



Urban Development and Housing Department
Government of Bihar

City Development Plan (2010-30)

MOTIHARI



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 मोतिहारी 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 मोतिहारी 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 मोतिहारी 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। मोतिहारी नगर परिषद् इस सहयोग के लिए DFID का आभारी है।

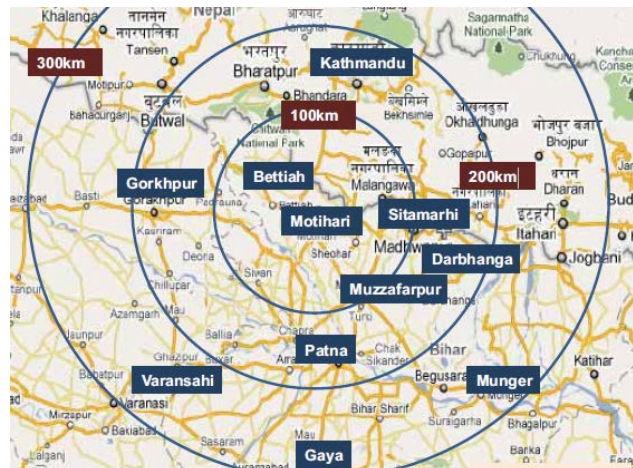
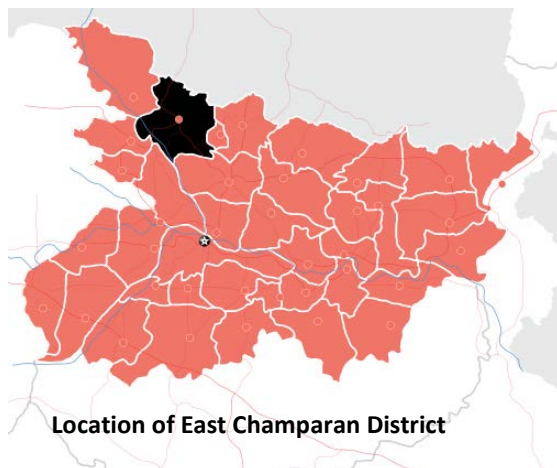

(उपसभापति)

मोतिहारी नगर परिषद्


(सभापति)
मोतिहारी नगर परिषद्

Overview

Motihari is located in the northwestern part of Bihar. The municipality of Motihari was established in 1879 and now it is the district head quarter of East Champaran. The Moti Jheel is the pride and main attraction of this town. The jheel is located in the centre with the town spread on either bank.



The town has development towards the northwest side and southwest along the National Highway 24-A and State Highway 54 towards Raxaul. The present and the future growth directions are towards the western and southern side and along the National and State highways. Low lying areas in the northwestern direction and the presence of Kareri Lake in southeast are barriers to growth in these directions.

Motihari has sugar mills, oil seeds and trade in agro base products. However, sugar mills are few in number and mostly old and dilapidated or totally closed. Recently the government has taken several initiatives to rejuvenate the old sugar mills in the Motihari region and proposed to develop it as an agro based market town mainly because, the region is the largest producer of sugar cane, fisheries, potatoes and other vegetables.

The competitive advantage of Motihari lies in its topography and transportation routes. Motihari town has developed along and on both sides of the Moti Jheel and along the main access road towards Muzaffarpur and West Champaran (Bettiah). Also its proximity to Nepal border and strong connectivity are favorable for economic development.



