



Urban Development and Housing Department  
Government of Bihar

## City Development Plan (2010-30)

### **NAWADA**



### EXECUTIVE SUMMARY

CDP Prepared By:



**Intercontinental Consultants & Technocrats Pvt. Ltd.**



**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)



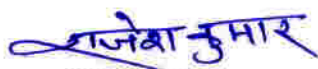
## संदेश



हमें यह घोषणा करते हुए अति प्रसन्नता हो रही है कि नवादा 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 अन्तःकालीन कार्यनीति में विभाजित की गई है के साथ ही नगर निवेश योजना (CIP) का भी समावेश है। इस योजना के आधार पर नवादा नगर परिषद, 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 परिषद 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 नवादा 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। नवादा नगर परिषद इस सहयोग के लिए DFID का आभारी है।



(उपसभापति)  
नवादा नगर परिषद

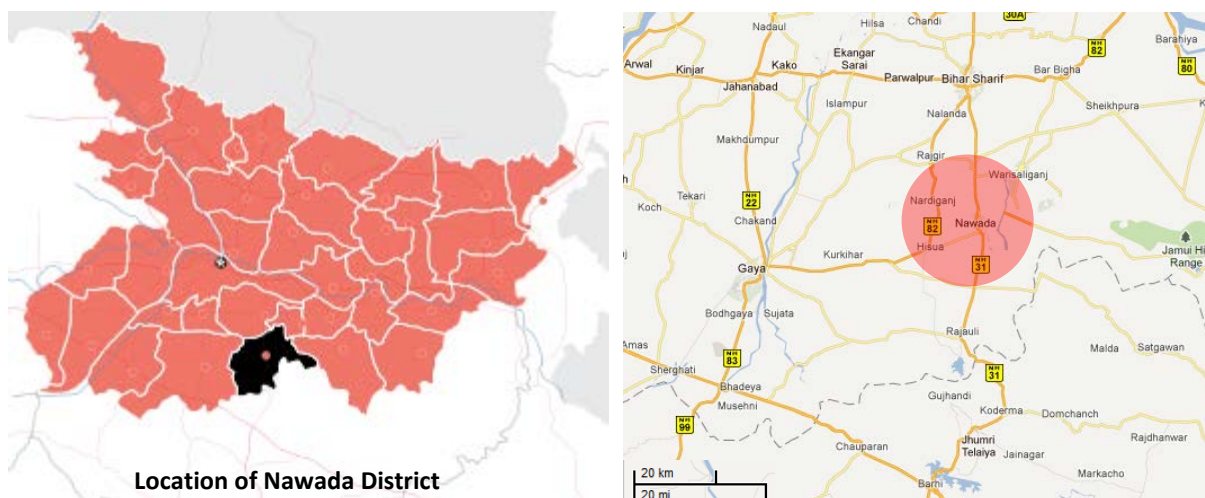


(सभापति)  
नवादा नगर परिषद



## Overview

**Nawada** is located in South Bihar and is an independent district. Prior to its declaration as a district, Nawada was part of Gaya district. The town is located on NH 33 at a distance of 80 km from Gaya and 105 km from Bodhgaya. The Nawada Nagar Parishad covers an area of 9.68 sq. km and is divided into 33 wards. NH 31 connects the town with Patna and Ranchi in the north and south respectively and SH8 connects the town to Gaya. There is a railway line connecting Nawada to Gaya.



Nawada has no functional large industries and only some 18 small and medium enterprises (SME) are located in the city in addition to a few stone chips factories and rice mills, however, potential of industrial development may be explored. The possibility of setting up agro-processing industries on small and medium scale may be explored based on the rich agricultural hinterland of the city. There is also potential to strengthen the existing SMEs and to develop new agro-based industries in the city. The city has regional agricultural mandi, iron material market, cement market, leather market, cloth market and vegetable market.

**The competitive advantage of Nawada** lies in its position as the District Headquarters. Nawada has been growing as an important trade centre with surrounding towns and villages having economic linkages with the town. For example, Warsaliganj is a large sugar cane growing area although the sugar mill is not operational; Kadrganj has silk related activities and trading linkages up to Bhagalpur; Hisua is famous for ornamental pottery, to name a few.

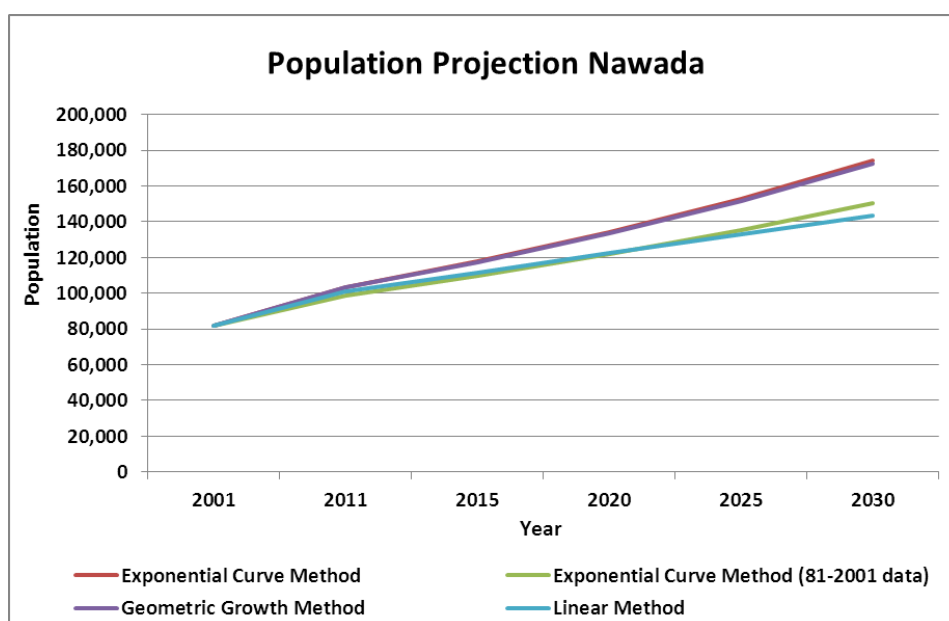


### CITY VISION

The vision for Nawada was derived on the basis of the status assessment of the city, stakeholder consultations and focused group discussions. Participatory consultations during the visioning process concluded that there is need to revive growth and improve the overall quality of life of its citizens. The identified Vision is as follows: ***“To develop Nawada as a city with comprehensive and integrated development in a sustainably planned way, with good governance, infrastructure facilities, employment opportunities with a focus on agro based industry, hygienic living environment to all citizens with public participation.”*** The identified vision forms the basis of sector-specific strategies adopted in framing the action plan.

## Demography

Nawada had been registering a slow population growth rate from 1981 to 2011 – annually at 5.4%. The growth rate further slowed to 3.3% during 2001 to 2011. The current estimated population of Nawada is approximately 109141(2011). The current population density of the city is about 112.75 persons/ha. For the purposes of the CDP, population projections have been made based on available figures from Census of 1981 and 2001. Four different methods have been used –Compounded Average Growth Rate (CAGR), Exponential Curve Method, Geometric Growth Method and Linear Method. The Exponential Curve Method has been adopted for its best fit. The projected population of Nawada will be 174058 by 2030.



## Sector Assessments & Growth Strategies

### **A) Water Supply**

Ground water is the main source in Nawada. The PHED has responsibility for production and distribution of water supply in the city. The ground water table is at 27-30m. Water is extracted through eight power pumps. There are two overhead tanks in the town of which only one is functional. There are about 267 hand pumps in different parts of the town. The gross water supply is about 2.86 MLD which is around 26 lpcd on current population. The supply is for 8 hours every day. There is no treatment of the water prior to supply. In general there is an absence of piped water supply in the peripheral areas of the town. Except for the overhead tank in the Hospital, all water supplies are through tube wells. The projected water demand in 2030 is 26.98 MLD.

**Strategies:** The CDP suggests the following

- Repair of overhead tanks; old pipelines and provision of community taps in the short term
- Exploring new water source; setting up a WTP; rain water harvesting; metering etc. are suggested in the long term

Water Supply Projects	Total (in Rs. Crore)	2011-2015	2016 - 2020	2021 - 2030
Installation of new Tube wells	0.30	0.30	-	-
Setting up Water Treatment Plant	10.44	10.44	-	-
Construction of Over Head Tanks	0.48	0.48	-	-
Technological up-gradation of the Pumping Station	0.25	0.25	-	-
Supply and installation of bulk water meters	0.05	0.05	-	-
Supply and installation of consumer water meters by 2030	4.97	4.97	-	-
Leak detection and repairs in trunk and distribution mains	1.38	1.38	-	-
Coverage of services in new areas/ uncovered areas	27.94	13.97	8.38	5.59
Replacement of existing distribution and transmission line	5.06	5.06	-	-
Rain Water Harvesting Structures	0.10	0.05	0.03	0.02
Awareness programme for the use of sources of water	0.10	0.10	-	-
Increase Water Charges	-	-	-	-
Computerization of Billing System	0.10	0.10	-	-
<b>Sub Total</b>	<b>51.17</b>	<b>37.15</b>	<b>8.41</b>	<b>5.61</b>

### **B) Sewerage and Sanitation**

Nawada does not have a sewer system. As per Census 2001, 12% of the population had no access to toilets and practiced open defecation. Night soil and sludge either flows through surface drains or through kaccha drains along the road. Since these drains are not designed to carry this load, water collects in low lying areas resulting in the formation of cess pools that generate foul smell and

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encourage mosquito breeding. The current (2010) sewage generation is estimated at 13.17 MLD and this is expected to increase to 21.58 MLD in 2030. Nawada has 22 public toilets that are largely non-functional and poorly maintained.

