-	-	-	1000.00
Resort near Chandi Sthan	-	-	-	-	-	1000.00
Upgradation/beautification of areas around tourist spots						
Kashtaharni Ghat	25.00	75.00	-	-	-	-
Pir Snah Nafah Shrine	12.50	37.50	-	-	-	-
Babua Ghat	12.50	37.50	-	-	-	-
Sojhi Ghat	12.50	37.50	-	-	-	-
Belua Ghat	12.50	37.50	-	-	-	-
Kankad Ghat	12.50	37.50	-	-	-	-
Chandi Sthan	12.50	37.50	-	-	-	-
Sita Kund	12.50	37.50	-	-	-	-
Sita Charan	25.00	75.00	-	-	-	-
Provision of net-railing by the sides of Outfall nallah (from River bed upto property line)	10.00	-	-	-	-	-
Development of Boating facility in existing moat along the fort	-	-	25.00	75.00	-	-
Development/ Re-establishment of Tourist Information Centre, Ferry booking centre, Provision of at least 10 Glow shine boards showing tourist spots and Boards on all the sites to be read as non-spitting area, waste to be dropped in provided bins only, no entry zone, etc.	-	-	-	200.00	-	-
Development of Peer Pahad as Adventure and Knowledge Tourist site (on PPP basis)	-	-	-	-	-	500.00
Establishment of intra-city tourist van/taxi service system	-	-	-	-	500.00	-
Upgradation/ construction of road along Ganga covering several tourist spots	-	-	-	-	1400.00	-
Upgradation of existing Ferry station	-	-	-	-	1000.00	-
Construction of an International standard old-age home	-	-	-	-	-	500.00
Construction of Dharamshalas	-	-	-	-	500.00	500.00
Mobile toilet facility specially in Mela time at Sita Kund	15.00	-	-	-	-	-
SUB TOTAL HERITAGE	162.50	412.50	25.00	275.00	3400.00	5000.00
Grand Total	Rs. 9275.00 Lakhs					

All figures in Rupees Lakhs

K) Urban Economy

The projects for rejuvenating the city economy are listed below.

PROJECTS	1 st Yr. (11-12)	2 nd Yr. (12-13)	3 rd Yr. (13-14)	4 th Yr. (14-15)	2016-21	2021-30
Development of planned vendor zones	-	-	-	-	300.00	-
Preparation of Master Plan for Munger	30.00	-	-	-	-	-
Construction of Slaughter House	25.00	75.00	-	-	-	-
Construction of a Regional level Stadium-cum-Sports Complex	-	-	-	-	-	10000.00
Development of a Commercial complexes/ shopping areas	-	-	-	-	5000.00	-
Re-development & renovation of Raja bazaar Market, Garhaiya Market, Kauda Maidan Market, Lalit narayan Market, Bekapur market & Purabsarai Market	-	-	-	-	-	6000.00
Construction of planned & modern Regional Level Market along Jamalpur Road (PPP mode)	-	-	-	-	-	9000.00
SUB TOTAL ECONOMY	55.00	75.00	-	-	5300.00	25000.00
Grand Total	Rs. 30430.00 Lakhs					

All figures in Rupees Lakhs

L) Urban Governance

The projects for improving municipal governance are listed below.

PROJECTS	1 st Yr. (11-12)	2 nd Yr. (12-13)	3 rd Yr. (13-14)	4 th Yr. (14-15)	2016-20	2021-25
Establishment of e-governance & Single Window System	125.00	375.00	-	-	-	-
Establishment of Double Accounting System	12.50	37.50	-	-	-	-
Capacity building of Municipal officials	25.00	-	-	-	-	-
SUB TOTAL GOVERNANCE	162.50	412.50	-	-	-	-
Grand Total	Rs. 575.00 Lakhs					

