Introduction:
Katihar is one of the 38 districts in Bihar. It is one of the 4 districts of Purnea division. The headquarter of the district is Katihar. The district Katihar is situated in the plains of North, Bhagalpur district in the west, sahebganj district in the south and west Bengal in the East. It was one of the subdivisions of the old Purnea. Paddy is the main agricultural crops. Jute and paper Mills is the main industry. Mahananda and Ganga are the main rivers. Katihar district is situated in the plains of North Eastern part of Bihar State, surrounded by Purnea district (Bihar) in the north and the west, Bhagalpur district (Bihar) and sahebganj district (Jharkhand) in the south and Malda district and Uttar Dinajpur district (Paschim Bengal) in the east.

Topography:
The topography of the Katihar district has been very much affected by the floods of river Ganges, Mahananda and Koshi. The district has alluvial soil and due to deposit of sand-silt by rivers and soil in southern and the western part has become sandy. The land is slightly higher in the North and gradually slopping towards the south. The slope is gradual. There is no hill in the district except a small block in Manihari Block which is composed of nodular lime stone.

Administrative set up.

Demography:
The population growth of Katihar has been erratic. A higher growth rate was observed in the 1971-1981 decade at 52.28%. This reduced to 26.53% in the 1981-1991 decade and further reduced to 23.65% in the 1991 – 2011 decade. The growth rate in the last decade (2001-2011) was around 27%. One of the reasons behind this growth pattern has been the reducing employment opportunities in the town with the closing of industries like jute. Katihar had a population of 190,873 as per Census 2001. The current estimated population of Katihar is approximately 243232 (2011 provisional census). For the purposes of the CDP, population projections have been made based on available figures from Census of 1981 and 2001. Three different methods have been used – Exponential Curve Method, Geometric Growth Method and Linear Method. The Exponential Curve Method has been found to have the best fit and has been used for the population projection. The projected population of Katihar is 405698 by 2030.

Overview:
Katihar used to be a hub for industries related to jute mill, flour mill, biscuit and paper mills, however, presently only one paper mill and a few very small industries are surviving. The earmarked industrial area is lying unused, which can be used for development of industries. According to the ULB, there is a huge local market for products produced by the mentioned industries. In addition, there is a famous cloth market in the city and its scale of operation can be further enhanced and improved by improving the basic infrastructure and facilities in the market area. Katihar used to be a hub for industries related to jute mill, flour mill, biscuit and paper mills. The competitive advantage of Katihar lies in its good rail and road connectivity with the surrounding region and also other parts of the country – giving it the potential to be developed a logistics hub. The Katihar Junction rail station has five rail routes converging. Katihar has a rich agricultural hinterland where banana, makhana, paddy, wheat are grown in plenty, and this indicates potential for agro-processing in the city. Furthermore, there is a defunct industrial area in the city, which can be used for industrial development in future.

District has a very small forest area. Availability of Minerals of Katihar district that as such there is no mineral availability found in this district.
City Development Plan for Katihar District; Plans & Strategies:

1) Water Supply:
Ground water is the main source in Katihar. The PHED has responsibility for production and distribution of water supply in the city. The ground water table is at 6-8 m. There are 2122 tube wells, 993 wells and 24838 hand pumps across the town. There are 250 public stand posts in the town some of which are in slums. It is estimated that the total water supply in the town is 15 MLD with a per capita supply of 75 lpcd. Stakeholder consultancies revealed that with the exception of the railway area, piped water supply is absent with existing pipelines choked and non-functional. Ground water in Katihar is high in iron and has traces of arsenic. Water supply is for 4 hours every day. There is no treatment of the water prior to supply.

Strategies: The urban development program suggests the following strategies:
- 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.

2) Sewerage and Sanitation:
Katihar does not have a sewer system. As per Census 2001, 39% of the households had water closet latrines, 15% had pit latrines and 17% other type of latrine. Open defecation was practiced by 29% of households. 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 encourage mosquito breeding.

Strategies: The urban development program suggests the following:
- Development of a sewerage system with all associated features.
- Development of public conveniences.

3) 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. The town is saucer shaped and with the absence of a drainage system, water logging is a critical problem. In many places in the town, drains are constructed above the level off the road and dirty water enters homes. According to the ULB, the town has about 45.5km of pucca drains and 22km of kutcha drains. Drains are clogged with garbage and silt thus their carrying capacity is reduced.