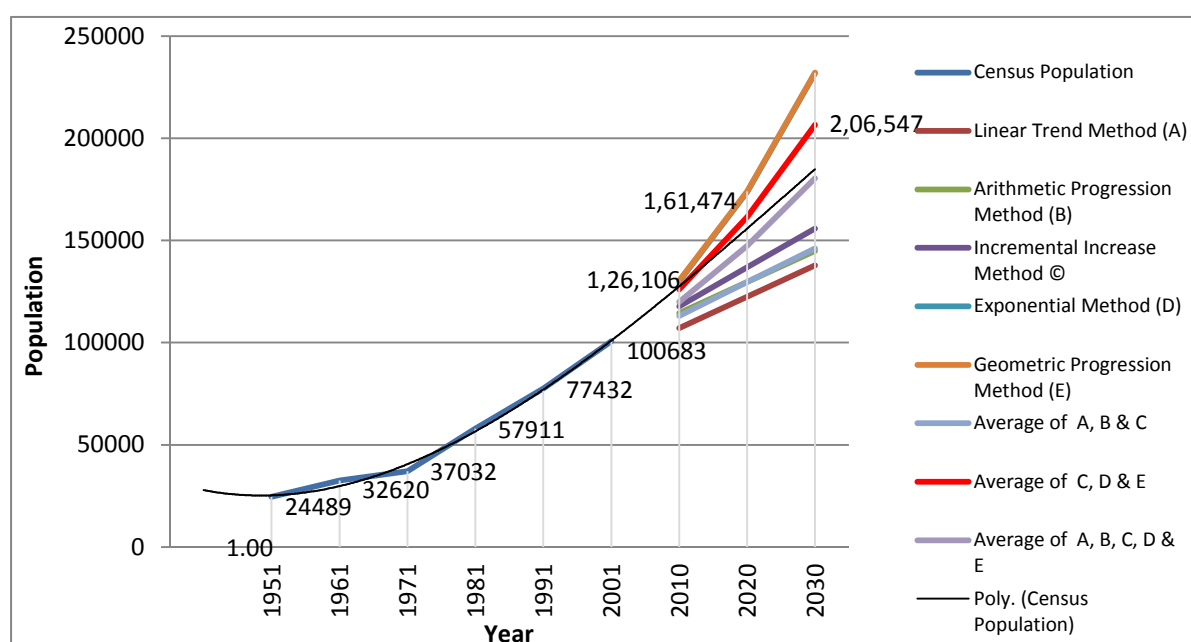
CITY VISION

The Vision for the town was developed through an extensive stakeholder consultation process. Some of the key elements highlighted in these consultations are (i) an environment friendly city with excellent environment friendly infrastructure for sustainable development, (ii) a 'slum free' and 'pollution free' city, (iii) The town being promoted as a 'tourist hub' and (iv) planned residential layouts with provision of social and physical infrastructure. The development of the vision also took into account some of the natural attributes/advantages of Motihari such as (i) presence of the Moti Jheel in the heart of the town, (ii) presence of 9 ox bow lakes within a radius of 10-12 km of the town, (iii) the region being a major producer of sugarcane, vegetables, fish and grain, (iv) good connectivity and (v) the town being the district headquarters of East Champaran.

Based on these factors, the Vision that has been defined is as follows: ***"To develop Motihari as a vibrant town based on tourism and agro based marketing and trading."***

Demography

The population growth has seen a fluctuating trend. The highest growth was recorded in the 1971-81 decade at 56%. Thereafter, the growth rate declined but highs of 34% in 1991 and 30% in 2001 were recorded. Five methods have been used to project population and analyzed with relation to polynomial curve and previous population growth trend-line of 1951 to 2011 - finally; the average of the three methods has been adopted as it was found to match most suitably with the previous growth trend line of 1951-2011. The projected population for the town in 2030 is about 206547.



SECTOR ASSESSMENTS & GROWTH STRATEGIES

A) Water Supply

Motihari is located in a high yield ground water zone and the entire supply is ground water based. The existing system comprises seven tube wells located at various parts of the town. Additionally, there are about 199 hand pumps that contribute to the supply. The ground water table varies from 16 ft to 22 ft. Although a water supply network exists, the overall supply levels are inadequate. Only 21.76% of households are connected to the supply system with per-capita water supply being 19 lpcd. Water losses are high at 50% mainly on account of the old network. Apart from these, the use of GI pipes for household connections leads to leakage and contamination. Water supply is intermittent because of power problems. The table below summarises the key interventions required for improvement of the sector.

PROJECTS	I st Yr. (11-12)	II nd Yr. (12-13)	III rd Yr. (13-14)	IV th Yr. (14-15)	2016-21	2021-30
Augmentation of existing Water Supply Scheme	-	-	150.00	-	-	-
Water Conservation awareness programme	10.00	-	-	-	-	-
SUB TOTAL WATER SUPPLY	10.00	-	150.00	-	-	-
Grand Total	Rs. 160.00 Lakhs					

All figures in Rupees Lakhs

A water supply scheme for Motihari is already planned (REORGANISATION OF MOTIHARI URBAN WATER SUPPLY SCHEME under Accelerated Urban Water Supply Programme). This will supply 18 MLD of water – this is below the estimated water projection done by the consultants – there is therefore need for augmentation of the proposed scheme.

B) Sewerage and Sanitation

The town has no sewerage system. Some households have their own septic tanks to handle domestic sewage. The sewage from remaining households and other commercial establishments are intermixed and flow through storm water drains into various nallahs and accumulate in the low lying areas and the Moti Jheel. Approximately 3.8 MLD sewage flows into these various nallahs daily or has been accumulated in the low-lying areas and Moti Jheel, which is creating unhygienic living conditions for the local residents. About 19.6% of the households practice open defecation. The sewage of the city is disposed into septic tanks, soak pits and finally into the Moti Jheel and Dhanuti river. The town has 7 public toilets and 4 community toilets but all are poorly maintained. The table below summarises the interventions required for improvement of the sector.

PROJECTS	I st Yr. (11-12)	II nd Yr. (12-13)	III rd Yr. (13-14)	IV th Yr. (14-15)	2016-21	2021-30
Construction of Sewage Treatment plant	-	345.00	1035.00	-	-	-
Laying down sewerage	-	3750.00	5625.00	5625.00	-	-

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network						
Re-construction of existing public toilets	100.00	-	-	80.00	-	-
Construction of new public toilets (for male & female)	-	-	-	-	150.00	450.00
Sanitation Awareness Programmes	10.00	-	-	-	-	-
SUB TOTAL SEWERAGE	110.00	4095.00	6660.00	5705.00	150.00	450.00
Grand Total	Rs. 17170.00 Lakhs					

All figures in Rupees Lakhs

C) Storm Water Drainage

The town lacks an efficient drainage system and this is a key case of flooding even in case of short spells of rain. The total length of drains in the town area is approximately 97.2 km. All drains converge in the Moti Jheel that is located in the centre of the town. The main drains leading to this Jheel are as follows: *Rowing club drain, Cold storage drain, Maduban Chowk Drain, Main road drain at Bhavanipu, Roxy Cinema Drain, Gyan Babu chowk Nala, Jaun pul Nala, Nala from old Bus Stand, Nala Near Sugar factory, and Nala From L.N.D College.* The table below summarises the key interventions required for improvement of the sector.

Motihari town being in the flood prone zone requires comprehensive drainage strategies and goals. The CDP recommends the need for a Drainage Master Plan.

PROJECTS	I st Yr. (11-12)	II nd Yr. (12-13)	III rd Yr. (13-14)	IV th Yr. (14-15)	2016-21	2021-30
De-silting of Discharge Drains	15.00	-	-	-	-	-
Repair & covering all open pucca drains	1135.00	3405.00	-	-	-	-
Construction of pucca drain over existing kuchha drain	1500.00	-	-	-	-	-
Construction of CETP at outfall	125.00	375.00	-	-	-	-
Construction of interceptor drain along Motijheel	30.00	90.00	-	-	-	-
Preparation of Comprehensive Drainage Master Plan	20.00	-	-	-	-	-
SUB TOTAL DRAINAGE	2825.00	3870.00	-	-	-	-
Grand Total	Rs. 6695.00 Lakhs					

All figures in Rupees Lakhs

D) Solid Waste Management

It is estimated that the tow generates about 30 tons of waste per day. The collection system is basic with high dependence on street sweeping. There is no designated site for disposal. The table below summarises the key interventions required for improvement of the sector. Recommendations also include exploring the possibility of introducing PPP in the sector.

PROJECTS	I st Yr. (11-12)	II nd Yr. (12-13)	III rd Yr. (13-14)	IV th Yr. (14-15)	2016-21	2021-30
Development of Sanitary Landfill	20.00	60.00	-	-	-	-

City Development Plan for Motihari: EXECUTIVE SUMMARY

Site						
Construction of compost plant at landfill site	12.50	37.50	-	-	-	-
Containerized Handcarts	-	5.55	-	-	5.55	11.40
Containerized Tricycles	-	1.30	-	-	1.30	2.40
Community bins for Slums	-	1.25	-	-	1.25	2.50
Silt Removal machine	-	3.00	-	-	-	-
Small vehicles for direct collection of waste	-	2.50	-	-	-	2.50
Closed dumper placers containers 4.5 cu.mtr. Volume	-	125.00	-	-	125.00	250.00
Closed dumper placers containers of 7 cu. Mtr. Volume	-		-	-		
Containers for domestic hazardous waste	-	1.16	-	-	1.16	2.03
4.5 cu. Mtr skips for construction waste	-	0.75	-	-	0.75	1.00
Construction Waste collection Vehicle	-	-	-	-	-	15.00
Small van for hospital waste collection	-	2.00	-	-	2.00	2.00
Bull Dozers/Wheel Dozers	-	-	-	-	-	40.00
Incineration Plant (BMW)	-	-	-	-	-	100.00
JCB Machine	-	10.00	-	-	-	10.00
Septic Tank Cleaning Machine	-	15.00	-	-	-	-
Street Sweeping Machines	-	0.0105	-	-	-	0.0105
Awareness generation programmes	10.00	-	-	-	-	-
SUB TOTAL SWM	42.50	265.00	-	-	137.00	438.90
Grand Total	Rs. 883.40 Lakhs					

All figures in Rupees Lakhs

E) Roads, Traffic and Transportation

The total length of surfaced roads within the municipal limits is 162 km. The average width of the surfaced roads varies from 5m to 6m which is further reduced to 3m to 4m due to encroachments. The overall road network is inadequate with less than 10% area under circulation against the standard of 15-20%. The road network system is deficient also in terms of geometric and traffic management. Gandhi Chowk, Balua Chowk, Madhubani Chowk, Chandmari Chowk, Gyan Babu Chowk, Gayatri Mandir Chowk and Chatauni Chowk are some of the major traffic nodes. Most of the existing main roads are poorly maintained including the absence of road infrastructure and pedestrian facilities e.g. footpath, subways, dividers, bus stops, signages, markings, guard rails and signals etc. that contribute to congestion in internal roads. All arterial roads within the municipal limits are of kutcha type and are in very poor condition. Further, there are no drains along the roads. In the absence of any organized traffic including parking facilities for large vehicles, heavy vehicles are parked along the major roads resulting in traffic jam and accidents. There have been indiscriminate encroachments on the roads reducing the capacity of the roads.

The CDP recommends a traffic management plan in the immediate stage. Thereafter, longer term interventions like development of parking spaces at important and congested commercial areas;

widening and improvement of roads along with the provision of other infrastructure; laying of new roads; refurbishment of ISBT with commercial complex; improvement and beautification of major intersections; and development of a Transport Nagar adjoining NH-28 A are recommended.

PROJECTS	I st Yr. (11-12)	II nd Yr. (12-13)	III rd Yr. (13-14)	IV th Yr. (14-15)	2016-21	2021-30
Development of a Transport Nagar near Chhatauni chowk	-	-	-	-	-	2500.00
Parking Spaces in selected sites	-	-	-	-	100.00	200.00
Road Improvement - All Internal roads	136.22	408.65	-	-	-	-
Provision of ring Road along Motijheel	60.00	180.00	-	-	-	-
Construction of 3 Bridges on Motijheel and Dhanuti river	-	750.00	2250.00	-	-	-
Construction of ISBT + Commerical Complexes	-	-	-	-	-	1500.00
Establishment of City Bus Based Public Transport System	-	-	-	-	700.00	-
Signalisation & beautification of major intersections	-	-	-	-	125.00	150.00
SUB TOTAL TRANSPORT	196.22	1338.65	2250.00	-	925.00	4350.00
Grand Total	Rs. 9059.87 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

It is estimated that about 24% of the urban population live in slums (SPUR survey 2010). This is higher compared to the national average of 21.25%. Service levels are poor in slums and require substantive upgrading. Housing is also a critical issue. Most slums have hand pumps but few toilets and open defecation is common. Overall living conditions are unhealthy. This ULB will be included in state level strategies being developed for improvement of the urban poor. In the interim, efforts are to be made to extend basic services to slum pockets.

PROJECTS	I st Yr. (11-12)	II nd Yr. (12-13)	III rd Yr. (13-14)	IV th Yr. (14-15)	2016-21	2021-30
Redevelopment (In-situ / Off-situ: to be decided as per DFID survey recommendation) of existing slums (3760 HH)	1410.00	2115.00	2115.00	-	-	-
Skill Development & Training for Slums	10.00	-	-	-	-	-
SUB TOTAL HOUSING	1420.00	2115.00	2115.00	-	-	-
Grand Total	Rs. 5650.00 Lakhs					

All figures in Rupees Lakhs

H) Social Infrastructure

The CDP recommends provision of various social infrastructure facilities at ward level as per the UDPI guidelines in a phased manner. At present, there are 40 of primary school and 17 senior secondary schools in Motihari. The condition of these primary and senior secondary schools is poor due to lack of supporting infrastructure.

Sadar hospital is the main hospital in the city but its functioning is impacted by inadequate staff and infrastructure facilities. The poor facilities mean that patients seeking specialized care have to travel either to Patna or Kolkata.

PROJECTS	I st Yr. (11-12)	II nd Yr. (12-13)	III rd Yr. (13-14)	IV th Yr. (14-15)	2016-21	2021-30
Construction of Senior Secondary Schools	-	-	-	-	-	400.00
Construction of School for Handicapped	-	-	-	-	-	150.00
SUB TOTAL EDUCATION	-	-	-	-	-	550.00
Construction of Intermediate Hospital (category-A, 200 beds)	-	-	-	-	-	10000.00
Construction of Intermediate Hospital (category-B, 80 beds)	-	-	-	-	-	1300.00
Construction of Poly-clinic	10.00	30.00	-	-	40.00	-
Construction of Nursing home	30.00	90.00	-	-	-	-
Construction of Dispensary	-	-	52.50	118.13	13.00	26.00
SUB TOTAL HEALTH	40.00	120.00	52.50	118.13	53.00	11326.00
Grand Total	Rs. 11709.63 Lakhs					

All figures in Rupees Lakhs

I) Environment

Natural Hazards: Motihari lies in seismic zone IV which is high risk zone. Therefore development controls in the area require earthquake resistant buildings and proper enforcement. The data of ambient air and quality of water is not monitored. A study needs to be conducted and proper regulations need to be in place.

Water Bodies: Moti Jheel is the largest ox-bow lake in Bihar and is located in the centre of the town. This lake is the outfall of all drains carrying domestic and storm water. The lake has a total area of around 80-100 hectare and its depth varies from 3.5m in rainy season to 1m in dry weather. The east-west length of the lake is nearly 3.5 to 4km. The main source of water in the lake is the Sikarna Link channel that carries water from the Sikarna River to the lake. The Link Channel is nearly 3500 ft. long. The Link Channel also carries domestic sewage of the town to Moti Jheel throughout the year. The Moti Jheel is also connected to another jheel known as Kerari Jheel that however does not receive any waste water discharge.

Action plan & Strategies for conservation of Moti Jheel & Kerari Lake

Lake Basin Management	Water Quality Management
<ul style="list-style-type: none"> ✓ Common Effluent Treatment Plant (CETP) to be constructed to minimize effluent load in the lake ✓ Establishing a sewerage network and separation from storm water drains on a priority ✓ Protection of the catchment topography to ensure runoff of rain water into the lake to sustain its hydrology ✓ To put in place an effective solid waste management system 	<ul style="list-style-type: none"> ✓ Formation of bio-conservation zone <ul style="list-style-type: none"> • A 'no development' buffer zone around the lake ensures protection from negative urban impacts • Bio-conservation zone between 50 to 100 meters width depending on topography, to act as an effective barrier to moderate the negative impacts • Developing regulations & their enforcement to ensure that only eco-friendly activities are allowed in this eco-sensitive zone ✓ Introduction of composite fish culture ✓ Aeration ✓ Establishment of lake conservation society to ensure peoples participation in protection and conservation of the lake

PROJECTS	I st Yr. (11-12)	II nd Yr. (12-13)	III rd Yr. (13-14)	IV th Yr. (14-15)	2016-21	2021-30
Rejuvenation of ox-bow lakes for Pisciculture	-	-	-	-	40.00	-
Redevelopment/ beautification of Recreational areas/parks	-	-	-	-	200.00	-
Preparation of Environmental sensitive area maps & data compilation	-	-	-	-	20.00	-
Preparation of a disaster management plan for the town	-	-	-	-	25.00	-
Provision of an Electric Crematorium	-	-	-	-	20.00	-
Community Awareness Programme for Rain Water Harvesting	10.00	-	-	-	-	-
SUB TOTAL ENVIRONMENT	10.00	-	-	-	305.00	-
Grand Total	Rs. 315.00 Lakhs					

All figures in Rupees Lakhs

J) Urban Heritage and Tourism

Motihari is the birth place of the famous author George Orwell and is of historic importance for its position in Mahatma Gandhi's Champaran Satyagraha. Other places in and around Motihari have had older links to Buddhism. The world's tallest stupa is at Kesaria, just an hour from Motihari. A museum and a stone pillar are there to commemorate Mahatma Gandhi's links with Motihari. Gandhiji's courageous statement given before a magistrate is inscribed here on a stone. The 48-ft tall Chunar stone pillar stands exactly at the site where Gandhiji was produced before the court of the sub-divisional magistrate on April 18, 1917 for violating prohibitory orders.

City Development Plan for Motihari: EXECUTIVE SUMMARY

Moti Jheel with its location in the centre of the town has tremendous potential for being developed as a recreational and tourist hub at regional level. The development of this zone will provide open space in the town and improve its environment significantly. The CDP recommends systematic development of the lake zone including a landscaped promenade; categorization and development of appropriate parts of the lake for recreation and rehabilitation; and rehabilitation/reorganization of encroachments along the lake.

PROJECTS	I st Yr. (11-12)	II nd Yr. (12-13)	III rd Yr. (13-14)	IV th Yr. (14-15)	2015-20	2020-25
Development of motijheel and Kerari lake as tourist places	2250.00	6750.00	-	-	-	-
Establishment of Aerators and pipe grid for Motijheel	12.50	37.50	-	-	-	-
Formation of Buffer Zones in Motijheel and Kerari lake	12.50	37.50	-	-	-	-
Upgradation / beautification of areas around tourist spots	-	-	-	-	-	-
Mahatama Gandhi Samark	-	-	-	-	30.00	-
Mahatama Gandhi Museum	-	-	-	-	30.00	-
Gandi memorial	-	-	-	-	30.00	-
Asoka Piller in kesria	-	-	-	-	30.00	-
George aurovil home	-	-	-	-	30.00	-
Provision of net-railing by the sides of Motijheel	12.50	37.50	-	-	-	-
Development/ Re-establishment of Tourist Information Centre	-	-	-	-	100.00	-
Construction of a Dharmshala	-	-	-	-	500.00	-
SUB TOTAL HERITAGE	2287.50	6862.50	-	-	750.00	-
Grand Total	Rs. 7900.00 Lakhs					

All figures in Rupees Lakhs

K) Urban Economy

The projects for rejuvenating the city economy are listed below.

PROJECTS	I st Yr. (11-12)	II nd Yr. (12-13)	III rd Yr. (13-14)	IV th Yr. (14-15)	2016-21	2021-30
Development of Vendor Zones near Mothijheel Bridge, Henry Bazaar, Chatauni Chowk	-	-	-	-	2500.00	-
Construction of Slaughter House	25.00	75.00	-	-	-	-
Establishment of Fish culture in existing water body	10.00	-	-	-	-	-
Development of a Commercial complex/ shopping area	-	-	-	-	5000.00	-
Redevelopment & renewable of city core areas	-	-	-	-	-	2500.00
Preparation of Master plan	30.00	-	-	-	-	-
SUB TOTAL ECONOMY	65.00	75.00	-	-	7500.00	2500.00
Grand Total	Rs. 10140.00 Lakhs					

All figures in Rupees Lakhs

L) Urban Governance

The projects for improving municipal governance are listed below.

PROJECTS	I st Yr. (11-12)	II nd Yr. (12-13)	III rd Yr. (13-14)	IV th Yr. (14-15)	2016-21	2021-30
Establishment of e-governance system & 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

The revenue income of the municipality was Rs. 858 lakh in FY 2008 -09 and increased to Rs. 887 lakh in the year of 2009-10. Government grants are a major revenue source for the municipality. The municipality is however unable to utilize all its resources optimally.