All figures in Rupees Lakhs

FINANCIAL POSITION OF THE LOCAL BODY

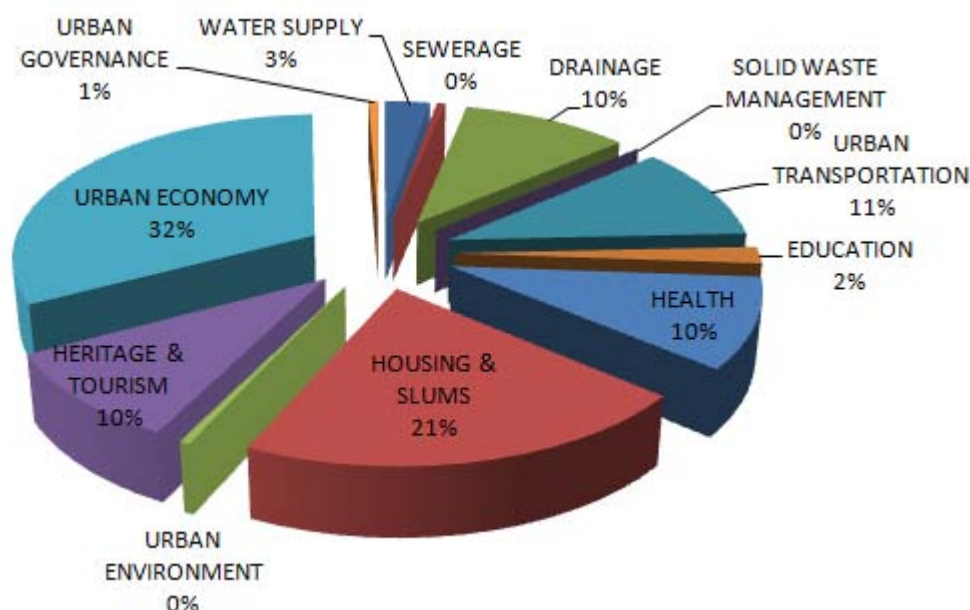
Revenue income of the corporation has decreased to Rs. 270 lakhs in the FY 2009-10 from Rs. 428 lakhs in FY 2008-09. The maximum share of income is from revenue grants. Income from capital grants and tax revenue has shown a positive growth in these years. The tax revenue collection efficiency is very low just as tax assessment is low compared to the growth of population. The investment sustaining capacity of the corporation is ascertained based on a financial operating plan (FOP), which is essentially a 20-year forecast of municipal income and expenditure, based on trend-

based and revenue enhancement assumptions. The phasing of investments has been linked to revenue enhancement.

CAPITAL INVESTMENT PLAN (CIP)

The projects have been derived in a participatory manner taking into account the corporations estimates of revenue enhancement and ensuring optimal and efficient utilization of existing infrastructure systems. The CDP estimates that the corporation will require a total capital investment of **Rs. 94507 lakhs** by 2030 to provide quality services to the increasing population. The table below shows the summary of sector-wise investment requirements.

SN	Sector	Total Investment (Rs. Lakh)	Phase-I	Phase-II	Phase-III
			2011-15	2016-21	2021-30
1	WATER SUPPLY	2,625.00	2,625.00	0.00	0.00
2	SEWERAGE	510.00	270.00	120.00	120.00
3	DRAINAGE	9,800.40	9,800.40	0.00	0.00
4	SOLID WASTE MANAGEMENT	10.00	10.00	0.00	0.00
5	URBAN TRANSPORTATION	9,996.33	4,396.33	2,690.00	2910.00
6	EDUCATION	1,750.00	0.00	600.00	1150.00
7	HEALTH	9,425.00	60.00	1,455.00	7910.00
8	HOUSING & SLUMS	19,661.00	19,661.00	0.00	0.00
9	URBAN ENVIRONMENT	450.00	15.00	0.00	435.00
10	HERITAGE & TOURISM	9,275.00	875.00	3,400.00	5000.00
11	URBAN ECONOMY	30,430.00	130.00	5,300.00	25000.00
12	URBAN GOVERNANCE	575.00	575.00	0.00	0.00
	TOTAL	94,507.73	38417.73	13565.00	42525.00



Financial Operating Plan (FOP)

The full project investment scenario is based on all the proposed investments identified for the ULB and the requirement for upgrading the town's infrastructure is estimated and phased based on the construction activity. Implications of this investment in terms of external borrowings required, resultant debt service commitments and additional operation and maintenance expenditure are worked out to ascertain sub-project cash flows. Revenue surpluses of the existing operations are applied to the sub-project cash flows emerging from full project investments – the municipality fund net surpluses indicates the ULB's ability to sustain full investments. 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 – the ULB will necessarily have to improve its collection mechanism to sustain full investments. Three scenarios have been considered to check financial sustainability of the ULB as follows:

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)	6000	14100	-ve
Investment Capacity (in Rs. Lakhs)	32000	50500	-ve
Investment Requirement (in Rs. Lakhs)	105590	74800	105590
Sustainable Investment Capacity % - IC / IR	30%	67%	NIL

Inference

- Municipality would be in a position to undertake the projects mentioned in FOP only if the financial reforms are carried out.
- The borrowing capacity of Munger Municipality works out to Rs. 6000 lakhs.
- The investment capacity of Munger Municipality works out to Rs. 32000 lakhs.
- As against the total investment requirement of Rs. 105590 lakhs, the investment capacity works out to Rs. 32000 lakhs. Thus the sustainable investment capacity works out to 30%.
- The present Municipality finance does not allow it to undertake any other capital projects.
- The Municipality would be in a position to undertake the other projects only if its own finances are substantially increased.

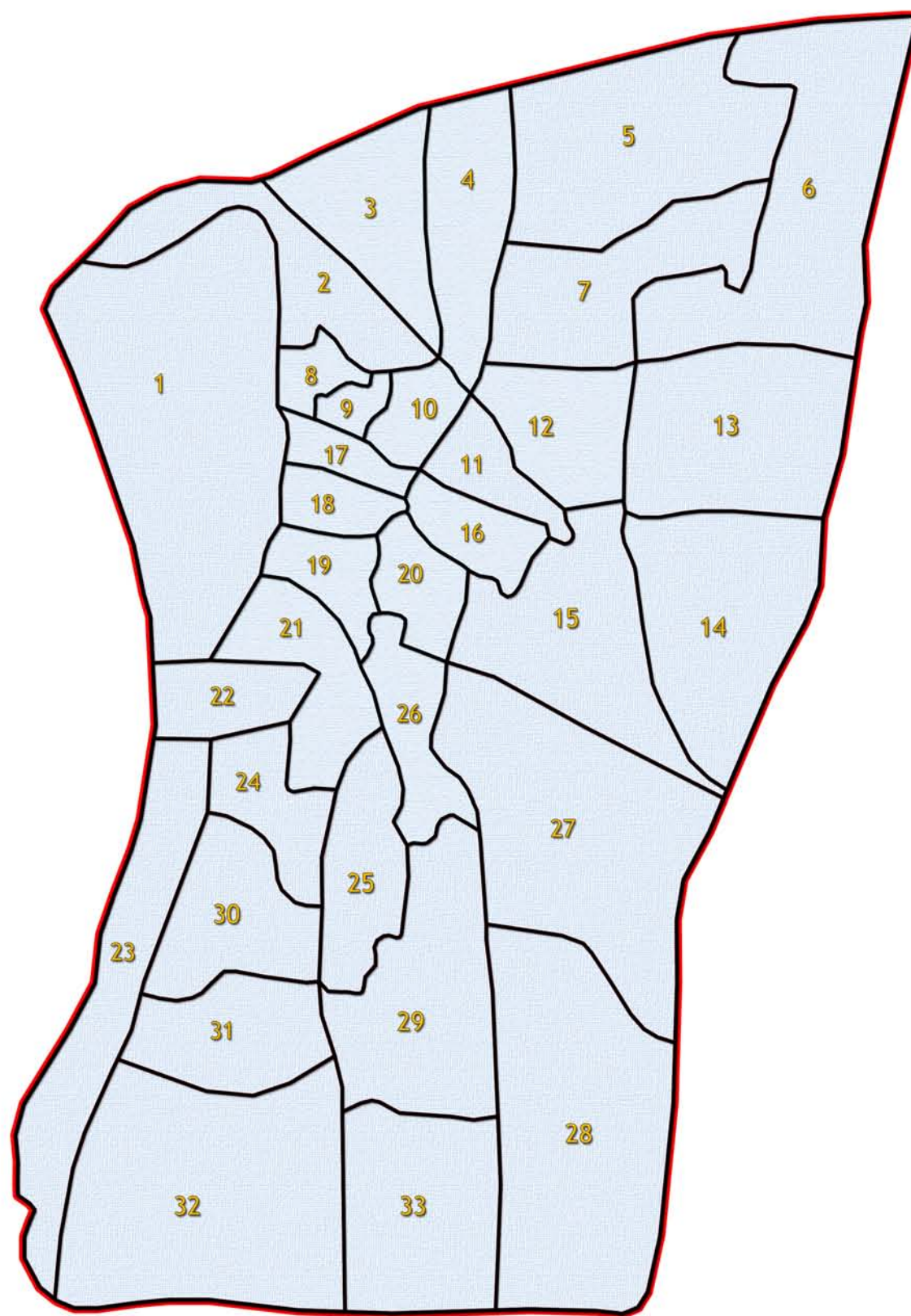
Overall Assessment

The table below indicates the assessment of the existing service delivery levels for Munger city. The gist of overall assessment shows that the status of financial management, poverty level, organizational structure and community participation are either alarming or below average. The leadership and economic development potential of the city is good.



SN	Parameter	Indicators	Munger
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

-  MMC Boundary
-  Ward Boundary



Source: MMC 2010

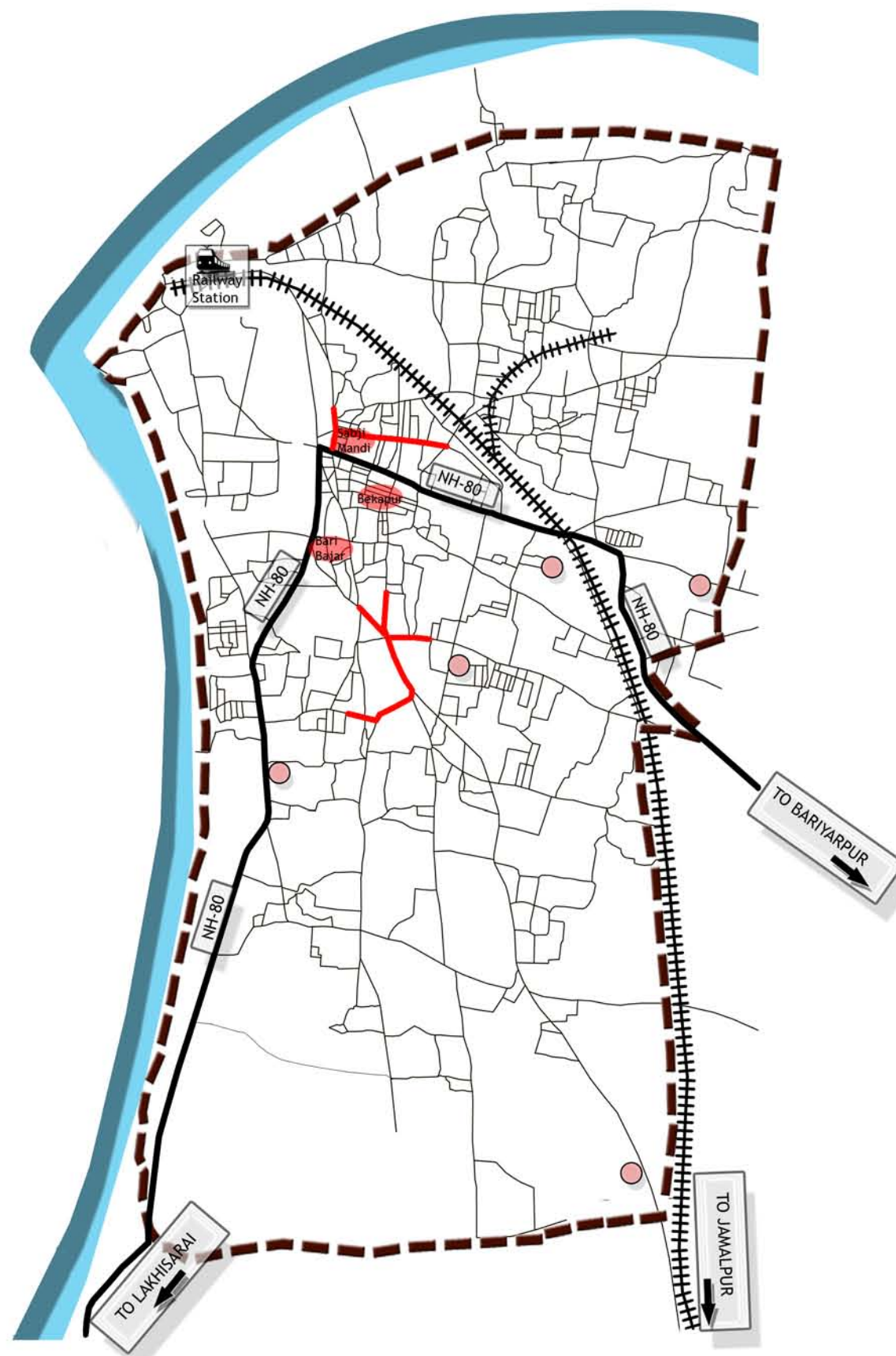
MUNGER MUNICIPAL CORPORATION Ward Map



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

- MMC Boundary
- Railway line
- National Highway
- City Road
- Market Area
- Cottage Industries of Gun Manufacturing
- Informal Activities Area



SCALE:
500 250 0 0.5 1.0KM

Source:Google Image & MMC 2010

MUNGER MUNICIPAL CORPORATION Map Showing Main Areas of Economic Activity

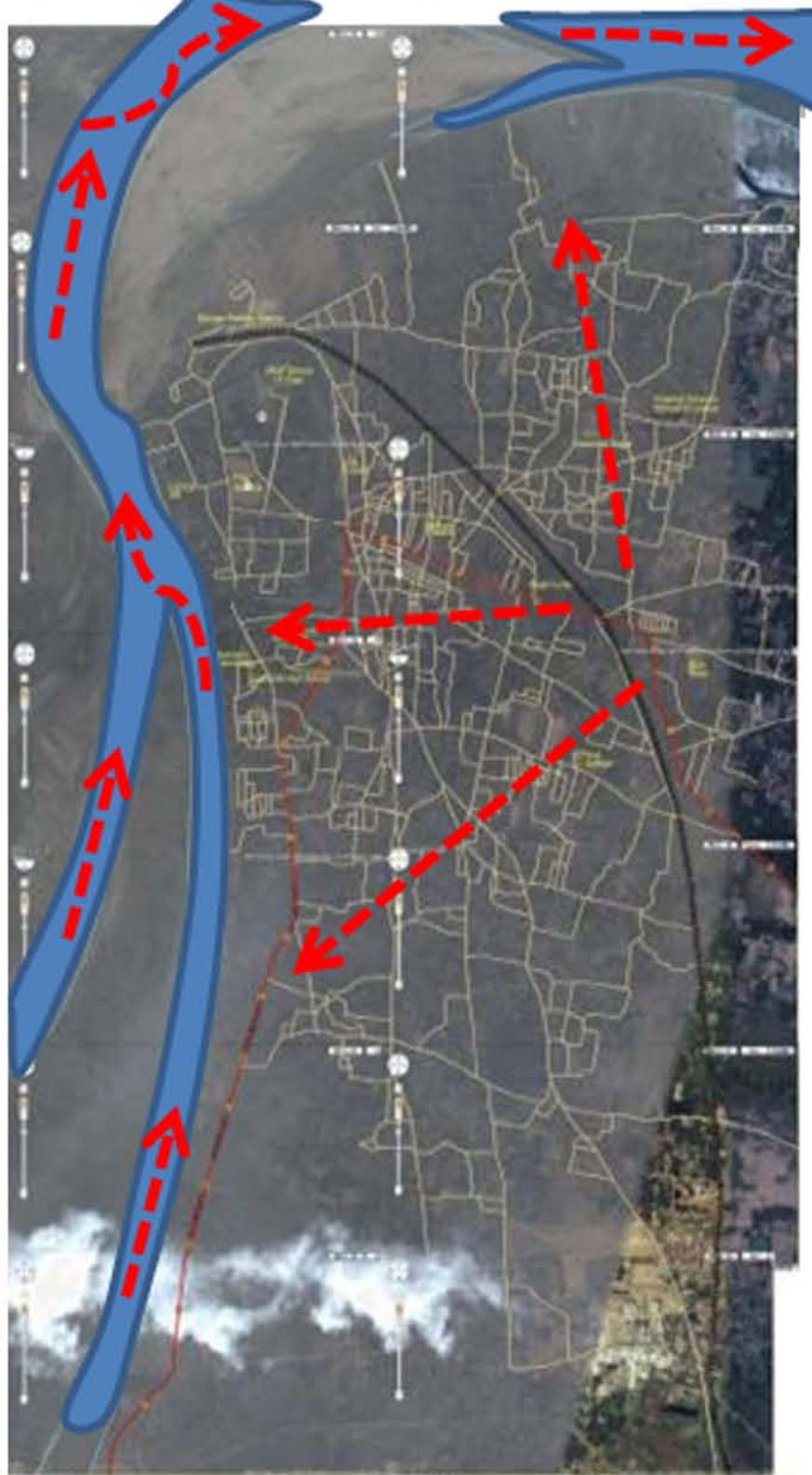


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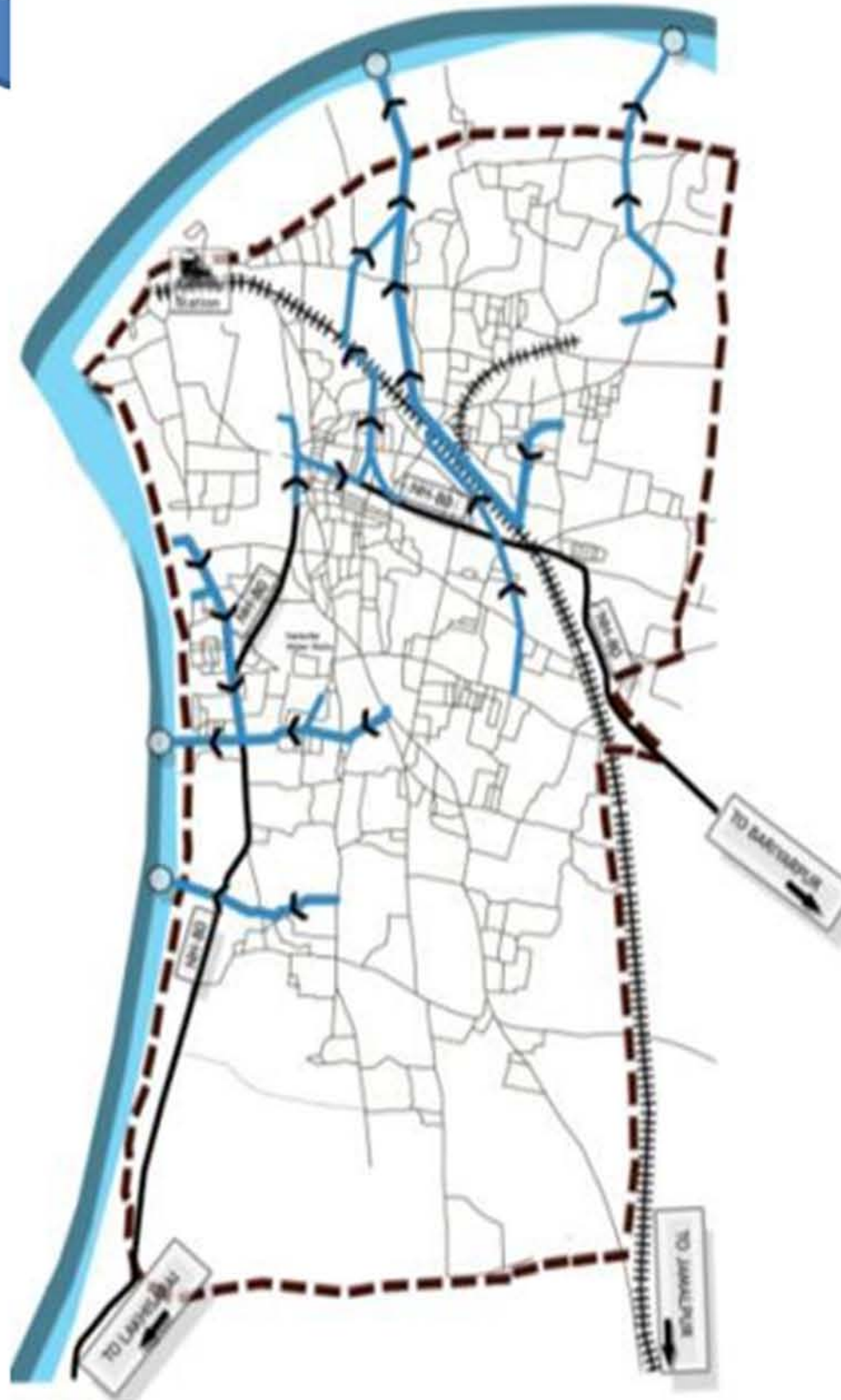


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Direction of Natural Flow
(Munger city Google image 2010)



Existing Drainage Network



LEGEND

- MMC Boundary
- Railway line
- National Highway
- City Road
- Existing Drain
- Outfall
- Flow Direction
- River Ganga

SCALE:

500 250 0 0.5 1.0KM

Source: Google Image & MMC 2010



MUNGER MUNICIPAL CORPORATION
Drainage



Voyants Solutions Pvt. Ltd, Gurgaon



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Government of Bihar
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LEGEND

- MMC Boundary
- Railway line
- National Highway
- City Road
- 10" dia. pipeline
- 8" dia. pipeline
- 6" dia. pipeline
- 5" dia. pipeline
- 3" dia. pipeline
- ① OHT-Basudevpur
- ② OHT-Sadar Hospital
- ③ OHT-Neelam Tower
- ④ OHT-Kila Tower
- ⑤ OHT-KWW
- ⑥ OHT-Police Line
- ⑦ OHT-Maksudpur

SCALE:

500 250 0 0.5 1.0KM

Source: Google Image & MMC 2010



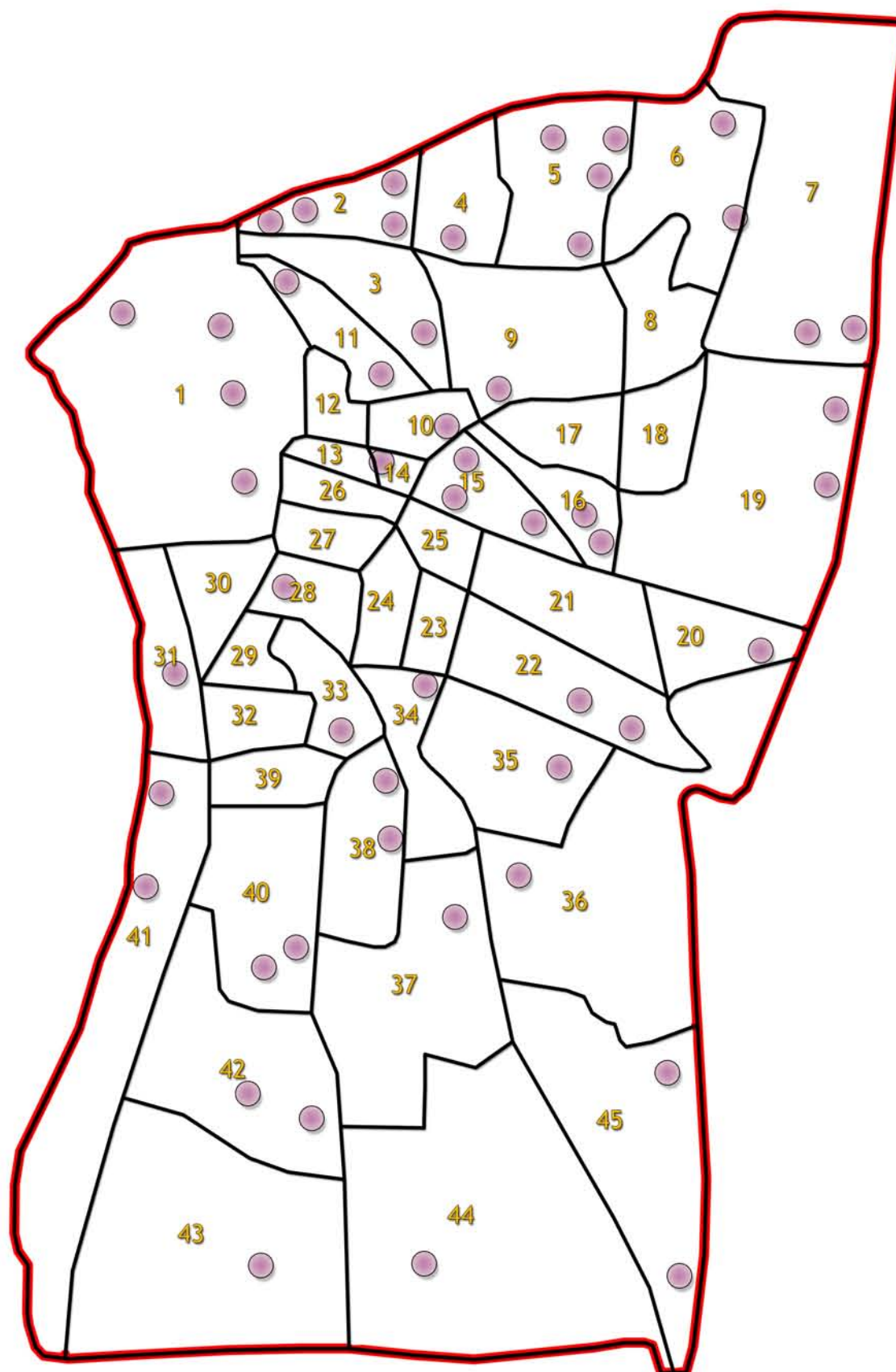
MUNGER MUNICIPAL CORPORATION
Water Supply



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

- MMC Boundary
- Ward Boundary
- Location Of Slum



Source: MMC 2010

MUNGER MUNICIPAL CORPORATION Location Of Slum On Ward Map



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