**Strategies:** The CDP suggests the following:

- Development of a sewerage system with all associated features
- Development of public conveniences

Sewerage Projects	Total (in Rs. Crore)	2011-2015	2016 - 2020	2021 - 2030
Main Sewer	20.00	10.00	6.00	4.00
branch and lateral	20.00	10.00	6.00	4.00
Sewerage Treatment Plant (18.79 MLD capacity)	14.09	14.09	-	-
For Men (20-WC, 20 Bathroom, 15- Urinal & 15 washbasin)	5.00	2.50	1.50	1.00
For Women (20-WC, 20- Bathroom & 15 washbasin)	5.00	2.50	1.50	1.00
<b>Sub Total</b>	<b>64.09</b>	<b>39.09</b>	<b>15.00</b>	<b>10.00</b>

### C) Drainage

At present, the drainage system is a result of piecemeal construction of open drains to meet temporary local conditions in different parts of the town. According to the ULB, the town has 11 km of pucca drains and 15.75km of kuccha drains. The natural slope of the town is towards the River Khuri that flows through the centre of the town. According to Census 2001, about 55% houses in the town were connected to open drains and 32% to closed drains but, field observations imply that the figure could be inflated. Drains are clogged with garbage and silt thus their carrying capacity is reduced.

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

- To develop a drainage system based on a Drainage Master Plan
- To construct new drains and missing links, align, develop and maintain existing drains

Drainage Projects	Total (in Rs. Crore)	2011- 2015	2016 - 2020	2021 - 2030
Preparation of Drainage Master Plan considering the city level slope	0.20	0.20	-	-
Construction of main drains in the city	8.46	4.23	2.54	1.69
Construction of Primary drains	10.50	5.25	3.15	2.10
Construction of Secondary drains	16.00	8.00	4.80	3.20
Improvement/ repairing of existing primary and secondary drains	0.14	0.14	-	-
Improvement/ repairing of existing main drains	0.59	0.59	-	-
De-silting and Alignment; Lining	0.06	0.06	-	-

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and covering of 5 main drains				
Removing the encroachment of drains in market area	0.06	0.06	-	-
Development of drainage solutions for low lying areas around/ within world heritage site	0.20	0.20	-	-
GIS Inventory Mapping & Data Base Management System	0.20	0.20	-	-
Jeep Mounted Excavator	0.30	0.30	-	-
Regular dozer	0.07	0.07	-	-
JCB's	0.23	0.23	-	-
Dumper Trucks	0.09	0.09	-	-
<b>Sub Total</b>	<b>37.10</b>	<b>19.62</b>	<b>10.49</b>	<b>6.99</b>

### D) Solid Waste Management

It is estimated that Nawada generates about 33 tonnes of garbage per day. Garbage generation is expected to increase to 43.50 tonnes per day by 2030. About 60% of the waste generated is collected while the rest is unattended. The town has no organized system for solid waste management. The ULB has limited vehicles and staff to manage the solid waste system. There are 92 staff engaged in solid waste management and the vehicles owned by the ULB make three trips per day for dumping. There are 66 garbage bins placed in different parts of the town. There is no designated disposal site and roadside dumping is the norm. Hospital waste is intermixed with household waste.

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

- Introduction of door to door collection including segregation at source
- Provision of community dustbins
- Procurement of equipment and vehicles
- Scientific disposal at sanitary landfill
- IEC campaigns to complement planned systems improvements

SWM Projects	Total (in Rs. Crore)	2011-2015	2016 - 2020	2021 - 2030
Community Dustbins at distance of 300 m	1.76	0.88	0.53	0.35
2 Green and 1 Blue Waste Collection Vans	0.14	0.14	-	-
Development of land fill site	2.00	2.00	-	-
Pay loader	0.06	0.06	-	-
Dumper	0.11	0.11	-	-
Formulation of structured program for community participation	0.05	0.05	-	-
Awareness program for segregation of waste at source and for solid waste management system in general	0.05	0.05	-	-
<b>Sub Total</b>	<b>4.17</b>	<b>3.29</b>	<b>0.53</b>	<b>0.35</b>



## E) Roads, Traffic, and Transportation

Nawada is well connected to other parts of the state and the region. The NH 31 connects Nawada to Patna and Ranchi to the north and south respectively. The SH 8 connects the town to Gaya. There is also a rail link

with Gaya. The main roads of the town are of reasonable width but on account of encroachment have reduced carrying capacity. The ULB has about 150 km roads of which 6 km are classified as main road, 30 km as major roads and 114 km as minor roads. The total road length in the town is about 26.75 km of which 59% is kuccha, 30% cement concrete and 7% bitumen. There is no organised parking and off-street parking is only available for the government office complex. Private buses and taxis ply between Nawada and other towns like Patna, Gaya, Ranchi, and Kolkata. For intra-city city transport there are small private buses, autos and cycle rickshaws.

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

- Improving existing roads and intersections
- Creation of new traffic infrastructure including a truck terminal, bus stand, parking and new roads
- Use of non-conventional energy for street lights

Traffic and Transportation Projects	Total (in Rs. Crore)	2011-2015	2016 - 2020	2021 - 2030
Provision of parking at bus depot (1000sqm)	0.20	0.20	-	-
Construction of pucca road and footpath in the whole city	120.00	60.00	60.00	-
Providing Pedestrian facility on the main road of the city	1.00	0.50	0.50	-
Construction of Bye pass from Jay Prakash chowk to hospital road to Kailash colony	14.00	7.00	7.00	-
Construction of Bye pass from Mufasil thana to Kadernanj bazar	10.50	5.25	5.25	-
Promoting efficient and environment friendly public transportation system	3.00	1.50	1.50	-
Construction of Railings along the shops in market area	0.20	0.10	0.10	-
Development of new bus stand for intercity traffic	2.00	1.00	1.00	-
Installation of signals at Sabzi mandi area and railway junction	0.20	0.20	-	-
Development of village roads in areas earmarked for urban renewal	7.50	3.75	3.75	-
Construction of divider from Jayprakash chowk to Surajganj	0.40	0.40	-	-
Development of truck terminus for wholesale/Aagri-based goods	10.00	5.00	5.00	-

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Construction of flyover from Jay Prakash chowk to Lalchowk	15.00	7.50	7.50	-
Construction of flyover from Malgada railway crossing	15.00	7.50	7.50	-
<b>Sub Total</b>	<b>199.00</b>	<b>99.90</b>	<b>99.10</b>	<b>-</b>

### **F) Street Lighting**

The town has 370 street light poles with the majority of lights being non-functional. No street lights are seen on the inner roads and in the newly developed peripheral areas of the town. The long power cuts adversely affect operation of the existing lights.

Street Lighting Projects	Total (in Rs. Crore)	2011 - 2015	2016 - 2020	2021 - 2030
Installing Street Light poles with underground cable network (including PCC poles, line, fixing, fitting etc.) @ 30 m distance	15.00	7.50	4.50	3.00
Implanting High mast Poles at Golumber Tiraha (14m Height) and main chawk	0.04	0.02	0.02	-
Implanting High mast Poles at Gohad Choraha (40m Height)	0.06	0.03	0.03	-
<b>Sub Total</b>	<b>15.10</b>	<b>7.55</b>	<b>4.55</b>	<b>3.00</b>

### **G) Social Infrastructure**

An assessment of social infrastructure in Nawada was done. There are 17 primary schools, 5 middle schools, 6 high schools and 7 colleges functioning

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

- Provision of health and educational facilities in line with UDPFI norms in phases

in Nawada. The town has two State Government Hospitals and 12 private hospitals with a combined capacity of 230 beds. The town is deficient in parks and open spaces. There is one stadium in the town – the Harish Chander stadium – the only officially designated open space.

Social Infrastructure Projects	Total (in Rs. Crore)	2011 - 2015	2016 - 2020	2021 - 2030
Upgradation of College from Graduation to PG level	5.00	5.00	-	-
1 College for girl	15.00	-	15.00	-
1 High Schools(Area=1.6 Ha)	2.00	2.00	-	-
1 Technical Centre (Area=1.4 Ha)	8.00	8.00	-	-
Awareness/promotion campaign for girls education	0.10	0.05	0.03	0.02
Provision of 2 nursing homes	4.00	2.00	1.20	0.80
Purchase high capacity generator set	0.50	0.50	-	-
Provision of 12 dispensaries	9.60	4.80	2.88	1.92

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Construction of mortuary with centralized air conditioning system	0.20	0.20	-	-
Shift the mortuary to the outer part of the city i.e. Bihari Ghat	0.07	0.07	-	-
Awareness Campaign for Fire Hazards Awareness Campaign for Fire Hazards	0.05	0.05	-	-
Community centre/ Baraat ghar	3.80	1.90	1.14	0.76
Renovation of Sun Temple	5.00	5.00	-	-
Construction of Recreational Club	5.00	2.50	2.50	-
Renovation of Harish Chandan Stadium	1.75	1.75	-	-
Development of Public Library (area 500sqm)	7.10	3.55	2.13	1.42
Awareness Campaign for Fire Hazards	0.20	0.20	-	-
<b>Sub Total</b>	<b>67.37</b>	<b>37.57</b>	<b>24.88</b>	<b>4.92</b>

### H) Slums and Urban Poor

Census 2001 had recorded presence of nine notified slums in Nawada with a population of 9103, which was 11% of the total city population. The SPUR survey in December 2010 recorded presence of 24 slums with a population of 32816. This survey also put the slum population at around 32% of the town population (109140-population 2011), which is quite high if compared to the 2001 census data. The slum population has increased from 11% in 2001 to 32% in 2011. Slums have poor infrastructure with hand pumps and public stand posts being the main water supply sources; very few households have toilets and there is a lack of public toilets.

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

- Improvement in housing conditions including construction of new houses
- Provision of infrastructure that is integrated with city level networks

Housing for Poor Projects	Total (in Rs. Crore)	2011 - 2015	2016 - 2020	2021 - 2030
Housing for slum dwellers (40 sqm plot Site)	70.32	70.32	-	-
<b>Sub Total</b>	<b>70.32</b>	<b>70.32</b>	<b>-</b>	<b>-</b>

### I) Local Economy

Nawada does not have any large industries although there are 18 SMEs located in the town. These units include stone chips and rice flour mills. There is potential to develop small units

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

- Improvement in the business approval processes
- Provision of improved infrastructure in the long run to develop industries

## City Development Plan for Nawada: EXECUTIVE SUMMARY

catering to the agriculture sector and linked to the rich hinterland of the town. Nawada town also has a regional agriculture mandi, a market dealing with iron materials, a cement market, leather market, cloth market and vegetable market. These markets need to be strengthened. In addition, vendor zones need to be developed to systematize the business and manage encroachment.

Economic Development Projects	Total (in Rs. Crore)	2011-2015	2016 - 2020	2021 - 2030
Development of Vending Zones	2.10	2.10	-	-
<b>Sub Total</b>	<b>2.10</b>	<b>2.10</b>	<b>-</b>	<b>-</b>

### J) Heritage and Tourism

Nawada has no heritage sites but has potential to be developed as a tourist center. There are several places of interest located in the vicinity of the town. These include Kakolat Waterfall (24km from town), Sekho Devra Ashram (Sarvodaya Ashram was established here in Kawakole block by Jaiprakash

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

- Inventory of potential places of interest and establishing an information kiosk are some of the short term measures
- Construction of related infrastructure – accommodation, community halls etc. in the long term

Narayan and inaugurated by Dr. Rajendra Prasad), Hariya Sun Temple (located in Hariya village under Nardiganj block), Baba Majaar and Hanuman Temple (located on NH 31, a shrine of Hazrat Saiyyad Shah Jalaluddin Bukhari and a Hanuman temple), Jarra Baba (located in Sirdalla), Hanuman Mandir (located in Kendua village) and Maa Bageshwari Mandir (located in Jamuyama, in 3 km of Jamui road of Nawada in side of Sakri River). Considering the central location of Nawada town for these sites, the town can be developed as a halt for tourists visiting these sites. There is however need to develop some basic infrastructure including accommodation.

Heritage and Tourism Projects	Total (in Rs. Crore)	2011-2015	2016 - 2020	2021 - 2030
Construction of Hotels and Guest Houses	10.00	5.00	5.00	-
Establishing information kiosk	0.10	0.10	-	-
Map preparation of regional tourist circuit	0.05	0.05	-	-
<b>Sub Total</b>	<b>10.15</b>	<b>5.15</b>	<b>5.00</b>	<b>-</b>

### K) Environment

The River Khuri is the only natural asset of the town. Currently the river serves as a discharge zone for wastes from the town – solid and liquid. There is potential to clean the river and also undertake river front development. This linked with improvements in city level infrastructure will have a positive impact on town the town level environment.

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

- Tree plantation along the River Khuri; development of incidental parks and spaces are proposed in the short term
- River front development in the long term

## City Development Plan for Nawada: EXECUTIVE SUMMARY

Environment Projects	Total (in Rs. Crore)	2011-2015	2016 - 2020	2021 - 2030
Khuri river Front Development	50.00	30.00	20.00	-
Beautification of incidental spaces and parks by means of landscaping	1.00	1.00	-	-
Plantation along proposed By-pass road	0.05	0.05	-	-
Awareness campaign about general cleanliness and conservation	0.10	0.10	-	-
<b>Sub Total</b>	<b>51.15</b>	<b>31.15</b>	<b>20.00</b>	<b>-</b>

### L) Urban Planning

In order to achieve the overall vision identified by the stakeholders, significant attention is to be given to urban planning. This will include the development of plans from macro to micro scale including development of regulations. The CDP therefore indicates some of the basic plans that are required for holistic and planned growth of Nawada.

Urban Planning Projects	Total (in Rs. Crore)	2011-2015	2016 - 2020	2021 - 2030
Master Plan Preparation	0.50	0.50	-	-
Zonal Plan Preparation	2.00	2.00	-	-
Preparation of local area development plan	5.00	5.00	-	-
Preparation and Implementation of Zoning Regulation	1.00	1.00	-	-
Preparation and Implementation of Building Byelaws	1.00	1.00	-	-
<b>Sub Total</b>	<b>9.50</b>	<b>9.50</b>	<b>-</b>	<b>-</b>

### M) Governance and Institutional Set Up

Institutional Setup Projects	Total (in Rs. Crore)	2011-2015	2016 - 2020	2021 - 2025
E-Governance System for Municipal Services	2.00	2.00	-	-
Implementation of Double Entry Accrual Based Accounting	0.10	0.10	-	-
Training and Institutional Strengthening	0.20	0.20	-	-
<b>Sub Total</b>	<b>2.30</b>	<b>2.30</b>	<b>-</b>	<b>-</b>



## Financial Position of the Local Body

Analysis of the financial position of the ULB shows that there has been an increase income of the ULB and this is projected to become Rs. 2.50 crore in 2010-11. There is a high dependence on grants from government that accounts for 87% of income. In terms of expenditure, establishment accounts for 75% and this too has been increasing. Property tax is the single largest source of income for the ULB but this has been decreasing over the years.

### Highlights of Financial Position

- Total tax revenue has decreased from average Rs. 21 lakhs (2007-08) to Rs. 15 lakhs (2009-10)
- Salaries and wages accounted for Rs. 92 lakhs in 2008-09
- Development expenditure has been increasing but not at par with other heads of expenditures

### Status of Municipal Finance

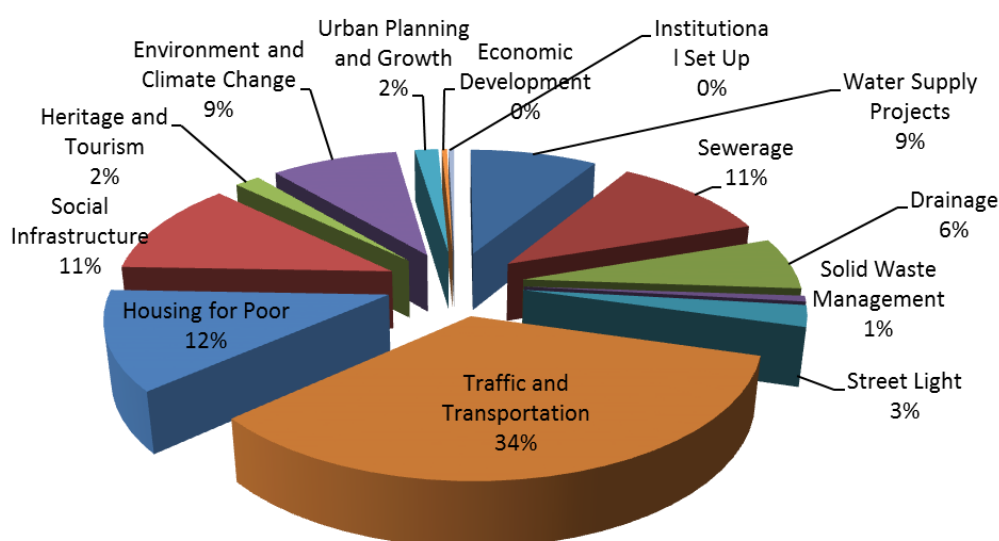
Income Source	Amount (in Rs. Lakhs)			
	2007-08	2008-09	2009-10	2010-11 (Estimated)
<b>Total Receipts</b>	<b>86.89</b>	<b>78.43</b>	<b>44.05</b>	<b>NA</b>
Own sources - Tax	24.06	17.35	14.60	NA
Own sources – Non tax	21.02	24.12	13.19	NA
Assigned revenues	23.51	15.72	3.18	NA
Revenue grants (including salary and matching grants)	18.28	21.22	13.08	78.00
<b>Total Expenditure</b>	<b>NA</b>	<b>89.22</b>	<b>109.72</b>	<b>105.00</b>
Establishment	NA	63.75	81.19	76.00
O&M	NA	13.98	10.39	13.00
Programme	NA	NA	NA	NA
Administration	NA	0.97	2.27	2.00
Miscellaneous	NA	10.52	15.87	14.00
<b>Surplus/Deficit (revenue)</b>	<b>NA</b>	<b>-10.79</b>	<b>-65.67</b>	<b>NA</b>

## Capital Investment Plan (CIP)

The total funding over the life of the CDP period, i.e. up to year 2030, is estimated at **Rs. 583.51 crores**. Sector-wise details of the investments have been defined for the entire period. In the previous sections, details of all identified projects and estimated costing have been shown. The CIP takes into account priority areas of intervention and funding ability and priorities of the ULB. The CIP accounts for funds that the ULB will be expected to contribute to meet all the interventions necessary for achievement of the Bodhgaya City Vision.

The scheduling or phasing of the CIP is based on the analysis of fiscal resources for new investments and O&M, technical capacity for construction and the choice of specific improvements to be taken up over the CDP period.

Sectors	Total (in Rs. Crore)	2011-2015	2016 - 2020	2021 - 2025
Water Supply Projects	51.17	37.15	8.41	5.61
Sewerage	64.09	39.09	15.00	10.00
Drainage	37.10	19.62	10.49	6.99
Solid Waste Management	4.17	3.29	0.53	0.35
Street Light	15.10	7.55	4.55	3.00
Traffic and Transportation	199.00	99.90	99.10	-
Housing for Poor	70.32	70.32	-	-
Social Infrastructure	67.37	37.57	24.88	4.92
Heritage and Tourism	10.15	5.15	5.00	-
Environment	51.15	31.15	20.00	-
Urban Planning and Growth	9.50	9.50	-	-
Economic Development	2.10	2.10	-	-
Institutional Set Up	2.30	2.30	-	-
<b>Total</b>	<b>583.51</b>	<b>364.69</b>	<b>187.95</b>	<b>30.87</b>



## Financial Operating Plan (FOP)

The Financial Operating Plan takes into account an analysis of the income and expenditure of the ULB on the basis of some assumptions. The key considerations of the FOP are

- Income by ULB's own tax sources by 50% per annum
- Income by ULB's own non-tax sources by 20% per annum
- Income from Revenue Grants (Include. Salary and Matching grants) increase by 5% per annum
- Income from other sources increase by 5% per annum
- Income from capital receipt increase by 5% per annum
- New Taxes proposed with the annual increase of 20% per annum
- Total Establishment Expenditure by 5% growth per annum
- Operation and maintenance expenditure increase by 5% per annum
- Programme expenditure increase by 5% per annum
- Administration expenditure increase by 5% per annum
- Miscellaneous Expenditure increase by 5% annually

The proposed income and expenditure of the ULB on the basis of the above assumptions in Phase I of the CDP is as follows:

	Actual Amount (in Rs. Lakhs)			Projected Income & Expenditure based on Average Growth Rate					
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Total Receipts	158.01	136.46	353.09	530.06	645.27	786.84	961.07	1175.83	1140.91
Total Expenditure		89.23	109.74	125.69	141.62	159.65	180.09	203.28	229.63
<b>Surplus/Deficit (Revenue)</b>				<b>183.59</b>	<b>227.66</b>	<b>282.20</b>	<b>349.75</b>	<b>433.50</b>	<b>537.47</b>

The key observations of the FOP are:

- The ULB is able to enhance its revenue from the current level of Rs. 530.06 lakhs in 2010-11 to Rs. 1140.91 lakhs in 2015-16
- Of the Rs. 583.51 crore investment required for the CDP period, Rs. 364.69 crores will be required in Phase I and the ULB will be able to generate a fair proportion of the requirements
- Innovative use of PPP especially in areas like solid waste management, transport, development parks will further reduce the financial burden on the ULB

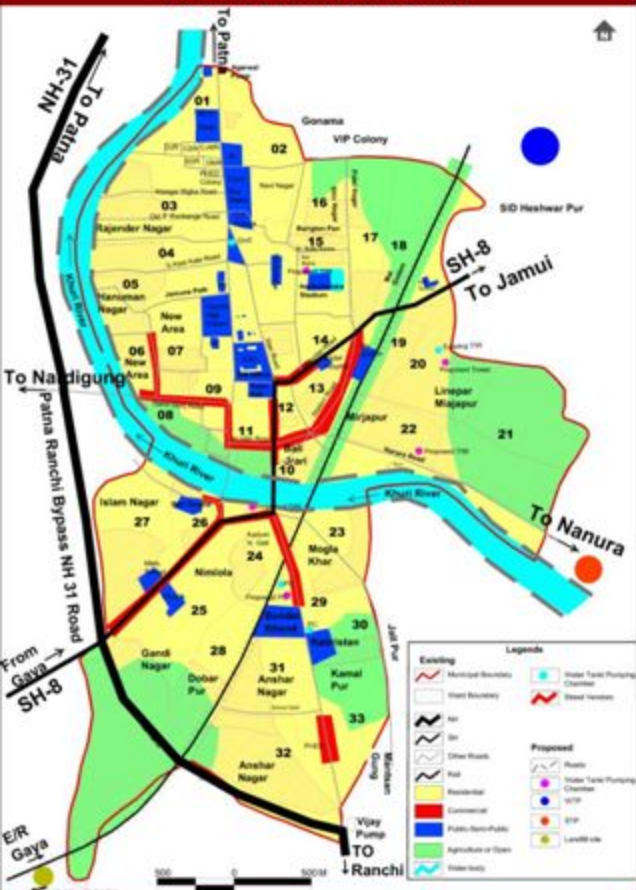
## Overall Assessment

An overall assessment of the existing service delivery levels in the town was done on the basis of various indicators. Service levels are found to be alarming in most cases.

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

### Legend

Alarming  Average  Below Average  Good







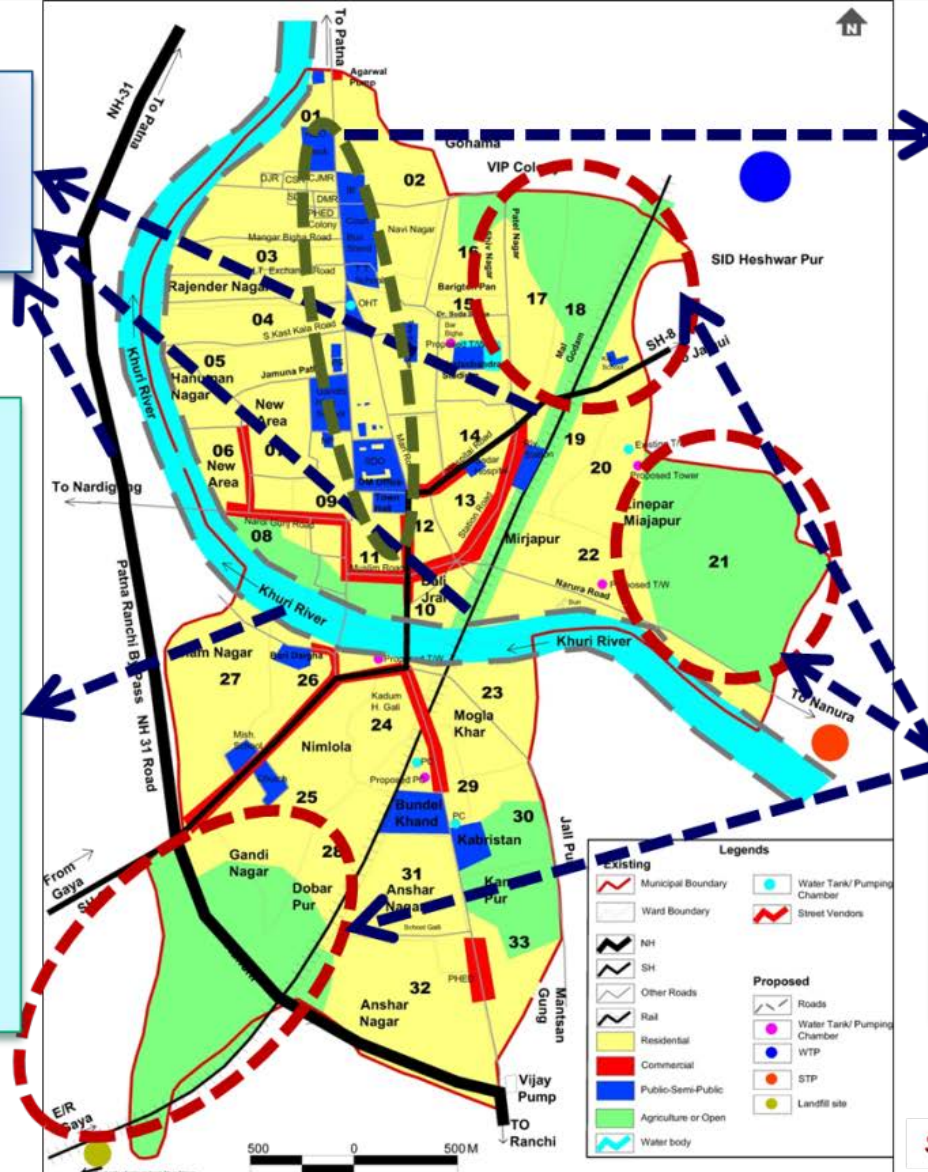
## Nawada Proposal

Strategic location,  
Connected through  
NH 31, SH 08 and  
Railway Line

- Khuri River for good environment and recharge ground water
- Good natural slope available in city towards Khuri River

Administrative  
headquarter of the  
District

- Availability of land for agro-based industrial and commercial development
- Potential for agro-based Industry development
- Rich agricultural land surrounds the town



Source : Prepared by Consultant