Strategies: The key strategies in the Urban development program are:
- To develop a drainage system based on a Drainage Master Plan.
- To develop a drainage system.

4) Solid Waste Management:
It is estimated that Katihar generates about 32 tonnes of garbage per day. Garbage generation is expected to increase to 142 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. The ULB has 7 tractors, 11 hand carts, 11 hand trolleys and 3 tempos for collection and transportation of garbage. In addition the town has 45 bins placed at various locations. The vehicles make three trips per day to dump garbage. The ULB has an 11acre site at DS College Road and another 12 acre site at Dumri, none of the sites are in use – garbage is dumped along the road on the outskirts of the town.

Strategies: The key strategies in the urban development program are:
- Introduction of door to door collection including segregation at source.
- Provision of community dustbins.

5) Roads, Traffic, and Transportation:
Katihar is a major railway junction on the North East Frontier Railway. The NH 81 passes close to the town and affords road connectivity to other parts of the region. The nearest airport is located at Bagdogra in West Bengal at a distance of 190 km. The ULB estimates that the total road length in the town is 210.89 km of which 166 km is under the ULB. Of the total roads in the town, 39% are kutcha, 29% kharanja, 20% PCC and 12% pitch. The town bus stand is located near the ULB office and the road in front witnesses high traffic density. There are about 200 buses originating from Katihar on a daily basis. The major intersections include the Ambedkar Chowk, Amar Jawan Chowk, Islamia Chowk, Gandhi Chowk, Shaheed Jadgdev Chowk. There is no organised parking – this combined with encroachment has reduced the road width in the town.

Strategies: The key strategies in the urban development program 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.
- Harnessing of rail link and strengthening roads to develop Katihar as a regional logistic hub.

6) Street Lighting:
Katihar has 60 high mast light poles, 160 central light poles, 265 sodium vapour lamps and 1950 tube lights – most of the lights are dysfunctional. Light poles are not present in the inner roads and the newly developed peripheral areas of the town. The long hours of power cuts impacts street lighting.

Strategies: The key strategies in the urban development program are:
- Installing street light poles.
- Implanting high poles.

7) Social Infrastructure:
An assessment of social infrastructure in Katihar was done. There are 15 primary schools, 21 middle schools, 4 senior secondary schools and 7 colleges functioning in Katihar. The town has one 289 bed district hospital, eleven dispensaries and a few smaller clinics. Stakeholder consultancies revealed that most citizens prefer to go to Siliguri or Purnea for specialized treatment. Katihar has three small parks – Shaheed Smarak Park, Major Ashutosh Park and Indira Gandhi Park.

Strategies: The key strategies in the urban development program are:
- Provision of health and educational facilities in line with UDPFI norms in phases.

8) Slums and Urban Poor:
Census 2001 had recorded that about 51.23% of the population lived in slums. Almost all the wards have slums with the majority of residents being in the BPL category. The SPUR survey in December 2010 recorded presence of 34 slums with a population of 62120. This survey also put the slum population at around 25.5% of the town population (243232-population 2011), which is lower compared to the 2001 census data. The slum population has decreased from 51.23% in 2001 to 25.5% 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 urban development program are:
- Improvement in housing conditions including construction of new houses.
- Provision of infrastructure that is integrated with city level networks.
9) Local Economy:
Katihar had a fairly strong industrial base in the past. The industries included jute mills, flour mill, biscuit factory and paper mill. Most of the units have had to shut down on account of power problems. Today there is a small paper mill and some small scale units operational. Katihar has a rich agricultural hinterland with banana and makhana being the major produce. The town also has a famous cloth market. There is potential to develop small units based on the local resource advantage of the region.

Strategies: The key strategies in the urban development program are:
- Improvement in the business approval processes.
- Provision of improved infrastructure in the long run to develop industries.

10) Environment:
Katihar is located very close to the River Kosi that is well known for its floods. The saucer shaped topography makes it prone to water logging. The fact that development has been largely unplanned has had an adverse impact on the overall city environment. The poor state of services and infrastructure further aggravate the environment and the quality of life of citizens.

Strategies: The key strategies in the urban development program are:
- Tree plantation along the river bed and roads; development of incidental parks and spaces are proposed in the short term.
- River front development in the long term.

References: