Assessment of Domestic Pollution Load from Urban Agglomeration in Ganga Basin: Bihar

GRBMP: Ganga River Basin Management Plan

bv

Indian Institutes of Technology















IIT Bombay IIT Delhi IIT Guwahati

Kanpur

Kharagpur

Madras

IIT Roorkee

Preface

In exercise of the powers conferred by sub-sections (1) and (3) of Section 3 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government has constituted National Ganga River Basin Authority (NGRBA) as a planning, financing, monitoring and coordinating authority for strengthening the collective efforts of the Central and State Government for effective abatement of pollution and conservation of the river Ganga. One of the important functions of the NGRBA is to prepare and implement a Ganga River Basin Management Plan (GRBMP).

A Consortium of 7 Indian Institute of Technology (IIT) has been given the responsibility of preparing Ganga River Basin Environment Management Plan (GRBMP) by the Ministry of Environment and Forests (MoEF), GOI, New Delhi. Memorandum of Agreement (MoA) has been signed between 7 IITs (Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras and Roorkee) and MoEF for this purpose on July 6, 2010.

This report is one of the many reports prepared by IITs to describe the strategy, information, methodology, analysis and suggestions and recommendations in developing Ganga River Basin Management Plan (GRB EMP). The overall Frame Work for documentation of GRBMP and Indexing of Reports is presented on the inside cover page.

There are two aspects to the development of GRB EMP. Dedicated people spent hours discussing concerns, issues and potential solutions to problems. This dedication leads to the preparation of reports that hope to articulate the outcome of the dialog in a way that is useful. Many people contributed to the preparation of this report directly or indirectly. This report is therefore truly a collective effort that reflects the cooperation of many, particularly those who are members of the IIT Team. Lists of persons who have contributed directly and those who have taken lead in preparing this report is given on the reverse side.

Dr. Vinod Tare Professor and Coordinator Development of GRBMP IIT Kanpur

The Team

1. A AKazmi, IIT Roorkee kazmifce@iitr.ernet.in

2. A K Gupta, IIT Kharagpur akgupta18@rediffmail.com,akgupta@iitkgp.ac.in

A K Mittal, IIT Delhi akmittal@civil.iitd.ernet.in
 A K Nema, IIT Delhi aknema@gmail.com
 Ajay Kalmhad, IIT Guwahati kajay@iitq.ernet.in

6. Anirban Gupta, BESU Shibpur guptaanirban@hotmail.com

Arun Kumar, IIT Delhi arunku@civil.iitd.ac.in
 G J Chakrapani, IIT Roorkkee gjcurfes@iitr.ernet.in
 GazalaHabib, IIT Delhi gazalahabib@gmail.com
 Himanshu Joshi, IIT Roorkee himanshujoshi58@gmail.com

11. InduMehrotra, IIT Roorkee indumfce@iitr.ernet.in12. I M Mishra, IIT Roorkee imishfch@iitr.ernet.in

13. Ligy Philip, IIT Madras ligy@iitm.ac.in

14. M MGhangrekar, IIT Kharagpur ghangrekar@civil.iitkgp.ernet.in

15. MukeshDoble, IIT Bombay mukeshd@iitm.ac.in

16. P K Singh, IT BHU dr_pksingh1@rediffmail.com

17. Purnendu Bose, IIT Kanpur pbose@iitk.ac.in
18. R Ravi Krishna, IIT Madras rrk@iitm.ac.in
19. Rakesh Kumar, NEERI Nagpur kumar@neeri.res.in

20. S M Shivnagendra, IIT Madras snagendra@iitm.ac.in
 21. SaumyenGuha, IIT Kanpur sguha@iitk.ac.in
 22. Shyam R Asolekar, IIT Bombay asolekar@iitb.ac.in

23. SudhaGoel, IIT Kharagpur sudhagoel@civil.iitkgp.ernet.in

24. Suparna Mukherjee, IIT Bombay mitras@iitb.ac.in
25. T R Sreekrishanan, IIT Delhi sree@dbeb.iitd.ac.in
26. Vinod Tare, IIT Kanpur vinod@iitk.ac.in
27. Vivek Kumar, IIT Roorkee vivekfpt@iitr.ernet.in

Lead Persons

- 1. Vinod Tare, IIT Kanpur
- 2. Purnendu Bose, IIT Kanpur
- 3. Shashikant Patel, IIT Kanpur
- 4. Swatantra Pratap Singh, IIT Kanpur

Contents

1	Introduct	tion	Page 6
2	•	ostruction and Abstraction Projects on the Tributaries of the river Ganga I in the State	8
3	Demogra	phic profile of Ganga Basin in the State	9
4	Religious	Places and their Importance	18
5	Pollution	Load	19
6	Conclusion	ons	30
Refe	erences		32
Арр	endix 1:	Compilation of Fact Sheets of Water Balance & Pollution Load (Domestic) of Class I Cities/Towns in Bihar	33
Арр	endix 2:	Compilation of Fact Sheets of Water Balance & Pollution Load (Domestic) of Class II Cities/Towns in Bihar	62
Арр	endix 2:	Compilation of the total sewage discharge through point sources in river Ganga basin (Adopted from CPCB, 2013)	94

1. Introduction

Bihar has the total area of 94163 sq km, which is about 2.86 % of the total area of the country. Bihar has total 38 districts and the third largest populated state with ~8.6% of the total population in India. Bihar shares its boundaries with Uttar Pradesh to west, Nepal to the North, West Bengal to the east and by Jharkhand to the south. Bihar is divided by the river Ganges into two and flows from west to east. It is also known for its historically rich heritage and culture and religious tourism. Patna is the capital as well as the most populated city of Bihar.

River Ganga touches the Bihar near Chausa (Buxar) and share around 110 km boundary with Uttar Pradesh and then finally enters to Bihar near Chhapra and exits near Manihari (Katihar). During her course in Bihar many tributaries such as Gandak, Bodhi Gandak, Kosi, Son and Ghaghara, which flow through Bihar, join the river, both from the left as well as from the right. The entire state of Bihar is in Ganga River Basin (GRB), and in terms of catchment area is the third largest contributor. The salient features of some major tributaries and sub-tributaries contributing directly or indirectly to the river Ganga in the state of Bihar are presented in Table 1.

Table 1: The Salient Features of Tributaries of the Ganga River Basin Contributing to the River Ganga in the State of Bihar.

Characteristics	Ghaghara	Gandak	Kosi	Burhi Gandak	Son
Position	Left bank	Left bank	Left bank	Left bank	Right bank
Region of origin	Tibetan Plateau near Lake Mansarovar	Tibetan Plateau near Nhubine Himal Glacier	Tibetan Plateau near Tribenigh at, Nepal	near Bisambhar pur, West Champara n district Bihar	Amarkantak
Mouth	Ganga	Ganga	Ganga	Ganga	Ganga
Total length (km)	1,080	630	720	320	784
Total catchment area (sq km)	127,950	46,300	61,788	10,150	11,100
Catchment area in Bihar (sq km)	43,488		30,437	-	6,184

River bed/ Soil	Clay, sand,	Clay, sand,	Sand, silt,	Clay, silt,	Red soil,
texture	loam and		clay and	and sand	
	deep black				
	soil				

The major tributaries (Ghaghara, Gandak, Kosi, Burhi Gandak and Son) of the river Ganga cover the catchment area of nearly 67% of the total area of the state of Bihar. Burhi Gandak is one of the largest tributary of river Ganga in Bihar, having a total catchment area of 35,572 sq km. The total annual average rainfall in the state of Bihar is in the order of 1,183 mm and it contributes approximately 31.99% of the total rainfall in the catchment of the Ganga basin.

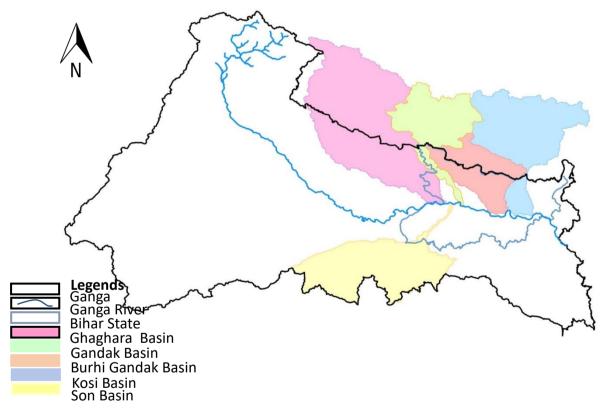


Figure 1: Ganga River Basin with its Major Sub-Basins of Bihar within the Indian Territory

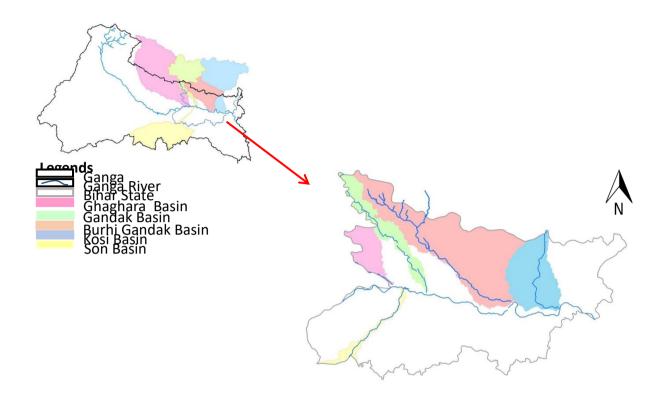


Figure 2: Major Sub-Basins or their Portions under the Ganga River Basin in the State of Bihar

2. Major Obstruction and Abstraction Projects on the Tributaries of the River Ganga Executed in the State

The natural flow regime in the river Ganga and her tributaries have been altered due to construction of number of dams and barrages in the mountainous reaches. The mountainous region of the main stem river Ganga is obstructed due to the ongoing hydroelectric projects *i.e.*, Maneri Bhali I, Maneri Bhali II, Tehri and Koteshwar. Further downstream, Bhimgauda barrage diverts nearly all water during non-monsoon season to upper Ganga canal through Har ki Pauri, Haridwar. As the river enters in the state of Uttar Pradesh, further obstacles are in the Bijnor and Narora districts in form of diversions in madhya (Kharif canal) and lower Ganga canal, respectively. The madhya and lower Ganga canal has capacities of 290 and 254 cumec, respectively. A parallel canal system of 130 cumec was added later by the state of Uttar Pradesh. Substantial portion of the river flow is diverted to support agricultural activities through these canal systems. Further downstream at Kanpur the river is interrupted by Luvkush barrage. Bihar has 21 Dams, 35 Barrage /Weir/Annicuts under Ganga river basin. These Dams and barrages are essentially for

irrigation and domestic water supplies. The list of the major dams on Ganga River and its tributaries in Bihar are mentioned underneath.

Table 2: Details of the Major Dams on the River Ganga and Her Tributaries in the State of Bihar (WRIS-wiki)

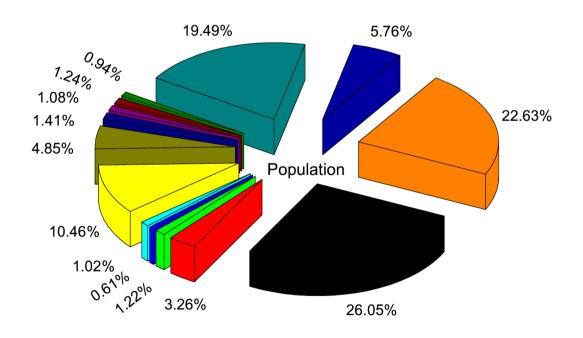
Projects	River	Year of	Remark
		Completion	
Ajan Dam	Ajan	1989	Major Irrigation Project
Badua Dam	Badua	1965	Major Irrigation Project
Baskund Dam	Baskund	1984	Major Irrigation Project
Belharna Dam	Belharna	1987	Major Irrigation Project
Bilasi Dam	Bilasi	2001	Major Irrigation Project
Chandan Dam	Chandan	1968	Major Irrigation Project
Jalkund Dam	Jalkund	1968	Major Irrigation Project
Job Dam	JOB	1977	Major Irrigation Project
Kailash Ghati Dam	Kailash Ghati	1980	Major Irrigation Project
Khargpur Lake Dam	Man	1876	Major Irrigation Project
Kohira Dam	Kohira	1962	Major Irrigation Project
Kolmahadeo Dam	Kolmahadev(bhusari)	1966	Major Irrigation Project
Morwy Dam	Morwe	1960	Major Irrigation Project
Nagi Dam	Nagi	1958	Major Irrigation Project
Nakti (Bihar) Dam	Nakti	1980	Major Irrigation Project
Orhni Dam	Orni	2000	Major Irrigation Project
Phulwaria Dam	Tilaiya	1988	Major Irrigation Project
Srikhandi Dam	Srikhandi	1965	Major Irrigation Project
Upper Kiul Dam	Kiul	2004	Major Irrigation Project

3. Demographic Profile of Ganga Basin in the State

Bihar has 26 Class I cities, 28 Class II cities and 75 Class III cities (Figure 4-6). The total population of the state according to the Census 2011 is 102 million out of which 11.3% belong to the urban area. The density in the state is about 881 people per square kilometre.

According to the Population Census 2011, some of the Class I cities are Arrah, Aurangabad, Bagaha, Bhagalpur, Buxar, Darbhanga, Gaya, Hajipur, Katihar, Muzaffarpur, Patna, Saharsa, and Siwan. The details of the area, population and the major river systems of all the Class I, II and III cities are presented in Table 3-5, respectively.

Figure 3 shows the population distribution of Class I cities, Class II and III towns in the major basins of river Ganga in the state and along the main stem of the river Ganga, Kosi, Bodhi Gandak and Gandak. Map in the Figure 4, 5 and 6 showing the distribution of Class I cities, Class II, and Class III towns, respectively in the state under Ganga River Basin. The average population of class I town in the state is 0.26 million, approximately four times and eight times higher than the population of class II and class III towns, respectively. Patna is the highly populated class I city having the population of 1.7 million while Aurangabad is the least populated (0.1 million) class I city. Lakhisarai and Bhabua are the cities having maximum and minimum population under class II towns, contains 0.09 and 0.05 million, respectively. In class III towns where the population is less than 0.05 million, the maximum population is in the Narkatiaganj town (0.049 million) while minimum is in the Nirmali (0.02 million).



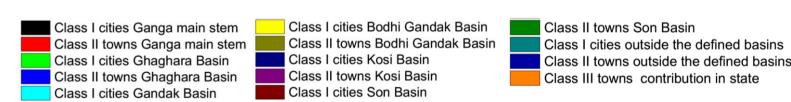


Figure 3: Population Distribution of Class I Cities and Class II, Class III Towns in the Major Basins of River Ganga in the Bihar State and Along the Main Stem of the River Ganga

Table 3: Demography of Class I Cities in Portion of the Ganga Basin Lying in the State of Bihar

S No.	Details	River System	Total Area (sq km)	Population (Census 2011)
1	Arrah (M Corp.)	Ganga River	30.97	261430
2	Aurangabad (NPP)	Adari River	21.33	102244
3	Bagaha (NPP)	Gandak River	46.83	112634
4	Begusarai (M Corp.)	Ganga River	47.51	252008
5	Bettiah (NPP)	Gandak River	8.01	132209
6	Bhagalpur (M Corp.)	Ganga River	30.17	400146
7	Biharsharif (M Corp.)	Panchane River	23.50	297268
8	Buxar (NPP)	Ganga River	5.16	102861
9	Chapra (NPP)	Ganga River	16.96	202352
10	Darbhanga (M Corp.)	Baghmati River	19.18	296,039
11	Dehri (NPP)	Sone	21.32	137231
12	Danapur Nizamat (NPP)	Panchane River	16.41	182429
13	Gaya (M Corp. + OG)	Falgu River	50.17	474093
14	Hajipur (NPP)	Gandak & Ganga River	19.64	147688
15	Jamalpur (NPP)	Ganga River	10.65	105434
16	Jehanabad (NPP)	Dardha River	20.23	103202
17	Katihar (M Corp. + OG)	Ganga River	51.70	240838
18	Kishanganj (NPP)	Mahananda River	30.12	105782
19	Motihari (NPP)	Bahuri Gandak	16.38	126158
20	Munger (M Corp.)	Ganga River	17.50	213303
21	Muzaffarpur (M Corp.)	Bahuri Gandak River	26.43	354462
22	Patna (M Corp. + OG)	Ganga River	107.69	1684297
23	Purnia (M Corp.)	Kosi & Ganga River	92.29	282248
24	Saharsa (NPP)	Koshi River	21.13	156540
25	Sasaram (NPP)	Kadir & Sone River	10.90	147408
26	Siwan (NPP)	River Daha	13.05	135066

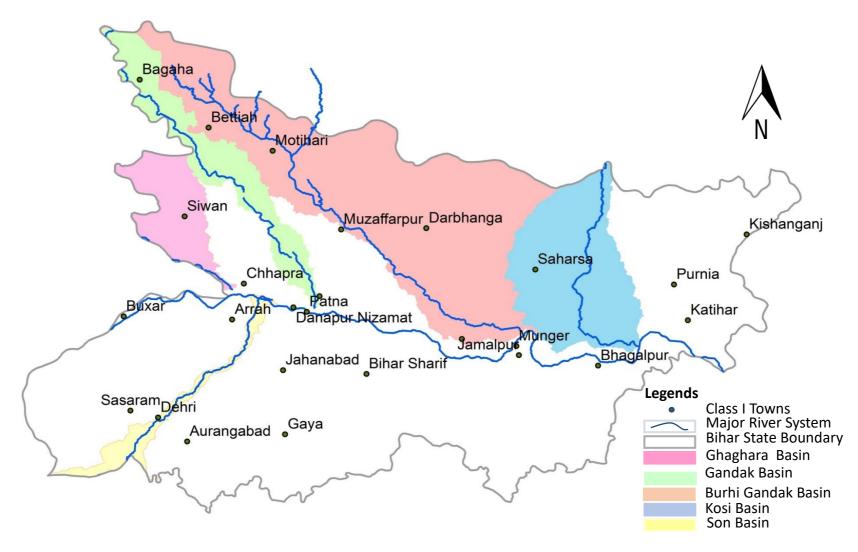


Figure 4: Class I Cities in the state of Bihar under Ganga River Basin

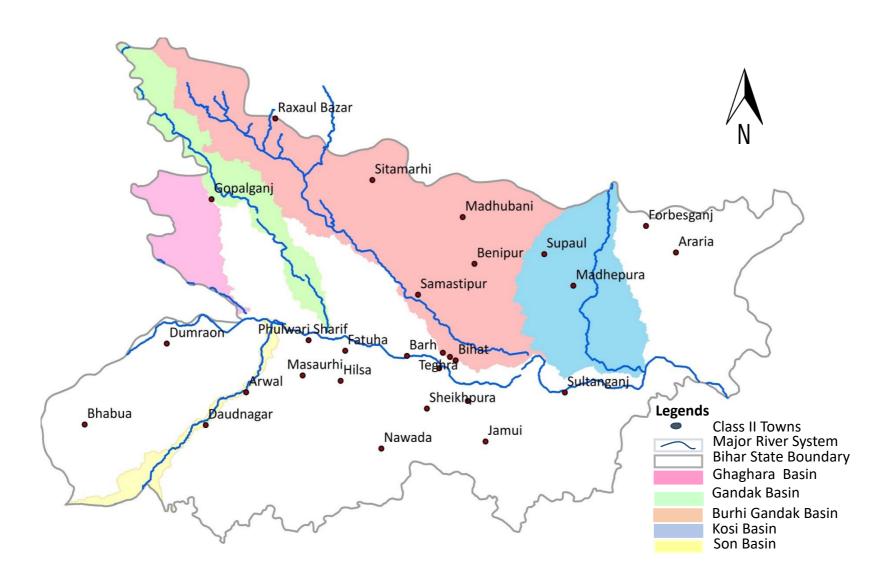


Figure 5: Class II Cities in the state of Biharunder Ganga River Basin

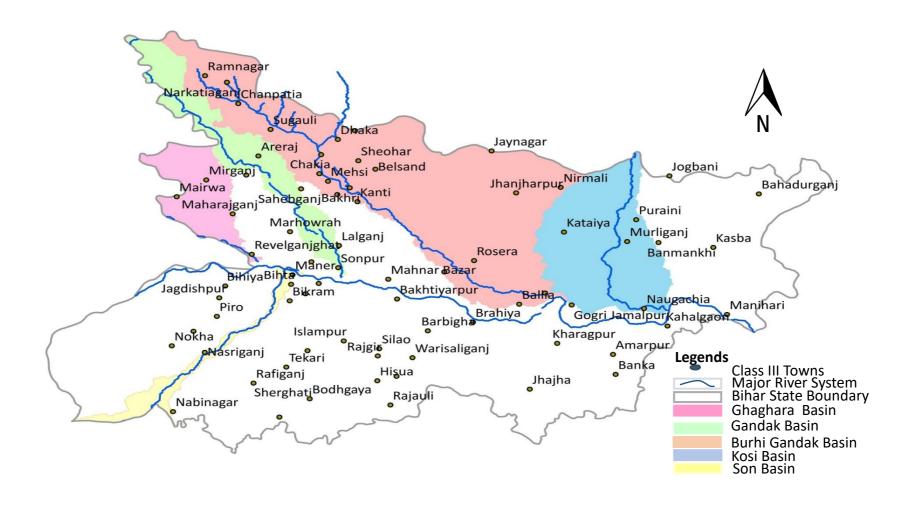


Figure 6: Class III Cities in the state of Bihar under Ganga River Basin

Table 4: Demography of Class II Cities in Portion of the Ganga Basin Lying in the State of Bihar

S No.	Details	River System	Total Area (sq km)	Population (Census 2011)
1	Araria (NPP)	Panar River	30.97	79021
2	Arwal (NPP)	Sone River	24.43	51849
3	Barauni (NPP)	Ganga River	17.55	71660
4	Barh (NPP)	Ganga River	4.50	61470
5	Benipur (NPP)	Kamla River	46.02	75317
6	Bhabua (NPP)	Suwara River	7.12	50179
7	Bihat (NPP)	Ganga River	23.45	67952
8	Daudnagar (NP)	Sone River	13.96	52364
9	Dumraon (NPP)	Ganga River	15.33	53618
10	Fatwah (NP)	Ganga River	4.90	50961
11	Forbesganj (NPP)	Koshi River	4.98	50475
12	Gopalganj (NPP)	Gandak River	11.11	67339
13	Hilsa (NPP)	Falgu River	22.96	51052
14	Jamui (NPP)	Kiul River	26.45	87357
15	Lakhisarai (NPP)	Kiul River	24.79	99979
16	Madhepura (NPP)	Koshi River	25.84	54472
17	Madhubani (NPP)	Kamla River	2.52	75736
18	Masaurhi (NPP)	Sone and Ganga River	9.43	59803
19	Mokameh (NPP)	Ganga River	14.18	60678
20	Nawada (NPP)	Panchane River	5.68	98029
21	Phulwari Sharif (NPP)	Ganga River	6.48	81740
22	Raxaul Bazar (NPP)	Sirsiya River	5.82	55536
23	Samastipur (NPP + OG)	Burhi Gandak River	3.45	67925
24	Sheikhpura (NPP)	Tati River	27.90	62927
25	Sitamarhi (NPP)	Gandak River	4.35	67818
26	Sultanganj (NPP)	Ganga River	12.29	52892
27	Supaul (NPP)	Koshi River	22.37	65437
28	Teghra (NP)	Ganga River	15.80	56234

Table 5: Demography of Class III Cities in Portion of the Ganga Basin Lying in the State of Bihar

S No.	Details	River System	Total Area (sq km)	Population (2011)
1	Amarpur (NP)	Chandan River	11.18	25336
2	Areraj (NP)	Gandak River	13.70	26014
3	Bahadurganj (NP)	Kankai River	29.17	36993
4	Bairgania (NP)	Bagmati River	14.32	42895
5	Bakhri (NP)	Burhi Gandak River	10.65	40043
6	Bakhtiarpur (NP)	Ganga River	13.18	47897
7	Balia (NP)	Ganga River	14.74	47550
8	Banka (NP)	Chandan River	18.87	45977
9	Banmankhi Bazar (NP)	Koshi River	20.15	30336
10	Barahiya (NP)	Ganga River	26.54	43032
11	Barauli (NP)	Gandak River	22.21	41877
12	Barbigha (NP)	Falgu River	15.60	46075
13	Behea (NP)	Ganga River	4.06	26707
14	Belsand (NP)	Bagmati River	10.09	20566
15	Bhadauni (CT)	Panchane River	3.14	20739
16	Bihta (NP)	Sone River	25.91	47549
17	Bikram (NP)	Sone River	13.99	22486
18	Bikramganj (NP)	Sone River	15.64	48465
19	Bodh Gaya (NP)	Falgu River	19.58	38439
20	Chakia (NP)	Burhi Gandak River	6.23	20686
21	Chanpatia (NP)	Burhi Gandak River	7.57	27095
22	Colgong (NP)	Ganga River	0.63	33700
23	Dalsinghsarai (NP)	Balaan River	2.94	23862
24	Dhaka (NP)	Bagmati River	12.93	42063
25	Dighwara (NP)	Ganga River	13.27	32741
26	Gogri Jamalpur (NP)	Ganga River	9.49	37753
27	Hisua (NP)	Tilaiya River	6.33	32585
28	Islampur (NP)	Falgu River	6.00	35641
29	Jagdishpur (NP)	Ganga River	25.63	32447
30	Jainagar (NP)	Kamla River	1.61	21782
31	Jhajha (NP)	Ulai River	9.87	40646
32	Jhanjharpur (NP)	Kamla River	12.44	30590
33	Jogabani (NP)	Koshi River	15.12	39281
34	Kanti (NP)	Burhi Gandak River	16.16	25051

35	Kasba (NP)	Koshi River	15.74	30421
36	Kataiya (NP)	Koshi River	12.06	20193
S No.	Details	Pivor System	Total Area	Population
3 NO.	Details	River System	(sq km)	(2011)
37	Khagaria (NPP)	Burhi Gandak River	2.97	49406
38	Khagaul (NPP)	Ganga River	3.66	44364
39	Kharagpur (NP)	Mani Nadi	9.74	31385
40	Lalganj (NP)	Gandak River	7.86	37098
41	Maharajganj (NP)	Daha River	7.60	24282
42	Mahnar Bazar (NP)	Ganga River	10.02	48293
43	Mairwa (NP)	Siahi River	6.23	23565
44	Makhdumpur (NP)	Dardha River	20.39	31994
45	Maner (NP)	Sone & Ganga River	12.00	40068
46	Manihari (NP)	Ganga River	11.31	26629
47	Marhaura (NP)	Ganga River	12.62	29932
48	Mehsi (NP)	Burhi Gandak River	7.16	25995
49	Mirganj (NP)	Daha River	5.48	26240
50	Motipur (NP)	Burhi Gandak River	12.77	28572
51	Murliganj (NP)	Koshi River	14.07	28691
52	Nabinagar (NP)	Sone River	17.42	23984
53	Narkatiaganj (NPP)	Burhi Gandak River	10.96	49507
54	Nasriganj (NP)	Sone River	8.69	23819
55	Naubatpur (NP)	Ganga River	14.39	25011
56	Naugachhia (NP)	Koshi River	11.24	49069
57	Nirmali (NP)	Koshi River	5.30	20189
58	Nokha (NP)	Sone River	13.45	27302
59	Pakri Dayal (NP)	Burhi Gandak River	19.13	29582
60	Piro (NP)	Sone River	6.47	33785
61	Puraini (CT)	Koshi River	9.33	30829
62	Rafiganj (NP)	Dhava Nadi	4.56	35536
63	Rajauli (NP)	Dhanarjay River	18.08	30170
64	Rajgir (NP)	Panchane River	50.18	41587
65	Ramnagar (NP)	Ramrekha Nadi	16.20	48411
66	Revelganj (NP)	Ganga River	12.48	39039
67	Rosera (NP)	Burhi Gandak River	1.03	31155
68	Sahebganj (NP)	Gandak River	9.81	23224
69	Sheohar (NP)	Bagmati River	9.33	28116
70	Sherghati (NP)	Morhor	10.79	40666
71	Silao (NP)	Panchane River	9.00	25674
72	Sonepur (NP)	Gandak River	8.27	37776
73	Sugauli (NP)	Burhi Gandak River	19.25	38815
74	Tikari (NP)	Falgu River	2.66	21324

75 Warisaligar	j (NP) Sakri River	13.11	34056	
----------------	--------------------	-------	-------	--

4. Religious Places and Their Importance

Bihar, a state in the Indo-Gangetic basin is home to many holy places, marked with the presence of sages, seers, devotees and mystics. Gaya, Patna, Bodhgaya, Sitamadhi, Bhagalpur, Vikramshila and Rajgir are major holy cities for Hindu, Buddhist and Jain communities. The hordes of pilgrims and devotees visit these places of pilgrimage every year and participate in festivals.

