

SCHOOL OF PLANNING AND ARCHITECTURE

UNIVERSITY OF MYSORE



DISTRICT DEVELOPMENT PLAN FOR MYSURU DISTRICT

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TOPIC: Urban Core Infrastructure & Rurban Cluster



MASTERS IN URBAN AND REGIONAL PLANNING
SCHOOL OF PLANNING AND ARCHITECTURE

URBAN CORE INFRASTRUCTURE & RURBAN CLUSTER

Urban Core Infrastructure:

- The total area of Mysore district is 6307 sq. km.
- Mysore district with a total population of 30, 01,127 stands at 3rd place in the State.
- The district has the second highest density of 476 in the State.
- Mysore district accounts for 4.9 percent of the total population of the State, third highest after Bangalore and Belgaum.
- With the decadal growth rate of 13.6 percent, it ranks 11th in the State in terms of decadal growth rate

Regional Planning and City Planning:

- City planning focuses on the land use plans, spatial growth and policies which are at local level (affecting that particular city or town)
- Whereas in case of regional planning the emphasis on the policies is more.
- Those policies become the guidelines for the urban areas and their existing plans are modified accordingly.
- Regional planning is an urban planning strategy that focuses on the social, economic, and environmental development of a specific area.
- Regional plans address the needs of the entire region rather than just one municipality.
- The benefits of regional planning include coordination of transportation, housing, and other public services such as police, fire departments, hospitals, and schools.

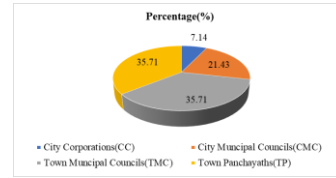
Urban Core Infrastructure Includes:

- Adequate water supply
- Assured electricity supply
- Sanitation, including solid waste management
- Efficient urban mobility and public transport
- Affordable housing especially for the poor
- Robust IT connectivity and digitalization

Urban Core Infrastructure

Demographic Studies (As per 2011 Census & Present 2024 Population):

TYPE OF URBAN LOCAL BODIES			
SI No	ULB Name	Numbers	Percentage(%)
1	City Corporations(CC)	1	7.14
2	City Municipal Councils(CMC)	3	21.43
3	Town Municipal Councils(TMC)	5	35.71
4	Town Panchayaths(TP)	5	35.71
Total		14	100.00

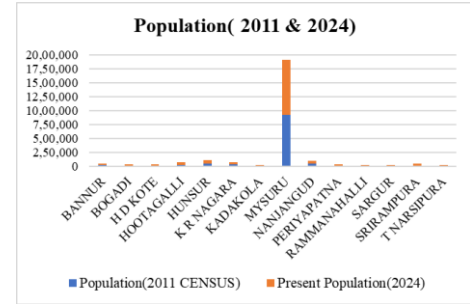


URBAN LOCAL BODIES IN MYSORE DISTRICT					
SI No	Name of Taluk	Name of ULB	Road Distance (in KM) from		Railway Station Distance in (KM) from Taluk Headquarters
			District Headquarter(Mysore)	Taluk Headquarter	
1	MYSURU	MYSURU(CC)	0	0	0
		KADAKOLA(TP)	13	13	0
		SRIRAMPURA(TP)	6	6	6
		RAMMANAHALLI(TP)	12	12	12
		BOGADI(TP)	5	5	5
		HOOTAGALLI(CMC)	10	15	10
2	T NARSIPURA	T NARSIPURA(TMC)	30	0	30
		BANNUR(TMC)	24	16	24
3	NANJANGUD	NANJANGUD(CMC)	24	0	0
4	H D KOTE	H D KOTE(TMC)	53	0	53
5	SARGUR	SARGUR(TP)	56	0	56
6	K R NAGARA	K R NAGARA(TMC)	42	0	1
7	HUNSUR	HUNSUR(CMC)	45	0	19
8	PERIYAPATNA	PERIYAPATNA(TMC)	67	0	40
9	SALIGRAMA	NA	NA	NA	NA

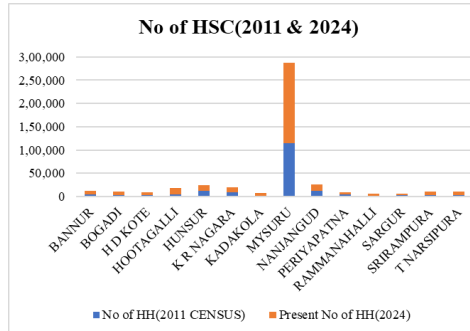
AREA,POPULATION AND HOUSEHOLD DETAILS OF ULBs IN 2011						
ULB Name	Type of ULB	Area(SQ.KM)	Population(2011 CENSUS)	No of HH(2011 CENSUS)	Density(PERSON/SQ.KM)	Growth Rate(%)
BANNUR	TMC	3.09	21,896	5,186	7086	9.25
BOGADI	CT	4.73	9,041	2,282	1911	8.85
H D KOTE	TP	1.89	14,313	3,336	7573	16.36
HOOTAGALLI	CT	3.44	18,308	4,936	5322	0
HUNSUR	TMC	11.76	50,865	11,793	4325	15.86
K R NAGARA	TMC	8.6	35,805	8,643	4163	16.88
KADAKOLA	CT	7.8	6,436	1,426	825	0
MYSURU	CC	112.81	9,20,550	1,15,061	8160	26.9
NANJANGUD	TMC	14.08	50,598	12,137	3594	10.25
PERIYAPATNA	TP	5.99	16,685	4,031	2785	11.8
RAMMANAHALLI	UN INHABITATED	4.82	UN INHABITATED	UN INHABITATED	UN INHABITATED	0
SARGUR	TP	0.59	11,425	2,703	19364	0
SRIRAMPURA	CT	3.77	11,234	2,787	2980	0
T NARSIPURA	TP	1	9,980	2,534	9980	55.26

PRESENT AREA,POPULATION AND HOUSEHOLD DETAILS OF ULBs IN 2024						
ULB Name	Type of ULB	Area(SQ.KM)	Present Population(2024)	Present No of HH(2024)	Density(PERSON/SQ.KM)	Total No of Wards
BANNUR	TMC	7.56	27,117	6,310	3587	23
BOGADI	TP	32.35	30,984	7,746	958	21
H D KOTE	TMC	7.6	18,381	5,557	2419	23
HOOTAGALLI	CMC	28.48	60,000	12,684	2107	31
HUNSUR	CMC	11.76	60,458	12,732	5141	31
K R NAGARA	TMC	8.04	39,886	11,224	4961	23
KADAKOLA	TP	34.71	22,664	5,676	653	20
MYSURU	CC	128.42	9,85,940	1,72,783	7677	65
NANJANGUD	CMC	11.29	52,284	13,274	4631	31
PERIYAPATNA	TMC	12	21,427	5,085	1786	23
RAMMANAHALLI	TP	22.81	27,560	6,756	1208	19
SARGUR	TP	3.85	12,560	3,385	3262	12
SRIRAMPURA	TP	14.48	33,801	8,047	2334	18
T NARSIPURA	TMC	13.92	12,816	8,300	921	23

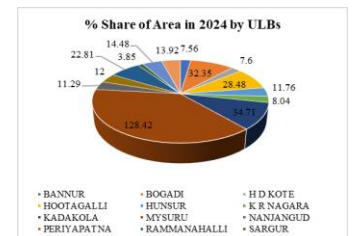
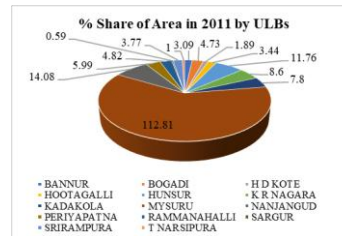
INCREASE IN POPULATION FROM 2011 TO 2024			
ULB Name	Population(2011 CENSUS)	Present Population(2024)	Total increase in Population
BANNUR	21,896	27,117	5,221
BOGADI	9,041	30,984	21,943
H D KOTE	14,313	18,381	4,068
HOOTAGALLI	18,308	60,000	41,692
HUNSUR	50,865	60,458	9,593
K R NAGARA	35,805	39,886	4,081
KADAKOLA	6,436	22,664	16,228
MYSURU	9,20,550	9,85,940	65,390
NANJANGUD	50,598	52,284	1,686
PERIYAPATNA	16,685	21,427	4,742
RAMMANAHALLI	UN INHABITED	27,560	27,560
SARGUR	11,425	12,560	1,135
SRIRAMPURA	11,234	33,801	22,567
T NARSIPURA	9,980	12,816	2,836



INCREASE IN HOUSEHOLD FROM 2011 TO 2024			
ULB Name	No of HH(2011 CENSUS)	Present No of HH(2024)	Total increase in No of HH
BANNUR	5,186	6,310	1,124
BOGADI	2,282	7,746	5,464
H D KOTE	3,336	5,557	2,221
HOOTAGALLI	4,936	12,684	7,748
HUNSUR	11,793	12,732	939
K R NAGARA	8,643	11,224	2,581
KADAKOLA	1,426	5,676	4,250
MYSURU	1,15,061	1,72,783	57,722
NANJANGUD	12,137	13,274	1,137
PERIYAPATNA	4,031	5,085	1,054
RAMMANAHALLI	UN INHABITED	6,756	6,756
SARGUR	2,703	3,385	682
SRIRAMPURA	2,787	8,047	5,260
T NARSIPURA	2,534	8,300	5,766



% SHARE OF AREA IN 2011 & 2024 BY ULBs		
ULB Name	% Area(SQ.KM)2011	% Area(SQ.KM)2024
BANNUR	1.68	2.24
BOGADI	2.57	9.59
H D KOTE	1.03	2.25
HOOTAGALLI	1.87	8.44
HUNSUR	6.38	3.49
K R NAGARA	4.66	2.38
KADAKOLA	4.23	10.29
MYSURU	61.19	38.08
NANJANGUD	7.64	3.35
PERIYAPATNA	3.25	3.56
RAMMANAHALLI	2.61	6.76
SARGUR	0.32	1.14
SRIRAMPURA	2.04	4.29
T NARSIPURA	0.54	4.13
14 ULBs AREA	100.00	100.00

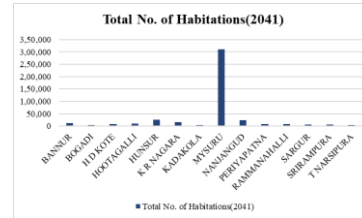
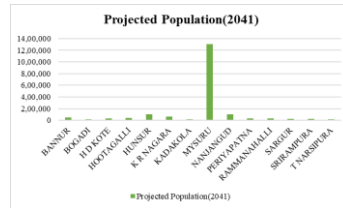
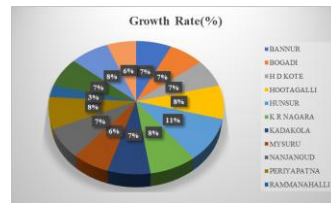


	2011	2024	Observation
Area	Mysuru is the largest in area i.e,128.42 SQ.KM Sargur TP is the smallest in area i.e,0.59 SQ.KM	Mysuru CC is the largest in area i.e,128.42 SQ.KM Sargur TP is the smallest in area i.e,3.85 SQ.KM	ULBs are expanding in area due to requirement of space because of increase in the population
Population	Most Populated ULB was Mysore with the population of 9,20,550 and growth rate of 26.9% Ramanahalli was Un Habitated Village in 2011	Most Populated ULB was Mysore with the population of 9,85,940. Sargur is less populated ULBs	Growth rate is high because of urbanization and better infrastructure facilities
No of Households	Mysore has highest HH i.e,1,15,061 Ramanahalli was Un Habitated Village in 2011	Mysore has highest HH i.e,1,72,783 Now it has 6,756	Total increase of 57,722 due to migration and better Infrastructure Facility, Education, Jobs Due to the close proximity of Mysore, this village has transformed into TP
Density	Sargur has the highest population density of 19,364 Person/SQ.KM	Hunsur has the highest population density of 5141 Person/SQ.KM	Sargur had the highest density because the area was 0.59 SQ.KM in 2011
ULBs	1 CC,4 TMC,4 TP,4 CT	1 CC,3 CMC,5 TMC,5 TP	