The investment sustaining capacity of the municipality is ascertained based on a financial operating plan (FOP), which is essentially a 20-year forecast of municipal income and expenditure, based on certain trend-based and revenue enhancement assumptions. Similarly, the investment phasing of control investment is worked out and shown in investment phasing plan.

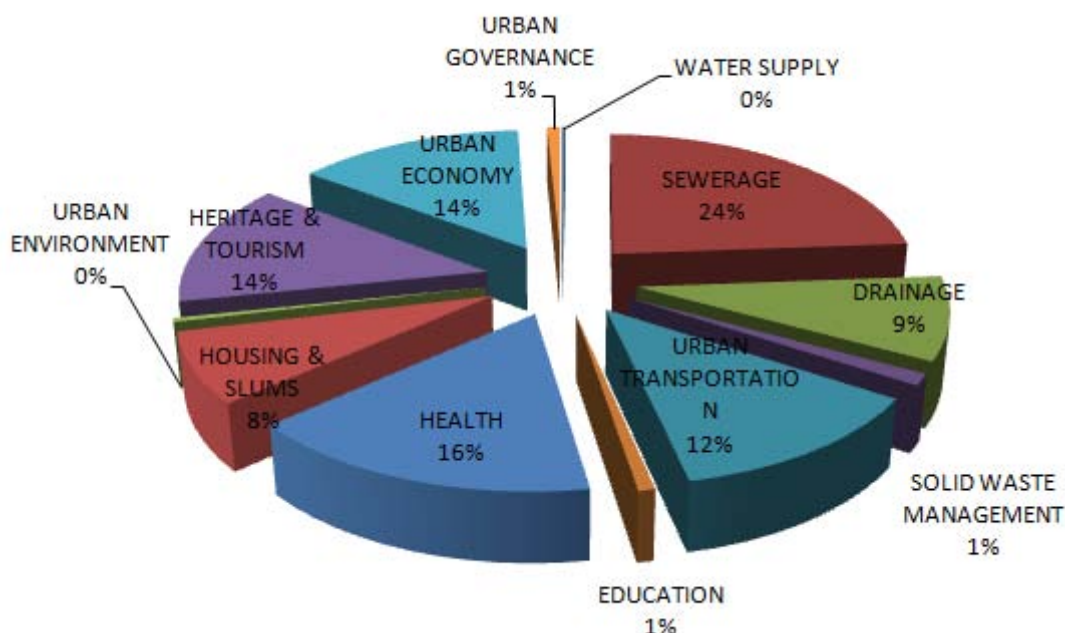
Capital Investment Plan (CIP)

The project's identification has been done based on the strategies listed under each of the sectors. The projects have been derived based on the municipality estimates and aimed at ensuring optimal and efficient utilization of existing infrastructure systems. The total estimated capital investment required for providing efficient services to the projected population of the ULB by the year 2030 is about **Rs. 72808 Lakhs**. 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	2016-21	2021-30
1	WATER SUPPLY	160.00	160.00	0.00	0.00
2	SEWERAGE	17170.00	16570.00	150.00	450.00
3	DRAINAGE	6695.00	6695.00	0.00	0.00
4	SOLID WASTE MANAGEMENT	883.37	307.52	137.01	438.84
5	URBAN TRANSPORTATION	9059.86	3784.86	925.00	4350.00
6	EDUCATION	550.00	0.00	0.00	550.00
7	HEALTH	11710.00	330.63	53.13	11326.26
9	HOUSING & SLUMS	5650.00	5650.00	0.00	0.00

City Development Plan for Motihari: EXECUTIVE SUMMARY

10	URBAN ENVIRONMENT	315.00	10.00	305.00	0.00
11	HERITAGE & TOURISM	9900.00	9150.00	750.00	0.00
12	URBAN ECONOMY	10140.00	140.00	7500.00	2500.00
13	URBAN GOVERNANCE	575.00	575.00	0.00	0.00
	TOTAL	72808.25	43373.01	9820.14	19615.10



Financial Operating Plan (FOP)

The sustainability analysis assumes that the municipality will carry out reforms indicated as assumptions for financial projections. A Financial and Operating Plan (FOP) is prepared which evaluates the Local Body Fund status for the Full Project scenario. The full project investment scenario is based on all the proposed investments identified for Motihari municipality 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 commitment 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.

FY 2011-12 is taken as the base year and FY 2030 is assumed as the reference year (30 years) to determine the net surpluses and whether the municipality maintains a debt / revenue surplus ratio as an indication of the ULB's ability to sustain investments

The growth rates for the various heads of income and expenditure have been arrived based on the past growth rates and the future estimated population growth. Improvements to the existing current and arrears collection percentages have been assumed for the various revenues directly collected by

the Local Body, which implies that the Local Body would have to improve its collection mechanism to sustain full investments.

Three scenarios have been worked out to check financial sustainability of 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 and Health and all financial reforms
3. **Scenario III** - Estimation of Borrowing and Investment Capacity by considering all Projects without Financial Reforms.