Gaya is the second largest city in Bihar having population of 0.47 million. The city has ancient historical significance and one of the major tourist attractions of Bihar. This place has great importance for the Hindu, Buddhist, and Jain followers. Gaya is situated on the bank of Phalgu River and other three sides by small rocky hills. Bodhgaya is approximately 15 km form Gaya and one of the most important site for Buddhists. UNESCO world heritage site Mahabodi temple is situated here.

Patna city is the capital of Bihar state and largest city with 1.7 million population, situated on the bank of Ganga. The city was founded in 490 BCE by the king Magadha with the name Pataliputra. Patan Devi temple, which is known as the oldest and one of the most revered place of worship for Hindus situated in Patna. This city is also important for the Sikh community as the birth place of tenth guru, Guru Gobind Singh. Similarly Vaishali, Sitamadi, Nalanda, Rajgir, Vikamshila and Bhagalpur have the importance for Hindu, Buddhist, and Jain religions. Some major religious events and their features in Bihar state have been illustrated in Table 6.

S No	Religious Events	Place	River Bank	Duration	Period
1	Chatth Puja	All river banks	Ganga and Tributaries	October- November	Annual
2	Kartik Poornima	All river banks	Ganga and Tributaries	November	Annual
3	Krishna Leela	All river banks	Ganga	October– November	Annual
4	Ganga Dusshera	All river banks	Ganga	June	Annual

Table 6: Major Religious Events on River Banks in Bihar

5. Pollution Load

The major pollution load in the area of basin under the state is due to point and nonpoint sources. Discharges of untreated/partially treated sewage from urban centres, discharge from open drain carrying sewage, discharges from the tributaries and discharge of untreated/partially treated wastewater from industrial units are the major point sources that contribute to the pollution load in the state. The major cities contributing the wastewater discharge of approximately 579 MLD through 25 numbers of drains in river

Ganga are in Buxer, Patana, Munger, Bhagalpur, and kahalgaon (CPCB, 2013). The discharge of wastewater through the state of Bihar is 9.5 % of the total discharge through 4 major states (Uttarakhand, Uttar Pradesh, Bihar, West Bengal) covered under the GRB. The Central Pollution Control Board (CPCB) and Central Water Commission (CWC) have planned to install 13 Real Time Water Quality Monitoring Station for monitoring in-situ river water quality parameters of the river Ganga and her tributaries (Gomti and Ramganga). One stations to be installed in Patna. The report published by CPCB in 2009 revealed that the total sewage generation of class I cities in Ganga basin is 15,305.55 MLD while its treatment capacity is only one third (32%) of the total sewage generation (4,886.28 MLD). The situation getting more critical in the class II towns as the difference between the sewage generation (1,083.85 MLD) and its treatment capacity (91.82 MLD) increased. The sewage treatment capacity is only 8% of the total sewage generation in class II town in the states under Ganga river basin.

The maximum sewage generated by class I cities and class II towns of Bihar are 1003.5 and 174.2 MLD. The comparison of the total sewage generation and sewage treatment capacity of the class I cities and Class II towns of the states lying under Ganga basin has been represented in Figure 7. The assessment shows that there is also a massive gap between the generation and treatment capacity in the main stretch of the Ganga. The trends of the data in Bihar depicted that the maximum share of sewage generation (58.53%) is from class I cities followed by class II and III towns, 17.48 and 23.99%, respectively (Figure 8). The BOD and COD load for Class I cities, Class II and Class III towns are in the range of 68.78, 16.53 and 22.69%, respectively. The TKN load almost showing the same trend as BOD and COD load. CPCB in 2013 has been identified 64 STPs (Sewage Treatment Plants) under Ganga river Catchment, out of which 5 STPs in Bihar having the total installed capacity is 140 MLD utilized the waste water of 100 MLD. A single STP was found to be nonoperational.

The assessment of the total water supply and total sewage generation of class I cities in the state revealed that the maximum sewage generation is in Patna 182 MLD, approximately 79.9% of the water supply. In case of the class II towns the sewage generation in Lakhisari is maximum 10.8 MLD, ~80% of its total water supply. The total BOD and COD load in Kg/day has been estimated on the per capita basis in Class I towns and its average are approximately 6.98 and 11.87 tons/day, respectively. The average BOD and COD load from the Class II towns is 1.75 and 2.99 tons/day, respectively whereas Class III towns contribute approximately 0.9 tons/day and 1.55 tons/day of BOD and COD, respectively. The maximum and minimum BOD and COD contributing cities in Class I towns are Patna and Aurangabad, respectively. In Class II towns maximum BOD and COD is from Lakhisarai, whereas minimum BOD and COD are from Bhahua. In class III towns maximum and minimum BOD and COD is from Narkatiaganj and Nirmali respectively.

The total TKN in metric tons/day contributed by Class I, Class II and Class III towns are approximately 1.39, 0.38 and 0.18 tons/day, respectively. The maximum and minimum contribution of TKN from class I towns are from Patna and Aurangabad respectively. The maximum and minimum contribution of TKN from class II towns is from Lakhisarai and

Bhahua, respectively while the maximum and minimum contribution of TKN from class III towns is from Narkatiaganj and Nirmali, respectively. The estimates of total water supplied, total sewage generated, BOD, COD and TKN loads are summarized and illustrated in Figures (9a-11b) for class I cities and class II towns. The comparative account of all the classes (I, II and III) for its population, sewage generation, water supply and BOD, COD and TKN load are presented in Figure 12.

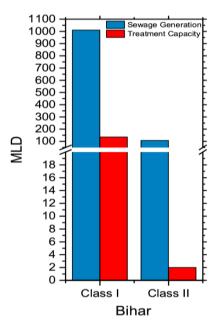


Figure 7: Assessment of Total Sewage Generation (MLD) and Sewage Treatment Capacity of Class I and II Cities in the State of Bihar

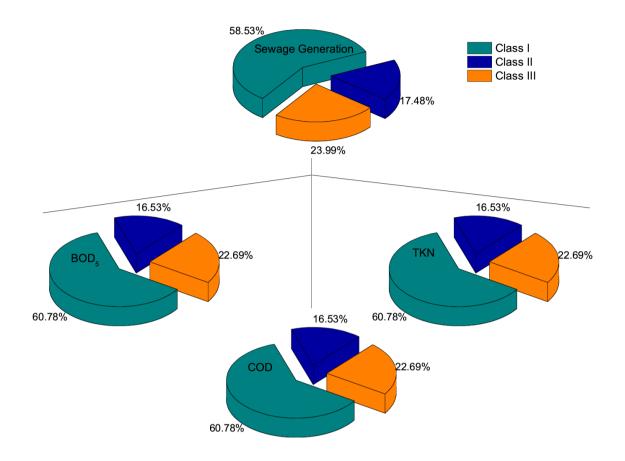


Figure 8: Distribution of Pollution Load of Class I Cities and Class II, Class III Towns in Bihar

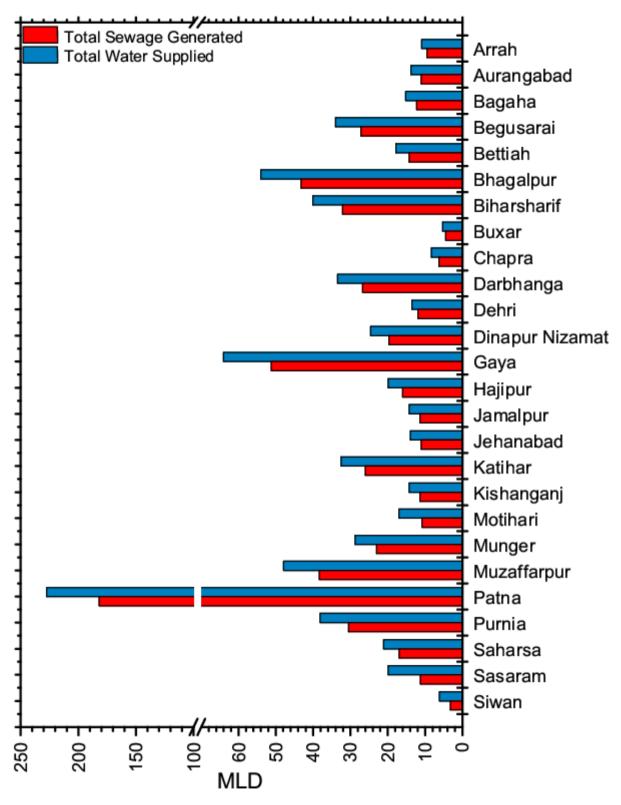


Figure 9a: Assessment of water supply and sewage generation (MLD) in Class I towns in the Ganga river Basin lying in the State of Bihar

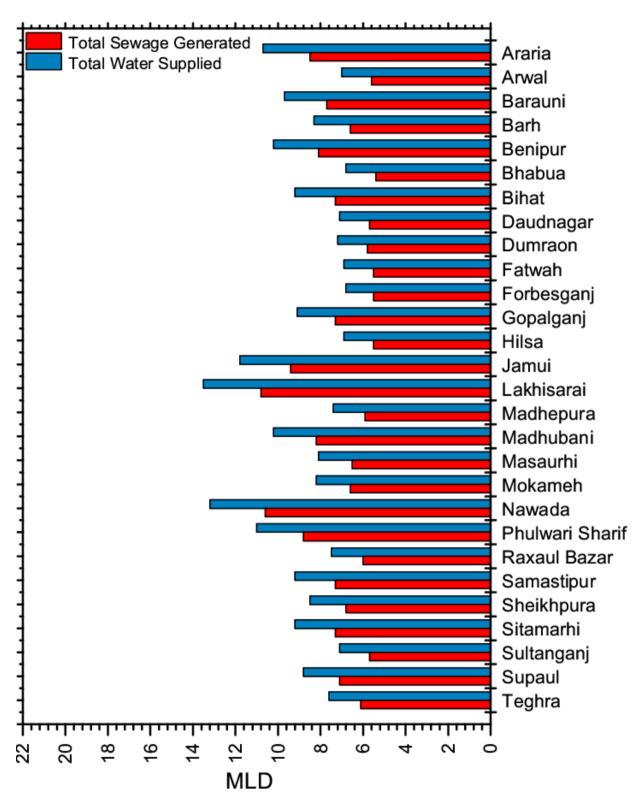


Figure 9b: Assessment of water supply and sewage generation (MLD) in Class II towns in the Ganga river Basin lying in the State of Bihar

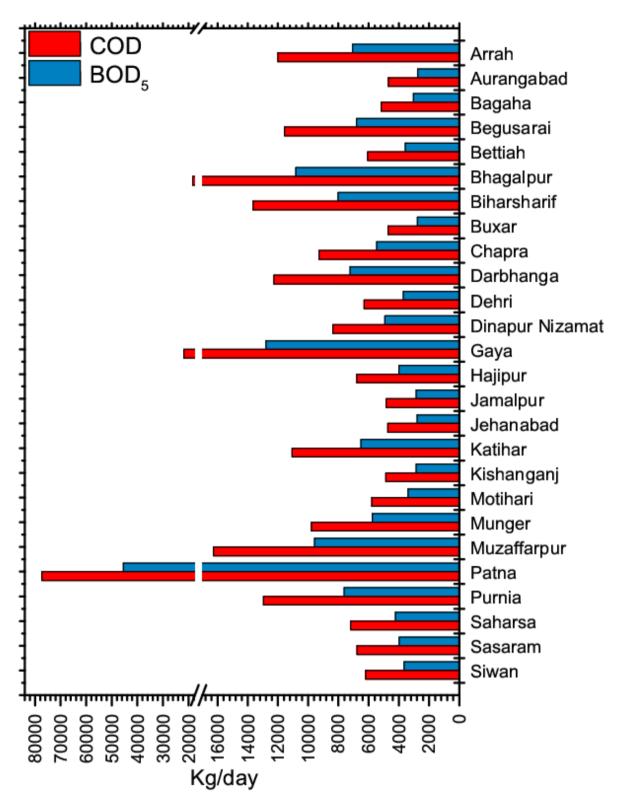


Figure 10a: Assessment of Organic Pollution Load (kg/day) from Class I Towns in the Ganga River Basin lying in the State of Bihar

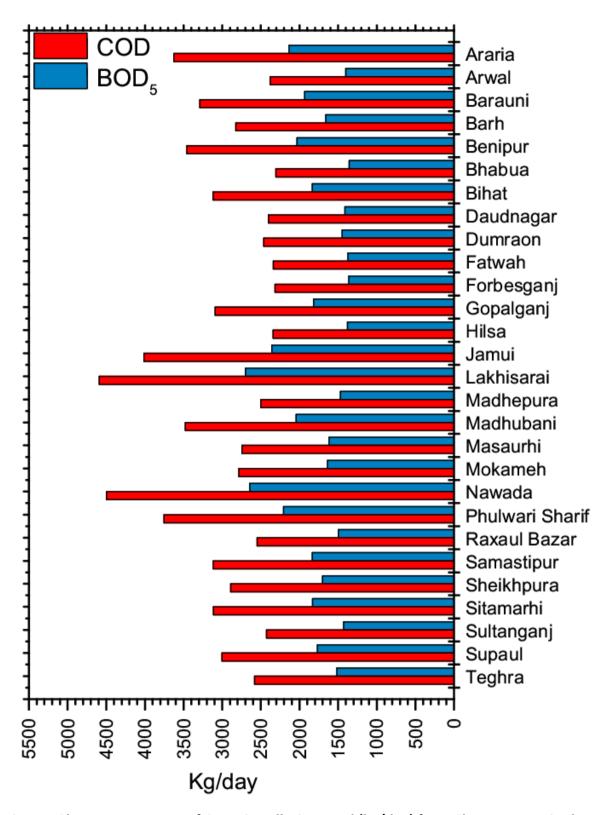


Figure 10b: Assessment of Organic Pollution Load (kg/day) from Class II Towns in the Ganga River Basin lying in the State of Bihar

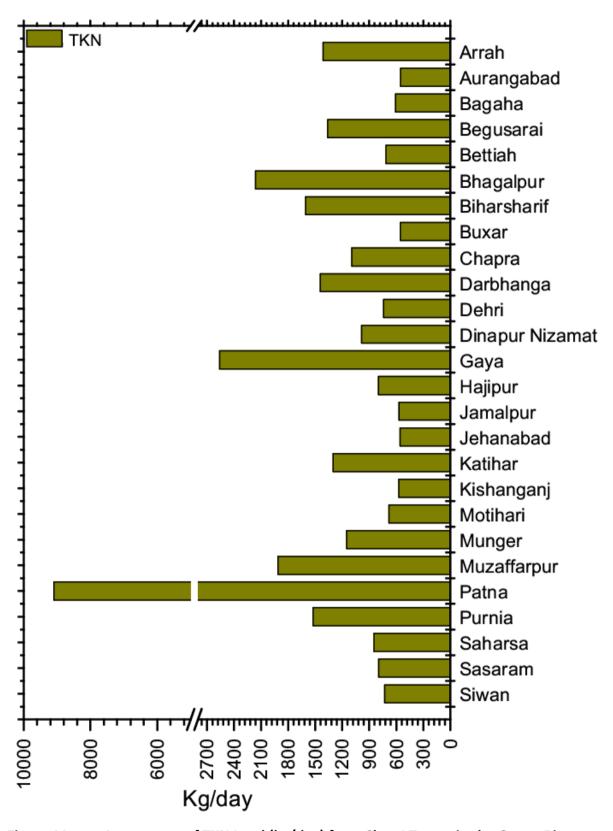


Figure 11a: Assessment of TKN Load (kg/day) from Class I Towns in the Ganga River Basin Lying in the State of Bihar

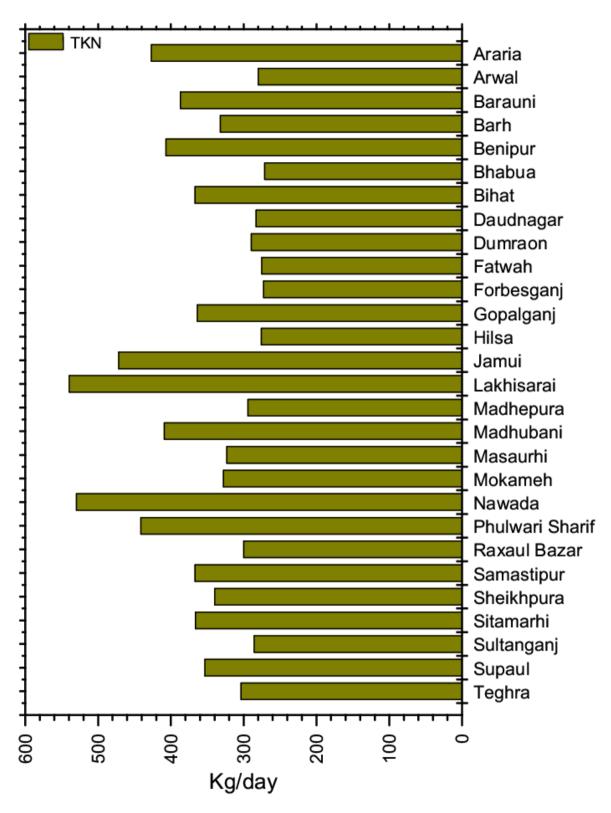


Figure 11b: Assessment of TKN Load (kg/day) from Class II Towns in the Ganga River Basin Lying in the State of Bihar

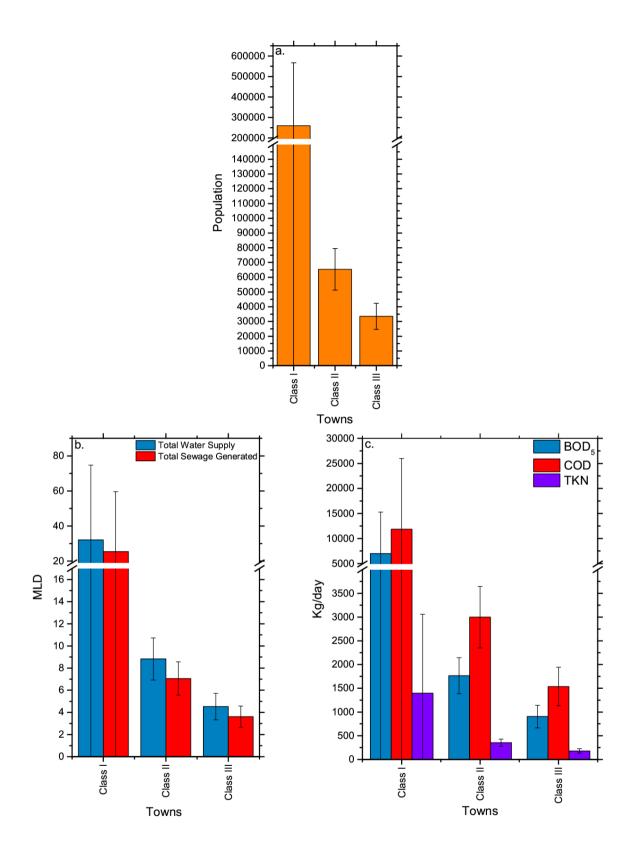


Figure 12: Comparative Analysis of Class I, Class II and Class III Cities/Towns Lying Under the Bihar State: (a) Population (b) Total Water Supply and Sewage Generation (c) Pollution Load

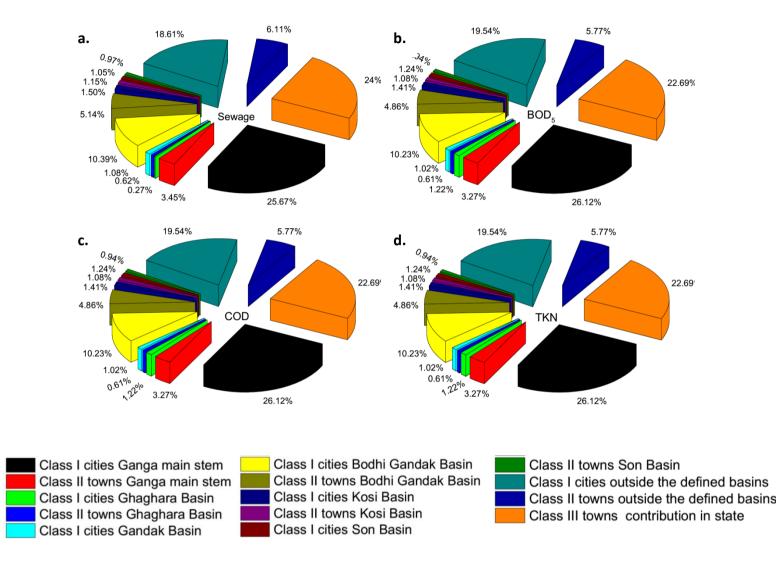


Figure 13 (a-d): Pollution load of Class I Cities and Class II, Class III Towns in the Major Basins of River Ganga in the State and Along the Main Stem of the River Ganga: (a) Sewage Generation; (b) BOD_5 ; (c) COD; (d) TKN

The results of the pollution load of Class I cities, Class II and Class III towns under the major basins of river Ganga in the state has been evaluated (Figure 13a-d) and the results revealed that the percentage of the total sewage generation is maximum in the Class I cities situated along the main stem of Ganga (25.67%). The sewage generation in the Buhri Gandak basin is highest for Class I cities (10.39%) and is higher than the Kosi (6.11%), Son basin (1.05%) and Ghaghara (0.27) compared with the total sewage generation. The sewage generation in all Class II towns in all the basins in the state is contributed ~9% of the total sewage generation. The Class I cities and Class II towns ouside the major defined basins combinedly

release 24.71% of waste water. The percentage sewage generation by Class III towns of the entire state is 24% of the total sewage generated by the state.

The BOD, COD and TKN load contributed by Class I cities of the main stem of Ganga and Burhi Gandak are 26.12 and 10.23%, respectively. The Class II and Class III towns of the state imparted around 9% and 22.69% respectively of the total BOD, COD, and TKN load. The basin wise major contributors of Class I cities for BOD, COD, and TKN load are Kosi (1.41%), Son(1.24%) and Ghaghara (0.61%). The significant BOD,COD, and TKN load contributed by the Class I cities and Class II towns lying outside the selected basins (BOD: 19.54%; COD: 19.54%). The details of the BOD and COD load in the state are presented in Figure 12b and c.

6. Conclusions:

River Ganga flows in the Indo-Gangetic plains of the state is one of the most sacred river in India, yet it is being polluted by many sources. Pollution levels in the river contributed 9-12% of the total burden of diseases in the state (Mallikarjun, 2003). The catchment of the river addressed the load of 63 Class I cities, 59 Class II towns and 232 Class III towns, directly or indirectly. The scenario of water quality in the system is factuating from bad to worse base on the spatial and temporal alterations. The multitudinous problems are also arising during lean season due to the continuous discharge of untreated and/or partially treated sewage and industrial wastewater. The Ghaghara, Gandak, Kosi, Burhi Gandak and Son tributaries discharges their partially treated and untreated effluent into river Ganga.

The maximum sewage generation is in the Class I cities (58.53%) followed by Class III (23.99%) and Class II towns (17.48%). Pollution load (BOD, COD and TKN load) also follows the same trend with maximum values for Class I cities. Patna and Lakhisarai are the Class I and Class II towns showing maximum amount of sewage generation in comparison to their water supply. The maximum BOD, COD and TKN contributing Class I cities, Class II and III towns are Patna, Lakhisarai and Narkatiaganj respectably. All calculations related to pollution load were done on per capita basis. There is lack of real data (Drains, water supply, etc.) for the Bihar state and suggested to be done for more accurate pollution situation.





References

- 1. CPCB (2013). Pollution Assessment: River Ganga. [Accessed April 26, 2014 from: http://cpcb.nic.in/upload/NewItems/NewItem_203_Ganga_report.pdf].
- 2. Dwivedi, A.C. (2006). Age structure of some commercially exploited fish stocks of the Ganga river system (Banda-Mirzapur section). D.Phil Thesis, Allahabad University, Allahabad, India.
- 3. Jain S.K., Agarwal, P.K. and Singh, V.P. (2007). Hydrology and Water Resources of India. Springer Netherlands, p 358.
- 4. NIH (1999). Hydrological Inventory of River Basin in Eastern Uttar Pradesh. Agriculture Factsheet SAG-11-09, Ohio State University. [Accessed April 03, 2012 from: http://www.nih.ernet.in/TechnicalPapers/Hydrological_Inventory_of_River_Basins_in_Eastern_Uttar_Pradesh.pdf].
- 5. Parua, P.K. (2009). The Ganga: Water Use in the Indian Subcontinent. DOI 10.1007/978-90-481-3103-Springer Netherlands.
- 6. Water Resources Information System (WRIS)- Wiki (http://india-wris.nrsc.gov.in/wrpinfo/index.php?title=Main_Page)

Appendix-1

Compilation of Fact Sheets of Water Balance & Pollution Load (Domestic) of Major Class I Cities/Towns in Bihar

C:1 A	Water Balance & Pollution Load (Domestic) Fa			D:l
City: Arr	I		State	e: Bihar
S. No.	Items			Value
1	Total Area (sq km)		<u>:</u>	30.97
2	Population as in 2011		:	261430
3	Population Growth Rate as in 2011 (%)		:	28.5
4	Total Number of Wards		:	45
5	Population per Ward (Thousands)		:	5810
6	Total Number of Household as in 2011		:	39,274
7	Number of Household per Ward		:	873
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	10.62
10	Number of Bore Wells		:	16
11	Ground Water Extraction per Bore Well (MLD)		:	0.66
12	Number of Hand Pumps/ Tubewells			510
13	Ground Water Extraction per Hand Pump (lpd)		:	500
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ipcd)		:	40.67
17	Total Water Supply from ULB and Non-ULB Sources (MLD)		:	10.88
18	Average Water Supply Rate from ULB & Non-ULB Sources	s (lpcd)	:	41.70
19	Total Sewage Generation (MLD)*		:	9.55
20	Per Capita Sewage Generation (Ipcd)		:	36.52
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP I & II (MLD)		:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Others (MLD)		:	NA
		BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow)	COD	:	NA
	(kg/d)		1.	NA

	Pollution Load (Domestic) (Method 2: Per Capita	BOD ₅	:	7058.61
29		COD	:	11999.64
		TKN	:	1411.72
30	30 Wastewater Disposal Means		:	River Disposal
31	Name of River/Streams for Wastewater Disposal		:	Ganga River
32	32 Number of Drains/Nallah for Wastewater Disposal		:	11
33	Number of Water Bodies		:	4
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	NA

	Water Balance & Pollution Load (Domestic) Fact Sheet				
City: A	urangabad	State: Bihar			
S. No.	Items		Value		
1	Total Area (sq km)		21.33		
2	Population as in 2011		102244		
3	Population Growth Rate as in 2011 (%)		28.78		
4	Total Number of Wards		33		
5	Population per Ward (Thousands)		3,098		
6	Total Number of Household as in 2011		15782		
7	Number of Household per Ward		478		
8	Surface Water Supply (MLD)		: NA		
9	Ground Water (GW) Supply (MLD)		: NA		
10	Number of Bore Wells		: NA		
11	Ground Water Extraction per Bore Well (MLD)		: NA		
12	Number of Hand Pumps/ Tubewells		: NA		
13	13 Ground Water Extraction per Hand Pump (lpd)		NA NA		
14	14 Number of Pumping Stations for Water Supply		: NA		
15	Total Pumping Capacity (MLD)		: NA		
16	16 Average Water Supply Rate from ULB Sources (lpcd)		NA NA		
17	Total Water Supply from ULB and Non-ULB Sources (MLD)		13.8		
18	Average Water Supply Rate from ULB & Non-ULB Sources (lpcd)		135.0		
19	Total Sewage Generation (MLD)*		11.0		
20	Per Capita Sewage Generation (Ipcd)		108.0		
21	Sewage Collection (MLD)		NA NA		
22	22 Percentage of Sewage Collection (%)		: NA		
23	23 Number of STPs		: NA		
24	24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD)		: NA		
25	25 Current Utilized Capacity of STPs (MLD)		: NA		
26	26 Percentage Utilization of Installed Capacity (%)		: NA		
27	Capacity of STPs Sanctioned under JNNURM & Others (MLD)		: NA		
28	Pollution Load (Domestic) (Method 1: Actual Flow) BOD ₅		NA		

	(kg/d)	COD		:	NA
		TKN		:	NA
	Della Carala (Danasa Cara) (Marila al 2, Dan Cara)	BOD ₅	5	:	2760.6
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD		:	4693.0
	TKN	TKN		:	552.1
	Wastewater Disposal Means				River & Land
30	wastewater disposal Means			:	Disposal
31	Name of River/Streams for Wastewater Disposal			:	Adari River
32	Number of Drains/Nallah for Wastewater Disposal			:	NA
33	Number of Water Bodies			:	NA
34	Gross Area of Water Bodies (Hectare)			:	NA
35	Area of Water Bodies as % of Total Area			:	<<< 1
	Water Balance & Pollution Load (Domestic) Fa	ct She			
	gah River		Sta	te	e: Bihar
S. No.	Items				Value
1	Total Area (sq km)			:	46.83
2	Population as in 2011			:	112634
3	Population Growth Rate as in 2011 (%)			:	23.14
4	Total Number of Wards			:	35
5	Population per Ward (Thousands)			:	3,218
6	Total Number of Household as in 2011			:	20980
7	Number of Household per Ward			:	599
8	Surface Water Supply (MLD)			:	NA
9	Ground Water (GW) Supply (MLD)			:	NA
10	Number of Bore Wells			:	NA
11	Ground Water Extraction per Bore Well (MLD)			:	NA
12	Number of Hand Pumps/ Tubewells			:	NA
13	Ground Water Extraction per Hand Pump (lpd)			:	NA
14	Number of Pumping Stations for Water Supply			:	NA
15	Total Pumping Capacity (MLD)			:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)			:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)			:	15.2
18	Average Water Supply Rate from ULB & Non-ULB Sources (lpcd))	:	135.0
19	Total Sewage Generation (MLD)*			:	12.2
20	Per Capita Sewage Generation (Ipcd)			:	108.0
21	Sewage Collection (MLD)			:	NA
22	Percentage of Sewage Collection (%)			:	NA
23	Number of STPs			:	NA
24	Total Installed Capacity of STPs under GAP & YAP I & II (MLD)				NA
25	Current Utilized Capacity of STPs (MLD)				NA
26	Percentage Utilization of Installed Capacity (%)			:	NA

27	Capacity of STPs Sanctioned under JNNURM & Others (MLD)		:	NA
	Pollution Load (Domostic) (Mothed 1, Actual Flour)	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
(kg/u)	(Ng/ U)	TKN	:	NA
	Pollution Load (Domestic) (Method 2: Per Capita		:	3041.1
29	Contribution) (kg/d)	COD	:	5169.9
		TKN	:	608.2
	Wastowator Disposal Moans			River & Land
30	Wastewater Disposal Means		:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Gandak River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	35 Area of Water Bodies as % of Total Area		:	<<< 1

	Water Balance & Pollution Load (Domestic) Fact She	<u>et</u>	
City: Be	egusarai	Stat	e: Bihar
S. No.	Items		Value
1	Total Area (sq km)	:	47.51
2	Population as in 2011	:	252008
3	Population Growth Rate as in 2011 (%)	:	168.83
4	Total Number of Wards	:	45
5	Population per Ward (Thousands)	:	5,600
6	Total Number of Household as in 2011	:	47030
7	Number of Household per Ward	:	1045
8	Surface Water Supply (MLD)	:	NA
9	Ground Water (GW) Supply (MLD)	:	NA
10	Number of Bore Wells	:	NA
11	Ground Water Extraction per Bore Well (MLD)	:	NA
12	Number of Hand Pumps/ Tubewells	:	NA
13	Ground Water Extraction per Hand Pump (lpd)	:	NA
14	Number of Pumping Stations for Water Supply	:	NA
15	Total Pumping Capacity (MLD)	:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)	:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)	:	34.0
18	Average Water Supply Rate from ULB & Non-ULB Sources (lpcd)	:	135.0
19	Total Sewage Generation (MLD)*	:	27.2
20	Per Capita Sewage Generation (lpcd)	:	108.0
21	Sewage Collection (MLD)	:	NA
22	Percentage of Sewage Collection (%)	:	NA
23	Number of STPs	:	NA

24	Total Installed Capacity of STPs under GAP & YAP I & II (N	1LD)	:	NA
25	Current Utilized Capacity of STPs (MLD)			NA
26	Percentage Utilization of Installed Capacity (%)			NA
27	Capacity of STPs Sanctioned under JNNURM & Others (M	LD)	:	NA
	Dellution Lood (Domostic) (Mathed 4. Astual Flour)	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow)	COD	:	NA
	(kg/d)	TKN	:	NA
	Dellution Lood (Domostic) (Mother d.2. Don Conita	BOD ₅	:	6804.2
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	11567.2
	TKN		:	1360.8
	Masternator Disposal Master			River & Land
30	Wastewater Disposal Means		:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Ganga River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
	Water Balance & Pollution Load (Domestic) Fa	ct Shee	<u>t</u>	
City: Be	ttiah	S	tate	e: Bihar
S. No.	Items			Value
1	Total Area (sq km)		:	8.01
2	Population as in 2011		:	132209
3	3 Population Growth Rate as in 2011 (%)		:	13.32
4	4 Total Number of Wards			39
5	Population per Ward (Thousands)		:	3,390
6	6 Total Number of Household as in 2011			24463
7	Number of Household per Ward		:	627
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)			NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)			NA
12	12 Number of Hand Pumps/ Tubewells			NA
13	13 Ground Water Extraction per Hand Pump (lpd)			NA
14	Number of Pumping Stations for Water Supply		:	NA
15	5 Total Pumping Capacity (MLD)		:	NA
16	6 Average Water Supply Rate from ULB Sources (lpcd)		:	NA
17	.7 Total Water Supply from ULB and Non-ULB Sources (MLD)			17.8
18				135.0
19	19 Total Sewage Generation (MLD)*			14.3
20	20 Per Capita Sewage Generation (lpcd)			108.0
21	Sewage Collection (MLD)		:	NA

22	Percentage of Sewage Collection (%)			NA
23	Number of STPs			NA
24	Total Installed Capacity of STPs under GAP & YAP I & II (M	II D)	:	NA
25	Current Utilized Capacity of STPs (MLD)	ilb)	+ :	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Others (M	ID)	:	NA
27	capacity of 511 5 Sanctioned under Sitted (ivi	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow)	COD	:	NA
20	(kg/d)	TKN	:	NA
		BOD ₅	 -	3569.6
29	Pollution Load (Domestic) (Method 2: Per Capita	COD	:	6068.4
	Contribution) (kg/d)	TKN	:	713.9
		11(1)	+	River & Land
30	Wastewater Disposal Means	:	Disposal	
31	Name of River/Streams for Wastewater Disposal		:	Gandak River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	9
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area			<<< 1
	Water Balance & Pollution Load (Domestic) Fa	ct Shee	<u>t</u>	
City: Bh	City: Bhagalpur			te: Bihar
S. No.	Items			Value
1	Total Area (sq km)			30.17
2	Population as in 2011			400146
3	Population Growth Rate as in 2011 (%)			17.43
4	Total Number of Wards			51
5	Population per Ward (Thousands)			7,846
6	Total Number of Household as in 2011			69984
7	Number of Household per Ward			1372
8	Surface Water Supply (MLD)			NA
9	Ground Water (GW) Supply (MLD)			NA
10	Number of Bore Wells			NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)			NA
14	Number of Pumping Stations for Water Supply		_:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)			NA
1				
17	Total Water Supply from ULB and Non-ULB Sources (ML	D)	:	54.0
17 18			:	

20	Per Capita Sewage Generation (lpcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I & II (N	1LD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Others (M	LD)	:	NA
	Pollution Load (Domostic) (Mothed 1. Actual Flow)	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
		TKN	:	NA
	Pollution Load (Domostic) (Mothed 2: Por Capita	BOD ₅	:	10803.9
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	18366.7
	Contribution) (kg/u)	TKN	:	2160.8
	Wastowator Disposal Moans			River & Land
30	30 Wastewater Disposal Means		:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Ganga River
32	32 Number of Drains/Nallah for Wastewater Disposal		:	NA
33	33 Number of Water Bodies		:	NA
34	34 Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1

City: Bi	harsharif	State	e: Bihar
S. No.	Items		Value
1	Total Area (sq km)	:	23.50
2	Population as in 2011	:	297268
3	Population Growth Rate as in 2011 (%)	:	28.09
4	Total Number of Wards	:	46
5	Population per Ward (Thousands)	:	6,462
6	Total Number of Household as in 2011	:	48641
7	Number of Household per Ward	:	1057
8	Surface Water Supply (MLD)	:	NA
9	Ground Water (GW) Supply (MLD)	:	NA
10	Number of Bore Wells	:	NA
11	Ground Water Extraction per Bore Well (MLD)	:	NA
12	Number of Hand Pumps/ Tubewells	:	NA
13	Ground Water Extraction per Hand Pump (lpd)	:	NA
14	Number of Pumping Stations for Water Supply	:	NA
15	Total Pumping Capacity (MLD)	:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)	:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)	:	40.1

18	Average Water Supply Rate from ULB & Non-ULB Sources	s (lpcd)	:	135.0
19	Total Sewage Generation (MLD)*		:	32.1
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I & II (N	1LD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Others (MLD)			NA
	Dellution Load (Demostic) (Mathed 1. Astual Flour)	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
	(kg/u)	TKN	:	NA
	Pollution Load (Domestic) (Method 2: Per Capita	BOD ₅	:	8026.2
29	Contribution) (kg/d)	COD	:	13644.6
	Continuation) (kg/ d)	TKN	:	1605.2
	Wastewater Disposal Means			River & Land
30	wastewater disposal Means		:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Panchane River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)			NA
35	Area of Water Bodies as % of Total Area		:	<<< 1

	Water Balance & Pollution Load (Domestic) Fact Sheet				
City:Bu	City:Buxar S				
S. No.	Items		Value		
1	Total Area (sq km)	:	5.16		
2	Population as in 2011	:	102861		
3	Population Growth Rate as in 2011 (%)	:	23.68		
4	Total Number of Wards	:	34		
5	Population per Ward (Thousands)	:	3025		
6	Total Number of Household as in 2011	:	16,710		
7	Number of Household per Ward		491		
8	Surface Water Supply (MLD)	:	NA		
9	Ground Water (GW) Supply (MLD)	:	5.18		
10	Number of Bore Wells		6		
11	Ground Water Extraction per Bore Well (MLD)		0.86		
12	Number of Hand Pumps/ Tubewells		240		
13	Ground Water Extraction per Hand Pump (lpd)	:	500		
14	Number of Pumping Stations for Water Supply	<u>:</u>	NA		
15	Total Pumping Capacity (MLD)	:	NA		

Average Water Supply Rate from ULB Sources (Ipcd)		:	50.54
Total Water Supply from ULB and Non-ULB Sources (M	LD)	:	5.30
Average Water Supply Rate from ULB & Non-ULB Source	ces (Ipcd)	:	51.70
Total Sewage Generation (MLD)*		:	4.46
Per Capita Sewage Generation (lpcd)		:	43.34
Sewage Collection (MLD)		:	NA
Percentage of Sewage Collection (%)		:	NA
Number of STPs		:	NA
Total Installed Capacity of STPs under GAP I & II (MLD)		:	NA
Current Utilized Capacity of STPs (MLD)		:	NA
Percentage Utilization of Installed Capacity (%)		:	NA
Capacity of STPs Sanctioned under JNNURM & Others	(MLD)	:	NA
Pollution Load (Domestic) (Method 1: Actual Flow)	BOD ₅	:	NA
· · · · · · · · · · · · · · · · · · ·		:	NA
(18) (1)	TKN	:	NA
Pollution Load (Domostic) (Mothod 2: Por Capita	BOD ₅	:	2777.25
·	COD	:	4721.32
Contribution, (kg/u)	TKN	:	555.45
Wastewater Disnosal Means			River&Land
0 Wastewater Disposal Means		<u>:</u>	Disposal
Name of River/Streams for Wastewater Disposal		:	Ganga River
Number of Drains/Nallah for Wastewater Disposal			5
Number of Water Bodies		:	5
Gross Area of Water Bodies (Hectare)		:	NA
Area of Water Bodies as % of Total Area			<<<1%
Water Balance & Pollution Load (Domestic)	Fact She	<u>et</u>	
hapra		Stat	te: Bihar
Items			Value
Total Area (sq km)		:	16.96
Population as in 2011		:	202352
Population Growth Rate as in 2011 (%)		:	12.93
Total Number of Wards		:	44
Population per Ward (Thousands)		:	4,599
Total Number of Household as in 2011		:	31501
Number of Household per Ward		:	716
Surface Water Supply (MLD)		:	NA
Ground Water (GW) Supply (MLD)		:	4.35
Number of Bore Wells		:	13
Ground Water Extraction per Bore Well (MLD)		:	0.33
Number of Hand Pumps/ Tubewells			1
Number of Hand Pumps/ Tubewells		<u>:</u>	515
	Total Water Supply from ULB and Non-ULB Sources (M Average Water Supply Rate from ULB & Non-ULB Sources Total Sewage Generation (MLD)* Per Capita Sewage Generation (Ipcd) Sewage Collection (MLD) Percentage of Sewage Collection (%) Number of STPS Total Installed Capacity of STPs under GAP I & II (MLD) Current Utilized Capacity of STPs (MLD) Percentage Utilization of Installed Capacity (%) Capacity of STPs Sanctioned under JNNURM & Others (Method 1: Actual Flow) (kg/d) Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) Wastewater Disposal Means Name of River/Streams for Wastewater Disposal Number of Drains/Nallah for Wastewater Disposal Number of Water Bodies Gross Area of Water Bodies (Hectare) Area of Water Bodies as % of Total Area Water Balance & Pollution Load (Domestic) hapra Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells	Total Water Supply from ULB and Non-ULB Sources (MLD) Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) Total Sewage Generation (MLD)* Per Capita Sewage Generation (Ipcd) Sewage Collection (MLD) Percentage of Sewage Collection (%) Number of STPs Total Installed Capacity of STPs under GAP I & II (MLD) Current Utilized Capacity of STPs (MLD) Percentage Utilization of Installed Capacity (%) Capacity of STPs Sanctioned under JNNURM & Others (MLD) Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) Wastewater Disposal Means Name of River/Streams for Wastewater Disposal Number of Drains/Nallah for Wastewater Disposal Number of Water Bodies Gross Area of Water Bodies (Hectare) Area of Water Bodies as % of Total Area Water Balance & Pollution Load (Domestic) Fact Shethapra Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells	Total Water Supply from ULB and Non-ULB Sources (MLD) Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) I Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) I Total Sewage Generation (MLD)* Per Capita Sewage Generation (Ipcd) Sewage Collection (MLD) Percentage of Sewage Collection (%) Number of STPs Total Installed Capacity of STPs under GAP I & II (MLD) Current Utilized Capacity of STPs (MLD) Percentage Utilization of Installed Capacity (%) Capacity of STPs Sanctioned under JNNURM & Others (MLD) Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) Rontribution) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) Rontribution) (kg/d) Wastewater Disposal Means Name of River/Streams for Wastewater Disposal Number of Drains/Nallah for Wastewater Disposal Number of Water Bodies Gross Area of Water Bodies (Hectare) Area of Water Bodies as % of Total Area Water Balance & Pollution Load (Domestic) Fact Sheet hapra Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Rumber of Bore Wells

14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)		:	21.58
17	17 Total Water Supply from ULB and Non-ULB Sources (MLD)			8.3
18	18 Average Water Supply Rate from ULB & Non-ULB Sources (lpcd)			109.6
19	19 Total Sewage Generation (MLD)**		:	6.3
20	Per Capita Sewage Generation (Ipcd)		:	31.2
21	21 Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP I & II (MLD)		:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Others (MI	LD)	:	NA
	Dellution Load (Demostic) (Mathed 4. Actual Els.)	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow)	COD	:	NA
(kg/d)	(kg/u)	TKN	:	NA
	Pollution Load (Domostic) (Mothed 2: Per Capita	BOD ₅	:	5463.5
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	9288.0
	Contribution) (kg/u)	TKN	:	1092.7
	Wastewater Disposal Means			
30	·		<u>:</u>	Disposal
31	Name of River/Streams for Wastewater Disposal		<u>:</u>	Ganga River
32	Number of Drains/Nallah for Wastewater Disposal		:	1
33	Number of Water Bodies		<u>:</u>	7
34	Gross Area of Water Bodies (Hectare)		<u>:</u>	NA
35	Area of Water Bodies as % of Total Area		:	NA
	Water Balance & Pollution Load (Domestic) Fact			
City: Da		St	ate	: Bihar
S. No.	Items			Value
1	Total Area (sq km)		:	19.18
2	Population as in 2011		:	2,96,039
	3 Population Growth Rate as in 2011 (%)		:	10.73
	4 Total Number of Wards		:	48
5	· · · · · · · · · · · · · · · · · · ·		:	6,167
6			:	56,492
7	'		:	1177
8			:	NA 12.27
_	9 Ground Water (GW) Supply (MLD)		:	13.37
	10 Number of Tube Wells			8
11	Ground Water Extraction per Tube Well (MLD)		:	4.5

12	Number of Hand Pumps			:	3000
13	Ground Water Extraction per Hand Pump (lpd)			:	500
14	Number of Pumping Stations for Water Supply			:	4
15	Total Pumping Capacity (MLD)			:	1.7
16	Average Water Supply Rate from ULB Sources (lpcd)		:	135
17	Total Water Supply from ULB and Non-ULB Sou	rces (MLD)		:	33.4
18	Average Water Supply Rate from ULB & Non-U	LB Sources (lp	ocd)	:	124.8
19	Total Sewage Generation (MLD)			:	26.7
20	Per Capita Sewage Generation (lpcd)			:	99.9
21	Sewage Collection (MLD)			:	NA
22	Percentage of Sewage Collection (%)			:	NA
23	Number of STPs			:	NA
24	Total Installed Capacity of STPs under GAP I & I	I (MLD)		:	NA
25	Current Utilized Capacity of STPs (MLD)			:	NA
26	Percentage Utilization of Installed Capacity (%)			:	NA
27	Capacity of STPs Sanctioned under JNNURM &	Others (MLD))	:	NA
	Pollution Load (Domestic) (Method 1: Actual	BOD ₅		:	NA
28	Flow) (kg/d)	COD		:	NA
	TKN		:	NA	
	Pollution Load (Domestic) (Method 2: Per			:	7218.4
29	Capita Contribution) (kg/d)	COD		:	12271.3
	- Capita Continuation, (1.6, a)	TKN		:	1443.7
	Wastewater Disposal Means				River & Land
30				:	Disposal
31	Name of River/Streams for Wastewater Dispos	al		:	Baghmati River
32	Number of Drains/Nallah for Wastewater Dispo	sal		<u>:</u>	19
33	Number of Water Bodies			:	206
34	Gross Area of Water Bodies (sq km)			:	4.16
35	Area of Water Bodies as % of Total Area			:	21.69
	Water Balance & Pollution Load (Do	mestic) Fact	Sheet		<u>. </u>
City: De			State	: B	ihar
S. No.	Items				Value
1	1 Total Area (sq km)			:	21.32
2	<u> </u>			:	137231
3	·			:	15.26
4				:	39
5				:	3519
6				:	23,234
7 Number of Household per Ward				:	596
8 Surface Water Supply (MLD)				:	8

9	Ground Water (GW) Supply (MLD)		:	5.47
10	Number of Bore Wells			6
11	Ground Water Extraction per Bore Well (MLD)			0.91
12	Number of Hand Pumps/ Tubewells		1:	30
13	Ground Water Extraction per Hand Pump (lpd)		:	500
14	14 Number of Pumping Stations for Water Supply			NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ipcd)		:	135
17	Total Water Supply from ULB and Non-ULB Sources (MLD))	:	13.49
18	Average Water Supply Rate from ULB & Non-ULB Source	s (lpcd)	:	135.00
19	Total Sewage Generation (MLD)*		:	11.89
20	Per Capita Sewage Generation (Ipcd)		:	86.63
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP I & II (MLD)		:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	26 Percentage Utilization of Installed Capacity (%)			NA
27	Capacity of STPs Sanctioned under JNNURM & Others (MLD)			NA
	Pollution Load (Domestic) (Method 1: Actual Flow)	BOD ₅		NA
28	(kg/d)	COD	:	NA
	(1.6) 4.7	TKN	:	NA
	Pollution Load (Domestic) (Method 2: Per Capita	BOD ₅	:	3705.24
29	Contribution) (kg/d)	COD	:	6298.90
	, , , , , ,	TKN	:	741.05
30	Wastewater Disposal Means		:	River Disposal
31	Name of River/Streams for Wastewater Disposal		:	Sone
32	Number of Drains/Nallah for Wastewater Disposal		:	5
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	NA
	Water Balance & Pollution Load (Domestic) Fa	ct Shee		
, , ,			Sta	ite: Bihar
S. No.	<u> </u>			Value
1	` ' '			: 16.41
2			\perp	: 182429
3				: 39.07
4				: 40
5 Population per Ward (Thousands) 6 Total Number of Household as in 2011			+	: 4,561
6 Total Number of Household as in 2011			\perp	: 28932
7	Number of Household per Ward			: 723