Demographic Studies for 2041 (Projected Population):

POPULATION PROJECTION FOR 2041									
ULB Name	Area(SQ. KM)	Present Population(2024)	Present No of HH(2024)	Projected Population(2021)	Projected Population(2031)	Projected Population(2041)	Total No. of Habitations(2041)	Growth Rate(%)	Density(Pa/Sqm)
BANNUR	7.56	27,117	6,310	28,400	37,600	46,800	11,143	12.66	6,190
BOGADI	32.35	30,984	7,746	11,700	15,100	19,500	4,643	12.38	603
H D KOTE	7.6	18,381	5,557	18,600	24,400	30,200	7,190	12.21	3,974
HOOTAGALLI	28.48	60,000	12,684	23,800	31,400	39,000	9,286	14.49	1,369
HUNSUR	11.76	60,458	12,732	66,000	85,000	1,04,000	24,762	18.27	8,844
K R NAGARA	8.04	39,886	11,224	46,000	56,000	66,000	15,714	14.15	8,209
KADAKOLA	34.71	22,664	5,676	8,300	10,400	17,500	4,167	12.80	504
MYSURU	128.42	9,85,940	1,72,783	10,38,469	11,71,453	13,04,437	3,10,580	11.19	10,158
NANJANGUD	11.29	52,284	13,274	65,000	83,000	1,01,000	24,048	12.82	8,946
PERIYAPATNA	12	21,427	5,085	21,600	28,500	35,400	8,429	13.49	2,950
RAMMANAHALLI	22.81	27,560	6,756	30,520	32,265	34,010	8,098	5.13	1,491
SARGUR	3.85	12,560	3,385	14,800	19,300	23,800	5,667	12.91	6,182
SRIRAMPURA	14.48	33,801	8,047	14,600	19,000	23,400	5,571	13.80	1,616
T NARSIPURA	13.92	12,816	8,300	12,900	16,700	20,500	4,881	10.54	1,473

Urban Classification of Towns(URDPFI)		
Class I	>1,00,000	City Corporation
Class II	50,000-99,999	City Municipal Council
Class III	20,000-49,999	Town Municipal Council
Class IV	10,000-19,999	Town Panchayath
Class V	5,000-9,999	
Class VI	<5,000	



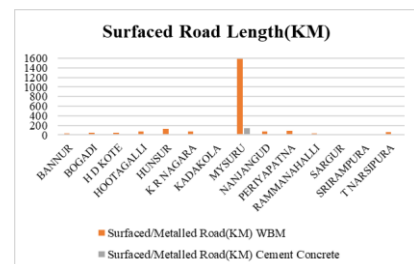
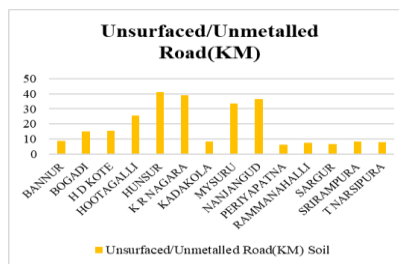
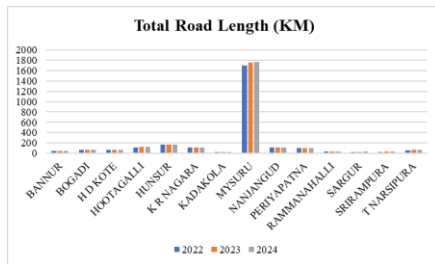
1.Transportation:

(a) Analysis:

CONNECTIVITY								
Sl No	Name of Taluk	Name of ULB	National Highway(NH)		State Highway(SH)		Railways	
			No of NH	NH Length(KM)	No of SH	SH Length(KM)	Railway Line Length(KM)	Railway Stations
1	MYSURU	MYSURU(CC)	National Highway 150A (NH 150A): Connects Mysore to Chamarajanagar National Highway 275 (NH 275): Connects Bangalore to Mangalore National Highway 766 (NH 766): Connects Mysore to Kollegal and beyond.	103.8	SH 86:Connects T Narsipur and Kollegal SH 88 A:Connects Hunsur and Hassan SH 17 D: Connects Bannur and Malavalli SH 33:Connects Kollegal and Bannur	227.5	Broad Gauge-72KM	8
		KADAKOLA(TP)						
		SRIRAMPURA(TP)						
		RAMMANAHALLI(TP)						
		BOGADI(TP)						
2	T NARSIPURA	HOOTAGALLI(CMC)	National Highway 275 (NH 275): Connects Bangalore to Mangalore	25	SH 86:Connects T Narsipur and Kollegal SH 79:Connects T Narsipur to Bannur SH 33:Connects Kollegal and Bannur	83.5		
		T NARSIPURA(TMC)						
		BANNUR(TMC)						
3	NANJANGUD	NANJANGUD(CMC)	National Highway 766 (NH 766): Connects Mysore to Kollegal and beyond. National Highway 150A (NH 150A): Connects Mysore to Chamarajanagar	40.6	SH 81:Connects Nanjangud to Chamarajanagar SH 88 A:Connects Hunsur and Hassan	143.45	Broad Gauge-25 KM	6
4	H D KOTE	H D KOTE(TMC)	No	0	SH 86:Connects T Narsipur and Kollegal SH 33:Connects Kollegal and Bannur	140.04		
5	SARGUR	SARGUR(TP)	No	0	SH 33:Connects Kollegal and Bannur SH 85:Connects Mysore,Hassan and Holenarsipura	83.5		
6	K R NAGARA	K R NAGARA(TMC)	National Highway 275 (NH 275): Connects Bangalore to Mangalore	19.6	SH 86:Connects T Narsipur and Kollegal SH 88 A:Connects Hunsur and Hassan	138.96	Broad Gauge-59KM	2
7	HUNSUR	HUNSUR(CMC)	National Highway 275 (NH 275): Connects Bangalore to Mangalore	41.8	SH 90:Connects Hunsur to Periyapatna SH 88 A:Connects Hunsur and Hassan	83.38		
8	PERIYAPATNA	PERIYAPATNA(TMC)	National Highway 275 (NH 275): Connects Bangalore to Mangalore	27.28	SH 90:Connects Hunsur to Periyapatna	136.79		
9	SALIGRAMA	NA	National Highway 66 (NH 66): Connects Pamel to Kanyakumari	10.2	0	0		

TOTAL LENGTH OF ROAD(KM)			
ULB's	2022	2023	2024
BANNUR	48	49.5	51
BOGADI	68	69	70
H D KOTE	72.4	74.6	74.6
HOOTAGALLI	118	121	120
HUNSUR	170	174	175
K R NAGARA	112	114	115
KADAKOLA	27	28	29.2
MYSURU	1,702	1,752	1,762
NANJANGUD	112	115	116
PERIYAPATNA	99	100.01	102.51
RAMMANAHALLI	35	37	39
SARGUR	29	30	31
SRIRAMPURA	30	31	32
T NARSIPURA	62	65	67

PRESENT TYPE OF ROAD IN ULBs			
ULB's	Surfaced/Metalled Road(KM)		Unsurfaced/Unmetalled Road(KM)
	WBM	Cement Concrete	Soil
BANNUR	39	3.25	8.75
BOGADI	52	3	15
H D KOTE	53	6.25	15.35
HOOTAGALLI	77.65	16.75	25.6
HUNSUR	125.52	8.3	41.18
K R NAGARA	68.32	7.85	38.83
KADAKOLA	18	2.76	8.44
MYSURU	1,588	140.35	33.65
NANJANGUD	74.08	5.36	36.56
PERIYAPATNA	89.75	6.42	6.34
RAMMANAHALLI	30	1.58	7.42
SARGUR	22	2.5	6.5
SRIRAMPURA	21	2.65	8.35
T NARSIPURA	55.95	3.25	7.8



National Highways (NH):

- 1) NH 275: Connects Bangalore to Mangalore
- 2) NH 766: Connects Mysore to Kollegal and beyond.
- 3) NH 150A: Connects Mysore to Chamarajanagar.

State Highways (SH):

- 1) SH 17: Connects Bangalore to Mysore via Ramanagara.
- 2) SH 88: Connects Mysore to Nanjangud.
- 3) SH 12: Connects Mysore to Madikeri
- 4) SH 90: Connects Hunsur to Periyapatna
- 5) SH 33: Connects Kollegal and Bannur
- 6) SH 79: Connects T Narsipur to Bannur
- 7) SH 86: Connects T Narsipur and Kollegal
- 8) SH 85: Connects Mysore, Hassan and Holenarsipura
- 9) SH 81: Connects Nanjangud to Chamrajnagar

Conclusion: The dynamics of urban development has resulted in a lot of mixed use getting developed along major roads, esp. the NH and the core city area

Railways:

- Railways also play a major role in connectivity.
- There are 16 Railways Station
- Mysore Railway Station is the main Station

(b) Proposals:

PROPOSED ROAD IN ULBs			
ULB's	Total Road Length(KM)	Existing All Weather Road(KM)	Proposed Road Length(KM)
BANNUR	51	42.25	8.75
BOGADI	70	55	15
H D KOTE	74.6	59.25	15.35
HOOTAGALLI	120	94.4	25.6
HUNSUR	175	133.82	41.18
K R NAGARA	115	76.17	38.83
KADAKOLA	29.2	20.76	8.44
MYSURU	1,762	1728.35	33.65
NANJANGUD	116	79.44	36.56
PERIYAPATNA	102.51	96.17	6.34
RAMMANAHALLI	39	31.58	7.42
SARGUR	31	24.5	6.5
SRIRAMPURA	32	23.65	8.35
T NARSIPURA	67	59.2	7.8
	2784.31	2524.54	259.77

Transportation			
Issues/Problems	Objectives	Strategies	Proposals/Policy Recommendation
259.77 km of road length is Kuccha Road	Upgrading surface of urban road to 100% of BT/CC Roads	Upgrading 259.77 km of road length from kuccha road to surfaced Road	Atal Mission for Rejuvenation and Urban Transformation - AMRUT : To provide basic civic amenities like water supply, sewerage, urban transport, parks as to improve the quality of life for all especially the poor and the disadvantaged. The focus of the Mission is on infrastructure creation that has a direct link to provision of better services to the citizens

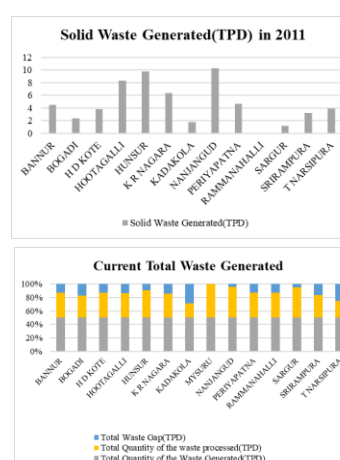
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2. Solid Waste Management:

(a) Analysis:

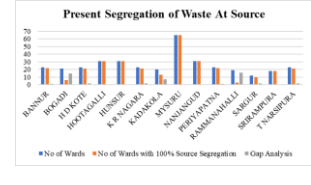
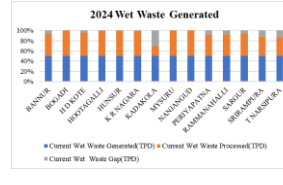
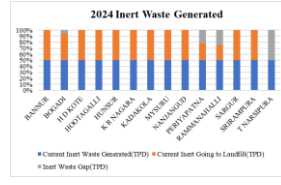
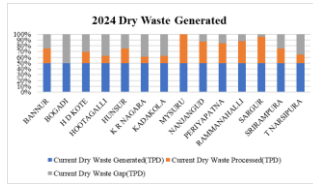
TOTAL WASTE GENERATED IN 2011				
Sl.No.	ULB Name	No. of House holds	Population (As per 2011 Census)	Solid Waste Generated(TPD)
1	BANNUR	5,186	21,896	4.51
2	BOGADI	2,282	9,041	2.36
3	H D KOTE	3,336	14,313	3.78
4	HOOTAGALLI	4,936	18,308	8.32
5	HUNSUR	11,793	50,865	9.74
6	K R NAGARA	8,643	35,805	6.32
7	KADAKOLA	1,426	6,436	1.74
8	MYSURU	1,15,061	9,20,550	450
9	NANJANGUD	12,137	50,598	10.28
10	PERIYAPATNA	4,031	16,685	4.62
11	RAMMANAHALLI	0	0	0
12	SARGUR	2,703	11,425	1.2
13	SRIRAMPURA	2,787	11,234	3.17
14	T NARSIPURA	2,534	9,980	3.85



CURRENT TOTAL WASTE GENERATED-2024						
ULB Name	Current Population	Present Households(2024)	Total Quantity of the Waste Generated(TPD)	Total Quantity of the waste processed(TPD)	Total Waste Gap(TPD)	Total Waste Gap(%)
BANNUR	27,117	6,310	8.51	6.35	2.16	25.38
BOGADI	30,984	7,746	8.30	5.40	2.90	34.94
H D KOTE	18,381	5,557	8.11	6.01	2.10	25.89
HOOTAGALLI	60,000	12,684	23.00	16.80	6.20	26.96
HUNSUR	60,458	12,732	23.00	18.80	4.20	18.26
K R NAGARA	39,886	11,224	13.00	9.30	3.70	28.46
KADAKOLA	22,664	5,676	3.50	1.50	2.00	57.14
MYSURU	9,85,940	1,72,783	550.00	550.00	0.00	0.00
NANJANGUD	52,284	13,274	23.00	20.95	2.05	8.91
PERIYAPATNA	21,427	5,085	9.00	6.75	2.25	25.00
AMMANAHALLI	27,560	6,756	6.00	4.50	1.50	25.00
SARGUR	12,560	3,385	2.51	2.25	0.26	10.36
SRIRAMPURA	33,801	8,047	7.50	5.00	2.50	33.33
T NARSIPURA	12,816	8,300	10.00	5.00	5.00	50.00

CURRENT DRY WASTE GENERATED				
ULB Name	Current Dry Waste Generated(TPD)	Current Dry Waste Processed(TPD)	Current Dry Waste Gap(TPD)	Current Dry Waste Gap(%)
BANNUR	2.98	1.50	1.48	49.58
BOGADI	2.90	0.00	2.90	100.00
H D KOTE	2.84	1.10	1.74	61.20
HOOTAGALLI	8.05	2.00	6.05	75.16
HUNSUR	8.05	4.00	4.05	50.31
K R NAGARA	4.55	1.00	3.55	78.02
KADAKOLA	1.00	0.25	0.75	75.00
MYSURU	225.00	225.00	0.00	0.00
NANJANGUD	8.05	6.00	2.05	25.47
PERIYAPATNA	3.15	2.15	1.00	31.75
AMMANAHALLI	2.00	1.50	0.50	25.00
SARGUR	0.88	0.80	0.08	8.57
SRIRAMPURA	3.00	1.50	1.50	50.00
T NARSIPURA	3.50	1.00	2.50	71.43

CURRENT WET WASTE GENERATED				
ULB Name	Current Wet Waste Generated(TPD)	Current Wet Waste Processed(TPD)	Current Wet Waste Gap(TPD)	Current Wet Waste Gap(%)
BANNUR	4.68	4.00	0.68	14.53
BOGADI	4.50	4.50	0.00	0.00
H D KOTE	4.46	4.10	0.36	8.07
HOOTAGALLI	12.65	12.50	0.15	1.19
HUNSUR	12.65	12.50	0.15	1.19
K R NAGARA	7.15	7.00	0.15	2.10
KADAKOLA	2.00	0.75	1.25	62.50
MYSURU	275.00	275.00	0.00	0.00
NANJANGUD	12.65	12.65	0.00	0.00
PERIYAPATNA	4.95	4.10	0.85	17.17
AMMANAHALLI	3.00	2.50	0.50	16.67
SARGUR	1.38	1.20	0.18	13.04
SRIRAMPURA	4.00	3.00	1.00	25.00
T NARSIPURA	5.50	4.00	1.50	27.27



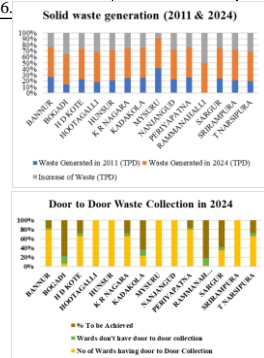
CURRENT INERT WASTE GENERATED				
ULB Name	Current Inert Waste Generated(TPD)	Current Inert Going to Landfill(TPD)	Inert Waste Gap(TPD)	Inert Waste Gap(%)
BANNUR	0.85	0.85	0.00	0.00
BOGADI	0.90	0.80	0.10	11.11
H D KOTE	0.81	0.81	0.00	0.00
HOOTAGALLI	2.30	2.30	0.00	0.00
HUNSUR	2.30	2.30	0.00	0.00
K R NAGARA	1.30	1.30	0.00	0.00
KADAKOLA	0.50	0.50	0.00	0.00
MYSURU	60.00	60.00	0.00	0.00
NANJANGUD	2.30	2.30	0.00	0.00
PERIYAPATNA	0.90	0.50	0.40	44.44
AMMANAHALLI	1.00	0.50	0.50	50.00
SARGUR	0.25	0.25	0.00	0.00
SRIRAMPURA	0.50	0.50	0.00	0.00
T NARSIPURA	1.00	0.00	1.00	100.00

CURRENT SEGREGATION OF WASTE AT SOURCE				
Sl No	ULB's	No of Wards	No of Wards with 100% Source	Gap Analysis
1	BANNUR	23	22	1
2	BOGADI	21	6	15
3	H D KOTE	23	21	2
4	HOOTAGALLI	31	31	0
5	HUNSUR	31	31	0
6	K R NAGARA	23	21	2
7	KADAKOLA	20	13	7
8	MYSURU	65	65	0
9	NANJANGUD	31	31	0
10	PERIYAPATNA	23	22	1
11	RAMMANAHALLI	19	3	16
12	SARGUR	12	10	2
13	SRIRAMPURA	18	18	0
14	T NARSIPURA	23	21	2

DETAILS OF SUP (SINGLE USE PLASTIC) RAID		
Sl No	ULB's	No of raids on use of single use plastic is carried till May 2024
1	Mysuru	708
2	Hootagalli	42
3	Hunsur	35
4	Nanjangudu	27
5	Bannur	27
6	H.D. Kote	35
7	K.R.Nagar	47
8	Periyapatna	32
9	T Narsipura	43
10	Bogadi	8
11	Kadakola	10
12	Rammanahalli	16
13	Sargur	31
14	Srirampura	15
		1076

WASTE GENERATED COMPARISSION-2011 & 2024				
ULB Name	Waste Generated in 2011 (TPD)	Waste Generated in 2024 (TPD)	Increase of Waste (TPD)	% Increase of Waste
BANNUR	4.51	8.51	4.00	53.00
BOGADI	2.36	8.30	5.94	28.43
H D KOTE	3.78	8.11	4.33	46.61
HOOTAGALLI	8.32	23.00	14.68	36.17
HUNSUR	9.74	23.00	13.26	42.35
K R NAGARA	6.32	13.00	6.68	48.62
KADAKOLA	1.74	3.50	1.76	49.71
MYSURU	450	550.00	100.00	81.82
NANJANGUD	10.28	23.00	12.72	44.70
PERIYAPATNA	4.62	9.00	4.38	51.33
AMMANAHALLI	UN INHABITED	6.00	6.00	100.00
SARGUR	1.2	2.51	1.31	47.81
SRIRAMPURA	3.17	7.50	4.33	42.27
T NARSIPURA	3.85	10.00	6.15	

ULB		CURRENT WET WASTE PROCESSING			CURRENT DRY WASTE PROCESSING			OVERALL
Sl No.	ULB Name	Design Capacity of Wet Waste Processing Facilities(TPD)	Design Operational Capacity of Wet Waste Processing Facilities(TPD)	Capacity Utilization(%)	Design Capacity of Dry Waste Processing	Design Operational Capacity of Dry Waste Processing Facilities(TPD)	Capacity Utilization(%)	Overall Capacity Utilization(%)
1	BANNUR	5	4	80%	3	1.5	50%	65%
2	BOGADI	NA	NA	NA	NA	NA	NA	NA
3	H D KOTE	4.5	4.1	91.11%	2.5	1.1	44.00%	67.55%
4	HOOTAGALLI	NA	NA	NA	NA	NA	NA	NA
5	HUNSUR	13	12.5	96.15%	9	4	44.44%	70.29%
6	K R NAGARA	13	7	53.84%	3	1	33.33%	16.66%
7	KADAKOLA	NA	NA	NA	NA	NA	NA	NA
8	MYSURU	350	275	78.57%	245	225	91.84%	85.20%
9	NANJANGUD	15	12.65	84.33%	6	6	100.00%	92.16%
10	PERIYAPATNA	5	4.1	82%	5	2.15	43.00%	62.50%
11	RAMMANAHALLI	NA	NA	NA	NA	NA	NA	NA
12	SARGUR	2	1.2	60%	1.5	0.8	53.33%	56.66%
13	SRIRAMPURA	NA	NA	NA	NA	NA	NA	NA
14	T NARSIPURA	NA	NA	NA	2.5	1	40%	40%



CURRENT STATUS OF SWM SITE IN THE ULBs					
Name of the ULB	Whether land is in possession (Yes/No)	DPR Approved (Yes/No)	If the SWM site is not in possession, Status of Identification	Common facilities developed (compound wall, approach road, internal road, security room, weighbridge,	Whether SWM Facility is in operation?
Mysuru	Yes	Yes	Vidyaranya param Survey Nos 180,181, Kesare Survey Nos 308,309,312,317 Rayankere Survey Nos 89	Developed	Yes
Nanjangud	Yes	Yes	Veeradevenapura Survey No 187, 7.23 Acres	Developed	Yes
Hunsur	Yes	Yes	Survey No 192 Doddahannasuru, 4.50 Acres	Developed	Yes
K R Nagara	Yes	Yes	Madlakoppala, Survey No 95, 4.05 Acres	Developed	Yes
Bannur	Yes	Yes	Channanahalli Survey No 131, 5 Acres	Developed	Yes
T.Narasipura	Yes	Yes	Kullur Survey No 144 3 acres	Developed	Yes
Periyapatna	Yes	Yes	Kaggundi-4 Acres	Developed	Yes
H D kote	Yes	Yes	Vaddargudi Survey No 47-48, 5 Acres	Developed	Yes
Sargur	Yes	Yes	Narasipura Road Survey No 84, 4 Acres	Developed	Yes
Hootagalli	Yes	Yes	KIADB Industrial Area, site No 29 C-3, 2.70 Acres	Yet to be started	No
Bogadi	Yes	Yes	Kemmanpura Survey No 22 2 Acres		No
Kadakola	Yes	Yes	Gudumavanahalli grama survey No 68, 4 acres		No
Ramanahalli	Yes	Yes	Hanchya grama survey no 381, 2 acres		No
Srirampura	Yes	Yes	Gorur Survey No 72, 38 Guntas		No

- Mechanical road sweeping is not carried out in the district only manual sweeping is practiced.
- All ULB's have dedicated vehicles for Waste collection
- All ULB's have SWM site in the District but it's not in function in Bogadi , Kadakola ,Ramanahalli, Hootagalli & Srirampura
- Transportation of the waste to the processing site is within 10 Km from the towns
- Due to non-functioning of SWM site in Bogadi, Kadakola, Ramanahalli, Hootagalli & Srirampura, collected waste is sent to Mysore SWM site for scientific disposal.

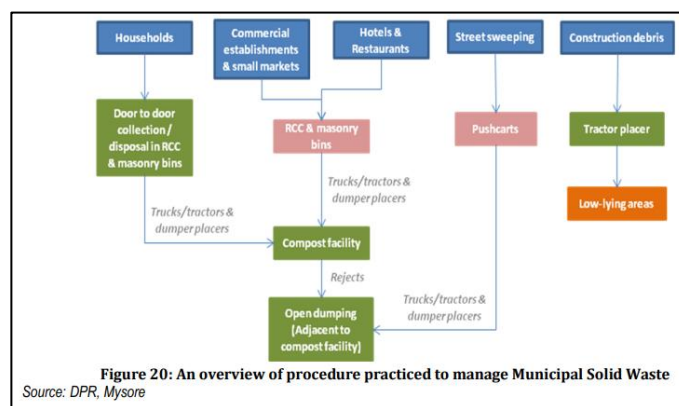
(b) Proposals:

WASTE GENERATION IN 2041							
ULB Name	Projected Population(2041)	Total No. of Habitations(2041)	Total Waste Generation(400 grams/person/day)	Total Wet Waste Generation(250 grams/person/day)	Total Dry Waste Generation(250 grams/person/day)	Existing Area(Acre)	Area Required(Proposed Area+2.5 Acre Buffer)
BANNUR	46,800	11,143	16.85	11.70	1.67	5 Acres	7 Acre
H D KOTE	30,200	7,190	10.87	7.55	1.08	5 Acres	9.5 Acre
HUNSUR	1,04,000	24,762	37.44	26.00	3.71	4.50 Acres	7 Acre
K R NAGARA	66,000	15,714	23.76	16.50	2.36	4.05 Acres	6.55 Acre
MYSURU	1304437.00	310580	469.60	326.11	46.59	60 Acres	85 Acre
HOOTAGALLI	39,000	9,286	14.04	9.75	1.39	2.70 Acres	4.5 Acre
SRIRAMPURA	23,400	5,571	8.42	5.85	0.84	38 Guntas	4 Acre
KADAKOLA	17,500	4,167	6.30	4.38	0.63	4 acres	8.5 Acre
AMMANAHALLI	34,010	8,098	12.24	8.50	1.21	2 acres	6.5 Acre
BOGADI	19,500	4,643	7.02	4.88	0.70	2 Acres	6.5 Acre
NANJANGUD	1,01,000	24,048	36.36	25.25	3.61	7.23 Acres	12 Acre
PERIYAPATNA	35,400	8,429	12.74	8.85	1.26	4 Acres	8.5 Acre
SARGUR	23,800	5,667	8.57	5.95	0.85	4 Acres	8.5 Acre
T NARSIPURA	20,500	4,881	7.38	5.13	0.73	3 acres	7.5 Acre

SOLID WASTE GENERATION			
Issues/Problems	Objectives	Strategies	Proposals/Policy Recommendation
1. Deficiency in the 100% coverage of waste generators through door to door collection. 2. Some wards are not practicing the 100% source segregation of municipal solid waste in the ULBs. 3. Waste is directly dumped without any treatment of the waste in the landfills	1. Cover 100% of waste generators through door to door collection. 2. Achieve 100% source segregation of municipal solid waste in all ULBs. 3. 100% of the biodegradable waste to be processed using appropriate technology. 4. No waste to be dumped or burnt in open space. 5. Products made of plastic are banned under Karnataka Plastic Ban across all ULBs. 6. Reduce waste going to the landfills to less than 30% of the total waste generated.	1. Waste should be segregated at the house itself 2. Door to door collection to be done by municipality daily 3. Dry waste should be sent to Material Recovery Facility and Wet waste should be sent to composting and processing all the 100% of collected waste 4. After the composting done the remaining inert material which is non reactive should be dumped in the landfill 5. Provide 100 m of buffer to the Sanitary Landfill to disconnect with the adjacent place present near it	The existing Facilities of all the ULBs are expanded in the area to accommodate the waste in 2041 & 100 m buffer is provided according to the URDPFI Guidelines for Sanitary Landfill Location

Procedure followed for MSW disposal in Mysore:

Existing Solid Waste Management in Mysore		
Type of Waste	Type of Treatment Facility	Capacity(TDP)
Dry Waste	30 TPD ZWM, 20 TPD DWCC, 15 TPD MRF at Kesare, 2TPD Plastic Waste Processing Unit	67
Wet Waste	Facility Provided-- 410TPD (200 TPD Vidyanarayapuram Waste to Compost Plant, 200 TPD Kesare Waste to Compost Plant, 10TPD poultry waste processing)	410



SOLID WASTE GENERATION IN MYSORE			
Issues/Problems	Objectives	Strategies	Proposals/Policy Recommendation
The Current Dry Waste is sent to Material Recovery Facility but the existing facility is not sufficient to handle the waste which will be generated in 2041	Achieve 100% of Dry Waste Processing & Material Recovery	To follow 4 Rs, Reduce, Reuse, Recycle & Regenerate	Integrated Waste Management System is proposed for the 100% processing of waste and to provide 100 m buffer to the landfill to disconnect the landfill from adjacent properties
The Current Wet Waste is not fully treated and directly dumped to the Landfill and there by the leachate generated is directly entering into the soil thereby polluting the Ground Water	100% Composting of the Wet Waste & only the inert material (which is non reactive in nature) should be dumped	2. To Expand the Existing MRF Facility	

Swachh Bharat Mission:

The objectives of the mission are mentioned below:

- All households and premises segregate their waste into Wet Waste (from kitchen and gardens) and Dry Waste (including paper, glass, plastic, and domestic hazardous waste and sanitary waste wrapped separately).
- 100% door to door collection of segregated waste from each household/ premise.

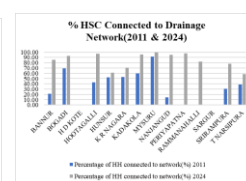
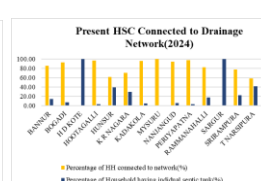
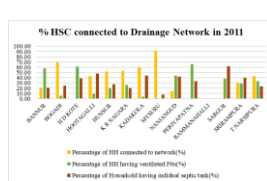
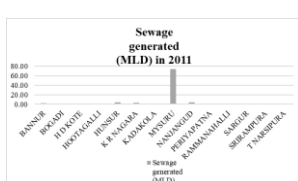
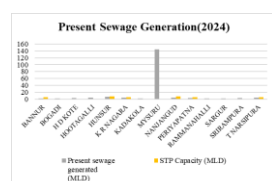
- 100% scientific management of all fractions of waste, including safe disposal in scientific landfills.
- All legacy dumpsites remediated and converted into green zone.
- All used water including fecal sludge, especially in smaller cities are safely contained, transported, processed and disposed so that no untreated fecal sludge and used water pollutes the ground or water bodies.

3.Sewage Treatment Plant:

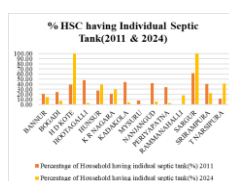
(a) Analysis:

SEWAGE GENERATED IN 2011				
SL.No.	ULB's	No. of Households	Population (As per 2011 Census)	Sewage generated (MLD)
1	BANNUR	5,186	21,896	1.75
2	BOGADI	2,282	9,041	0.72
3	H D KOTE	3,336	14,313	1.15
4	HOOTAGALLI	4,936	18,308	1.46
5	HUNSUR	11,793	50,865	4.07
6	K R NAGARA	8,643	35,805	2.86
7	KADAKOLA	1,426	6,436	0.51
8	MYSURU	1,15,061	9,20,550	73.64
9	NANJANGUD	12,137	50,598	4.05
10	PERIYAPATNA	4,031	16,685	1.33
11	RAMMANAHALLI	0	0	0.00
12	SARGUR	2,703	11,425	0.91
13	SRIRAMPURA	2,787	11,234	0.90
14	T NARSIPURA	2,534	9,980	0.80

PRESENT SEWAGE GENERATION(2024)					
ULB's	Present Populations on 2024	No of Households as on 2024	Present sewage generated (MLD)	STP Capacity (MLD)	Capacity Utilization(%)
BANNUR	27,117	6,310	2.17	5	43.4
BOGADI	30,984	7,746	2.42	No STP	
H D KOTE	18,381	5,557	2.86	No STP	
HOOTAGALLI	60,000	12,684	4.8	No STP	
HUNSUR	60,458	12,732	6.97	8.1	86.04
K R NAGARA	39,886	11,224	4.86	6	81
KADAKOLA	22,664	5,676	1.81	No STP	
MYSURU	9,85,940	1,72,783	145	157.65(3 No)	91.97
NANJANGUD	52,284	13,274	4.18	7.62	54.85
PERIYAPATNA	21,427	5,085	2.7	5	54.2
RAMMANAHALLI	27,560	6,756	2.2	No STP	
SARGUR	12,560	3,385	1.46	No STP	
SRIRAMPURA	33,801	8,047	2.7	No STP	
T NARSIPURA	12,816	8,300	4.29	5.5	78

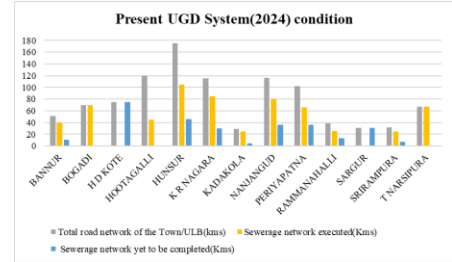
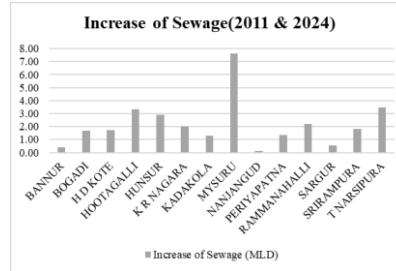
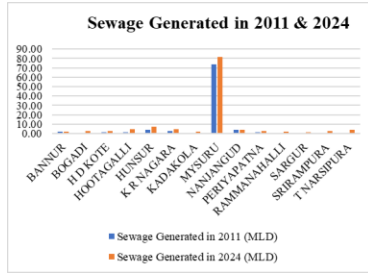


HOUSEHOLDS CONNECTED TO DRAINAGE NETWORK(2011)									
SL.No.	ULB's	Population as on 2011	No of Households as on 2011	No. of HH connected to network	Percentage of HH connected to network(%)	No. of HH having ventilated Pits	Percentage of HH having ventilated Pits(%)	No. of Household having individual septic tank	Percentage of Household having individual septic tank(%)
1	BANNUR	21,896	5,186	1,080	20.83	3,009	58.02	1,097	21.15
2	BOGADI	9,041	2,282	1,586	69.50	133	5.83	563	24.67
3	H D KOTE	14,313	3,336	0	0.00	2,039	61.12	1,297	38.88
4	HOOTAGALLI	18,308	4,936	2,123	43.01	445	9.02	2,368	47.97
5	HUNSUR	50,865	11,793	6,150	52.15	2,384	20.22	3,259	27.64
6	K R NAGARA	35,805	8,643	4,601	53.23	2,262	26.17	1,780	20.59
7	KADAKOLA	6,436	1,426	852	59.75	58	4.07	632	44.32
8	MYSURU	9,20,550	1,15,061	1,05,286	91.50	517	0.45	9,258	8.05
9	NANJANGUD	50,598	12,137	1,727	14.23	5,324	43.87	5,086	41.90
10	PERIYAPATNA	16,685	4,031	22	0.55	2,652	65.79	1,357	33.66
11	RAMMANAHALLI	0	0	0	0	0	0	0	0
12	SARGUR	11,425	2,703	0	0.00	1,039	38.44	1,664	61.56
13	SRIRAMPURA	11,234	2,787	862	30.93	799	28.67	1,126	40.40
14	T NARSIPURA	9,980	2,534	1,080	42.62	850	33.54	604	23.84



PRESENT HOUSEHOLDS CONNECTED TO DRAINAGE NETWORK(2024)								
Sl.No.	ULB's	Present Populations on 2024	No of Households as on 2024	No. of HH connected to network	Percentage of HH connected to network(%)	No. of HH made and not connected to network	No. of Household having individual septic tank	Percentage of Household having individual septic tank(%)
1	BANNUR	27,117	6,310	5,410	85.74	900	900	14.26
2	BOGADI	30,984	7,746	7,216	93.16	530	530	6.84
3	H D KOTE	18,381	5,557	0	0.00	5,557	5,557	100.00
4	HOOTAGALLI	60,000	12,684	12,324	97.16	360	360	2.84
5	HUNSUR	60,458	12,732	7,800	61.26	4,932	4,932	38.74
6	K R NAGARA	39,886	11,224	7,931	70.66	3,293	3,293	29.34
7	KADAKOLA	22,664	5,676	5,429	95.65	247	247	4.35
8	MYSURU	9,85,940	1,72,783	1,72,783	100.00	0	0	0.00
9	NANJANGUD	52,284	10,300	9,745	94.61	555	555	5.39
10	PERIYAPATNA	21,427	5,085	4,950	97.35	135	135	2.65
11	RAMMANAHALLI	27,560	6,756	5,562	82.33	1,194	1,194	17.67
12	SARGUR	12,560	3,385	0	0.00	3,385	3,385	100.00
13	SRIRAMPURA	33,801	8,047	6,258	77.77	1,789	1,789	22.23
14	T NARSIPURA	12,816	8,300	4,860	58.55	3,440	3,440	41.45

HOUSEHOLDS CONNECTED TO DRAINAGE NETWORK(2011 & 2024)				
ULB's	2011		2024	
	Percentage of HH connected to network(%) 2011	Percentage of Household having individual septic tank(%) 2011	Percentage of HH connected to network(%) 2024	Percentage of Household having individual septic tank(%) 2024
BANNUR	20.83	21.15	85.74	14.26
BOGADI	69.50	24.67	93.16	6.84
H D KOTE	0.00	38.88	0.00	100.00
HOOTAGALLI	43.01	47.97	97.16	2.84
HUNSUR	52.15	27.64	61.26	38.74
K R NAGARA	53.23	20.59	70.66	29.34
KADAKOLA	59.75	44.32	95.65	4.35
MYSURU	91.50	8.05	100.00	0.00
NANJANGUD	14.23	41.90	94.61	5.39
PERIYAPATNA	0.55	33.66	97.35	2.65
RAMMANAHALLI	0	0	82.33	17.67
SARGUR	0.00	61.56	0.00	100.00
SRIRAMPURA	30.93	40.40	77.77	22.23
T NARSIPURA	38.67	11.68	58.55	41.45



SEWAGE GENERATED IN 2011 & 2024			
ULB Name	Sewage Generated in 2011 (MLD)	Sewage Generated in 2024 (MLD)	Increase of Sewage (MLD)
BANNUR	1.75	2.17	0.42
BOGADI	0.72	2.42	1.70
H D KOTE	1.15	2.86	1.71
HOOTAGALLI	1.46	4.8	3.34
HUNSUR	4.07	6.97	2.90
K R NAGARA	2.86	4.86	2.00
KADAKOLA	0.51	1.81	1.30
MYSURU	73.64	81.29	7.65
NANJANGUD	4.05	4.18	0.13
PERIYAPATNA	1.33	2.7	1.37
RAMMANAHALLI	0.00	2.2	2.20
SARGUR	0.91	1.46	0.55
SRIRAMPURA	0.90	2.7	1.80
T NARSIPURA	0.80	4.29	3.49

PRESENT UNDERGROUND DRAINAGE SYSTEM						
Sl No.	ULB's	Present Populations on 2024	No of Households as on 2024	Total road network of the Town/ULB(kms)	Sewerage network executed(Kms)	Sewerage network yet to be completed(Kms)
1	BANNUR	27,117	6,310	51	40	11
2	BOGADI	30,984	7,746	70	70	0
3	H D KOTE	18,381	5,557	74.6	0	74.6
4	HOOTAGALLI	60,000	12,684	120	45.05	0
5	HUNSUR	60,458	12,732	175	105	46.3
6	K R NAGARA	39,886	11,224	115	85	30
7	KADAKOLA	22,664	5,676	29.2	25	4.2
8	MYSURU	9,85,940	1,72,783	1,762	1,762	0
9	NANJANGUD	52,284	10,300	116	80	36
10	PERIYAPATNA	21,427	5,085	102.51	66.02	36.49
11	RAMMANAHALLI	27,560	6,756	39	26	13
12	SARGUR	12,560	3,385	31	0	31
13	SRIRAMPURA	33,801	8,047	32	25	7
14	T NARSIPURA	12,816	8,300	67	67	0

- There is no working underground drainage system in H D Kote & Sargur
- The system of soak pits and septic tanks are used for the disposal of sewage in the city.
- In H D Kote, the sewage from the city is collected through open drains, Septic Tanks and let into Nalas which is eventually joining Kabini River
- In Sargur, the sewage from the city is collected through open drains, Septic Tanks and let into Nalas which is eventually joining Nagu River Downstream.
- Bogadi, Srirampura, Kadakola, Ramanahalli, Hootagalli doesn't have STP hence the Sewage is treated by Mysore's 3 STPs

(b) Proposals:

SEWAGE GENERATION IN 2041								
ULB Name	Projected Population(2041)	Total No. of Habitations(2041)	Water requirement MLD(2041)	Sewage Generated(80% of MLD)	Present STP Capacity(MLD)	Shortage MLD	Proposed STP Capacity(MLD)	Area Required(1 MLD require 0.5 acre)
BANNUR	46,800	11,143	6.32	6.00	5	-1.00	Install capacity 2.00 MLD 1/2 MLD SBR STP	1
H D KOTE	30,200	7,190	4.08	3.87	No STP	(-3.87)	Install capacity 4.00 MLD 1/4 MLD SBR STP	2
HUNSUR	1,04,000	24,762	14.04	13.34	8	-5.34	Install capacity 8.00 MLD 1/8 MLD SBR STP	4
K R NAGARA	66,000	15,714	8.91	8.46	5.79	-2.67	Install capacity 4 MLD 1) Kantenahalli - 2 MLD - SBR STP 2) Madhuvinahalli - 2 MLD - SBR STP	2
MYSURU	13,04,437	3,10,580	283.50	269.33	157.65	-128.78	Install capacity 130 MLD 1) Chikanahalli - 25 MLD - SBR STP 2) Madapura - 55 MLD - SBR STP 3) Kesare New - 20 MLD - SBR STP 4) Vidyaranyapuram New - 30 MLD - SBR STP	1)12.5
HOOTAGALLI	39,000	9,286	5.27	5.00				2)27.5
KADAKOLA	17,500	4,167	2.36	2.24				3)10
SRIRAMPURA	23,400	5,571	3.16	3.00				4)15
RAMMANAHALLI	34,010	8,098	4.59	4.36				
BOGADI	19,500	4,643	2.63	2.50	7.03	-7.08	Install capacity 8 MLD 1/8 MLD SBR STP	65 Acres
NANIANGUD	1,01,000	24,048	14.85	14.11				4
PERIYAPATNA	35,400	8,429	4.78	4.54	4.2	-0.34	Install capacity 2 MLD 1/2 MLD SBR STP	1
SARGUR	23,800	5,667	3.21	3.05	No STP	(-3.05)	Install capacity 4 MLD 1/4 MLD SBR STP	2
T NARSIPURA	20,500	4,881	2.77	2.63	5.5	2.87	Install capacity 1 MLD 1/4 MLD SBR STP	1

SEWER LINES TO BE COMPLETED FOR 2041			
ULB's	Total road network of the Town/ULB(kms)	Sewerage network executed(Kms)	Sewerage network yet to be completed(Kms)
BANNUR	51	40	11
BOGADI	70	63	7
H D KOTE	74.6	0	74.6
HOOTAGALLI	120	95.05	24.95
HUNSUR	175	105	46.3
K R NAGARA	115	85	30
KADAKOLA	29.2	25	4.2
MYSURU	1,762	1,742	20
NANIANGUD	116	80	36
PERIYAPATNA	102.51	66.02	36.49
RAMMANAHALLI	39	26	13
SARGUR	31	0	31
SRIRAMPURA	32	25	7
T NARSIPURA	67	60	7

Sewage Generation			
Issues/Problems	Objectives	Strategies	Proposals/Policy Recommendation
There is no Under Ground Drainage System in Sargur and H D Kote,also the remaining sewer lines must be completed	To provide UGD to keep sanitation	To provide the UGD System to Sargur & H D Kote as the sewage is polluting the neighbouring water body	Completing the Construction of Sewage will keep the sanitation of the ULBs
There is no Sewage Treatment Plant in Sargur and H D Kote,also there will be shortage of Capacity of Existing STP Facility	To provide STP	To provide Sewage Treatment Plant in Sargur and H D Kote,also to increase the Capacity of Existing STP Facility	Constructing the STP in Sargur & H D Kote and also increasing the capacity of the existing STP Capacity for 2041

Existing STPs in Mysuru			
STPs	Rayankere (District A & D)	Vidyaranyapuram(District B)	Kesare((District C)
Location	Near Rayankere on Manandwadi road	At Vidyaranyapuram inside the sewage farm	At Kesare, side of the outer ring road
Wet Wells	1.STP Campus 2.Beside D	1. J.P. Nagar 2. STP campus	1. Hebbal 2. Siddiquinagar 3. STP campus
Total area covered	48.44 Sqkm	27.21Sqkm	24.56Sqkm
Total capacity	60MLD	67.65MLD	30MLD
Total length of sewer lines	167.45Kms	64.54Kms	122.65Kms

Sewage Generation in Mysore			
Issues/Problems	Objectives	Strategies	Proposals/Policy Recommendation
1. There are several missing links at each district and 30 MLD is discharged on land, in low lying areas, which joins water bodies. . 2. The total length of missing sewer line is 20 km.	Completion of Sewer lines and Construction of STP to treat the Sewage Water	1. Existing STPs are extended to handle the estimated Sewage in 2041. 2. Additional 2 STPs are proposed to cover the missing links	1. To construct the STP for the drainage district E. Under the Urban Renewal Project for Mysore City Corporation 2. The drainage district E covers the areas coming under MCC wards no's 55 and 56, part of the MUDA layouts like Alanahalli, Sathagalli, Yaranahalli and the areas all along the TN pura road and Bannur road. 3. The catchment drains towards south east. Two locations are found suitable for location of new STP's they are Chikanahalli & Madapura 4. Approximate area covering under this drainage district is 6.06 sq km and is proposed to be located at outer ring road junction on Bannur road.

SBR Reactor:

The Sequencing Batch Reactor is a type of activated sludge process for wastewater treatment where the processes occur in a single tank in sequential steps.

How It Works:

SBR operates in cycles, with each cycle consisting of five stages:

- 1.Fill: Wastewater enters the reactor.
- 2.React (Aeration): Air is supplied to promote microbial activity that breaks down organic matter.
- 3.Settle: Aeration stops, and solids settle at the bottom of the tank.
- 4.Decant: The treated water (supernatant) is removed. 5.Idle: The reactor prepares for the next cycle.

Applications:

SBR is used for municipal and industrial wastewater treatment, particularly where flow rates or loadings vary.

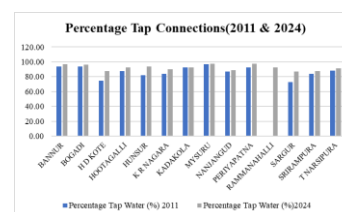
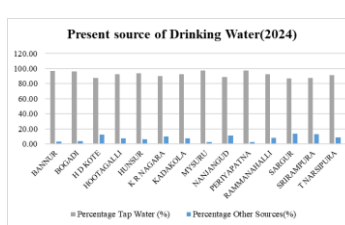
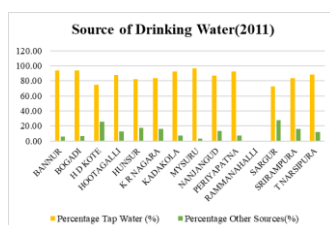
4.Water Supply:**(a) Analysis:**

- River Kaveri is the main source of drinking water supply.
- Almost all the towns depend directly on river (direct pumping, infiltration galleries, shallow wells in the river bed etc) during low flow season, the water supply is supplemented by groundwater.
- The Kaveri water quality is classified as Category “C” Drinking water source after conventional treatment and disinfection in the upstream of town where the intake is situated.
- However, in the down stream, due to discharges from various industries and sewage from different areas of Mysore, the water quality on the downstream side is poor.

SOURCE OF DRINKING WATER(2011)						
ULB's	Population(2011 CENSUS)	No of HH(2011 CENSUS)	From Tap Water	Percentage Tap Water (%)	From Other Sources	Percentage Other Sources(%)
BANNUR	21,896	5,186	4,869	93.89	317	6.11
BOGADI	9,041	2,282	2,135	93.56	147	6.44
H D KOTE	14,313	3,336	2,484	74.46	852	25.54
HOOTAGALLI	18,308	4,936	4,325	87.62	611	12.38
HUNSUR	50,865	11,793	9,704	82.29	2,089	17.71
K R NAGARA	35,805	8,643	7,241	83.78	1,402	16.22
KADAKOLA	6,436	1,426	1,323	92.78	103	7.22
MYSURU	9,20,550	1,15,061	1,11,253	96.69	3,808	3.31
NANJANGUD	50,598	12,137	10,526	86.73	1,611	13.27
PERIYAPATNA	16,685	4,031	3,742	92.83	289	7.17
RAMMANAHALLI	UN INHABITATED	UN INHABITATED	UN INHABITATED	0.00	UN INHABITATED	0.00
SARGUR	11,425	2,703	1,963	72.62	740	27.38
SRIRAMPURA	11,234	2,787	2,335	83.78	452	16.22
T NARSIPURA	9,980	2,534	2,232	88.08	302	11.92

WATER STORAGE AND CAPACITY IN 2011				
ULB's	System of Storage	Capacity in Kilo litres	System of Storage	Capacity in Kilo litres
BANNUR	Over Head Tank(OHT) 1	600	OHT 2	550
BOGADI	OHT 1	2,200	Bore Well Pumping(BWP)	1400
H D KOTE	OHT 1	1,000	BWP	750
HOOTAGALLI	OHT 1	1,600	OHT 2	1,200
HUNSUR	OHT 1	9,281	OHT 2	682
K R NAGARA	OHT 1	1,500	OHT 2	750
KADAKOLA	OHT 1	650	OHT 2	570
MYSURU	OHT 1	90,000	OHT 2	50,000
NANJANGUD	OHT 1	4,000	BWP	2,500
PERIYAPATNA	OHT 1	1,059	OHT 2	472
RAMMANAHALLI	UN INHABITATED	UN INHABITATED	UN INHABITATED	UN INHABITATED
SARGUR	OHT 1	600	BWP	150
SRIRAMPURA	OHT 1	1,300	BWP	700
T NARSIPURA	OHT 1	2,300	OHT 2	900

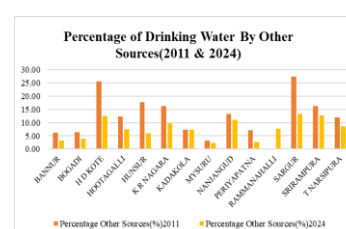
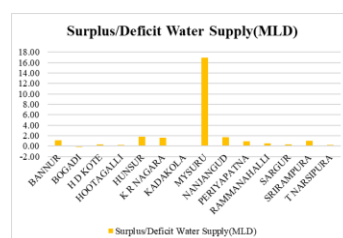
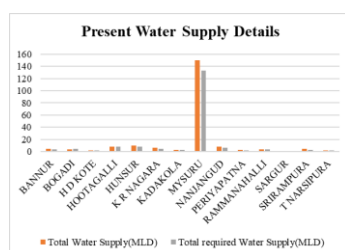
SOURCE OF DRINKING WATER(2024)						
Sl No	ULB's	Present Households(2024)	From Tap Water	Percentage Tap Water (%)	From Other Sources	Percentage Other Sources(%)
1	BANNUR	6,310	6,112	96.86	198	3.14
2	BOGADI	7,746	7,435	95.99	311	4.01
3	H D KOTE	5,557	4,858	87.42	699	12.58
4	HOOTAGALLI	12,684	11,725	92.44	959	7.56
5	HUNSUR	12,732	11,956	93.91	776	6.09
6	K R NAGARA	11,224	10,141	90.35	1,083	9.65
7	KADAKOLA	5,676	5,258	92.64	418	7.36
8	MYSURU	1,72,783	1,68,785	97.69	3,998	2.31
9	NANJANGUD	13,274	11,809	88.96	1,465	11.04
10	PERIYAPATNA	5,085	4,947	97.29	138	2.71
11	RAMMANAHALLI	6,756	6,234	92.27	522	7.73
12	SARGUR	3,385	2,935	86.71	450	13.29
13	SRIRAMPURA	8,047	7,025	87.30	1,022	12.70
14	T NARSIPURA	8,300	7,585	91.39	715	8.61



SOURCE OF DRINKING WATER(2011 & 2024)					
Sl.No.	ULB's	2011		2024	
		Percentage Tap Water (%) 2011	Percentage Other Sources(%)2011	Percentage Tap Water (%)2024	Percentage Other Sources(%)2024
1	BANNUR	93.89	6.11	96.86	3.14
2	BOGADI	93.56	6.44	95.99	4.01
3	H D KOTE	74.46	25.54	87.42	12.58
4	HOOTAGALLI	87.62	12.38	92.44	7.56
5	HUNSUR	82.29	17.71	93.91	6.09
6	K R NAGARA	83.78	16.22	90.35	9.65
7	KADAKOLA	92.78	7.22	92.64	7.36
8	MYSURU	96.69	3.31	97.69	2.31
9	NANJANGUD	86.73	13.27	88.96	11.04
10	PERIYAPATNA	92.83	7.17	97.29	2.71
11	RAMMANAHALLI	UN INHABITATED	UN INHABITATED	92.27	7.73
12	SARGUR	72.62	27.38	86.71	13.29
13	SRIRAMPURA	83.78	16.22	87.30	12.70
14	T NARSIPURA	88.08	11.92	91.39	8.61

PRESENT WATER SUPPLY DETAILS(2024)								
Sl No	ULB's	Present Households(2024)	Present Population(2024)	Source of Water	Per Capita Water Supply(LPCD)	Total Water Supply(MLD)	Total required Water Supply(MLD)	Surplus/Deficit Water Supply(MLD)
1	BANNUR	6,310	27,117	Kaveri River	125	4.5	3.39	1.11
2	BOGADI	7,746	30,984	Kaveri River	90	4	2.79	1.21
3	H D KOTE	5,557	18,381	Kabini Reservoir	90	2	1.65	0.35
4	HOOTAGALLI	12,684	60,000	Kaveri River	135	8.34	8.10	0.24
5	HUNSUR	12,732	60,458	Kaveri River and local sources	135	10	8.16	1.84
6	K R NAGARA	11,224	39,886	Kaveri River and Borewells	110	6	4.39	1.61
7	KADAKOLA	5,676	22,664	Kaveri River	125	2.84	2.83	0.01
8	MYSURU	1,72,783	9,85,940	Kaveri River	135	150	133.10	16.90
9	NANJANGUD	13,274	52,284	Kabini Reservoir	125	8.24	6.54	1.70
10	PERIYAPATNA	5,085	21,427	Kaveri River and Borewells	70	2.39	1.50	0.89
11	RAMMANAHALLI	6,756	27,560	Kaveri River	125	4	3.45	0.56
12	SARGUR	3,385	12,560	Kabini Reservoir	70	1.24	0.88	0.36
13	SRIRAMPURA	8,047	33,801	Kaveri River and local sources	95	4.2	3.21	0.99
14	T NARSIPURA	8,300	12,816	Kaveri River	135	2	1.73	0.27

PRESENT STATUS OF WATER SUPPLY IN ULBs						
Sl No.	Name of ULB	Source of Water	Reservoir sufficiency (12 months)	Status of Water Supply		
				Total No. of wards	Daily	Alternate Days
1	BANNUR	Kaveri River	12	23	13	10
2	BOGADI	Kaveri River	12	21	0	15
3	H D KOTE	Kabini Reservoir	12	23	15	8
4	HOOTAGALLI	Kaveri River	12	31	23	8
5	HUNSUR	Kaveri River and local sources	12	31	0	31
6	K R NAGARA	Kaveri River and Borewells	12	23	0	21
7	KADAKOLA	Kaveri River	12	20	15	5
8	MYSURU	Kaveri River	12	65	65	0
9	NANJANGUD	Kabini Reservoir	12	31	22	9
10	PERIYAPATNA	Kaveri River and Borewells	12	23	8	15
11	RAMMANAHALLI	Kaveri River	12	19	8	11
12	SARGUR	Kabini Reservoir	12	12	0	12
13	SRIRAMPURA	Kaveri River and local sources	12	18	12	6
14	T NARSIPURA	Kaveri River	12	23	12	11



Water Supply Schemes:

1.Jaladhare Program: To provide surface water-based drinking solutions.

- Multi-village water supply schemes (MVS) sourcing water from rivers and reservoirs, like the Kaveri River, treating it, and delivering it to multiple villages.
- SVS (Single Village Scheme): Designed for villages with sufficient local water resources. Provides piped water supply to individual households within a single village.

2.Urban Water Treatment Plants:

- Mysore city has water treatment plants at Belagola, Melapura, and Hongalli that manage raw water from the Kaveri River.
- These plants ensure treated water meets safety standards for drinking, even amidst seasonal variations in water quality

3.Jal Jeevan Mission:

- Integrated with rural areas, this mission aims for 100% household tap connections, prioritizing safe and piped water for drinking.

(b) Proposals:

WATER SUPPLY IN 2041								
ULB Name	Projected Population(2041)	Total No. of Habitations (2041)	Existing Per Capita LPCD(2024)	Per Capita LPCD(2041)	Source of Water	Water requirement MLD(2041)	Availability of water MLD(2041)	Surplus MLD(2041)
BANNUR	46,800	11,143	125	135	Kaveri River	6.32	7	0.68
BOGADI	19,500	4,643	90	135	Kaveri River	2.63	6	3.37
H D KOTE	30,200	7,190	90	135	Kabini Reservoir	4.08	10	5.92
HOOTAGALLI	39,000	9,286	135	135	Kaveri River	5.27	9	3.74
HUNSUR	1,04,000	24,762	135	135	Kaveri River and local sources	14.04	18	3.96
K R NAGARA	66,000	15,714	110	135	Kaveri River and Borewells	8.91	10	1.09
KADAKOLA	17,500	4,167	125	135	Kaveri River	2.36	6	3.64
MYSURU	13,04,437	3,10,580	135	135	Kaveri River	283.50	351.66	68.16
NANJANGUD	1,01,000	24,048	125	135	Kabini Reservoir	14.85	14.96	0.11
PERIYAPATNA	35,400	8,429	70	135	Kaveri River and Borewells	4.78	8	3.22
RAMMANAHALLI	34,010	8,098	125	135	Kaveri River	4.59	7	2.41
SARGUR	23,800	5,667	70	135	Kabini Reservoir	3.21	5	1.79
SRIRAMPURA	23,400	5,571	95	135	Kaveri River and local sources	3.16	4	0.84
T NARSIPURA	20,500	4,881	135	135	Kaveri River	2.77	5	2.23

Water Supply			
Issues/Problems	Objectives	Strategies	Proposals/Policy Recommendation
Improper frequency of Water Supply	To provide water on all the days with adequate LPCD of water according to URDPFI Guidelines	Rainwater Harvesting in addition to the Water Supply Schemes in the ULBs	To implement the Rainwater Harvesting System mandatorily for HHIG, HIG & MIG Houses

WATER SUPPLY SCHEMES IN MYSORE									
Water Schemes	Belagola			Hongally			Melapura		
Location	Near Belagola village			Near Hongally village			Near Mealapura village		
Intake	Devaraya canal from Krishnarajasagara, Intake headwork located at MC road Between Belagola and Palahalli.			Right bank low level canal from KRS and Cauvery River.			Cauvery River just downstream of Srirangapatana		
Capacity	52.24 MLD			90.87 MLD			100MLD		
	Phase	Year of commission	Capacity in MLD	Phase	Year of commission	Capacity in MLD	Phase	Year of commission	Capacity in MLD
	First phase	1896	4.55	First phase	1959	36.32	First phase	2002	50
	Second phase	1924	11.37	Second phase	1979	54.55	Second phase	2006	50
	Third phase	1998	36.32						
Treatment	The raw water from Devaraya irrigation canal is tapped and pumped to Vanivilasa treatment works			The treatment works are located adjacent to the intake and the treated water is pumped to the ground level reservoirs			The treatment works are located at Rammanahalli village of Mysore taluk and treated water is pumped to the Devanoor and Germen press ground level service reservoirs in Mysore.		

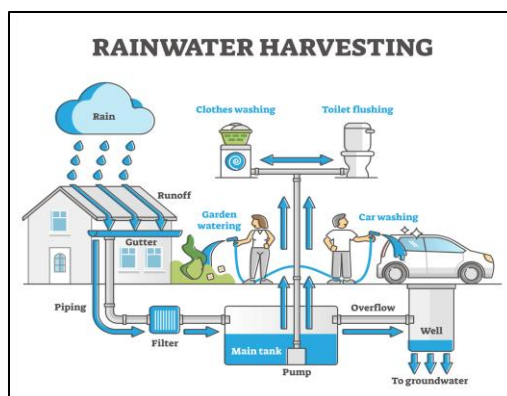
OTHER WATER SUPPLY SOURCES		
1	Bore wells fitted with Power Pumps 651no'sX850X4	4.55 MLD
2	Kabini Phase I	54 MLD
Total		351.66 MLD

Existing Master Balancing reservoirs in Mysore City				
No	Balancing Reservoirs	Type	Capacity in Million Liters	Source of supply
1	High level reservoir in Yadavgiri Reservoir	GLSR	22.73	Hongally 2nd Stage
2	Central Service Reservoir in Vijay Nagar	GLSR	54.55	Hongally 3rd Stage
3	German Press Reservoir	GLSR	16.87	Melapura Phase I and II
4	Near Teresian college			
5	Kuvempu nagar Reservoir	GLSR	11.37	Hongally 3rd Stage
6	Devnur Reservoir	GLSR	11.37	Melapura Phase I and II
7	Vanivilasa Reservoir	GLSR	9.09	Belagola

Water Supply Available in Mysore for 2041					
No	Year	Population	Demand (MLD)	Total quantum available (MLD)	Excess available (MLD)
1	2011	9,20,550	166.89	247.66	80.77
2	2021	10,38,469	203.38	351.66	148.28
3	2031	11,71,453	256.16	351.66	95.5
4	2041	13,04,437	283.5	351.66	68.16

Rain Water Harvesting:

- Due to Climate Change, there will be severe impact in the water supply in the future, as it dependent on the Rainfall hence we need to collect the rain water.
- The Rainwater Harvesting System should be introduced in addition to the Water Supply Schemes in the ULBs
- By implement the Rainwater Harvesting System mandatorily for HHIG, HIG & MIG Houses we can to some extent reduce the reliance on water supply by the Corporation



5. Street Lights:

(a) Analysis:

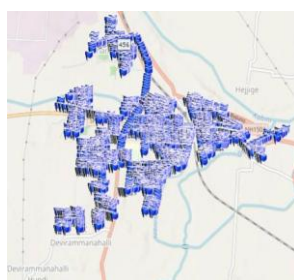
Current Street Light Conditions in the ULBs(2024)							
SL NO	ULB's	Non-Working Lights	Working Lights	Total Lights	Pole With No Lights	Total Quantity	Switching Points
1	BANNUR	61	1469	1530	231	1761	72
2	H D KOTE	41	1266	1307	594	1901	55
3	HUNSUR	424	2767	3191	1347	4538	137
4	K R NAGARA	93	3575	3668	681	4349	177
5	NANJANGUD	150	2601	2751	748	3499	155
6	PERIYAPATNA	71	1761	1832	771	2603	75
7	SARGUR	84	928	1012	360	1372	26
8	T NARSIPURA	50	2375	2425	819	3244	133
9	MYSURU	2,836	53,382	56,218	21,711	81,889	2,752
	BOGADI						
	HOOTAGALLI						
	KADAKOLA						
	RAMMANAHALLI						
	SRIRAMPURA						

Type of Light in Mysore Taluk	
Type of Light	% of Total Lights
CFL Lights	2.05
High Pressure Sodium Vapour(HPSV)	48.12
Metal Halide(MH)	1.3
Fluorescent Tube Light(FTL)	32.68
LED	15.85

Present Street Light Location using GIS



Periyapatna



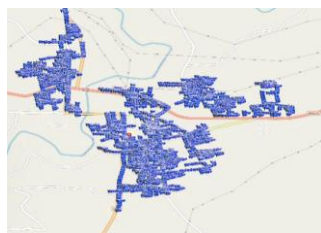
Nanjangud



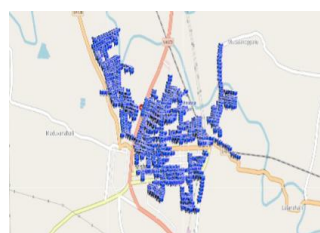
T N Pura



Bannur



Hunsur



K R Nagara



Sargur



H D Kote

- Electricity Consumption in all the ULBs is 43.11 MU for the Street Lights.
- 30.68 Crores is the energy Cost of all the ULBs for the Street Lights.

Existing Infrastructure Deficiencies:

WEIGHTAGES FOR INFRASTRUCTURE			
Variables	Indicators	Weightages(W)	
SOCIAL INFRASTRUCTURE	Education	Pre-Primary School	1
		Primary School	2
		Middle School	3
		Secondary School	4
	Health	Dispensary	1
PHYSICAL INFRASTRUCTURE	Transportation	Primary Health Sub-Centre	2
		Primary Health Centre	4
		Community Health Centre	6
		ODR	2
		MDR	4
	Water Supply	SH	8
		NH	12
		Hand Pump	1
		Other Source	2
		Tube- Wells/Borewells	3
ECONOMIC INFRASTRUCTURE	Bank	Tap Water	4
		Co-operative/Commercial Bank	2
	Tele Communication	ATM	2
		Sub Post Office	1
		Post Office	2
		Post & Telegraph Office	4

INFRASTRUCTURE SHORTAGE IN ULBs						
ULBs	TRANSPORTATION(Un Metalled Road)	SWM(if SWM Present/Not)	STP(if STP Present/Not)	UGD(Present/Not)	WATER SUPPLY(LPCD Water Supply)	STREET LIGHTS(Pole with No Street Lights)
BANNUR (TMC)	8.75	SWM PRESENT	5	UGD PRESENT	125	231
H D KOTE (TMC)	15.35	SWM PRESENT	No STP	NO UGD	90	594
HUNSUR (CMC)	41.18	SWM PRESENT	8.1	UGD PRESENT	135	1347
K R NAGARA (TMC)	38.83	SWM PRESENT	6	UGD PRESENT	110	681
NANJANAGUDU (CMC)	36.56	SWM PRESENT	7.62	UGD PRESENT	125	748
PIRIYAPATNA (TMC)	6.34	SWM PRESENT	5	UGD PRESENT	70	771
SARAGUR (TP)	6.5	NO SWM	No STP	NO UGD	70	360
T NARSIPUR (TMC)	7.8	SWM PRESENT	5.5	UGD PRESENT	135	819
BHOGADI (TP)	15	NO SWM	No STP	UGD PRESENT	90	
HUTAGALLI (CMC)	25.6	NO SWM	No STP	UGD PRESENT	135	
KADAKOLA (TP)	8.44	NO SWM	No STP	UGD PRESENT	125	
MYSORE (M CORP. + OG)	33.65	SWM PRESENT	157.65(3 No)	UGD PRESENT	135	21,711
RAMMANAHALLI(TP)	7.42	SWM PRESENT	No STP	UGD PRESENT	125	
SRIRAMPURA (TP)	8.35	NO SWM	No STP	UGD PRESENT	95	

WEIGHTAGES GIVEN TO THE INFRASTRUCTURE FACILITIES PRESENT IN EACH ULBs																						
ULBs	EDUCATION				HEALTH		WATER SUPPLY				TELE COMMUNICATION			TRANSPORTATION				BANK		Sum	Weighted Score	
	Pre Primary (W=1)	Primary (W=2)	Middle (W=3)	Secondary (W=4)	Community Health Centre (CHC)(W=6)	Primary Health Centre (W=4)	Primary Health Sub Centre (W=2)	Tap Water (W=4)	Well(W=2)	Handpump W=1)	Tube well/Bore well(W=3)	Post Office(W=2)	Sub Post Office(W=1)	Post & Telegraph Office(W=4)	Connected to NH(W=12)	Connected to SH(W=8)	Connected to MDR(W=4)	Connected to ODR(W=2)	Commercial & Co-operative Banks(W=4)			ATM(W=2)
BANNUR (TMC)	15	38	54	40	12	20	8	4	2	1	3	2	1	4	24	24	44	126	12	2	436	0.6434
BHOGADI (TP)	5	10	27	32	0	4	2	4	2	1	3	2	1	4	12	8	4	2	4	2	129	0.1903
H D KOTE (TMC)	15	108	27	24	24	36	12	4	2	1	3	2	1	4	0	16	16	70	8	2	375	0.4534
HUTAGALLI (CMC)	5	3	8	24	4	0	0	4	2	1	3	2	1	4	12	8	4	2	4	2	108	0.1593
HUNSUR (CMC)	15	50	60	36	30	36	12	4	2	1	3	2	1	4	12	16	0	14	8	2	308	0.5953
K R NAGARA (TMC)	20	54	69	28	24	20	12	4	2	1	3	2	1	4	12	8	40	56	8	2	370	0.5460
KADAKOLA (TP)	2	10	6	12	0	4	6	4	2	1	3	2	1	4	12	8	4	2	4	2	89	0.1313
MYSORE (M CORP. + OG)	30	724	987	880	102	44	6	4	2	1	3	2	1	4	36	32	60	92	40	2	3052	4.504
NANJANAGUDU (CMC)	15	66	87	64	42	20	4	4	2	1	3	2	1	4	24	16	56	304	8	2	725	1.0699
PIRIYAPATNA (TMC)	20	26	45	36	12	20	8	4	2	1	3	2	1	4	12	8	20	14	8	2	248	0.3659
SARAGUR (TP)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2	10	0.0147
SRIRAMPURA (TP)	4	8	9	12	0	8	8	4	2	1	3	2	1	4	12	8	4	2	4	2	98	0.1446
T NARSIPUR (TMC)	15	10	12	8	36	40	12	4	2	1	3	2	1	4	24	24	44	126	8	2	378	0.5578

(b) Proposals:

Street Lights			
Issues/Problems	Objectives	Strategies	Proposals/Policy Recommendation
Some of the poles do not have the lights in many ULBs	100% Coverage of Street Lights	To provide Street Light for every 50 m stretch of the Road	Replacing the Conventional Light with Smart Lighting System of LEDs to reduce the electricity consumption & provide the Street Light for every 50 m stretch of the road

ENERGY EFFICIENCY							
If Conventional Lamps are provided for 2041			If Smart LED are provided for 2041			Energy Savings if LEDs are provided	
Conventional Lamps	Energy Consumed(KWh/day)	Energy Consumed(KWh/year)	Replacement	Energy Consumed(KWh/day)	Energy Consumed(KWh/year)	Energy Saved(KWh/day)	Energy Saved(KWh/year)
40 W CFL Lights	10,246.80	3740082	28 W LED Lights	7,172.76	26,18,057.40	3,074.04	11,22,024.60
250 W MH/HPSV	64,042.50	23375512.5	100 W LED Lights	25,617.00	93,50,205.00	38,425.50	1,40,25,307.50
400 W MH/HPSV	1,02,468.00	37400820	150 W LED Lights	38,425.50	1,40,25,307.50	64,042.50	2,33,75,512.50

PROPOSED STREET LIGHTS					
SL NO	ULB's	Total Road Length(KM)	2024 Poles with Street Light	2041 Required Poles with Street Lights	Proposed Poles with LED Street Lights
1	BANNUR	51	1,761	2,550	789
2	H D KOTE	70	1,901	3,500	1,599
3	HUNSUR	175	4,538	8,750	4,212
4	K R NAGARA	115	4,349	5,750	1,401
5	NANJANGUD	116	3,499	5,800	2,301
6	PERIYAPATNA	102.51	2,603	5,126	2,523
7	SARGUR	31	1,372	1,550	178
8	T NARSIPURA	67	3,244	3,350	106
9	MYSURU	1,762	81,889	88,100	6,211
10	BOGADI	70	1,259	3,500	2,241
11	HOOTAGALLI	120	3,535	6,000	2,465
12	KADAKOLA	29.2	1,256	1,460	204
13	RAMMANAHALLI	39	1,028	1,950	922
14	SRIRAMPURA	32	1,135	1,600	465
Total		2779.71	1,13,369	1,38,986	25,617

Smart Street Lighting System:

A smart street lighting system is an advanced, automated lighting solution designed to improve the efficiency, functionality, and sustainability of traditional street lighting.