We have arrived at the borrowing capacity of Municipality on the minimum of the following:

Summary of Borrowing and Investment Capacity			
	Scenario - I	Scenario - II	Scenario -
Borrowing Capacity (in Rs. Lakhs)	6000	6800	-ve
Investment Capacity (in Rs. Lakhs)	38000	38000	-ve
Investment Requirement (in Rs. Lakhs)	46000	46000	46000
Sustainable Investment Capacity % - IC / IR	83%	83%	Nil

Overall Assessment

The table below summarises the existing service delivery levels for Motihari town. This summary underlines the need for all round improvements.

SN	Parameter	Indicators	Motihari
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

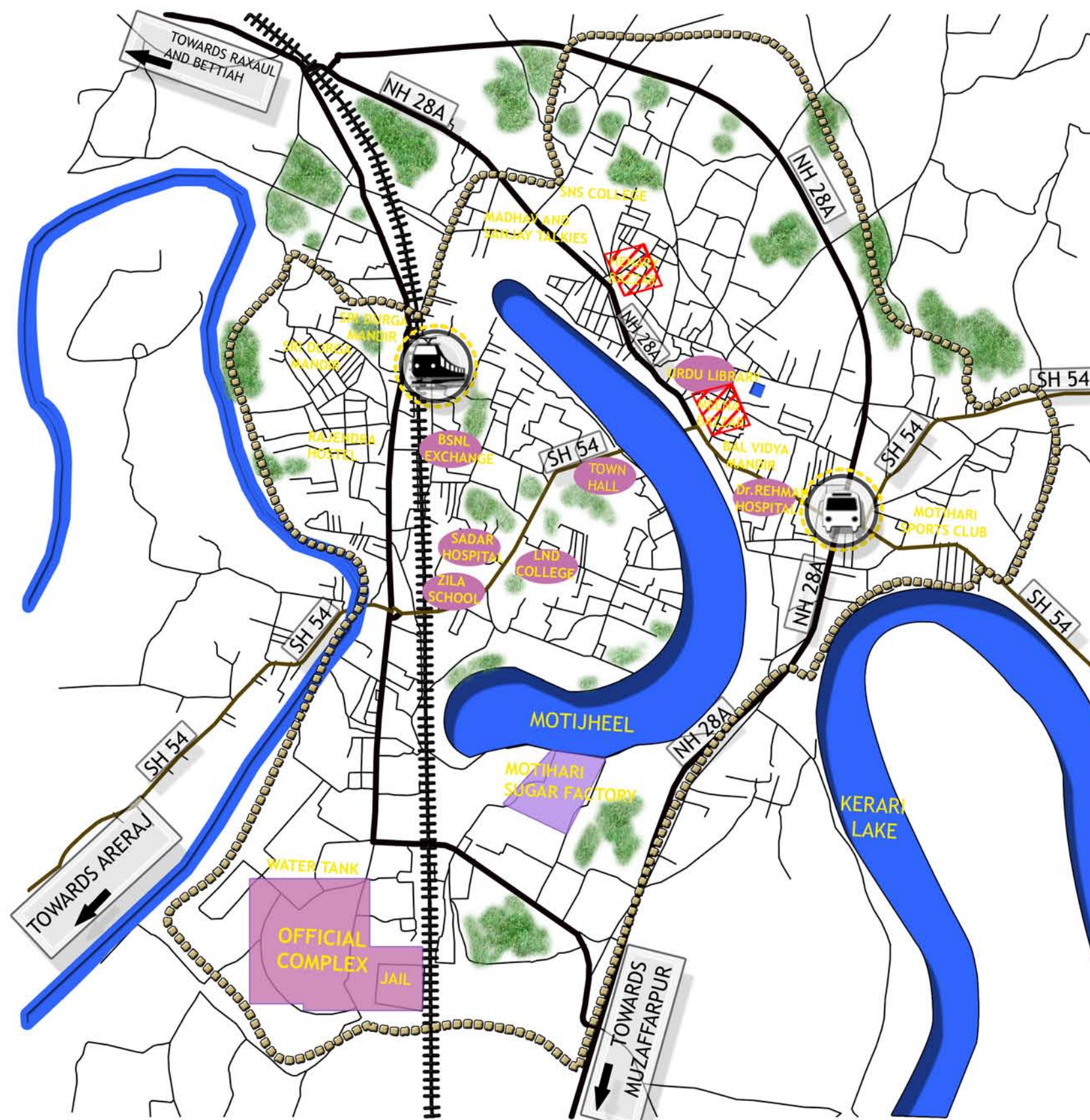


Below Average



Good





LEGEND

- MMC Boundary
- City Roads
- Railway Line
- National Highway
- State Highway
- River
- Industrial Area
- Green Spaces
- Commercial Area
- Henary Bazaar
- Meena Bazaar