Surface Water Supply (MLD)					
10	8	Surface Water Supply (MLD)		:	NA
11 Ground Water Extraction per Bore Well (MLD)	9	Ground Water (GW) Supply (MLD)		:	NA
12	10	Number of Bore Wells		:	NA
13 Ground Water Extraction per Hand Pump (lpd) NA 14 Number of Pumping Stations for Water Supply NA 15 Total Pumping Capacity (MLD) NA 16 Average Water Supply Rate from ULB Sources (lpcd) NA 17 Total Water Supply Rate from ULB Sources (MLD) 24.6 18 Average Water Supply Rate from ULB & Non-ULB Sources (lpcd) 135.0 19 Total Sewage Generation (MLD)* 19.7 20 Per Capita Sewage Generation (ipcd) 108.0 21 Sewage Collection (MLD) NA 22 Percentage of Sewage Collection (%) NA 23 Number of STPs NA 24 Total Installed Capacity of STPs under GAP & YAP & II (MLD) NA 25 Current Utilized Capacity of STPs (MLD) NA 26 Percentage Utilization of Installed Capacity (%) NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) NA 29 Pollution Load (Domestic) (Method 2: Per Capital Contribution) (kg/d) River & Land 30 Wastewater Disposal Means River & Land 30 Wastewater Disposal Means River & Land 31 Name of River/Streams for Wastewater Disposal NA 33 Number of Drains/Nallah for Wastewater Disposal NA 34 Gross Area of Water Bodies NA 35 Area of Water Bodies NA 36 Area of Water Bodies Sol.17 Sol.17 2 Population as in 2011 474093 474093 3 Population Growth Rate as in 2011 (%) 21.81 474093	11	Ground Water Extraction per Bore Well (MLD)			NA
14	12	Number of Hand Pumps/ Tubewells		:	NA
15	13	Ground Water Extraction per Hand Pump (lpd)		:	NA
16	14	Number of Pumping Stations for Water Supply		:	NA
17	15	Total Pumping Capacity (MLD)		:	NA
18	16	Average Water Supply Rate from ULB Sources (Ipc	d)	:	NA
19	17	Total Water Supply from ULB and Non-ULB Source	s (MLD)	:	24.6
20	18				135.0
21 Sewage Collection (MLD) : NA	19	Total Sewage Generation (MLD)*			19.7
22 Percentage of Sewage Collection (%) : NA	20	Per Capita Sewage Generation (Ipcd)		:	108.0
23 Number of STPs : NA	21	Sewage Collection (MLD)		:	NA
Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA	22	Percentage of Sewage Collection (%)		:	NA
25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) Elow) (kg/d) Elow) (kg/d) Elow) (kg/d) (kg/d) (kg/d) Elow) (kg/d) (kg/d) (kg/d) (kg/d) (kg/d) (kg/d) (kg/d) (kg/d) (kg/d) Elow) (kg/d) (kg/d) (kg/d) (kg/d) (kg/d) (kg/d) (kg/d) (kg/d	23	Number of STPs		:	NA
26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) BOD₅ : NA 29 TKN : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) COD : 8373.5 TKN : 985.1 30 Wastewater Disposal Means : River & Land Disposal 31 Name of River/Streams for Wastewater Disposal : River & Land Disposal 32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<<1	24	Total Installed Capacity of STPs under GAP & YAP I & II (MLD)			NA
27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) BOD₅ : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) BOD₅ : 4925.6 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) COD : 8373.5 7 KN : 985.1 8 Wastewater Disposal Means : NK River & Land 30 Name of River/Streams for Wastewater Disposal : River Land 31 Number of Drains/Nallah for Wastewater Disposal : NA 32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<<1	25	Current Utilized Capacity of STPs (MLD)			NA
28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) BOD₅ COD S: NA 29 NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) BOD₅ S: 4925.6 30 COD S: 8373.5 TKN S: 985.1 River & Land Disposal 30 Name of River/Streams for Wastewater Disposal S: NA Panchane River 31 Name of River/Streams for Wastewater Disposal S: NA NA 32 Number of Drains/Nallah for Wastewater Disposal S: NA NA 33 Number of Water Bodies NA 34 Gross Area of Water Bodies (Hectare) S: NA NA 35 Area of Water Bodies as % of Total Area S: NA NA Water Balance & Pollution Load (Domestic) Fact Sheet City: Gaya State: Bihar S. No. Items Value 1 Total Area (sq km) : 50.17 2 Population as in 2011 : 474093 3 Population Growth Rate as in 2011 (%) : 21.81 4 Total Number of Wards : 53	26	Percentage Utilization of Installed Capacity (%)			NA
Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	27	Capacity of STPs Sanctioned under JNNURM & Others (MLD)			NA
Flow) (kg/d) COD : NA		Dellustians Lond (Domontia) (Mathed 4. Actual	BOD ₅	:	NA
Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	28	, , ,	COD	:	NA
Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) TKN : 8373.5 TKN : 985.1 River & Land Disposal Panchane River/Streams for Wastewater Disposal : NA Name of River/Streams for Wastewater Disposal : NA Number of Drains/Nallah for Wastewater Disposal : NA Number of Water Bodies : NA Area of Water Bodies (Hectare) : NA Total Area (sq km) : 50.17 Population Growth Rate as in 2011 (%) : 53 COD		Tiow) (kg/d)	TKN	:	NA
Contribution (kg/d) COD : 8373.5		Dall time Land (Dansaria) (Marilia d. 2. Dan Carilla	BOD ₅	:	4925.6
Wastewater Disposal Means Name of River/Streams for Wastewater Disposal Name of River/Streams for Wastewater Disposal Number of Drains/Nallah for Wastewater Disposal Number of Water Bodies NA Mass Number of Water Bodies (Hectare) Area of Water Bodies as % of Total Area Water Balance & Pollution Load (Domestic) Fact Sheet City: Gaya State: Bihar S. No. Items Value 1 Total Area (sq km) : 50.17 2 Population as in 2011 : 474093 3 Population Growth Rate as in 2011 (%) : 21.81 4 Total Number of Wards : 53	29		COD	:	8373.5
Name of River/Streams for Wastewater Disposal Panchane River		Contribution) (kg/u)	TKN	:	985.1
Name of River/Streams for Wastewater Disposal : River Number of Drains/Nallah for Wastewater Disposal : NA Number of Water Bodies : NA Gross Area of Water Bodies (Hectare) : NA Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Gaya State: Bihar S. No. Items Value Total Area (sq km) : 50.17 Population as in 2011 : 474093 Population Growth Rate as in 2011 (%) : 21.81 Total Number of Wards : 53	30	Wastewater Disposal Means		:	
State: Bihar Stat		Name of Diver/Streems for Westewater Disposel			Panchane
33Number of Water Bodies: NA34Gross Area of Water Bodies (Hectare): NA35Area of Water Bodies as % of Total Area: <<< 1	31	Name of River/Streams for wastewater Disposal		:	River
34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Gaya State: Bihar S. No. Items Value 1 Total Area (sq km) : 50.17 2 Population as in 2011 : 474093 3 Population Growth Rate as in 2011 (%) : 21.81 4 Total Number of Wards : 53	32	•		:	NA
35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Gaya State: Bihar S. No. Items Value 1 Total Area (sq km) : 50.17 2 Population as in 2011 : 474093 3 Population Growth Rate as in 2011 (%) : 21.81 4 Total Number of Wards : 53	33	Number of Water Bodies		:	NA
Water Balance & Pollution Load (Domestic) Fact SheetCity: GayaState: BiharS. No.ItemsValue1Total Area (sq km): 50.172Population as in 2011: 4740933Population Growth Rate as in 2011 (%): 21.814Total Number of Wards: 53	34	Gross Area of Water Bodies (Hectare)		:	NA
City: Gaya State: Bihar S. No. Items Value 1 Total Area (sq km) : 50.17 2 Population as in 2011 : 474093 3 Population Growth Rate as in 2011 (%) : 21.81 4 Total Number of Wards : 53	35	Area of Water Bodies as % of Total Area		:	<<< 1
S. No. Items Value 1 Total Area (sq km) : 50.17 2 Population as in 2011 : 474093 3 Population Growth Rate as in 2011 (%) : 21.81 4 Total Number of Wards : 53			stic) Fact Shee		
1 Total Area (sq km) : 50.17 2 Population as in 2011 : 474093 3 Population Growth Rate as in 2011 (%) : 21.81 4 Total Number of Wards : 53					
2 Population as in 2011 : 474093 3 Population Growth Rate as in 2011 (%) : 21.81 4 Total Number of Wards : 53					
3 Population Growth Rate as in 2011 (%) : 21.81 4 Total Number of Wards : 53				:	
4 Total Number of Wards : 53				:	
				:	
5 Population per Ward (Thousands) : 8,945				:	
	5	5 Population per Ward (Thousands)		:	8,945

6	Total Number of Household as in 2011		:	72978
7	Number of Household per Ward		:	1377
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply			NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)		:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)		:	64.0
18	Average Water Supply Rate from ULB & Non-ULB Sources (lpcd)	:	135.0
19	Total Sewage Generation (MLD)*		:	51.2
20	Per Capita Sewage Generation (lpcd)			108.0
21	Sewage Collection (MLD)	:	NA	
22	Percentage of Sewage Collection (%)	:	NA	
23	Number of STPs			NA
24	Total Installed Capacity of STPs under GAP & YAP I & II (MLD)		:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Others (MLI	D)	:	NA
		BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
		TKN	:	NA
	Dellution Load (Demostic) (Mothed 3: Dem Conita	BOD ₅	:	12800.5
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	21760.9
		TKN	:	2560.1
				River & Land
30			:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Falgu River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies			NA
34	Gross Area of Water Bodies (Hectare)			NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
·			_	

	Water Balance & Pollution Load (Domestic) Fact Sheet				
City: Ha	City: Hajipur State: Bihar				
S. No.	Items			Value	
1	Total Area (sq km)			19.64	
2	Population as in 2011			147688	

3	Population Growth Rate as in 2011 (%)		:	23.68
4	Total Number of Wards		:	39
5	Population per Ward (Thousands)		:	3,787
6	Total Number of Household as in 2011		:	24033
7	Number of Household per Ward		:	616
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ipo	cd)	:	NA
17	Total Water Supply from ULB and Non-ULB Source	es (MLD)	:	19.9
18	Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd)		:	135.0
19	Total Sewage Generation (MLD)*		:	16.0
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP	I & II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Ot	hers (MLD)	:	NA
		BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual	COD	:	NA
	Flow) (kg/d)	TKN	:	NA
	_ ,, , , ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,	BOD₅	:	3987.6
29	Pollution Load (Domestic) (Method 2: Per	COD	:	6778.9
	Capita Contribution) (kg/d)	TKN	1:	797.5
				River & Land
30	Wastewater Disposal Means		:	Disposal
	Name of Piver/Streams for Wastewater Disposal			Gandak&
31	Name of River/Streams for Wastewater Disposal		:	Ganga River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
			_	

Water Balance & Pollution Load (Domestic) Fact Sheet				
City: Jamalpur State: Bihar			e: Bihar	
S. No.	Items			Value

		1	<u> </u>		
1 Total Area (sq km)		:	10.65		
2 Population as in 2011		:	105434		
3 Population Growth Rate as in 2011 (%)		:	8.71		
4 Total Number of Wards		:	36		
5 Population per Ward (Thousands)		:	2,929		
6 Total Number of Household as in 2011		:	20372		
7 Number of Household per Ward		:	566		
8 Surface Water Supply (MLD)		:	NA		
9 Ground Water (GW) Supply (MLD)		:	NA		
10 Number of Bore Wells		:	NA		
11 Ground Water Extraction per Bore Well (MLD)		:	NA		
12 Number of Hand Pumps/ Tubewells		:	NA		
13 Ground Water Extraction per Hand Pump (lpd)		:	NA		
14 Number of Pumping Stations for Water Supply		:	NA		
15 Total Pumping Capacity (MLD)		:	NA		
16 Average Water Supply Rate from ULB Sources (Ipco	d)	:	NA		
17 Total Water Supply from ULB and Non-ULB Source	7 Total Water Supply from ULB and Non-ULB Sources (MLD)		14.2		
Average Water Supply Rate from ULB & Non-ULB Sources (lpcd)		:	135.0		
7 Total Sewage Generation (MLD)*		:	11.4		
Per Capita Sewage Generation (Ipcd)		:	108.0		
Sewage Collection (MLD)		:	NA		
22 Percentage of Sewage Collection (%)	Percentage of Sewage Collection (%)		NA		
23 Number of STPs		:	NA		
24 Total Installed Capacity of STPs under GAP & YAP I	& II (MLD)	:	NA		
25 Current Utilized Capacity of STPs (MLD)		:	NA		
26 Percentage Utilization of Installed Capacity (%)		:	NA		
27 Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA		
Dellution Lond (Doubletic) (Marth ed 1, Astual	BOD ₅	:	NA		
Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA		
110W) (kg/u)	TKN	:	NA		
Dellution Load (Demostic) (Mathed 2: Per Capita	BOD ₅	:	2846.7		
Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	4839.4		
Continuation (Ng/ a)	TKN	:	569.3		
Wastewater Disposal Means			River & Land		
30		:	Disposal		
Name of River/Streams for Wastewater Disposal		:	Ganga River		
Number of Drains/Nallah for Wastewater Disposal		:	NA		
Number of Water Bodies		:	NA		
34 Gross Area of Water Bodies (Hectare)		:	NA		
35 Area of Water Bodies as % of Total Area : <<< 1					
Water Balance & Pollution Load (Domestic) Fact Sheet					

City: Je	r: Jehanabad S		Stat	State: Bihar	
S. No.	Items			Value	
1	Total Area (sq km)		:	20.23	
2	Population as in 2011		:	103202	
3	Population Growth Rate as in 2011 (%)		:	26.62	
4	Total Number of Wards		:	33	
5	Population per Ward (Thousands)		:	3,127	
6	Total Number of Household as in 2011		:	16802	
7	Number of Household per Ward		:	509	
8	Surface Water Supply (MLD)		:	NA	
9	Ground Water (GW) Supply (MLD)		:	NA	
10	Number of Bore Wells		:	NA	
11	Ground Water Extraction per Bore Well (MLD)		:	NA	
12	Number of Hand Pumps/ Tubewells		:	NA	
13	Ground Water Extraction per Hand Pump (lpd)		:	NA	
14	Number of Pumping Stations for Water Supply		:	NA	
15	Total Pumping Capacity (MLD)		:	NA	
16	Average Water Supply Rate from ULB Sources (lpcd)		:	NA	
17	Total Water Supply from ULB and Non-ULB Sources (MLD)		:	13.9	
18	Average Water Supply Rate from ULB & Non-ULB Sources (lpcd)		:	135.0	
19	Total Sewage Generation (MLD)*		:	11.1	
20	Per Capita Sewage Generation (Ipcd)		:	108.0	
21	Sewage Collection (MLD)		:	NA	
22	Percentage of Sewage Collection (%)		:	NA	
23	Number of STPs		:	NA	
24	Total Installed Capacity of STPs under GAP & YAP I	& II (MLD)	:	NA	
25	Current Utilized Capacity of STPs (MLD)		:	NA	
26	Percentage Utilization of Installed Capacity (%)		:	NA	
27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA	
		BOD ₅	:	NA	
28	Pollution Load (Domestic) (Method 1: Actual	COD	:	NA	
	Flow) (kg/d)	TKN	:	NA	
		BOD ₅	:	2786.5	
29	Pollution Load (Domestic) (Method 2: Per Capita	COD	:	4737.0	
-	Contribution) (kg/d)	TKN	:	557.3	
				River & Land	
30	Wastewater Disposal Means		:	Disposal	
	Name of Biver/Streams for Wastewater Disposal			Dardha	
31	Name of River/Streams for Wastewater Disposal		:	River	
32	Number of Drains/Nallah for Wastewater Disposal		:	NA	
33	Number of Water Bodies		:	NA	

34	Gross Area of Water Bodies (Hectare)			NA
35	Area of Water Bodies as % of Total Area			<<< 1
	Water Balance & Pollution Load (Dome	stic) Fact Shee	<u>t</u>	
City: Ka	City: Katihar St			e: Bihar
S. No.	Items			Value
1	Total Area (sq km)		:	51.70
2	Population as in 2011		:	240838
3	Population Growth Rate as in 2011 (%)		:	26.18
4	Total Number of Wards		:	45
5	Population per Ward (Thousands)		:	5,352
6	Total Number of Household as in 2011		:	47059
7	Number of Household per Ward		:	1046
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ipcd)		:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)		:	32.5
18	8 Average Water Supply Rate from ULB & Non-ULB Sources (lpcd)		:	135.0
19	Total Sewage Generation (MLD)*		:	26.0
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I	& II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA
	Pollution Load (Domostic) (Mathed 1: Actual	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
	11000) (118) (2)	TKN	:	NA
	Pollution Load (Domestic) (Method 2: Per Capita	BOD ₅	:	6502.6
29	Contribution) (kg/d)	COD	:	11054.5
	33	TKN	:	1300.5
Wastewater Disposal Means			River & Land	
30	·			Disposal
31	Name of River/Streams for Wastewater Disposal			Ganga River

32	Number of Drains/Nallah for Wastewater Disposal	:	NA
33	Number of Water Bodies	:	NA
34	Gross Area of Water Bodies (Hectare)	:	NA
35	Area of Water Bodies as % of Total Area	:	<<< 1

City: Kishanganj Items Value S. No. Items : 30.12 1 Total Area (sq km) : 105782 2 Population as in 2011 : 105782 3 Population Growth Rate as in 2011 (%) : 23.59 4 Total Number of Wards : 33.3 5 Population per Ward (Thousands) : 3,206 6 Total Number of Household as in 2011 : 20698 7 Number of Household per Ward : 627 8 Surface Water Supply (MLD) : NA 9 Ground Water (GW) Supply (MLD) : NA 10 Number of Bore Wells : NA 11 Ground Water Extraction per Bore Well (MLD) : NA 12 Number of Hand Pumps/ Tubewells : NA 13 Ground Water Extraction per Hand Pump (Ipd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Pumping Tube Multang Non-U		Water Balance & Pollution Load (Domestic) Fact Sheet				
Total Area (sq km)	City: Ki	ty: Kishanganj S			e: Bihar	
2	S. No.	Items			Value	
3	1	Total Area (sq km)		:	30.12	
Total Number of Wards 33 3,206	2	Population as in 2011		:	105782	
S	3	Population Growth Rate as in 2011 (%)		:	23.59	
Total Number of Household as in 2011 20698	4	Total Number of Wards		:	33	
Number of Household per Ward Surface Water Supply (MLD) NA	5	Population per Ward (Thousands)		:	3,206	
8 Surface Water Supply (MLD) : NA 9 Ground Water (GW) Supply (MLD) : NA 10 Number of Bore Wells : NA 11 Ground Water Extraction per Bore Well (MLD) : NA 12 Number of Hand Pumps/ Tubewells : NA 13 Ground Water Extraction per Hand Pump (lpd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (lpcd) : NA 17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 14.3 18 Average Water Supply Rate from ULB & Non-ULB Sources (lpcd) : 135.0 19 Total Sewage Generation (MLD)* : 11.4 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita COD : A855.4	6	Total Number of Household as in 2011		:	20698	
9 Ground Water (GW) Supply (MLD) : NA 10 Number of Bore Wells : NA 11 Ground Water Extraction per Bore Well (MLD) : NA 12 Number of Hand Pumps/ Tubewells : NA 13 Ground Water Extraction per Hand Pump (Ipd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 14.3 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 11.4 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) : 4855.4	7	Number of Household per Ward		:	627	
10 Number of Bore Wells 11 Ground Water Extraction per Bore Well (MLD) 12 Number of Hand Pumps/ Tubewells 13 Ground Water Extraction per Hand Pump (Ipd) 14 Number of Pumping Stations for Water Supply 15 Total Pumping Capacity (MLD) 16 Average Water Supply Rate from ULB Sources (Ipcd) 17 Total Water Supply Rate from ULB Sources (MLD) 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) 19 Total Sewage Generation (MLD)* 20 Per Capita Sewage Generation (Ipcd) 21 Sewage Collection (MLD) 22 Percentage of Sewage Collection (%) 23 Number of STPs 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) 25 Current Utilized Capacity of STPs (MLD) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) 20 Response of Hand Pumps (Ipd) 21 NA 22 Per Capita Sewage Collection (%) 23 Number of STPs 24 Total Installed Capacity of STPs (MLD) 25 Current Utilized Capacity of STPs (MLD) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) 3 Robert States (RDD) 4 Robert States (RDD) 5 Robert States (RDD) 6 Robert States (RDD) 7 Robert States (RDD) 7 Robert States (RDD) 8 Robert States (RDD) 8 Robert States (RDD) 9 Robert States	8	Surface Water Supply (MLD)		:	NA	
11 Ground Water Extraction per Bore Well (MLD) : NA 12 Number of Hand Pumps/ Tubewells : NA 13 Ground Water Extraction per Hand Pump (Ipd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 14.3 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 11.4 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	9	Ground Water (GW) Supply (MLD)		:	NA	
12 Number of Hand Pumps/ Tubewells 13 Ground Water Extraction per Hand Pump (lpd) 14 Number of Pumping Stations for Water Supply 15 Total Pumping Capacity (MLD) 16 Average Water Supply Rate from ULB Sources (lpcd) 17 Total Water Supply from ULB and Non-ULB Sources (MLD) 18 Average Water Supply Rate from ULB & Non-ULB Sources (lpcd) 19 Total Sewage Generation (MLD)* 20 Per Capita Sewage Generation (lpcd) 21 Sewage Collection (MLD) 22 Percentage of Sewage Collection (%) 23 Number of STPs 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) 25 Current Utilized Capacity of STPs (MLD) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 29 Pollution Load (Domestic) (Method 2: Per Capita COD 20 : NA 21 Pollution Load (Domestic) (Method 2: Per Capita COD 22 COD 23 Sewage Collection (MLD) 24 COD 25 COD 26 COD 27 CAPACITY (MAC) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 29 Pollution Load (Domestic) (Method 2: Per Capita COD 30 COD 31 COD 32 COD 33 COD 34 COD 35 COD 36 COD 37 COD 38 CO	10	Number of Bore Wells		:	NA	
13 Ground Water Extraction per Hand Pump (Ipd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 14.3 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 11.4 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) ENA 29 Pollution Load (Domestic) (Method 2: Per Capita BOD ₅ : NA COD	11	Ground Water Extraction per Bore Well (MLD)		:	NA	
14 Number of Pumping Stations for Water Supply 15 Total Pumping Capacity (MLD) 16 Average Water Supply Rate from ULB Sources (Ipcd) 17 Total Water Supply from ULB and Non-ULB Sources (MLD) 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) 19 Total Sewage Generation (MLD)* 20 Per Capita Sewage Generation (Ipcd) 21 Sewage Collection (MLD) 22 Percentage of Sewage Collection (%) 23 Number of STPs 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) 25 Current Utilized Capacity of STPs (MLD) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 29 Pollution Load (Domestic) (Method 2: Per Capita COD 20 : NA 21	12	Number of Hand Pumps/ Tubewells		:	NA	
15 Total Pumping Capacity (MLD) 16 Average Water Supply Rate from ULB Sources (Ipcd) 17 Total Water Supply from ULB and Non-ULB Sources (MLD) 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) 19 Total Sewage Generation (MLD)* 20 Per Capita Sewage Generation (Ipcd) 21 Sewage Collection (MLD) 22 Percentage of Sewage Collection (%) 23 Number of STPs 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) 25 Current Utilized Capacity of STPs (MLD) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) 20 COD 21 Sewage Collection (%) 22 Percentage Utilization of Installed Capacity (%) 23 NA 24 Total Installed Capacity of STPs (MLD) 25 Current Utilized Capacity of STPs (MLD) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 29 COD 20 : NA 20	13	Ground Water Extraction per Hand Pump (lpd)		:	NA	
16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 14.3 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 11.4 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 POllution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) : 4855.4	14	Number of Pumping Stations for Water Supply		:	NA	
17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 14.3 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 11.4 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) : 4855.4	15	Total Pumping Capacity (MLD)		:	NA	
18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 11.4 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) ROD5 NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) COD 2856.1	16	Average Water Supply Rate from ULB Sources (lpcd)		:	NA	
19 Total Sewage Generation (MLD)* 20 Per Capita Sewage Generation (Ipcd) 21 Sewage Collection (MLD) 22 Percentage of Sewage Collection (%) 23 Number of STPs 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) 25 Current Utilized Capacity of STPs (MLD) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	17	Total Water Supply from ULB and Non-ULB Sources (MLD)		:	14.3	
20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	18	Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd)		:	135.0	
21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) ENA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) ENA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) ENA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) ENA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) ENA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) ENA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) ENA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) ENA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) ENA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) ENA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) ENA 20 POLITIZED (ENA 21 POLITIZED (ENA 22 POLITIZED (ENA 23 POLITIZED (ENA 24 POLITIZED (ENA 25 POLITIZED (ENA 26 POLITIZED (ENA 27 POLITIZED (ENA 28 POLITIZED (ENA 29 POLITIZED (ENA 29 POLITIZED (ENA 20 POLITIZED (ENA 20 POLITIZED (ENA 20 POLITIZED (ENA 20 POLITIZED (ENA 21 POLITIZED (ENA 22 POLITIZED (ENA 23 POLITIZED (ENA 24 POLITIZED (ENA 25 POLITIZED (ENA 26 POLITIZED (ENA 27 POLITIZED (ENA 28 POLITIZED (ENA 29 POLITIZED (ENA 20 POLITIZED (ENA 20 POLITIZED (ENA 20 POLITIZED (ENA 20 POLITIZED (ENA 21 POLITIZED (ENA 21 POLITIZED (ENA 22 POLITIZED (ENA 23 POLITIZED (ENA 24 POLITIZED (ENA 25 POLITIZED (ENA 26 POLITIZED (ENA 27 POLITIZED (ENA 28 POLITIZED (ENA 28 POLITIZED (ENA 29 POLITIZED (ENA 20 POLITIZED (ENA 20 POLITIZED (ENA 20 POLITIZED (ENA 20 POLITIZED (ENA 21 POLITIZED (ENA 21 POLIT	19	Total Sewage Generation (MLD)*		:	11.4	
Percentage of Sewage Collection (%) : NA	20	Per Capita Sewage Generation (Ipcd)		:	108.0	
Number of STPs I NA NA Total Installed Capacity of STPs under GAP & YAP I & II (MLD) Current Utilized Capacity of STPs (MLD) Percentage Utilization of Installed Capacity (%) Capacity of STPs Sanctioned under JNNURM & Others (MLD) Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) RA SNA BOD ₅ TKN NA BOD ₅ COD ABS 6.1 COD ABS 6.1	21	Sewage Collection (MLD)		:	NA	
Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA Current Utilized Capacity of STPs (MLD) : NA Percentage Utilization of Installed Capacity (%) : NA Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) : 2856.1 COD : 4855.4	22	Percentage of Sewage Collection (%)		:	NA	
25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) : 4855.4	23	Number of STPs		:	NA	
26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) : 4855.4	24	Total Installed Capacity of STPs under GAP & YAP I	& II (MLD)	:	NA	
27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) : 4855.4	25	Current Utilized Capacity of STPs (MLD)		:	NA	
28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) BOD ₅ : NA COD : NA TKN : NA Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) BOD ₅ : 2856.1 COD : 4855.4	26	Percentage Utilization of Installed Capacity (%)		:	NA	
Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	27	Capacity of STPs Sanctioned under JNNURM & Oth	ners (MLD)	<u>:</u>	NA	
28 Flow) (kg/d)		Dollution Load (Domostic) (Mathed 1. Actual	BOD ₅		NA	
29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) TKN : NA BOD ₅ : 2856.1 COD : 4855.4	28	, , , , , , , , , , , , , , , , , , , ,	COD	:	NA	
Pollution Load (Domestic) (Method 2: Per Capita COD : 4855.4		Tiow, (kg/u)	TKN	:	NA	
Contribution) (kg/d) Contribution COD : 4855.4		Ball Marchael (Barrell) (Barrell 12 Barrell)	BOD ₅	:	2856.1	
Contribution) (kg/d)	29		COD	:	4855.4	
		Contribution) (kg/u)	TKN	:		

30	Wastewater Disposal Means			River & Land
30			+	Disposal Mahananda
31	Name of River/Streams for Wastewater Disposal		:	River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
	Water Balance & Pollution Load (Domestic) F	act Sheet	<u>.</u>	
City: M	otihari		Stat	te: Bihar
S. No.	Items			Value
1	Total Area (sq km)		:	16.38
2	Population as in 2011		:	126158
3	Population Growth Rate as in 2011 (%)		:	25.30
4	Total Number of Wards		:	38
5	Population per Ward (Thousands)		:	3,320
6	Total Number of Household as in 2011		:	22224
7	Number of Household per Ward		:	585
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	500
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)		:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MLI	D)	:	17.0
18	Average Water Supply Rate from ULB & Non-ULB Source	s (lpcd)!	:	NA
19	Total Sewage Generation (MLD)***		:	10.8
20	Per Capita Sewage Generation (lpcd)!		:	NA
21	Sewage Collection (MLD)		:	3.7
22	Percentage of Sewage Collection (%)		:	100
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP I & II (MLD)		:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under JNNURM & Others (Marchael Capacity of STPs Sanctioned under	1LD)	:	NA
	Pollution Load (Domestic) (Method 1: Actual Flow)	BOD ₅	:	NA
28	(kg/d)	COD	:	NA
	\(\cdot\)	TKN	:	NA

		BOD ₅		:	3406.3
29	Pollution Load (Domestic) (Method 2: Per Capita	COD		:	5790.7
	Contribution) (kg/d)	TKN		:	681.3
30	Wastewater Disposal Means	•		:	River & Lake
	Name of River/Streams for Wastewater Disposal				Bahuri
31	Name of River/Streams for Wastewater Disposar			:	Gandak
32	Number of Drains/Nallah for Wastewater Disposal			:	17
33	Number of Water Bodies			:	3
34	Gross Area of Water Bodies (Hectare)			:	NA
35	Area of Water Bodies as % of Total Area			:	NA
	Water Balance & Pollution Load (Domestic)	Fact Shee	_		
City: M	unger		Sta	ate	e: Bihar
S. No.	Items				Value
1	Total Area (sq km)			:	17.50
2	Population as in 2011			:	213303
3	Population Growth Rate as in 2011 (%)			:	13.43
4	Total Number of Wards			:	45
5	Population per Ward (Thousands)			:	4,740
6	Total Number of Household as in 2011			:	38921
7	Number of Household per Ward			:	865
8	Surface Water Supply (MLD)			:	NA
9	Ground Water (GW) Supply (MLD)			:	NA
10	Number of Bore Wells			:	NA
11	Ground Water Extraction per Bore Well (MLD)			:	NA
12	Number of Hand Pumps/ Tubewells			:	NA
13	Ground Water Extraction per Hand Pump (lpd)			:	NA
14	Number of Pumping Stations for Water Supply			:	NA
15	Total Pumping Capacity (MLD)			:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)			:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MI	_D)		:	28.8
18	Average Water Supply Rate from ULB & Non-ULB Source	es (lpcd)		:	135.0
19	Total Sewage Generation (MLD)*			:	23.0
20	Per Capita Sewage Generation (Ipcd)			:	108.0
21	Sewage Collection (MLD)			:	NA
22	Percentage of Sewage Collection (%)			:	NA
23	Number of STPs			:	NA
24	Total Installed Capacity of STPs under GAP & YAP I & II	MLD)		:	NA
25	Current Utilized Capacity of STPs (MLD)			:	NA
26	Percentage Utilization of Installed Capacity (%)			:	NA
27	Capacity of STPs Sanctioned under JNNURM & Others (MLD)		:	NA
28	Pollution Load (Domestic) (Method 1: Actual BOD) ₅		:	NA

	Flow) (kg/d)	COD		: NA
	, (3. /	TKN		: NA
		BOD ₅		: 5759.2
29	Pollution Load (Domestic) (Method 2: Per Capita	COD		: 9790.6
	Contribution) (kg/d)	TKN		: 1151.8
	Westernaton Disposal Manage			River & Land
30	Wastewater Disposal Means			: Disposal
31	Name of River/Streams for Wastewater Disposal			: Ganga River
32	Number of Drains/Nallah for Wastewater Disposal			: NA
33	Number of Water Bodies			: NA
34	Gross Area of Water Bodies (Hectare)			: NA
35	Area of Water Bodies as % of Total Area			: <<< 1
	Water Balance & Pollution Load (Dome	stic) Fact She	<u>eet</u>	
City: M	luzaffarpur		State	e: Bihar
S. No.	Items			Value
1	Total Area (sq km)		:	26.43
2	Population as in 2011		:	354462
3	Population Growth Rate as in 2011 (%)		:	16.02
4	Total Number of Wards		:	49
5	Population per Ward (Thousands)		:	7,234
6	Total Number of Household as in 2011		:	65870
7	Number of Household per Ward		:	1344
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ipc	d)	:	NA
17	Total Water Supply from ULB and Non-ULB Source	s (MLD)	:	47.9
18	Average Water Supply Rate from ULB & Non-ULB S	Sources (Ipcd) :	135.0
19	Total Sewage Generation (MLD)		:	38.3
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP I & II (N	1LD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA

27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA
		BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual	COD	:	NA
	Flow) (kg/d)	TKN	:	NA
		BOD ₅	:	9570.5
29	Pollution Load (Domestic) (Method 2: Per Capita	COD	 	16269.8
	Contribution) (kg/d)	TKN	:	1914.1
30	Wastewater Disposal Means		:	River & Land
	Name of River/Streams for Wastewater Disposal			Bahuri
31	Name of River/Streams for Wastewater Disposal		:	Gandak River
32	Number of Drains/Nallah for Wastewater Disposal		:	20
33	Number of Water Bodies		:	14
34	Gross Area of Water Bodies (sq km)		:	3.02
35	Area of Water Bodies as % of Total Area		:	<<1.0
	Water Balance & Pollution Load (Dome	stic) Fact She	<u>et</u>	
City: Pa	atna		Stat	e: Bihar
S. No.	Items			Value
1	Total Area (sq km)		:	107.69
2	Population as in 2011		:	1684297
3	Population Growth Rate as in 2011 (%)		:	17.60
4	Total Number of Wards		:	72
5	Population per Ward (Thousands)		:	23,393
6	Total Number of Household as in 2011		:	294631
7	Number of Household per Ward		:	4092
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ipco	d)	:	NA
17	Total Water Supply from ULB and Non-ULB Source	s (MLD)	:	227.4
18	Average Water Supply Rate from ULB & Non-ULB S	Sources (lpcd)) :	135.0
19	Total Sewage Generation (MLD)		:	181.9
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP I & II (N	ILD)	:	NA

Current Utilized Capacity of STPs (MLD)		:	NA
6 Percentage Utilization of Installed Capacity (%)		••	NA
Capacity of STPs Sanctioned under JNNURM & Others (MLD)		••	NA
Pollution Load (Domostia) (Mothed 1, Astual	BOD ₅		NA
, ,,	COD	:	NA
riow) (kg/u)	TKN	••	NA
Pollution Load (Domostic) (Mothod 2: Por Capita	BOD ₅		45476.0
, , , , , , , , , , , , , , , , , , , ,	COD	:	77309.2
Contribution (kg/u)	TKN	:	9095.2
Wastewater Disposal Means		:	River & Land Disposal
Name of River/Streams for Wastewater Disposal		:	Ganga River
Number of Drains/Nallah for Wastewater Disposal		:	NA
Number of Water Bodies		:	NA
Gross Area of Water Bodies (sq km)		:	NA
Area of Water Bodies as % of Total Area		:	<<1.0
	Capacity of STPs Sanctioned under JNNURM & Oth Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) Wastewater Disposal Means Name of River/Streams for Wastewater Disposal Number of Drains/Nallah for Wastewater Disposal Number of Water Bodies Gross Area of Water Bodies (sq km)	Capacity of STPs Sanctioned under JNNURM & Others (MLD) Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) Wastewater Disposal Means Name of River/Streams for Wastewater Disposal Number of Drains/Nallah for Wastewater Disposal Number of Water Bodies Gross Area of Water Bodies (sq km)	Capacity of STPs Sanctioned under JNNURM & Others (MLD) Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) Wastewater Disposal Means Name of River/Streams for Wastewater Disposal Number of Drains/Nallah for Wastewater Disposal Number of Water Bodies Gross Area of Water Bodies (sq km)

Water Balance & Pollution Load (Domestic) Fact Sheet

City: Pu	ırnia	State	e: Bihar
S. No.	Items		Value
1	Total Area (sq km)	:	92.29
2	Population as in 2011	:	282248
3	Population Growth Rate as in 2011 (%)	:	64.40
4	Total Number of Wards	:	46
5	Population per Ward (Thousands)	:	6,136
6	Total Number of Household as in 2011	:	54058
7	Number of Household per Ward	:	1175
8	Surface Water Supply (MLD)	:	NA
9	Ground Water (GW) Supply (MLD)	:	NA
10	Number of Bore Wells	:	NA
11	Ground Water Extraction per Bore Well (MLD)	:	NA
12	Number of Hand Pumps	:	NA
13	Ground Water Extraction per Hand Pump (lpd)	:	NA
14	Number of Pumping Stations for Water Supply	:	NA
15	Total Pumping Capacity (MLD)	:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)	:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)	:	38.1
18	Average Water Supply Rate from ULB & Non-ULB Sources (lpcd)) :	135.0
19	Total Sewage Generation (MLD)	:	30.5
20	Per Capita Sewage Generation (Ipcd)	:	108.0
21	Sewage Collection (MLD)	:	NA
22	Percentage of Sewage Collection (%)	:	NA

:	NA
	147 (
:	NA
:	7620.7
:	12955.2
:	1524.1
:	River & Land
	Kosi & Ganga
:	River
:	NA
:	NA
:	NA
:	<<1.0
tate	e: Bihar
	37-1 -
	Value
:	21.13
:	
	21.13
:	21.13 156540
:	21.13 156540 25.06
:	21.13 156540 25.06 41
:	21.13 156540 25.06 41 3,818
: : : : : : : : : : : : : : : : : : : :	21.13 156540 25.06 41 3,818 28862
: : : : : : : : : : : : : : : : : : : :	21.13 156540 25.06 41 3,818 28862 704
: : : : : : : : : : : : : : : : : : : :	21.13 156540 25.06 41 3,818 28862 704 NA
: : : : : : : : : : : : : : : : : : : :	21.13 156540 25.06 41 3,818 28862 704 NA
: : : : : : : : : : : : : : : : : : : :	21.13 156540 25.06 41 3,818 28862 704 NA NA
: : : : : : : : : : : : : : : : : : : :	21.13 156540 25.06 41 3,818 28862 704 NA NA
: : : : : : : : : : : : : : : : : : : :	21.13 156540 25.06 41 3,818 28862 704 NA NA NA
: : : : : : : : : : : : : : : : : : : :	21.13 156540 25.06 41 3,818 28862 704 NA NA NA NA
:::::::::::::::::::::::::::::::::::::::	21.13 156540 25.06 41 3,818 28862 704 NA NA NA NA
:::::::::::::::::::::::::::::::::::::::	21.13 156540 25.06 41 3,818 28862 704 NA NA NA NA NA
	21.13 156540 25.06 41 3,818 28862 704 NA NA NA NA NA NA
	21.13 156540 25.06 41 3,818 28862 704 NA NA NA NA NA NA NA NA NA NA NA
	: : : : : : : : : : : : : : : : : : : :

21	Sewage Collection (MLD)		Τ.	NA
22	Percentage of Sewage Collection (%)		· :	NA
23	Number of STPs		+	NA
24			+:	NA
	25 Current Utilized Capacity of STPs (MLD)		+	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MID)	<u> </u>	NA
27	capacity of off 5 surface office affact state affact a	BOD ₅	+	NA
28	Pollution Load (Domestic) (Method 1: Actual	COD	<u> </u>	NA
	Flow) (kg/d)	TKN	 	NA
		BOD ₅	 	4226.6
29	Pollution Load (Domestic) (Method 2: Per Capita	COD	†:	7185.2
	Contribution) (kg/d)	TKN	Ť.	845.3
			Ť	River & Land
30	Wastewater Disposal Means		:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Koshi River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (sq km)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<1.0
	Water Balance & Pollution Load (Dome	stic) Fact She	<u>et</u>	
City: Sa				e: Bihar
City: Sa				e: Bihar Value
_	saram			
S. No.	saram Items			Value
S. No.	Items Total Area (sq km)			Value 10.9
S. No. 1 2	Items Total Area (sq km) Population as in 2011			Value 10.9 147408
\$. No. 1 2 3	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%)			Value 10.9 147408 12.38
\$. No. 1 2 3 4	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards			Value 10.9 147408 12.38 40
\$. No. 1 2 3 4 5	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands)			Value 10.9 147408 12.38 40 3685
\$. No. 1 2 3 4 5 6	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD)			Value 10.9 147408 12.38 40 3685 23,866
\$. No. 1 2 3 4 5 6 7	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward			Value 10.9 147408 12.38 40 3685 23,866 597
\$. No. 1 2 3 4 5 6 7 8	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD)			Value 10.9 147408 12.38 40 3685 23,866 597 NA
\$. No. 1 2 3 4 5 6 7 8 9	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD)		: : : : : :	Value 10.9 147408 12.38 40 3685 23,866 597 NA NA
\$. No. 1 2 3 4 5 6 7 8 9 10	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells		: : : : : :	Value 10.9 147408 12.38 40 3685 23,866 597 NA NA
\$. No. 1 2 3 4 5 6 7 8 9 10 11	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells Ground Water Extraction per Hand Pump (Ipd)		: : : : : :	Value 10.9 147408 12.38 40 3685 23,866 597 NA NA NA
\$. No. 1 2 3 4 5 6 7 8 9 10 11 12	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells Ground Water Extraction per Hand Pump (Ipd) Number of Pumping Stations for Water Supply		: : : : : :	Value 10.9 147408 12.38 40 3685 23,866 597 NA NA NA NA
\$. No. 1 2 3 4 5 6 7 8 9 10 11 12 13	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells Ground Water Extraction per Hand Pump (Ipd) Number of Pumping Stations for Water Supply Total Pumping Capacity (MLD)		: : : : : :	Value 10.9 147408 12.38 40 3685 23,866 597 NA NA NA NA NA NA NA SOO
\$. No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells Ground Water Extraction per Hand Pump (Ipd) Number of Pumping Stations for Water Supply Total Pumping Capacity (MLD) Average Water Supply Rate from ULB Sources (Ipce	d)	: : : : : :	Value 10.9 147408 12.38 40 3685 23,866 597 NA
S. No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Items Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells Ground Water Extraction per Hand Pump (Ipd) Number of Pumping Stations for Water Supply Total Pumping Capacity (MLD)	d) s (MLD)	: : : : : :	Value 10.9 147408 12.38 40 3685 23,866 597 NA

19	Total Sewage Generation (MLD)*		:	11.29
20	Per Capita Sewage Generation (lpcd)		:	76.62
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP I & II (MLD) :		:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Others	(MLD)	:	NA
	Dellution Load (Demostic) (Mothed 1, Actual Flow)	BOD ₅		NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
	(Ng/ U)	TKN	:	NA
	Pollution Load (Domestic) (Method 2: Per Capita	BOD ₅	:	3980.02
29	Contribution) (kg/d)	COD	:	6766.03
	(1.87 4)	TKN	:	796.00
	Wastewater Disposal Means			
30	·		:	River and Land
31	Name of River/Streams for Wastewater Disposal		:	Kadir & Sone
32	Number of Drains/Nallah for Wastewater Disposal		:	9
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<<1%
	Water Balance & Pollution Load (Domestic	Fact Shee	<u>t</u>	
City: Si	wan State: Bi	har		
S. No.	Items			Value
1	Total Area (sq km)		:	13.05
2	Population as in 2011		:	135066
3	Population Growth Rate as in 2011 (%)		:	22.88
4	Total Number of Wards		:	38
5	Population per Ward (Thousands)		:	3,554
6	Total Number of Household as in 2011		:	21223
7	Number of Household per Ward		:	559
8	Surface Water Supply (MLD)		:	3
9	Ground Water (GW) Supply (MLD)		:	2.84
10	Number of Bore Wells		:	8
11	Ground Water Extraction per Bore Well (MLD)		:	0.38
12	Number of Hand Pumps/ Tubewells		$ \cdot $	550
	Transcr of fland Lamps, Tabewens		_	
13	Ground Water Extraction per Hand Pump (lpd)		:	500
			:	500 NA
13	Ground Water Extraction per Hand Pump (lpd)		:	

17	Total Water Supply from ULB and Non-ULB S	Sources (MLD)	:	6.1
18	Average Water Supply Rate from ULB & Non	-ULB Sources (lpcd)	:	45.3
19	Total Sewage Generation (MLD)		:	3.2
20	Per Capita Sewage Generation (lpcd)		:	24.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP I	& II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)	:	NA
27	Capacity of STPs Sanctioned under JNNURM	& Others (MLD)	:	NA
	Dellation Lood (Demostic) (Mathed 4)	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
	Actual Flow) (kg/u)	TKN	:	NA
	Pollution Load (Domestic) (Method 2: Per	BOD ₅	:	3646.8
29	Capita Contribution) (kg/d)	COD	:	6199.5
	capita contribution, (kg/a)	TKN	:	729.4
	Wastewater Disposal Means			River & Land
30	wastewater bisposar wearis		:	Disposal
31	Name of River/Streams for Wastewater Disp	osal	:	River Daha
32	Number of Drains/Nallah for Wastewater Di	sposal	:	2
33	Number of Water Bodies		:	2
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	NA

Appendix-2

Compilation of Fact Sheets of Water Balance & Pollution Load (Domestic) of Major Class II Cities/Towns in

Bihar

Water Balance & Pollution Load (Domestic) Fact Sheet			
City: Araria Sta		State	e: Bihar
S. No.	Items		Value
1	Total Area (sq km)	:	30.97
2	Population as in 2011	:	79021
3	Population Growth Rate as in 2011 (%)	:	29.84
4	Total Number of Wards		32
5	Population per Ward (Thousands)	:	2,469
6	Total Number of Household as in 2011	:	15248
7	Number of Household per Ward	:	477
8	Surface Water Supply (MLD)	:	NA
9	Ground Water (GW) Supply (MLD)	:	NA
10	Number of Bore Wells	:	NA
11	Ground Water Extraction per Bore Well (MLD)	:	NA

12	Number of Hand Pumps			NA
13	Ground Water Extraction per Hand Pump (lpd)			500
14	Number of Pumping Stations for Water Supply		:	4
15	Total Pumping Capacity (MLD)		:	4
16	Average Water Supply Rate from ULB Sources (Ipco	d)	:	NA
17	Total Water Supply from ULB and Non-ULB Source	s (MLD)	:	10.7
18	Average Water Supply Rate from ULB & Non-ULB S	Sources (Ipcd)	:	135.0
19	Total Sewage Generation (MLD)		:	8.5
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP I & II (N	ILD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA
	Dell dischard (Dec. 11) (Maril 11)	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
		TKN	:	NA
	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	BOD ₅	:	2133.6
29		COD	:	3627.1
		TKN	:	426.7
	Wastewater Disposal Means			River & Land
30			:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Panar River
32	Number of Drains/Nallah for Wastewater Disposal		:	13
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (sq km)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<1.0
	Water Balance & Pollution Load (Dome	stic) Fact Shee	<u>t</u>	
City: Aı	wal		State	e: Bihar
S. No.	S. No. Items			Value
1	<u> </u>			24.43
2	2 Population as in 2011			51849
3	3 Population Growth Rate as in 2011 (%)			NA
4	Total Number of Wards			25
5	Population per Ward (Thousands)			2,074
6	Total Number of Household as in 2011			8453
7	7 Number of Household per Ward			338
8	8 Surface Water Supply (MLD)			NA
9	9 Ground Water (GW) Supply (MLD)			NA

10	Number of Bore Wells			: NA
11	Ground Water Extraction per Bore Well (MLD)			NA NA
12	Number of Hand Pumps/ Tubewells			: NA
13	Ground Water Extraction per Hand Pump (lpd)			: NA
14	Number of Pumping Stations for Water Supply			NA NA
15	Total Pumping Capacity (MLD)			: NA
16	Average Water Supply Rate from ULB Sources (Ipco	d)		NA NA
17	Total Water Supply from ULB and Non-ULB Source	s (MLD)		7.0
18	Average Water Supply Rate from ULB & Non-ULB S	Sources (Ipcd)		135.0
19	Total Sewage Generation (MLD)*			5.6
20	Per Capita Sewage Generation (Ipcd)			108.0
21	Sewage Collection (MLD)			NA NA
22	Percentage of Sewage Collection (%)			NA
23	Number of STPs			NA NA
24	Total Installed Capacity of STPs under GAP & YAP I	& II (MLD)		NA NA
25	Current Utilized Capacity of STPs (MLD)			NA NA
26	Percentage Utilization of Installed Capacity (%)			: NA
27	Capacity of STPs Sanctioned under JNNURM & Oth		NA NA	
	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	BOD ₅		NA
28		COD		NA NA
		TKN		NA NA
	Pollution Load (Domestic) (Method 2: Per Capita	BOD ₅		1399.9
29	Contribution) (kg/d)	COD		2379.9
		TKN		280.0
	Wastewater Disposal Means			River & Land
30				Disposal
31	Name of River/Streams for Wastewater Disposal			Sone River
32	Number of Drains/Nallah for Wastewater Disposal			NA
33	Number of Water Bodies			NA NA
34	Gross Area of Water Bodies (Hectare)			NA
35	Area of Water Bodies as % of Total Area			<<< 1
	Water Balance & Pollution Load (Dome	stic) Fact She	<u>et</u>	
City: Barauni St			Sta	te: Bihar
S. No.	S. No. Items			Value
1	1 Total Area (sq km)			17.55
2	Population as in 2011			71660
3	3 Population Growth Rate as in 2011 (%)			416.21
4	Total Number of Wards			4
5				17,915
	Population per Ward (Thousands)			17,915
6	Population per Ward (Thousands) Total Number of Household as in 2011			12964

8	Surface Water Supply (MLD)			NA
9	Ground Water (GW) Supply (MLD)			NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ipco	d)	:	NA
17	Total Water Supply from ULB and Non-ULB Source	s (MLD)	:	9.7
18	Average Water Supply Rate from ULB & Non-ULB S	Sources (Ipcd)	:	135.0
19	Total Sewage Generation (MLD)*		:	7.7
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)	-	:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I	& II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)			NA
26	Percentage Utilization of Installed Capacity (%)			NA
27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA
	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	BOD ₅	:	NA
28		COD	:	NA
		TKN	:	NA
	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	BOD ₅	:	1934.8
29		COD	:	3289.2
		TKN	:	387.0
	Waste also Bissand Massa			River & Land
30	Wastewater Disposal Means		:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Ganga River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
	Water Balance & Pollution Load (Dome	stic) Fact She	<u>et</u>	
City: Ba	State	e: Bihar		
S. No.	Items			Value
1	Total Area (sq km)		:	4.50
2	Population as in 2011		:	61470
3	Population Growth Rate as in 2011 (%)			26.89
4	Total Number of Wards			27
5	Population per Ward (Thousands)		:	2,277

6	Total Number of Household as in 2011			9310	
7	Number of Household per Ward			345	
8	Surface Water Supply (MLD)		:	NA	
9	Ground Water (GW) Supply (MLD)		:	NA	
10	Number of Bore Wells		:	NA	
11	Ground Water Extraction per Bore Well (MLD)		:	NA	
12	Number of Hand Pumps/ Tubewells		:	NA	
13	Ground Water Extraction per Hand Pump (lpd)		:	NA	
14	Number of Pumping Stations for Water Supply		:	NA	
15	Total Pumping Capacity (MLD)		:	NA	
16	Average Water Supply Rate from ULB Sources (Ipco	d)	:	NA	
17	Total Water Supply from ULB and Non-ULB Source	s (MLD)	•	8.3	
18	Average Water Supply Rate from ULB & Non-ULB S	Sources (Ipcd) :	135.0	
19	Total Sewage Generation (MLD)*		:	6.6	
20	Per Capita Sewage Generation (Ipcd)		•	108.0	
21	Sewage Collection (MLD)		:	NA	
22	Percentage of Sewage Collection (%)		:	NA	
23	Number of STPs			NA	
24	Total Installed Capacity of STPs under GAP & YAP I & II (MLD)			NA	
25	Current Utilized Capacity of STPs (MLD)			NA	
26	Percentage Utilization of Installed Capacity (%)			NA	
27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA	
	Delli ilian land (Daniella) (Marked A. Antal	BOD ₅	:	NA	
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA	
	Flow) (kg/d)	TKN	:	NA	
	Pollution Load (Domostic) (Mothod 2: Por Capita	BOD ₅	:	1659.7	
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	2821.5	
	Contribution) (kg/u)	TKN	:	331.9	
	Wastowater Disposal Means			River & Land	
30	Wastewater Disposal Means		<u>:</u>	Disposal	
31	Name of River/Streams for Wastewater Disposal			Ganga River	
32	Number of Drains/Nallah for Wastewater Disposal			NA	
33	Number of Water Bodies			NA	
34	Gross Area of Water Bodies (Hectare)			NA	
35	Area of Water Bodies as % of Total Area			<<< 1	
Water Balance & Pollution Load (Domestic) Fact Sheet					
City: Banipur St				e: Bihar	
S. No.	. No. Items			Value	
1	Total Area (sq km)			46.02	
2	Population as in 2011			75317	
3	Population Growth Rate as in 2011 (%)			NA	
				•	

5	4	Total Number of Wards		:	29	
7	5	Population per Ward (Thousands)			2,597	
Surface Water Supply (MLD)	6	Total Number of Household as in 2011		:	15078	
9 Ground Water (GW) Supply (MLD) : NA 10 Number of Bore Wells : NA 11 Ground Water Extraction per Bore Well (MLD) : NA 12 Number of Hand Pumps/ Tubewells : NA 13 Ground Water Extraction per Hand Pump (Ipd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Water Supply Rate from ULB Sources (Ipcd) : NA 18 Average Water Supply Rate from ULB Sources (Ipcd) : 10.2 18 Average Water Supply Rate from ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : NA 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita COD : NA 30 Wastewater Disposal Means : NA 30 Wastewater Disposal Means : NA 31 Name of River/Streams for Wastewater Disposal : NA 32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies (Hectare) : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : Value City: Bhabua : Value City: Bhabua : Value	7	Number of Household per Ward		:	520	
10	8	Surface Water Supply (MLD)		:	NA	
11 Ground Water Extraction per Bore Well (MLD) 1 NA 12 Number of Hand Pumps/ Tubewells 1 NA 13 Ground Water Extraction per Hand Pump (Ipd) 1 NA 14 Number of Pumping Stations for Water Supply 1 NA 15 Total Pumping Capacity (MLD) 1 NA 16 Average Water Supply Rate from ULB Sources (Ipcd) 1 NA 17 Total Water Supply Rate from ULB Sources (MLD) 1 10.2 18 Average Water Supply Rate from ULB Sources (MLD) 1 10.2 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) 1 135.0 19 Total Sewage Generation (MLD)* 1 108.0 1	9	Ground Water (GW) Supply (MLD)		:	NA	
12	10	Number of Bore Wells		:	NA	
13 Ground Water Extraction per Hand Pump (Ipd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Water Supply Rate from ULB Sources (MLD) : 10.2 18 Average Water Supply Rate from ULB Sources (IMLD) : 135.0 19 Total Sewage Generation (MLD)* : 108.0 19 Total Sewage Generation (MLD)* : 108.0 20 Per Capita Sewage Generation (MLD) : NA 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPS : NA 24 Total Installed Capacity of STPs under GAP & YAP & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) : NA 30 Wastewater Disposal Means : Disposal : Kamla River & Land Disposal : NA 31 Name of River/Streams for Wastewater Disposal : NA 32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies (Hectare) : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<<1	11	Ground Water Extraction per Bore Well (MLD)		:	NA	
14 Number of Pumping Stations for Water Supply : NA 15	12	Number of Hand Pumps/ Tubewells		:	NA	
15	13	Ground Water Extraction per Hand Pump (lpd)		:	NA	
16	14	Number of Pumping Stations for Water Supply		:	NA	
17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 10.2 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 8.1 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) BOD ₅ : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) COD : NA 30 Wastewater Disposal Means : NA 31 Name of River/Streams for Wastewater Disposal : Kamla River 32 Number of Drains/Nallah for Wastewater Disposal : NA 33	15	Total Pumping Capacity (MLD)		:	NA	
18	16	Average Water Supply Rate from ULB Sources (Ipco	d)	:	NA	
19	17	Total Water Supply from ULB and Non-ULB Source	s (MLD)	:	10.2	
20	18	Average Water Supply Rate from ULB & Non-ULB S	ources (lpcd)) :	135.0	
21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) BOD₅ : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) COD : NA 30 Wastewater Disposal Means : Disposal 31 Name of River/Streams for Wastewater Disposal : Kamla River 32 Number of Drains/Nallah for Wastewater Disposal : Kamla River 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<<<1	19	Total Sewage Generation (MLD)*		:	8.1	
22 Percentage of Sewage Collection (%) : NA	20	Per Capita Sewage Generation (Ipcd)		:	108.0	
23	21	. Sewage Collection (MLD)			NA	
Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25	22	Percentage of Sewage Collection (%)			NA	
Current Utilized Capacity of STPs (MLD) : NA	23	Number of STPs			NA	
26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) <td: na<="" td=""> 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) BOD₅ <td: na<="" td=""> 29 COD : NA Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) BOD₅ : 2033.6 COD : 3457.1 TKN : 406.7 River & Land Disposal : Na 30 Wastewater Disposal Means : Kamla River 31 Name of River/Streams for Wastewater Disposal : Kamla River 32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<<1</td:></td:>	24	Total Installed Capacity of STPs under GAP & YAP I & II (MLD)			NA	
27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) 30 Wastewater Disposal Means 31 Name of River/Streams for Wastewater Disposal 31 Name of River/Streams for Wastewater Disposal 32 Number of Drains/Nallah for Wastewater Disposal 33 Number of Water Bodies 34 Gross Area of Water Bodies (Hectare) 35 Area of Water Bodies as % of Total Area COD 1 NA River & Land 1 Disposal 1 NA 33 Number of Water Bodies 1 NA 34 Gross Area of Water Bodies (Hectare) 35 Area of Water Bodies as % of Total Area City: Bhabua State: Bihar Value	25	Current Utilized Capacity of STPs (MLD)			NA	
Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) 30 Wastewater Disposal Means 31 Name of River/Streams for Wastewater Disposal 32 Number of Drains/Nallah for Wastewater Disposal 33 Number of Water Bodies 34 Gross Area of Water Bodies (Hectare) 35 Area of Water Bodies as % of Total Area City: Bhabua State: Bihar Value	26	Percentage Utilization of Installed Capacity (%)			NA	
Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 29	27	Capacity of STPs Sanctioned under JNNURM & Others (MLD)			NA	
Flow) (kg/d) COD : NA		Dollation Load (Domostis) (Mothed 1, Astual	BOD ₅	:	NA	
Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) River & Land Disposal Name of River/Streams for Wastewater Disposal Number of Drains/Nallah for Wastewater Disposal Number of Water Bodies River & Land Disposal Kamla River NA Number of Water Bodies NA Area of Water Bodies (Hectare) Area of Water Bodies as % of Total Area Water Balance & Pollution Load (Domestic) Fact Sheet City: Bhabua	28	, , ,	COD	:	NA	
Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) COD		Tiow) (kg/d)	TKN	:	NA	
Contribution) (kg/d) Contribution) (kg/d) CoD : 3457.1 TKN : 406.7 River & Land Disposal Name of River/Streams for Wastewater Disposal : Kamla River Number of Drains/Nallah for Wastewater Disposal : NA Number of Water Bodies Gross Area of Water Bodies (Hectare) : NA Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Bhabua State: Bihar S. No. Items Value		Della Caral (Danasa) (Marila da 2 Dan Caral	BOD ₅	:	2033.6	
Wastewater Disposal Means Wastewater Disposal Means I River & Land Disposal I Name of River/Streams for Wastewater Disposal Number of Drains/Nallah for Wastewater Disposal Number of Water Bodies Gross Area of Water Bodies (Hectare) Area of Water Bodies as % of Total Area Water Balance & Pollution Load (Domestic) Fact Sheet City: Bhabua State: Bihar Value	29	I COD	COD	:	3457.1	
30 Wastewater Disposal Means : Disposal 31 Name of River/Streams for Wastewater Disposal : Kamla River 32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Bhabua State: Bihar S. No. Items Value		Contribution) (kg/u)	TKN	:	406.7	
31 Name of River/Streams for Wastewater Disposal : Kamla River 32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Bhabua State: Bihar S. No. Items Value		Wasternator Diametel Manne			River & Land	
32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Bhabua State: Bihar S. No. Items Value	30	30 Wastewater Disposal Means			Disposal	
33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Bhabua State: Bihar S. No. Items Value	31	Name of River/Streams for Wastewater Disposal			Kamla River	
34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Bhabua State: Bihar S. No. Items Value	32	32 Number of Drains/Nallah for Wastewater Disposal		:	NA	
35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Bhabua State: Bihar S. No. Items Value	33	Number of Water Bodies		:	NA	
Water Balance & Pollution Load (Domestic) Fact Sheet City: Bhabua State: Bihar S. No. Items Value	34	Gross Area of Water Bodies (Hectare)		:	NA	
City: Bhabua State: Bihar S. No. Items Value	35	35 Area of Water Bodies as % of Total Area			<<< 1	
S. No. Items Value	Water Balance & Pollution Load (Domestic) Fact Sheet					
	City: Bhabua			Stat	ate: Bihar	
1 Total Area (sq km) : 7.12		S. No. Items			Value	
	1	1 Total Area (sq km)			7.12	

2	Population as in 2011		:	50179
3	Population Growth Rate as in 2011 (%)		:	20.12
4	Total Number of Wards		:	25
5	Population per Ward (Thousands)		:	2,007
6	Total Number of Household as in 2011		:	7855
7	Number of Household per Ward		:	314
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ipco	(k	:	NA
17	Total Water Supply from ULB and Non-ULB Source	s (MLD)	:	6.8
18	Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd)			135.0
19	Total Sewage Generation (MLD)*			5.4
20	Per Capita Sewage Generation (lpcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I & II (MLD)		:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA
	Dollution Load (Domostia) (Mathed 4. Astual	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
	riow) (kg/u)	TKN	:	NA
	Dell dischard (Dec. 11) (Maril 12, 2, 2, 11)	BOD ₅	:	1354.8
29	Pollution Load (Domestic) (Method 2: Per Capita	COD	1:	2303.2
	Contribution) (kg/d)	TKN	:	271.0
	Mostowator Disposal Masins			River & Land
30	Wastewater Disposal Means			Disposal
31	Name of River/Streams for Wastewater Disposal		:	Suwara River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
Water Balance & Pollution Load (Domestic) Fact Sheet				
City: B	City: Bihat St			
<u>-</u>				

S. No.	Items			Value
1	Total Area (sq km)	•	:	23.45
2	Population as in 2011		:	67952
3	Population Growth Rate as in 2011 (%)		:	NA
4	Total Number of Wards		:	7
5	Population per Ward (Thousands)		:	9,707
6	Total Number of Household as in 2011		:	12958
7	Number of Household per Ward		:	1851
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ipco	<u>(</u> t	:	NA
17	Total Water Supply from ULB and Non-ULB Source	s (MLD)	:	9.2
18	Average Water Supply Rate from ULB & Non-ULB S	Sources (Ipcd)	:	135.0
19	Total Sewage Generation (MLD)*		:	7.3
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I & II (MLD)		:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA
	Delli ilian kanal (Danisal III) (Marika da Arian)	BOD₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual	COD	:	NA
	Flow) (kg/d)	TKN	:	NA
	Pollution Load (Domestic) (Method 2: Per Capita	BOD ₅	:	1834.7
29	Contribution) (kg/d)	COD	:	3119.0
		TKN	:	366.9
	Wastewater Disposal Means			River & Land
30	·		:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Ganga River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1

	Water Balance & Pollution Load (Dome	stic) Fact She	<u>et</u>	
City: Da	audnagar		State: Bihar	
S. No.	Items			Value
1	Total Area (sq km)		:	13.96
2	Population as in 2011		:	52364
3	Population Growth Rate as in 2011 (%)		:	37.75
4	Total Number of Wards		:	23
5	Population per Ward (Thousands)		:	2,277
6	Total Number of Household as in 2011		:	8111
7	Number of Household per Ward		:	353
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)		:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)		:	7.1
18	Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd)		:	135.0
19	Total Sewage Generation (MLD)*		:	5.7
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I	& II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA
	Dollation Lood (Domostic) (Mathed 4. Actual	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
	riow) (kg/d)	TKN	:	NA
		BOD ₅	:	1413.8
29	Pollution Load (Domestic) (Method 2: Per Capita	COD	:	2403.5
	Contribution) (kg/d)	TKN	:	282.8
	Westernator Diametel Masses	1		River & Land
30	Wastewater Disposal Means		:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Sone River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA

34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
	Water Balance & Pollution Load (Dome	stic) Fact She	et	1
City: Dumaraon			Stat	e: Bihar
S. No.	Items			Value
1	Total Area (sq km)	1	:	15.33
2	Population as in 2011		:	53618
3	Population Growth Rate as in 2011 (%)		:	17.05
4	Total Number of Wards		:	26
5	Population per Ward (Thousands)		:	2,062
6	Total Number of Household as in 2011		:	8621
7	Number of Household per Ward		:	332
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)		:	NA
17	Total Water Supply from ULB and Non-ULB Source	s (MLD)	:	7.2
18	Average Water Supply Rate from ULB & Non-ULB S	Sources (Ipcd)	:	135.0
19	Total Sewage Generation (MLD)*		:	5.8
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I	& II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA
	Dell Carlot (Daniel Maria Land	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual	COD	:	NA
	Flow) (kg/d)	TKN	:	NA
	Dellution Load (Demostic) (Mathed 2: Dec Carita	BOD ₅	:	1447.7
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	2461.1
	Continuation) (kg/u)	TKN	:	289.5
	Wastewater Disposal Means			River & Land
30	•		:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Ganga River

32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
	Water Balance & Pollution Load (Dome	stic) Fact Sheet	I	
City: Fa		State: Bihar		
S. No.	Items	State: Billar		Value
1	Total Area (sq km)		•	4.90
2	Population as in 2011		:	50961
3	Population Growth Rate as in 2011 (%)		:	31.78
4	Total Number of Wards		:	23
5	Population per Ward (Thousands)		:	2,216
6	Total Number of Household as in 2011		:	8225
7	Number of Household per Ward		:	358
8	Surface Water Supply (MLD)			NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ipco	d)	:	NA
17	Total Water Supply from ULB and Non-ULB Source		:	6.9
18	Average Water Supply Rate from ULB & Non-ULB S		:	135.0
19	Total Sewage Generation (MLD)*		:	5.5
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I	& II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA
	Dellution Load (Describe) (Marth. 14, A. 1.	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual	COD	:	NA
	Flow) (kg/d)	TKN	:	NA
_	Pollution Load (Domestia) (Mathed 2: Day Co. 1)	BOD ₅	:	1375.9
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	2339.1
	Contribution (kg/u)	TKN	:	275.2

30 Wastewater Disposal Means					River & Land	
32	30	Wastewater Disposal Means		:	Disposal	
33 Number of Water Bodies . NA	31	Name of River/Streams for Wastewater Disposal		:	Ganga River	
34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 . <<< 1	32	Number of Drains/Nallah for Wastewater Disposal		:	NA	
State: Bihar Stat	33	Number of Water Bodies		:	NA	
City:Forbesganj S. No. Items Value 1	34	Gross Area of Water Bodies (Hectare)		:	NA	
City:Forbesganj State: Bihar S. No. Items Value 1 Total Area (sq km) : 4.98 2 Population as in 2011 : 50475 3 Population Growth Rate as in 2011 (%) : 21.63 4 Total Number of Wards : 25 5 Population per Ward (Thousands) : 2,019 6 Total Number of Household as in 2011 : 9632 7 Number of Household per Ward : 385 8 Surface Water Supply (MLD) : NA 9 Ground Water (GW) Supply (MLD) : NA 10 Number of Bore Wells : NA 11 Ground Water Extraction per Bore Well (MLD) : NA 12 Number of Hand Pumps/ Tubewells : NA 13 Ground Water Extraction per Hand Pump (Ipd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Water Supply from ULB and Non-ULB Sources (Ipcd) <td>35</td> <td>Area of Water Bodies as % of Total Area</td> <td></td> <td>:</td> <td><<< 1</td>	35	Area of Water Bodies as % of Total Area		:	<<< 1	
Total Area (sq km)		Water Balance & Pollution Load (Dome	<u>et</u>			
Total Area (sq km)	City:Fo	City:Forbesganj State: Bihar				
2	S. No.	Items			Value	
3	1	Total Area (sq km)		:	4.98	
Total Number of Wards	2	Population as in 2011		:	50475	
5 Population per Ward (Thousands) : 2,019 6 Total Number of Household as in 2011 : 9632 7 Number of Household per Ward : 385 8 Surface Water Supply (MLD) : NA 9 Ground Water (GW) Supply (MLD) : NA 10 Number of Bore Wells : NA 11 Ground Water Extraction per Bore Well (MLD) : NA 12 Number of Hand Pumps/ Tubewells : NA 13 Ground Water Extraction per Hand Pump (Ipd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Water Supply Rate from ULB Sources (Ipcd) : NA 18 Average Water Supply Rate from ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 5.5 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA <td>3</td> <td>Population Growth Rate as in 2011 (%)</td> <td></td> <td>:</td> <td>21.63</td>	3	Population Growth Rate as in 2011 (%)		:	21.63	
Total Number of Household as in 2011 : 9632 Number of Household per Ward : 385 Surface Water Supply (MLD) : NA Ground Water (GW) Supply (MLD) : NA Number of Bore Wells : NA Surface Water Extraction per Bore Well (MLD) : NA Number of Hand Pumps/ Tubewells : NA Surface Water Extraction per Bore Well (MLD) : NA Number of Hand Pumps/ Tubewells : NA Surface Water Extraction per Hand Pump (Ipd) : NA Mumber of Pumping Stations for Water Supply : NA Surface Water Supply Rate from ULB Sources (Ipcd) : NA Total Pumping Capacity (MLD) : NA Average Water Supply Rate from ULB Sources (Ipcd) : NA Total Water Supply From ULB and Non-ULB Sources (Ipcd) : 135.0 Total Sewage Generation (MLD)* : 5.5 Per Capita Sewage Generation (Ipcd) : 108.0 Sewage Collection (MLD) : NA Number of STPs : NA Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA Total Installed Capacity of STPs (MLD) : NA Percentage Utilization of Installed Capacity (%) : NA Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA	4			:	25	
7 Number of Household per Ward 8 Surface Water Supply (MLD) 9 Ground Water (GW) Supply (MLD) 10 Number of Bore Wells 11 Ground Water Extraction per Bore Well (MLD) 12 Number of Hand Pumps/ Tubewells 13 Ground Water Extraction per Hand Pump (Ipd) 14 Number of Pumping Stations for Water Supply 15 Total Pumping Capacity (MLD) 16 Average Water Supply Rate from ULB Sources (Ipcd) 17 Total Water Supply Rate from ULB Sources (MLD) 18 Average Water Supply Rate from ULB Sources (MLD) 19 Total Sewage Generation (MLD)* 20 Per Capita Sewage Generation (Ipcd) 21 Sewage Collection (MLD) 22 Percentage of Sewage Collection (%) 23 Number of STPs 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) 25 Current Utilized Capacity of STPs (MLD) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 28 Flow) (kg/d) 28 Flow) (kg/d) 28 Flow) (Method 1: Actual Flow) (Kg/d) 29 Flow (MLD) (Method 1: Actual Flow) (Kg/d) 20 Flow) (Method 1: Actual Flow) (Kg/d) 21 NA	5	Population per Ward (Thousands)		:	2,019	
8 Surface Water Supply (MLD) 9 Ground Water (GW) Supply (MLD) 10 Number of Bore Wells 11 Ground Water Extraction per Bore Well (MLD) 12 Number of Hand Pumps/ Tubewells 13 Ground Water Extraction per Hand Pump (Ipd) 14 Number of Pumping Stations for Water Supply 15 Total Pumping Capacity (MLD) 16 Average Water Supply Rate from ULB Sources (Ipcd) 17 Total Water Supply Rate from ULB Sources (MLD) 18 Average Water Supply Rate from ULB Sources (MLD) 19 Total Sewage Generation (MLD)* 20 Per Capita Sewage Generation (Ipcd) 21 Sewage Collection (MLD) 22 Percentage of Sewage Collection (%) 23 Number of STPs 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) 25 Current Utilized Capacity of STPs (MLD) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 28 Folium State	6	Total Number of Household as in 2011		:	9632	
9 Ground Water (GW) Supply (MLD) : NA 10 Number of Bore Wells : NA 11 Ground Water Extraction per Bore Well (MLD) : NA 12 Number of Hand Pumps/ Tubewells : NA 13 Ground Water Extraction per Hand Pump (Ipd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 6.8 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 5.5 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utiliz	7	Number of Household per Ward		:	385	
10 Number of Bore Wells 11 Ground Water Extraction per Bore Well (MLD) 12 Number of Hand Pumps/ Tubewells 13 Ground Water Extraction per Hand Pump (lpd) 14 Number of Pumping Stations for Water Supply 15 Total Pumping Capacity (MLD) 16 Average Water Supply Rate from ULB Sources (lpcd) 17 Total Water Supply from ULB and Non-ULB Sources (MLD) 18 Average Water Supply Rate from ULB & Non-ULB Sources (lpcd) 19 Total Sewage Generation (MLD)* 20 Per Capita Sewage Generation (Ipcd) 21 Sewage Collection (MLD) 22 Percentage of Sewage Collection (%) 23 Number of STPs 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) 25 Current Utilized Capacity of STPs (MLD) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 29 Road Street	8	Surface Water Supply (MLD)		:	NA	
11 Ground Water Extraction per Bore Well (MLD) : NA 12 Number of Hand Pumps/ Tubewells : NA 13 Ground Water Extraction per Hand Pump (lpd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (lpcd) : NA 17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 6.8 18 Average Water Supply Rate from ULB & Non-ULB Sources (lpcd) : 135.0 19 Total Sewage Generation (MLD)* : 5.5 20 Per Capita Sewage Generation (lpcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA	9	Ground Water (GW) Supply (MLD)		:	NA	
12 Number of Hand Pumps/ Tubewells 13 Ground Water Extraction per Hand Pump (lpd) 14 Number of Pumping Stations for Water Supply 15 Total Pumping Capacity (MLD) 16 Average Water Supply Rate from ULB Sources (lpcd) 17 Total Water Supply from ULB and Non-ULB Sources (MLD) 18 Average Water Supply Rate from ULB & Non-ULB Sources (lpcd) 19 Total Sewage Generation (MLD)* 20 Per Capita Sewage Generation (lpcd) 21 Sewage Collection (MLD) 22 Sewage Collection (MLD) 23 Number of STPs 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) 25 Current Utilized Capacity of STPs (MLD) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 28 Robert Supply Rate from ULB Sources (lpcd) 29 Sources (Ipcd) 20 : NA 21 NA 20 Percentage Utilization of Installed Capacity (%) 21 NA 22 Percentage Utilization of Installed Capacity (%) 23 NA 24 Robert Supply Rate from ULB Sources (Ipcd) 25 NA 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Robert Supply Rate From ULB Sources (Ipcd) 29 NA 20 NA 20 NA 20 NA 21 NA 22 NA 23 NA 24 NA 25 NA 26 Percentage Utilization of Installed Capacity (%) 27 NA 28 NA 29 NA 20 NA 20 NA 20 NA 21 NA 22 NA 23 NA 24 NA 25 NA 26 NA 27 NA 28 NA 29 NA 29 NA 20 NA 20 NA 20 NA 21 NA 22 NA 23 NA 24 NA 25 NA 26 NA 27 NA 28 NA 29 NA 20 NA 20 NA 20 NA 21 NA 22 NA 23 NA 24 NA 25 NA 26 NA 27 NA 28 NA 29 NA 20 NA 20 NA 20 NA 21 NA 21 NA 22 NA 23 NA 24 NA 25 NA 26 NA 27 NA 28 NA 29 NA 20 NA 20 NA 21 NA 21 NA 22 NA 23 NA 24 NA 25 NA 26 NA 27 NA 28 NA 29 NA 20 NA 20 NA 20 NA 21 NA 21 NA 22 NA 23 NA 24 NA 25 NA 26 NA 27 NA 28 NA 29 NA 20 NA 20 NA 20 NA 20 NA 21 NA 21 NA 22 NA 23 NA 24 NA 25 NA 26 NA 27 NA 28 NA 29 NA 20 N	10	Number of Bore Wells		:	NA	
13 Ground Water Extraction per Hand Pump (lpd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (lpcd) : NA 17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 6.8 18 Average Water Supply Rate from ULB & Non-ULB Sources (lpcd) : 135.0 19 Total Sewage Generation (MLD)* : 5.5 20 Per Capita Sewage Generation (lpcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA	11	Ground Water Extraction per Bore Well (MLD)		:	NA	
14 Number of Pumping Stations for Water Supply 15 Total Pumping Capacity (MLD) 16 Average Water Supply Rate from ULB Sources (Ipcd) 17 Total Water Supply from ULB and Non-ULB Sources (MLD) 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) 19 Total Sewage Generation (MLD)* 20 Per Capita Sewage Generation (Ipcd) 21 Sewage Collection (MLD) 22 Percentage of Sewage Collection (%) 23 Number of STPs 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) 25 Current Utilized Capacity of STPs (MLD) 26 Percentage Utilization of Installed Capacity (%) 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) 29 Reference Stationard Sta	12	Number of Hand Pumps/ Tubewells		:	NA	
15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 6.8 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 5.5 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA	13	Ground Water Extraction per Hand Pump (lpd)		:	NA	
16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 6.8 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 5.5 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA	14	Number of Pumping Stations for Water Supply		:	NA	
Total Water Supply from ULB and Non-ULB Sources (MLD) : 6.8 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 5.5 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA	15	Total Pumping Capacity (MLD)		:	NA	
18 Average Water Supply Rate from ULB & Non-ULB Sources (lpcd) : 135.0 19 Total Sewage Generation (MLD)* : 5.5 20 Per Capita Sewage Generation (lpcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA	16	Average Water Supply Rate from ULB Sources (Ipco	d)	:	NA	
18 Average Water Supply Rate from ULB & Non-ULB Sources (lpcd) : 135.0 19 Total Sewage Generation (MLD)* : 5.5 20 Per Capita Sewage Generation (lpcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA	17	Total Water Supply from ULB and Non-ULB Source	s (MLD)	:	6.8	
20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA	18			:	135.0	
21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 TKN : NA	19	Total Sewage Generation (MLD)*		:	5.5	
22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 COD : NA 20 TKN : NA	20	Per Capita Sewage Generation (Ipcd)		:	108.0	
23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA COD : NA TKN : NA	21	Sewage Collection (MLD)		:	NA	
Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA Current Utilized Capacity of STPs (MLD) : NA Percentage Utilization of Installed Capacity (%) : NA Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA TKN : NA	22	Percentage of Sewage Collection (%)		:	NA	
25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA COD : NA TKN : NA	23	Number of STPs		:	NA	
26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA COD : NA TKN : NA	24	Total Installed Capacity of STPs under GAP & YAP I	& II (MLD)	:	NA	
26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA COD : NA TKN : NA	25	Current Utilized Capacity of STPs (MLD)	•	:	NA	
Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) BOD ₅ : NA COD : NA TKN : NA	26	Percentage Utilization of Installed Capacity (%)		:	NA	
Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) COD : NA TKN : NA	27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA	
Flow) (kg/d)		Delli diserte ed (Dec. 11) / 24 de la comi	BOD ₅	:	NA	
TKN : NA	28		COD	:	NA	
29 Pollution Load (Domestic) (Method 2: Per Capita BOD ₅ : 1362.8		riow) (kg/u)	TKN	:	NA	
	29	Pollution Load (Domestic) (Method 2: Per Capita	BOD ₅	:	1362.8	

	Contribution) (kg/d)	COD	:	2316.8
		TKN	:	272.6
	Wastewater Disposal Means			River & Land
30	30 Wastewater Disposar Mearis		:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Koshi River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
	<u>et</u>			
City: Gopalganj Si		State	e: Bihar	
S. No.	Items			Value
1	Total Area (sq km)		:	11.11
2	Population as in 2011		:	67339
3	Population Growth Rate as in 2011 (%)		:	23.67
4	Total Number of Wards		:	28
5	Population per Ward (Thousands)		:	2,405
6	6 Total Number of Household as in 2011		:	10796
7	7 Number of Household per Ward		:	386
8	8 Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ipco	(k	:	NA
17	Total Water Supply from ULB and Non-ULB Source	s (MLD)	:	9.1
18	Average Water Supply Rate from ULB & Non-ULB S	ources (lpcd)	:	135.0
19	Total Sewage Generation (MLD)*		:	7.3
20	Per Capita Sewage Generation (lpcd)		:	110.5
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I	& II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Oth	ers (MLD)	:	NA
20	Pollution Load (Domestic) (Method 1: Actual	BOD ₅	:	NA
28	Flow) (kg/d)	COD	:	NA

				T = = =
		TKN	:	NA
	Pollution Load (Domestic) (Method 2: Per Capita	BOD ₅	<u>:</u>	1818.2
29	Contribution) (kg/d)	COD	:	3090.9
	TKN		:	363.6306
30	Wastewater Disposal Means		:	River & Land
31	Name of River/Streams for Wastewater Disposal		:	Gandak River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
Water Balance & Pollution Load (Domestic) Fact Sheet				
City:Hil	sa		State	e: Bihar
S. No.	Items			Value
1	Total Area (sq km)		:	22.96
2	Population as in 2011		:	51052
3	Population Growth Rate as in 2011 (%)		:	35.15
4	Total Number of Wards		:	26
5	Population per Ward (Thousands)		:	1,964
6	Total Number of Household as in 2011		:	8681
7	Number of Household per Ward		:	334
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ip	cd)	:	NA
17	Total Water Supply from ULB and Non-ULB Source	ces (MLD)	:	6.9
	Average Water Supply Rate from ULB & Non-ULB	Sources		135.0
18	(lpcd)		:	
19	Total Sewage Generation (MLD)*		:	5.5
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP	1 & II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & O	thers (MLD)	:	NA

		BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual	COD	:	NA
	Flow) (kg/d)	TKN	:	NA
	Della disease del December 2 Dece	BOD ₅	:	1378.4
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	2343.3
		TKN	:	275.7
30	Wastewater Disposal Means	•	:	River & Land
31	Name of River/Streams for Wastewater Disposal		:	Falgu River
32	Number of Drains/Nallah for Wastewater Dispos	al	:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
	Water Balance & Pollution Load (Dome	estic) Fact She	eet	
City:Jam	ui		State	e: Bihar
S. No.	Items			Value
1	Total Area (sq km)		:	26.45
2	Population as in 2011		:	87357
3			:	30.78
4	4 Total Number of Wards		:	30
5	Population per Ward (Thousands)		:	2,912
6	Total Number of Household as in 2011		:	14509
7	Number of Household per Ward		:	484
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ip	cd)	:	NA
17	Total Water Supply from ULB and Non-ULB Source	ces (MLD)	:	11.8
	Average Water Supply Rate from ULB & Non-ULE	3 Sources		135.0
18	(lpcd)		:	
19	Total Sewage Generation (MLD)*		:	9.4
20	Per Capita Sewage Generation (lpcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP	1 & II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA

26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & O	thers (MLD)	:	NA
	Delli die alle ed (De constita) (Madhada 4 Antari	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) TKN		:	NA
	Tiow) (kg/d)	TKN	:	NA
	Dellution Load (Demostic) (Mathed 2: Dem	BOD ₅		2358.6
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	4009.7
	Capita Contribution) (kg/a)	TKN	:	471.7
30	Wastewater Disposal Means		:	River & Land
31	Name of River/Streams for Wastewater Disposal		:	Kiul River
32	Number of Drains/Nallah for Wastewater Disposal :		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
	Water Balance & Pollution Load (Dome	estic) Fact Sho	<u>eet</u>	
City: Lak	hisarai		State	: Bihar
S. No.	Items			Value
1	Total Area (sq km)		:	24.79
2	2 Population as in 2011		:	99979
3	3 Population Growth Rate as in 2011 (%)		:	28.38
4	4 Total Number of Wards		:	33
5	Population per Ward (Thousands)		:	3,030
6	Total Number of Household as in 2011		:	17214
7	Number of Household per Ward		:	522
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)			NA
16	Average Water Supply Rate from ULB Sources (Ip	ocd)	:	NA
17	Total Water Supply from ULB and Non-ULB Source	ces (MLD)	:	13.5
	Average Water Supply Rate from ULB & Non-ULE	3 Sources		135.0
18	(lpcd)		:	
19	Total Sewage Generation (MLD)*		:	10.8
20	Per Capita Sewage Generation (Ipcd)		<u>:</u>	108.0
21	Sewage Collection (MLD)		<u>:</u>	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA

24	Total Installed Capacity of STPs under GAP & YAP I & II (MLD)			NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Ot	thers (MLD)	:	NA
	Dollution Load (Domostic) (Mothed 1, Actual	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
	110W) (Rg/U)	TKN		NA
	Pollution Load (Domostic) (Mothod 2: Por	BOD ₅	:	2699.4
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	4589.0
	TKN		:	539.9
30	Wastewater Disposal Means		:	River & Land
31	Name of River/Streams for Wastewater Disposal		:	Kiul River
32	Number of Drains/Nallah for Wastewater Disposa	al	:	NA
33	Number of Water Bodies		:	NA
34	34 Gross Area of Water Bodies (Hectare)		:	NA
35 Area of Water Bodies as % of Total Area		:	<<< 1	
	Water Balance & Pollution Load (Dome	stic) Fact She	et	
City: Madhepura St			e: Bihar	
S. No.	Items			Value
1	Total Area (sq km)		:	25.84
2	Population as in 2011		:	54472
3	Population Growth Rate as in 2011 (%)		:	20.97
4	Total Number of Wards		:	26
5	Population per Ward (Thousands)		:	2,095
6	Total Number of Household as in 2011		:	10577
7	Number of Household per Ward		:	407
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ip	cd)	:	NA
17	Total Water Supply from ULB and Non-ULB Source	es (MLD)	:	7.4
10	Average Water Supply Rate from ULB & Non-ULB Sources			135.0
18	(lpcd)		:	
19			:	5.9
	(lpcd) Total Sewage Generation (MLD)* Per Capita Sewage Generation (lpcd)			5.9 108.0

22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAF	P I & II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & O	thers (MLD)	:	NA
	Dell die also d'Oscardio (Madhada Astad	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
	Tiow) (kg/d)	TKN	:	NA
		BOD ₅	:	1470.7
29	Pollution Load (Domestic) (Method 2: Per	COD	:	2500.3
	Capita Contribution) (kg/d)	TKN	:	294.1
30	Wastewater Disposal Means		:	River & Land
31	Name of River/Streams for Wastewater Disposal		:	Koshi River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
	Water Balance & Pollution Load (Dome	estic) Fact She	et	
City: Madhubani State: Bihar				
			Ju	O
S. No.	Items			Value
S. No.	Items Total Area (sq km)		:	
				Value
1	Total Area (sq km)			Value 2.52
1 2	Total Area (sq km) Population as in 2011		:	Value 2.52 75736
1 2 3	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%)		:	Value 2.52 75736 14.16
1 2 3 4	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards		:	Value 2.52 75736 14.16 30
1 2 3 4 5	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands)		:	Value 2.52 75736 14.16 30 2,525 13583
1 2 3 4 5 6	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011		:	Value 2.52 75736 14.16 30 2,525 13583
1 2 3 4 5 6 7	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward		:	Value 2.52 75736 14.16 30 2,525 13583 453 NA
1 2 3 4 5 6 7 8	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD)		:	Value 2.52 75736 14.16 30 2,525 13583 453 NA
1 2 3 4 5 6 7 8 9	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD)		:	Value 2.52 75736 14.16 30 2,525 13583 453 NA NA
1 2 3 4 5 6 7 8 9	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells		:	Value 2.52 75736 14.16 30 2,525 13583 453 NA NA NA
1 2 3 4 5 6 7 8 9 10 11	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD)		:	Value 2.52 75736 14.16 30 2,525 13583 453 NA NA NA
1 2 3 4 5 6 7 8 9 10 11	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells		:	Value 2.52 75736 14.16 30 2,525 13583 453 NA NA NA NA NA
1 2 3 4 5 6 7 8 9 10 11 12 13	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells Ground Water Extraction per Hand Pump (Ipd)		:	Value 2.52 75736 14.16 30 2,525 13583 453 NA NA NA NA NA NA
1 2 3 4 5 6 7 8 9 10 11 12 13	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells Ground Water Extraction per Hand Pump (Ipd) Number of Pumping Stations for Water Supply	ocd)	:	Value 2.52 75736 14.16 30 2,525 13583 453 NA NA NA NA NA NA NA NA NA N
1 2 3 4 5 6 7 8 9 10 11 12 13 14	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells Ground Water Extraction per Hand Pump (Ipd) Number of Pumping Stations for Water Supply Total Pumping Capacity (MLD)		:	Value 2.52 75736 14.16 30 2,525 13583 453 NA NA NA NA NA NA NA NA NA N
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells Ground Water Extraction per Hand Pump (Ipd) Number of Pumping Stations for Water Supply Total Pumping Capacity (MLD) Average Water Supply Rate from ULB Sources (Ipp	ces (MLD)		Value 2.52 75736 14.16 30 2,525 13583 453 NA NA NA NA NA NA NA NA NA N
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Total Area (sq km) Population as in 2011 Population Growth Rate as in 2011 (%) Total Number of Wards Population per Ward (Thousands) Total Number of Household as in 2011 Number of Household per Ward Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells Ground Water Extraction per Hand Pump (Ipd) Number of Pumping Stations for Water Supply Total Pumping Capacity (MLD) Average Water Supply Rate from ULB Sources (Iptotal Water Supply From ULB and Non-ULB Sources) Average Water Supply Rate from ULB & Non-ULB	ces (MLD)		Value 2.52 75736 14.16 30 2,525 13583 453 NA NA NA NA NA NA NA NA NA N

20	Per Capita Sewage Generation (lpcd)			:	108.0
21	Sewage Collection (MLD)			:	NA
22	Percentage of Sewage Collection (%)			:	NA
23	Number of STPs			:	NA
24	Total Installed Capacity of STPs under GAP & YA	P I & II (ML	.D)	:	NA
25	Current Utilized Capacity of STPs (MLD)			:	NA
26	Percentage Utilization of Installed Capacity (%)			:	NA
27	Capacity of STPs Sanctioned under JNNURM & (Others (ML	D)	:	NA
	Dell die also de December 14 August et also de la	BOD ₅		:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD		:	NA
	TKN			:	NA
	BOD ₅			:	2044.9
29	Pollution Load (Domestic) (Method 2: Per			:	3476.3
	Capita Contribution) (kg/d)	TKN	-		409.0
30	Wastewater Disposal Means			:	River & Land
31	Name of River/Streams for Wastewater Disposal			:	Kamla River
32	Number of Drains/Nallah for Wastewater Disposal			:	NA
33	Number of Water Bodies			:	NA
34	Gross Area of Water Bodies (Hectare)			:	NA
35	Area of Water Bodies as % of Total Area			:	<<< 1
	Water Balance & Pollution Load (Dom	estic) Fact	Sheet		
City: Ma		•	State:	Bil	nar
S. No.	Items				Value
1	Total Area (sq km)			:	9.43
2	Population as in 2011			:	59803
3	Population Growth Rate as in 2011 (%)			:	32.17
4	Total Number of Wards			:	26
5	Population per Ward (Thousands)			:	2,300
6	Total Number of Household as in 2011			:	10210
7	Number of Household per Ward			:	393
8	Surface Water Supply (MLD)			:	NA
9	Ground Water (GW) Supply (MLD)			:	NA
10	Number of Bore Wells			:	NA
11	Ground Water Extraction per Bore Well (MLD)			:	NA
12	Number of Hand Pumps/ Tubewells			:	NA
13	Ground Water Extraction per Hand Pump (lpd)			:	NA
14	Number of Pumping Stations for Water Supply			:	NA
15	Total Pumping Capacity (MLD)			:	NA
16	Average Water Supply Rate from ULB Sources (I	pcd)		:	NA
					- 4

Total Water Supply from ULB and Non-ULB Sources (MLD)

: 8.1

17

18	Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd			135.0
19	Total Sewage Generation (MLD)*		:	6.5
20	Per Capita Sewage Generation (lpcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAF	Total Installed Capacity of STPs under GAP & YAP I & II (MLD)		NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & O	thers (MLD)	:	NA
	BOD ₅		:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)		:	NA
	TKN		:	NA
		BOD ₅	:	1614.7
29	Pollution Load (Domestic) (Method 2: Per	COD	1:	2745.0
	Capita Contribution) (kg/d) TKN		:	322.9
30	Wastewater Disposal Means			River & Land
	Name of Diver(Character for Westernator Disease)			Sone and
31	Name of River/Streams for Wastewater Disposal		:	Ganga River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		<u>:</u>	<<< 1
	Water Balance & Pollution Load (Dome	estic) Fact Shee	<u>t</u>	
City: Mo	kameh		State	e: Bihar
S. No.	Items			Value
1	Total Area (sq km)		:	14.18
2	Population as in 2011		:	60678
3	Population Growth Rate as in 2011 (%)		:	7.18
4	Total Number of Wards		:	28
5	Population per Ward (Thousands)		:	2,167
6	Total Number of Household as in 2011		:	9742
	Number of Household per Ward			240
7	Number of Household per ward		:	348
7 8	Surface Water Supply (MLD)		:	NA
	•		:	
8	Surface Water Supply (MLD)		: :	NA
8 9	Surface Water Supply (MLD) Ground Water (GW) Supply (MLD)		: : : : : : : : : : : : : : : : : : : :	NA NA
8 9 10	Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells		: : : : : : : : : : : : : : : : : : : :	NA NA NA
8 9 10 11	Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD)		: : : : : : : : : : : : : : : : : : : :	NA NA NA
8 9 10 11 12	Surface Water Supply (MLD) Ground Water (GW) Supply (MLD) Number of Bore Wells Ground Water Extraction per Bore Well (MLD) Number of Hand Pumps/ Tubewells		: : : : : : : : : : : : : : : : : : : :	NA NA NA NA

16	Average Water Supply Rate from ULB Sources (lpcd)			NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)	:	8.2
18	Average Water Supply Rate from ULB & Non-ULB Sou	ırces (lpcd)	:	135.0
19	Total Sewage Generation (MLD)*		:	6.6
20	Per Capita Sewage Generation (Ipcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I &	II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Other	s (MLD)	:	NA
	Della Line Lord (Decreasive) (Marthod A. A. Lal Elea	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow)	COD	:	NA
	(kg/d)	TKN	:	NA
		BOD ₅		1638.3
29	Pollution Load (Domestic) (Method 2: Per Capita	COD	:	2785.1
	Contribution) (kg/a)	TKN	:	327.7
				River & Land
30	Wastewater Disposal Means			Disposal
31	Name of River/Streams for Wastewater Disposal		:	Ganga River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	3 Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	35 Area of Water Bodies as % of Total Area		:	<<< 1
	Water Balance & Pollution Load (Domestic)	Fact Sheet		
City: Nav	City: Nawada State: Biha			
S. No.	Items			Value
1	Total Area (sq km)		:	5.68
2	Population as in 2011		:	98029
3	Population Growth Rate as in 2011 (%)		:	19.71
4	Total Number of Wards		:	33
5	Population per Ward (Thousands)		:	2,971
6	Total Number of Household as in 2011		:	15399
7	Number of Household per Ward		:	467
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	11 Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA

14	Number of Pumping Stations for Water Supply			NA
15	Total Pumping Capacity (MLD)			NA
16	Average Water Supply Rate from ULB Sources (lpcd)			NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)			13.2
18	Average Water Supply Rate from ULB & Non-ULB Sou	ırces (Ipcd)	:	135.0
19	Total Sewage Generation (MLD)*		•	10.6
20	Per Capita Sewage Generation (lpcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		<u>:</u>	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I &	II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Other	s (MLD)	:	NA
	Pollution Load (Domestic) (Method 1: Actual Flow)	BOD ₅	:	NA
28	(kg/d)	COD	:	NA
	(10) 6/1	TKN	:	NA
	Dell 1's a Lord (Decreatis) (Mathed 2, Dec Coe'le	BOD ₅	:	2646.8
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	4499.5
	Contribution) (kg/u)	TKN	:	529.4
30	Wastewater Disposal Means		:	River & Land
	Name of River/Streams for Wastewater Disposal			Panchane
31	Walle of Mivery Streams for Wastewater Disposar		<u>:</u>	River
32	Number of Drains/Nallah for Wastewater Disposal		<u>:</u>	NA
33	Number of Water Bodies		:	NA
34	Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
	Water Balance & Pollution Load (Domestic)	Fact Shee	<u>t</u>	
City: Phu	lwari Sharif		State	e: Bihar
S. No.	Items			Value
1	Total Area (sq km)		:	6.48
2	Population as in 2011		<u> </u> :	81740
3	Population Growth Rate as in 2011 (%)		<u>:</u>	52.93
4	Total Number of Wards		:	28
5	Population per Ward (Thousands)		:	2,919
6	Total Number of Household as in 2011		:	13404
7	Number of Household per Ward		:	479
0	Surface Water Supply (MLD)		_ :	NA
8		Ground Water (GW) Supply (MLD)		
9			:	NA
			:	NA NA

12	Number of Hand Pumps/ Tubewells			:	NA
13	Ground Water Extraction per Hand Pump (lpd)			• •	NA
14	Number of Pumping Stations for Water Supply			• •	NA
15	Total Pumping Capacity (MLD)			:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)			:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)		:	11.0
18	Average Water Supply Rate from ULB & Non-ULB Sou	irces (lpcd))	••	135.0
19	Total Sewage Generation (MLD)*				8.8
20	Per Capita Sewage Generation (Ipcd)			••	108.0
21	Sewage Collection (MLD)				NA
22	Percentage of Sewage Collection (%)			• •	NA
23	Number of STPs			••	NA
24	Total Installed Capacity of STPs under GAP & YAP I &	II (MLD)		• •	NA
25	Current Utilized Capacity of STPs (MLD)			••	NA
26	Percentage Utilization of Installed Capacity (%)			••	NA
27	Capacity of STPs Sanctioned under JNNURM & Other	s (MLD)			NA
	Dellution Lord (Demostic) (Mathed 4. Actual Flour)	BOD ₅		• •	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow)	COD		:	NA
	(kg/d)	TKN		:	NA
	Dell Production (Decrease) (Marthad 2, DecCarity	BOD ₅			2207.0
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD		:	3751.9
	Contribution (kg/u)	TKN		:	441.4
	Wastowator Disposal Moans				River & Land
30	Wastewater Disposal Means			:	Disposal
31	Name of River/Streams for Wastewater Disposal			:	Ganga River
32	Number of Drains/Nallah for Wastewater Disposal			:	NA
33	Number of Water Bodies			:	NA
34	Gross Area of Water Bodies (Hectare)			:	NA
35	Area of Water Bodies as % of Total Area			:	<<< 1
	Water Balance & Pollution Load (Domestic	Fact Shee	<u>t</u>		
City: Rax	aul Bazar		St	ate	e: Bihar
S. No.	Items				Value
1	Total Area (sq km)			••	5.82
2	Population as in 2011				55536
3	3 Population Growth Rate as in 2011 (%)			:	33.47
4	4 Total Number of Wards			:	25
5	5 Population per Ward (Thousands)			:	2,221
6	6 Total Number of Household as in 2011			:	9513
7	7 Number of Household per Ward			:	381
8	Surface Water Supply (MLD)			:	NA
9	Ground Water (GW) Supply (MLD)				NA

10	Number of Bore Wells			:	NA
11	Ground Water Extraction per Bore Well (MLD)				NA
12	Number of Hand Pumps/ Tubewells				NA
13	Ground Water Extraction per Hand Pump (lpd)			:	NA
14	Number of Pumping Stations for Water Supply				NA
15	Total Pumping Capacity (MLD)			:	NA
16	Average Water Supply Rate from ULB Sources (Ipcd)				NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)			7.5
18	Average Water Supply Rate from ULB & Non-ULB Sou	ırces (lpcd)		135.0
19	Total Sewage Generation (MLD)*			:	6.0
20	Per Capita Sewage Generation (lpcd)			:	108.0
21	Sewage Collection (MLD)			:	NA
22	Percentage of Sewage Collection (%)				NA
23	Number of STPs			:	NA
24	Total Installed Capacity of STPs under GAP & YAP I &	II (MLD)			NA
25	Current Utilized Capacity of STPs (MLD)			:	NA
26	Percentage Utilization of Installed Capacity (%)			:	NA
27	27 Capacity of STPs Sanctioned under JNNURM & Others (MLD)				NA
	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	BOD ₅		:	NA
28		COD		:	NA
		TKN		:	NA
	Pollution Load (Domestic) (Method 2: Per Capita	BOD ₅		:	1499.5
29	Contribution) (kg/d)	COD			2549.1
	contribution, (18, a)	TKN			299.9
20	Wastewater Disposal Means				River & Land
30	Name of Piver/Streams for Wastewater Disposal				Disposal
31	Name of River/Streams for Wastewater Disposal Number of Drains/Nallah for Wastewater Disposal				Sirsiya River NA
32	Number of Water Bodies			:	NA
33	Gross Area of Water Bodies (Hectare)				NA
34	Area of Water Bodies as % of Total Area				<< 1
35		\ Fact Class		•	<< 1
City: San	Water Balance & Pollution Load (Domestic	, ract snee		1 +1	e: Bihar
S. No.	•		310	110	
	Total Area (cg km)			_	Value
2	1 Total Area (sq km)			•	3.45
			<u>. </u>	67925	
3 Population Growth Rate as in 2011 (%) Total Number of Words			:	9.56	
4 Total Number of Wards			<u>:</u>	28	
5 Population per Ward (Thousands)			:	2,426	
6	Total Number of Household as in 2011			:	13135
7	Number of Household per Ward			:	469

8	Surface Water Supply (MLD)		١.	NA
9	Ground Water (GW) Supply (MLD)			NA
10	Number of Bore Wells		•	NA
11	Ground Water Extraction per Bore Well (MLD)			NA
12	Number of Hand Pumps/ Tubewells			NA
13	Ground Water Extraction per Hand Pump (lpd)			NA
14	Number of Pumping Stations for Water Supply			NA
15	Total Pumping Capacity (MLD)			NA
16	Average Water Supply Rate from ULB Sources (Ipcd)			NA
17	Total Water Supply from ULB and Non-ULB Sources (MID)	<u> </u>	9.2
18	Average Water Supply Rate from ULB & Non-ULB So			135.0
19	Total Sewage Generation (MLD)*	urces (ipeu)		7.3
20	Per Capita Sewage Generation (Ipcd)			108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		1:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I & II (MLD)		:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Other	s (MLD)	:	NA
		BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow)	COD	:	NA
	(kg/d)	TKN	:	NA
	_ ,, , , , , , , , , , , , , , , , , ,	BOD ₅	:	1834.0
29	Pollution Load (Domestic) (Method 2: Per Capita	COD	:	3117.8
	Contribution) (kg/d)	TKN	:	366.8
30	Wastewater Disposal Means		:	River & Land
				Burhi
31	Name of River/Streams for Wastewater Disposal		:	Gandak River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA
34	34 Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1

Water Balance & Pollution Load (Domestic) Fact Sheet City: Sheikhpura State: Bihar				
S. No.	Items	Value		
1	Total Area (sq km)	:	27.90	
2	Population as in 2011	:	62927	
3	Population Growth Rate as in 2011 (%)	:	45.96	
4	Total Number of Wards	:	27	
5	Population per Ward (Thousands)	:	2,331	

1 2	Total Area (sq km) Population as in 2011			:	4.35 67818
	Total Area (sq km)			:	4.35
J. 14U.	Total Area (sq km)		T		
S. No.	Items				Value
City: Sitamarhi S			Sta	ite	e: Bihar
	Water Balance & Pollution Load (Domestic) Fact Shee	<u>t</u>		
35	35 Area of Water Bodies as % of Total Area			:	<<< 1
34	34 Gross Area of Water Bodies (Hectare)			:	NA
33	33 Number of Water Bodies			:	NA
32	32 Number of Drains/Nallah for Wastewater Disposal			:	NA
31	31 Name of River/Streams for Wastewater Disposal			:	Tati River
30	30 Wastewater Disposal Means			:	Disposal
		TKN		:	339.8 River & Land
29	Contribution) (kg/d)	COD	_	:	2888.3
20	Pollution Load (Domestic) (Method 2: Per Capita	BOD ₅		:	1699.0
		TKN		:	NA 1600 0
28	(kg/d)	COD		:	NA
20	Pollution Load (Domestic) (Method 1: Actual Flow)		\dashv	:	NA
27	Capacity of STPs Sanctioned under JNNURM & Others (MLD)		_	:	NA
26				:	NA
25	· · · · · · · ·		_	:	NA
24				:	NA
23				:	NA
	22 Percentage of Sewage Collection (%)			:	NA
21	Sewage Collection (MLD)		-	:	NA
20	Per Capita Sewage Generation (lpcd)		_	:	108.0
19	Total Sewage Generation (MLD)*		_	:	6.8
18	Average Water Supply Rate from ULB & Non-ULB So	urces (Ipcd)	<u> </u>	:	135.0
17	Total Water Supply from ULB and Non-ULB Sources (:	8.5
16	Average Water Supply Rate from ULB Sources (lpcd)			:	NA
15	Total Pumping Capacity (MLD)		\perp	:	NA
14	Number of Pumping Stations for Water Supply			:	NA
13	Ground Water Extraction per Hand Pump (lpd)			:	NA
12	Number of Hand Pumps/ Tubewells			:	NA
11	Ground Water Extraction per Bore Well (MLD)		\perp	:	NA
10	Number of Bore Wells		\perp	:	NA
9	Ground Water (GW) Supply (MLD)		\perp	:	NA
8	Surface Water Supply (MLD)		\perp	:	NA
7	Number of Household per Ward	Number of Household per Ward			377
6	Total Number of Household as in 2011			:	10181

5	4	Total Number of Wards		:	28		
7	5	Population per Ward (Thousands)		:	2,422		
Surface Water Supply (MLD)	6	Total Number of Household as in 2011		:	12718		
9	7	Number of Household per Ward		:	454		
10	8	Surface Water Supply (MLD)		:	NA		
11 Ground Water Extraction per Bore Well (MLD) : NA 12 Number of Hand Pumps/ Tubewells : NA 13 Ground Water Extraction per Hand Pump (Ipd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (Ipcd) : NA 17 Total Water Supply Rate from ULB Sources (Ipcd) : NA 18 Average Water Supply Rate from ULB Sources (Ipcd) : 9.2 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 7.3 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) BOD ₅ : NA 29 Pollution Load (Domestic) (Method 2: Per Capita COD : 3112.8 TKN : 366.2 : NA 30 Wastewater Disposal Means : River & Land Gandak 31 Name of River/Streams for Wastewater Disposal : NA 32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Sultanganj State: Bihar Capacity Cap	9	Ground Water (GW) Supply (MLD)		:	NA		
12	10	Number of Bore Wells		:	NA		
13 Ground Water Extraction per Hand Pump (lpd) : NA 14 Number of Pumping Stations for Water Supply : NA 15 Total Pumping Capacity (MLD) : NA 16 Average Water Supply Rate from ULB Sources (lpcd) : NA 17 Total Water Supply Rate from ULB Sources (MLD) : 9.2 18 Average Water Supply Rate from ULB Sources (MLD) : 9.2 18 Average Water Supply Rate from ULB Sources (MLD) : 9.2 19 Total Sewage Generation (MLD)* : 1.35.0 19 Total Sewage Generation (MLD)* : 1.08.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita COD : NA TKN : NA 30 Wastewater Disposal Means : River & Land Gandak	11	Ground Water Extraction per Bore Well (MLD)		:	NA		
14	12	Number of Hand Pumps/ Tubewells		:	NA		
Total Pumping Capacity (MLD)	13	Ground Water Extraction per Hand Pump (lpd)		:	NA		
16	14	Number of Pumping Stations for Water Supply		:	NA		
17 Total Water Supply from ULB and Non-ULB Sources (MLD) : 9.2 18 Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd) : 135.0 19 Total Sewage Generation (MLD)* : 7.3 20 Per Capita Sewage Generation (Ipcd) : 108.0 21 Sewage Collection (MLD) : NA 22 Percentage of Sewage Collection (%) : NA 23 Number of STPs : NA 24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) ENDOs : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) ENDOs : 1831.1 20 COD : 3112.8 TKN : 366.2 30 Wastewater Disposal Means : River & Land Gandak : River 31 Name of River/Streams for Wastewater Disposal	15	Total Pumping Capacity (MLD)		:	NA		
18	16	Average Water Supply Rate from ULB Sources (lpcd)		:	NA		
19	17	Total Water Supply from ULB and Non-ULB Sources (MLD)	:	9.2		
20	18	Average Water Supply Rate from ULB & Non-ULB Sou	irces (lpcd)) :	135.0		
21 Sewage Collection (MLD) : NA	19	Total Sewage Generation (MLD)*		:	7.3		
22 Percentage of Sewage Collection (%) : NA	20	20 Per Capita Sewage Generation (lpcd)		:	108.0		
Number of STPs : NA	21	21 Sewage Collection (MLD)		:	NA		
Total Installed Capacity of STPs under GAP & YAP I & II (MLD) : NA 25	22	22 Percentage of Sewage Collection (%)		:	NA		
25 Current Utilized Capacity of STPs (MLD) : NA 26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) EVANCE EVA	23	23 Number of STPs		:	NA		
26 Percentage Utilization of Installed Capacity (%) : NA 27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) : NA 30 Wastewater Disposal Means : River & Land 31 Name of River/Streams for Wastewater Disposal : River & Land 32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Sultanganj State: Bihar Value	24	Total Installed Capacity of STPs under GAP & YAP I &	II (MLD)	:	NA		
27 Capacity of STPs Sanctioned under JNNURM & Others (MLD) : NA 28 Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) : NA 29 Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) : 1831.1 COD : 1831.1 COD : 1831.1 COD : 3112.8 TKN : 366.2 30 Wastewater Disposal Means : River & Land 31 Name of River/Streams for Wastewater Disposal : River & Land 32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Sultanganj State: Bihar S. No. Items Value	25	Current Utilized Capacity of STPs (MLD)		:	NA		
Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) Pollution Load (Domestic) (Method 2: Per Capita CoD : 3112.8 TKN : 366.2 Wastewater Disposal Means : River & Land Gandak River Name of River/Streams for Wastewater Disposal : River Number of Drains/Nallah for Wastewater Disposal : NA Number of Water Bodies : NA Gross Area of Water Bodies (Hectare) : NA Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Sultanganj State: Bihar S. No. Items Value	26	Percentage Utilization of Installed Capacity (%)		:	NA		
Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	27	Capacity of STPs Sanctioned under JNNURM & Others (MLD)		:	NA		
COD		Pollution Load (Domostic) (Mathed 1: Actual Flow)		:	NA		
Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d) River & Land Wastewater Disposal Means Name of River/Streams for Wastewater Disposal Number of Drains/Nallah for Wastewater Disposal Number of Water Bodies River NA River Shade of Water Bodies (Hectare) River NA State: Bihar S. No. River State: Bihar Value	28	·	COD	:	NA		
Pollution Load (Domestic) (Method 2: Per Capita COD : 3112.8 TKN : 366.2 30 Wastewater Disposal Means : River & Land Name of River/Streams for Wastewater Disposal : River 31 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Sultanganj State: Bihar S. No. Items Value		(1/6) (1)	TKN	:	NA		
Contribution) (kg/d) Contribution) (kg/d) TKN : 3112.8 TKN : 366.2 River & Land Gandak River NA And And Gross Area of Water Bodies (Hectare) Area of Water Bodies as % of Total Area Water Balance & Pollution Load (Domestic) Fact Sheet City: Sultanganj State: Bihar S. No. Items		Dellastica Lond (Demonstra) (Masthard 2: Day Courita	BOD ₅	:	1831.1		
TKN : 366.2	29		COD	:	3112.8		
Name of River/Streams for Wastewater Disposal : River 32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Sultanganj State: Bihar S. No. Items Value		Contribution) (kg/a)		:	366.2		
31 Name of River/Streams for Wastewater Disposal : River	30	Wastewater Disposal Means			River & Land		
31 : River 32 Number of Drains/Nallah for Wastewater Disposal : NA 33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Sultanganj State: Bihar S. No. Items Value					Gandak		
33 Number of Water Bodies : NA 34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Sultanganj State: Bihar S. No. Items Value	31	ivallie of kiver/streams for wastewater Disposal		:	River		
34 Gross Area of Water Bodies (Hectare) : NA 35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Sultanganj State: Bihar S. No. Items Value	32	Number of Drains/Nallah for Wastewater Disposal		:	NA		
35 Area of Water Bodies as % of Total Area : <<< 1 Water Balance & Pollution Load (Domestic) Fact Sheet City: Sultanganj State: Bihar S. No. Items Value	33	33 Number of Water Bodies		:	NA		
Water Balance & Pollution Load (Domestic) Fact Sheet City: Sultanganj State: Bihar S. No. Items Value	34	Gross Area of Water Bodies (Hectare)		<u>:</u>	NA		
City: Sultanganj State: Bihar S. No. Items Value	35	35 Area of Water Bodies as % of Total Area		:	<<< 1		
S. No. Items Value		Water Balance & Pollution Load (Domestic	Fact Shee	<u>t</u>			
	City: Sult	tanganj		Stat	State: Bihar		
1 Total Area (sq km) : 12.29	S. No.	Items			Value		
	1	Total Area (sq km)		:	12.29		

2	Population as in 2011		:	52892
3	Population Growth Rate as in 2011 (%)			26.06
4	Total Number of Wards		:	25
5	Population per Ward (Thousands)		:	2,116
6	Total Number of Household as in 2011		:	9410
7	Number of Household per Ward		:	376
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)		:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)	:	7.1
18	Average Water Supply Rate from ULB & Non-ULB Sou	ırces (lpcd)	:	135.0
19	19 Total Sewage Generation (MLD)*		:	5.7
20	20 Per Capita Sewage Generation (lpcd)		:	108.0
21	21 Sewage Collection (MLD)		:	NA
22	22 Percentage of Sewage Collection (%)		:	NA
23	23 Number of STPs		:	NA
24	24 Total Installed Capacity of STPs under GAP & YAP I & II (MLD)		:	NA
25	25 Current Utilized Capacity of STPs (MLD)		:	NA
26	26 Percentage Utilization of Installed Capacity (%)		:	NA
27	27 Capacity of STPs Sanctioned under JNNURM & Others (MLD)			NA
	Pollution Load (Domestic) (Method 1: Actual Flow)	BOD ₅	:	NA
28	(kg/d)	COD	:	NA
	(16) (1)	TKN	:	NA
	Dellustian Load (Demostia) (Mothed 2: Dem Comite	BOD ₅	:	1428.1
29	Pollution Load (Domestic) (Method 2: Per Capita Contribution) (kg/d)	COD	:	2427.7
		TKN	:	285.6
	Wastowator Disposal Moans	•		River & Land
30	30 Wastewater Disposal Means		:	Disposal
31	31 Name of River/Streams for Wastewater Disposal		<u> </u> :	Ganga River
32	32 Number of Drains/Nallah for Wastewater Disposal		:	NA
33			:	NA
34	34 Gross Area of Water Bodies (Hectare)		:	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1
	Water Balance & Pollution Load (Domestic)	Fact Sheet		
City: Sup			State	e: Bihar
,,-				

S. No.	Items			Value
1	Total Area (sq km)		:	22.37
2	Population as in 2011		:	65437
3	Population Growth Rate as in 2011 (%)		:	20.99
4	Total Number of Wards		:	28
5	Population per Ward (Thousands)		:	2,337
6	Total Number of Household as in 2011		:	12495
7	Number of Household per Ward		:	446
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (lpd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (lpcd)		:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)	:	8.8
18	Average Water Supply Rate from ULB & Non-ULB So	:	135.0	
19	Total Sewage Generation (MLD)*		:	7.1
20	Per Capita Sewage Generation (lpcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I &	II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Other	s (MLD)	:	NA
	Dellution Load (Demostic) (Mathed 1. Actual Flau)	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow) (kg/d)	COD	:	NA
	(Ng/ U)	TKN	:	NA
	Pollution Load (Domestic) (Method 2: Per Capita	BOD ₅	:	1766.8
29	Contribution) (kg/d)	COD	:	3003.6
	Contribution, (Ng, a)	TKN	:	353.4
	Wastewater Disposal Means			River & Land
30	<u>'</u>			Disposal
31	Name of River/Streams for Wastewater Disposal		:	Koshi River
32	Number of Drains/Nallah for Wastewater Disposal		<u> </u> :	NA
33	Number of Water Bodies		<u> :</u>	NA
34	Gross Area of Water Bodies (Hectare)		<u> :</u>	NA
35	Area of Water Bodies as % of Total Area		:	<<< 1

	Water Balance & Pollution Load (Domestic) Fact Shee	<u>t</u>	
City:Teg	hra		Stat	e: Bihar
S. No.	Items			Value
1	Total Area (sq km)		:	15.80
2	Population as in 2011		:	56234
3	Population Growth Rate as in 2011 (%)		:	NA
4	Total Number of Wards		:	5
5	Population per Ward (Thousands)		:	11,247
6	Total Number of Household as in 2011		:	10772
7	Number of Household per Ward		:	2154
8	Surface Water Supply (MLD)		:	NA
9	Ground Water (GW) Supply (MLD)		:	NA
10	Number of Bore Wells		:	NA
11	Ground Water Extraction per Bore Well (MLD)		:	NA
12	Number of Hand Pumps/ Tubewells		:	NA
13	Ground Water Extraction per Hand Pump (Ipd)		:	NA
14	Number of Pumping Stations for Water Supply		:	NA
15	.5 Total Pumping Capacity (MLD)		:	NA
16	Average Water Supply Rate from ULB Sources (Ipcd)		:	NA
17	Total Water Supply from ULB and Non-ULB Sources (MLD)		:	7.6
18	Average Water Supply Rate from ULB & Non-ULB Sources (Ipcd)		:	135.0
19	Total Sewage Generation (MLD)*		:	6.1
20	Per Capita Sewage Generation (lpcd)		:	108.0
21	Sewage Collection (MLD)		:	NA
22	Percentage of Sewage Collection (%)		:	NA
23	Number of STPs		:	NA
24	Total Installed Capacity of STPs under GAP & YAP I &	II (MLD)	:	NA
25	Current Utilized Capacity of STPs (MLD)		:	NA
26	Percentage Utilization of Installed Capacity (%)		:	NA
27	Capacity of STPs Sanctioned under JNNURM & Other	s (MLD)	:	NA
	Bell tier Level (Bennette) (24 til 14 A til 151)	BOD ₅	:	NA
28	Pollution Load (Domestic) (Method 1: Actual Flow)	COD	:	NA
	(kg/d)	TKN	:	NA
		BOD ₅	:	1518.3
29	Pollution Load (Domestic) (Method 2: Per Capita	COD	:	2581.1
	Contribution) (kg/d)	TKN	:	303.7
	Mestawatan Dianasal Masira	1		River & Land
30	Wastewater Disposal Means		:	Disposal
31	Name of River/Streams for Wastewater Disposal		:	Ganga River
32	Number of Drains/Nallah for Wastewater Disposal		:	NA
33	Number of Water Bodies		:	NA

34	Gross Area of Water Bodies (Hectare)	••	NA
35	Area of Water Bodies as % of Total Area	••	<<< 1

Appendix-3

Compilation of the total sewage discharge through point sources in river Ganga basin (Adopted from CPCB, 2013)

State	Region		Name of the Drains	Discharge	Remark
	Uttarkashi &				
	Devprayag	1	Storm Water Drain Uttarkashi	1.73	Domestic, industrial waste
		2	Kodia nala, Devprayag	1.73	
	Rishikesh	1	Triveni Drain/ Saraswati Nala	11.5	
		2	Rambha nadi/drain	152	
		3	Lakkar Ghat STP Drain	12	
		4	IDPL- STP Drain	3	
Uttarakhand		5	Swarg Ashram STP Drain	2.5	
		6	Gadhi Shyampur Drain	0	
	Haridwar	1	Jagjeetpur STP Drain	42	
		2	Kassavan Drain	11	
		3	Pandey wala Drain	0	
		4	Matra Sadan Drain	3.8	
		5	Rawlirao Drain	2.8	
	Laksar	1	Laksar drain	196	
	Sukratal	1	Banganga River (at confluence with river Ganga)	0	Domestic, industrial waste
	Bijnor	1	Hemraj Drain	0	
		2	Bijnor Sewage Drian	7.6	
		3	Malan River (at confluence with river Ganga)	16.5	
		4	Chhoiya Drain (at conf. with river Ganga)	124	
	Gajrola and Babrala	1	Bagad River	1.8	
	Garh	1	Garh Drain	14	
		2	Fuldehra Drain (at confluence with river Ganga)	32	
	Badaun	1	Badaun Sewage Drain	29.9	
		2	Sot River	42	
Uttar Pradesh	Anupshar	1	Anupsahar STP Drain-1	0.85	

	2	Anupsahar STP Drain-2	1.75	
Kanpur	1	Dabka Nalla-1 (Kachha nala)	94	
	2	Dabka Nalla-2 (Pakka nala)	25	
	3	Dabka Nalla-3 (Pakka nala)	0.26	
	4	Shetla Bazar (Kachha nala)	29	
	5	Wazidpur Nalla	54	
	6	Satti Chaura	1.1	
	7	Golaghat Nala	0.83	
	8	Bhagwatdas Nala	11	
	9	Sisamau Nala	197	
	10	Permiya Nala	186	
Unnao	1	Loni Drain	41.9	
	2	City Jail Drain	35.86	
Fatehpur to				
Raibareilly	1			
	3			
	4			
Allahabad	1			
	2			
	3			
	4	Rasulabad-4 (Kachha nala)		
	5	Nehru Drain		
	6	Kodar Drain	20	
	7	Pongaghat Drain	8	
	8	Solari Drain	34.8	
	9	Maviya Drain	65	
	Unnao	Kanpur 1 2 3 4 5 6 7 8 9 10 10 Unnao 1 2 2 Fatehpur to Raibareilly 1 2 3 4 4 Allahabad 1 2 3 4 5 6 7 8 8	Kanpur 1 Dabka Nalla-1 (Kachha nala) 2 Dabka Nalla-2 (Pakka nala) 3 Dabka Nalla-3 (Pakka nala) 4 Shetla Bazar (Kachha nala) 5 Wazidpur Nalla 6 Satti Chaura 7 Golaghat Nala 8 Bhagwatdas Nala 9 Sisamau Nala 10 Permiya Nala Unnao 1 Loni Drain 2 City Jail Drain Fatehpur to Raibareilly 1 Pandu River 2 Seepage 3 Arihari Drain 4 NTPC drain Allahabad 1 Rasulabad-1 (Pakka nala) 2 Rasulabad-2 (Pakka nala) 3 Rasulabad-3 (kachha nala) 4 Rasulabad-4 (Kachha nala) 5 Nehru Drain 6 Kodar Drain 7 Pongaghat Drain 7 Pongaghat Drain	Kanpur 1 Dabka Nalla-1 (Kachha nala) 94 2 Dabka Nalla-2 (Pakka nala) 25 3 Dabka Nalla-3 (Pakka nala) 0.26 4 Shetla Bazar (Kachha nala) 29 5 Wazidpur Nalla 54 6 Satti Chaura 1.1 7 Golaghat Nala 0.83 8 Bhagwatdas Nala 11 9 Sisamau Nala 197 10 Permiya Nala 186 Unnao 1 Loni Drain 41.9 2 City Jail Drain 35.86 Fatehpur to Raibareilly 1 Pandu River 1396 2 Seepage 0 3 Arihari Drain 34.25 4 NTPC drain 60.29 Allahabad 1 Rasulabad-1 (Pakka nala) 29.8 2 Rasulabad-2 (Pakka nala) 20.2 3 Rasulabad-3 (kachha nala) 48.5 5 Nehru Drain 7 6 Kodar Drain 20 7 Pongaghat Drain 34.8

		10	Mugalaha Drain	46	
	Mirzapur	1	Ghore Saheed drain	86.4	
		2	Khandwa drain	62.21	
	Varanasi	1	Rajghat drain	16.19	
		2	Nagwa drain	66.45	
		3	Ramnagar drain	23.65	
		4	Varuna drain	304.5	
		5	Shivala Drain	0	
	Buxer	1	Sidhharth Drain	7.5	Domestic , industrial waste
		2	Sati Ghat Drain	7.7	
		3	Nath Baba Drain	5.2	
		4	Tadka Drain	6.8	
		5	Sariupur Drain	6.7	
	Patna	1	Danapur Cantt Drain	10.1	
		2	Digha Ghat Drain	9.6	
		3	Kurzi Drain	120.4	
		4	Rajapur Drain	40.7	
Bihar		5	Bansh Ghat Drain	6.6	
		6	Collectriate Ghat Drain	14.3	
		7	Mittan Ghat Drain	5.4	
		8	Mahavir Drain	5.4	
		9	Badshahi Drain	21.4	
	Munger	1	ITC Drain	10.13	
		2	Lal Darwala Drain	8.5	
	Bhagalpur	1	Jamunia Drain	82.61	
		2	Adampur Drain	11.75	
		3	Sarkikal Drain	6.62	

		4	Saklichand Drain	7.7	
		5	Hathiya Drain	11.8	
		6	Chama Drain	10.6	
		7	Barari Ghat Drain	9.7	
	Kahalgaon	1	Kowa Drain	147.28	
		2	Kagzi Drain	5.2	
		1	Circular Canal adjacent to River Hooghly	320.3	Domestic, industrial waste
		2	Tolly Nala adjacent to Dahighata	380.2	
		3	Dhankheti Khal Near CESE Intake Point	65.2	
		4	Akhra Food Ghar Adjacent to Hooghly River	83.4	
	Left bank	5	Khardah Municipal Drain Connected to Hooghly River	63	
		6	Debitala Pancha Khal, Ichapore (Adjacent to R.N.S Brick Field)	46	
		7	Khal Near Nimtala Burning Ghat	20.7	
		8	MuniKhali Khal Adjacent to Arun Mistri Ghat	19.4	
		9	Kashipur Khal Adjacent to Khamarhati Jute Mill	16.1	
		10	In front of S.P Bunglow, S.N Banerjee Road, Mistry Ghat, Barrackpore	22.7	
West Bengal		11	Adjacent to Cossipore ferryghat & gunshell factory	19.8	
		12	Chitpur Ghat, Dilarjung Road	15	
			Majher Char Khal & Kalyani combined waste sewage near brick field with		
		13	foam near sluice gate	16.5	
		14	Drain Opposite to Fort William , Judges Court Ghat	7.65	
		15	Adjacent to Garifa Rly.Stn., Patterson road, adjacent to Ram Ghat	7.78	
		16	Adjacent to Garifa Rly. Stn.(North side) on Patterson road(domestic)	9.68	
		17	Baranagar Khal Adjacent to Ratan Babu Ghat	10.3	
			Mohan Misra lane & crossing of Ghosh para road, Halisahar, adjacent to		
		18	Prabhat Sangha playground	10.7	
		19	Bagher Khal, adjacent to Hotel Dreamland, near sluice gate, open pucca	11.1	

		drain		
	20	Drain between Pratapnagar and Rajbari	4.19	
		By the side of Alliance jute mill, Jagatdal Jetty, opposite side of bank		
	21	Chandannagar Jetty	4.96	
		Adjacent to boundary wall of Gandhighat & near Upashak Social Welfare		
	22	Organization, Gandhighat, South gate-1,Barrackpore	3.61	
	23	Balughat, Manirampur pucca drain	2.28	
	24	Bishalakshmi Ghat, adjacent to CESC Power House, Titagarh	4.01	
	25	Thanar Khal, adjacent to Thana & over tank by Naihati Municipality	5.29	
	26	Sasan ghat	2.92	
	27	Open pucca drain carrying waste for ward nos. 9 & 10	1.2	
	28	Saidabad kunja Bhata(opposite to auto center)ward no. 25	1.26	
	29	Shovabazar Canal Near Shovabazar Launch Ghat	0.42	
	30	Open pucca drain flowing adjacent to Diamond club,	0.96	
	31	Open Kuccha drain carrying domestic waste for Ward 16	0.66	
	32	Adjacent to boundary wall of Jangipur College and B D Office	1.08	
	33	Shasan (burning) Ghat, Bhairabpur, Purbaparaword 9 no 16	0.54	
	34	Radhar Ghat(Old Ichagra shasan Ghat) Bhairabpur, Purbapara	0.48	
	1	Bhagirathi lane, Mahesh, Serampore	41.5	
	2	Hastings Ghat road, adjacent to Hastings jute mill, Rishra, Hooghly	42	
	3	Najerganj Khal, north side of Shalimar paint, near Hans Khali Poll, Sankrail	326	
	4	Singhi More Khal (Singhi mara Khal), Manikpur, Sankrail, near brick field	26.1	
Right bank		Chatra Khal, Beniapara, Serampore, Behind Ganga Darsan, Raja K. L		
	5	Goswami street, Serampore	28.4	
	6	Bagh Khal, border of Rishra & Konnagar Municipality on G.T Road	18.4	
	7	Telkal Ghat	21.9	
	8	Ramkrishna Mullickghat Road	12.2	

	9	130 Foreshore Road Martin Burn	17.6	
	10	Shibpur Burning Ghat	13.3	
		Jagannath Ghat Road, opposite to China pharmacy, by the side of Bijoy		
	11	lakshmi rolling mill	17.3	
		Combined of Swarasati Khal and Rajganj Khal, near Sankrail Police station,		
	12	near Pareshnath Hazra Ghat	2.77	
		Champdany Ferry Ghat, opposite nabal garrage, Champdany , Poura		
	13	bhavan road, Pin-712222	4.15	
	14	South side of Dawnagazi Ghat, Bally Municipality, Bally	1.31	
		Jagatnath Ghat, Ward No14, Lalababu Saha Rd., South side of Kathgola		
	15	Ghat	9.33	
	16	101,Foreshore Road	6.24	
	17	Kuthighat South Side of Belur Math	5.76	
	18	N.C.Pal Khal, Sankrail	3.87	
	19	Adjacent to bazarpara and Garighat (ward no. 18) Kuccha drain	1.2	
	20	Shalimar Coal Deposit No 1Naresh Kumar Ward	0.16	
		Total Discharge	6088.4	