SCALE:
500 250 0 0.5 1.0KM

Source: Google Image 2010 & BMC

MOTIHARI MUNICIPAL COUNCIL



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

- MNC Area
- MNC Boundary
- Water Body



SCALE:
500 250 0 0.5 1.0KM

Source:Google Image 2010 & BMC

MOTIHARI MUNICIPAL COUNCIL

Ward Map



Voyants Solutions Pvt. Ltd, Gurgaon



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LEGEND

- MMC Boundary
- City Roads
- Railway Line
- National Highway
- State Highway
- Water Bodies
- Industrial Area
- Green Spaces
- Major Intersections
- Bus Terminal
- Railway Station



SCALE:
500 250 0 0.5 1.0KM

Source: Google Image 2010 & BMC

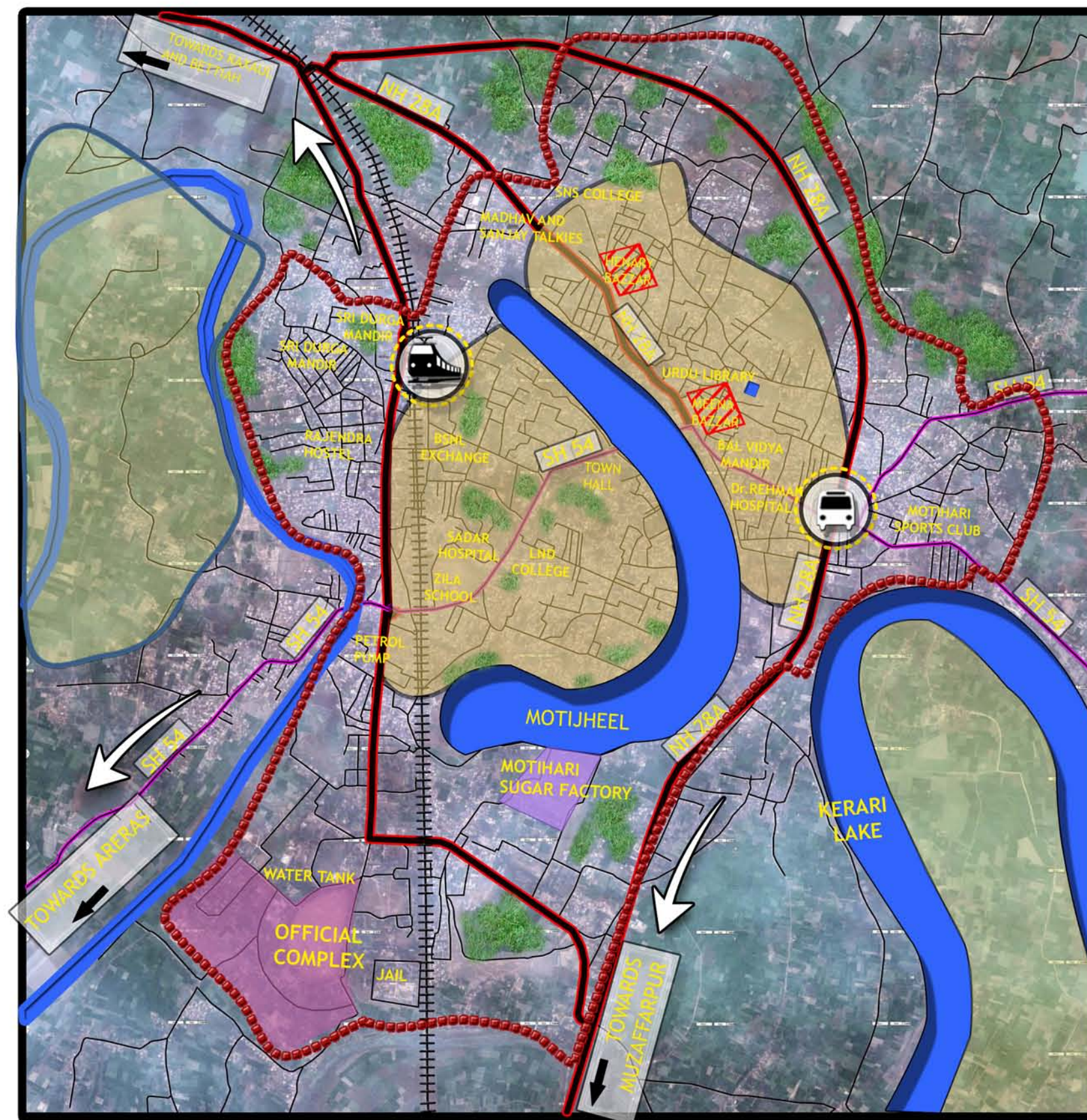
MOTIHARI MUNICIPAL COUNCIL
Road And Transportation



Voyants Solutions Pvt. Ltd, Gurgaon



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LEGEND

- MMC Boundary
- City Roads
- Railway Line
- National Highway
- State Highway
- River
- Industrial Area
- Green Spaces
- Commercial Area
 - Henary Bazaar
 - Meena Bazaar
- Public & Semi Public
- City Core Area
- Future Growth Direction
- Water Logging Areas

SCALE:

500 250 0 0.5 1.0KM

Source: Google Image 2010 & BMC

MOTIHARI MUNICIPAL COUNCIL
Future Growth Direction and Water logging Areas



Voyants Solutions Pvt. Ltd, Gurgaon



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