Key Features of a Smart Street Lighting System

1. **Energy Efficiency:** Utilizes energy-efficient LEDs and intelligent control to minimize electricity consumption.
2. **Automation:** Automatically adjusts brightness based on factors like traffic, motion, or ambient light.
3. **Remote Monitoring and Control:** Allows city operators to manage lights remotely through a centralized dashboard.
4. **Real-Time Data Collection:** Equipped with sensors to monitor light levels, weather conditions, and maintenance needs.
5. **Adaptive Lighting:** Lights can dim during low-traffic hours or brighten in areas with high activity.
6. **Integration with Smart City Systems:** Can be linked to systems like traffic management, surveillance, and environmental monitoring.

RURBAN CLUSTER

A ‘Rurban cluster’ is a cluster of geographically contiguous villages with a population of about 25000 to 50000 in plain and coastal areas and with a population of 5000 to 15000 in desert, hilly or tribal areas.

Vision: Development of a cluster of villages that preserve and nurture the essence of rural community life with focus on equity and inclusiveness without compromising with the facilities perceived to be essentially urban in nature, thus creating a cluster of Rurban Villages

Preparation of Integrated Cluster Action Plan:

Step 1	Selection of Cluster
Step 2	Delineation & Notification of Planning Area*
Step 3	Cluster Profiling
Step 4	Deficiency Analysis and Identification of needs
Step 5	Identification & Detailing of Mission Components
Step 6	Scheme Convergence
Step 7	Investment/Phasing
Step 8	Arriving at CGP Estimate
Step 9	Implementation Strategy
Step 10	O&M Strategy
Step 11	Obtaining Gram Sabha Resolutions
Step 12	Submission of ICAP to MoRD
Step 13	Revision of ICAP based on approved DPR
Step 14	Five Yearly Iteration to ICAP

STEP 1: Selection of Cluster:

- The cluster selection process is done by the Ministry and the State RD Departments.
- The Ministry identifies a set of potential locations (sub districts) for Rurban clusters.
- The State identified a set of contiguous villages around a growth centre within the sub district to form a Rurban cluster.

The selection of sub districts by the Ministry: By considering various parameters:

1. Decadal Growth in Rural Population. :35%
2. Decadal Growth in Non-Farm work participation :35%
3. Presence of Economic Clusters :10%
4. Presence of places of Tourism and Religious significance :10%

5. Proximity to Transport Corridors :10%

The State Governments selects the clusters: By considering the following parameters:

1. Decadal growth in Rural Population.
2. Rise in Land Values.
3. Decadal growth in Non- Farm Work force participation.
4. Percentage Enrollment of girls in secondary schools.

Parameters for the Selection of Sub District	
Decadal Growth in Rural Population	14.48
Decadal Growth in Non-Farm Work Force Participation	33.08
Tourism & Pilgrim Significance	Nagarhole,Sagarkatte View Point
Presence of Economic Clusters	34.68 Ha of Industrial Area(73 Saw Mills)
Proximity to Transport Corridor	National Highway 275 (NH 275): Connects Bangalore to Mangalore
	SH 90:Connects Hunsur to Periyapatna
	SH 88 A:Connects Hunsur and Hassan

Parameters for the Selection of the Cluster	
Decadal Growth in Rural Population	14.48
Rise in Land Values	Yes
Decadal Growth in Non-Farm Work Force Participation	33.08
Percentage Enrollment of Girl Child in Secondary Schools	41.05%

STEP 2: Delineation of Planning Area:

1.Delineation of Planning Area:

- The cluster boundary needs to be clearly delineated following the process specified in the respective State/UT statutes.
- The Planning area needs to be distinctively shown on the map with GIS co-ordinates on a scale of 1:8000
- Planning areas shall as far as possible include full plot Nos (Survey Nos).
- Two or more clusters may be combined into one Planning Area in consultation with the Planning Authorities in the State

2.Notification of Planning Area:

- The declaration of the planning area shall be widely published in at least 2 local newspapers having wide circulation as well as by a public notice affixed at prominent places, Government offices, local authorities and public places situated within the Planning Area.

- This will be followed by initiation of the Spatial Planning Component of the ICAP. The process shall follow the planning norms as laid down in the State Town and Country Planning Acts

RURBAN CLUSTER(NEAR HUNSUR)	
Details of Cluster	As per 2011 Census
No of Grama Panchayath	5
No of Villages	8
Total Area in Ha	1289.41
Total Population	29,521
No of Households	6880
Total Male Population	14,798
Total Female Population	14,723
SC Population	4443
ST Population	3365
Literacy Rate	63.02%
Average Sex Ratio	976
Decadal Growth Rate	14.48
Distance from District HQ	Mysore(40 KM)
Distance from Taluk HQ	Hunsur(8 KM)

WEIGHTAGES FOR INFRASTRUCTURE			
Variables		Indicators	Weightages (W)
SOCIAL INFRASTRUCTURE	Education	Pre-Primary School	1
		Primary School	2
		Middle School	3
		Secondary School	4
	Health	Dispensary	1
		Primary Health Sub Centre	2
		Primary Health Centre	4
		Community Health Centre	6
PHYSICAL INFRASTRUCTURE	Transportation	ODR	2
		MDR	4
		SH	8
		NH	12
	Water Supply	Hand Pump	1
		Other Source	2
		Tube Wells/Borewells	3
		Tap Water	4
ECONOMIC INFRASTRUCTURE	Bank	Co-operative/Commercial Bank	4
		ATM	2
	Tele Communication	Sub Post Office	1
		Post Office	2
		Post & Telegraph Office	4

WEIGHTAGES GIVEN TO THE INFRASTRUCTURE FACILITIES PRESENT IN EACH VILLAGE																								
Name	EDUCATION				HEALTH				WATER SUPPLY				TELE COMMUNICATION				TRANSPORTATION				BANK		Sum	Weight Score
	Pre Primary (W=1)	Primary (W=2)	Middle (W=3)	Secondary (W=4)	Community Health Centre (CHC)(W=6)	Primary Health Centre (W=2)	Primary Health Sub Centre (W=2)	Tap Water(W=4)	Well(W=2)	Handpump (W=1)	Tube well/Borewell (W=3)	Post Office(W=2)	Sub Post Office(W=1)	Post & Telegraph Office(W=4)	Connected to NH(W=12)	Connected to SH(W=8)	Connected to MDR(W=4)	Connected to ODR(W=2)	Commercial & Co-operative Banks(W=4)	ATM(W=2)				
ASPATHREKAVAL	2	6	3	4	6	4	2	4	0	1	3	2	1	4	0	8	4	2	4	2	62	0.09		
BALLENAHALI	2	2	3	4	6	1	2	4	2	1	3	2	1	4	0	8	4	2	4	2	56	0.11		
HANCHYA	2	2	3	4	6	1	2	4	0	1	3	2	1	4	12	8	4	2	4	2	54	0.12		
KOTTIRKAVAL	2	2	3	4	6	4	2	4	0	1	3	2	1	4	0	8	4	2	4	2	56	0.11		
HOSAKOTE	2	2	3	4	6	1	2	4	2	1	3	2	1	4	0	8	4	2	4	2	56	0.11		
KUDLUR	2	2	3	4	6	4	2	4	0	1	0	2	1	4	0	8	4	2	4	2	60	0.13		
UDDURKAVAL	2	4	3	4	6	4	2	4	2	1	3	2	1	4	0	8	4	2	4	2	56	0.11		
UMMATHUR	2	8	3	4	6	4	2	4	0	1	3	2	1	4	0	8	4	2	4	2	78	0.38		

DETAILS OF CLUSTER																						
SL NO	Gram Panchayat	Village Name	Nearest Town	Area Under Agriculture	Area in Ha	No of HH	2011 Total Population	2001 Total Population	Decadal Growth Rate	Sex Ratio	Total Male Population	Total Female Population	Population(>60)	Population(15-49)	Population(0-15)	Total ST Population	Total SC Population	Literates	% of Literacy	Illiterates	% of Illiterates	Total Workers
1	Aspathrekaaval	Aspathrekaaval	Hunsur (8 km)	1414.1	1089.6	1566	6363	5990	3.4	930	2623	2640	566	1112	2566	116	1638	3032	48.41	2221	51.59	2894
		Ballehalli		235.25	340.77	577	2307	1160	12.47	950	1661	1666	174	1154	980	221	497	723	11.54	564	48.46	736
2	Govidanahalli	Hanchya	Hunsur (5 km)	148.6	100.53	644	2576	482	18.5	974	1305	1271	73	1280	1215	30	346	1143	13.43	520	86.57	286
		Kottirkaaval		15.63	30.31	573	2292	326	10.43	998	1147	1145	32	1146	1114	207	0	235	10.25	157	89.75	190
3	Reggandura	Kudlur	Hunsur (7 km)	771.6	498.44	491	1724	698	19.87	991	1308	1356	58	862	861	48	416	467	27.09	257	72.91	384
4	Uddurkaaval	Kudlur	Hunsur (8 km)	380.8	426.31	1058	6631	763	26.21	979	1497	1466	48	8316	3248	3	2	3603	54.34	360	85.66	630
4	Uddurkaaval	Uddurkaaval	Hunsur (8 km)	1414	1614.05	491	1963	4930	14.22	990	2830	2803	622	1423	696	1210	257	1423	25.46	2135	64.54	2803
5	Ummathur	Ummathur	Hunsur (7 km)	367.9	424.35	1441	5765	3654	26.41	996	2197	2178	709	2883	2174	1127	467	2495	43.28	2470	56.72	2177
				4347.88	1289.41	6880	29521	17069	14.48	976	14798	14723	2382	14761	14403	3365	4443	11597	63.02	6154	36.98	10100

STEP 3: Cluster Profiling:

The existing profile of the cluster needs to be detailed out at 2 levels

- (1) General Profile
- (2) Component Profiling

(1) General Profile:

Under the General Profiling the Demographic details of the GPs within the cluster, the socio-economic profiling, cultural profiling and the administrative profiling of the GPs need to be done.

a. Demography:

This will enable planning and designing as per the demographic needs and trends for each of the components chosen for the cluster

b. Socio Economic& Cultural:

This will enable identification of the most appropriate needs for the cluster as well as understand the latent potential of the cluster, which can be further developed or given impetus under this Mission.

c. Administrative:

It is important to understand the administrative profile of the cluster for smooth implementation of the Mission and to enable setting up of the institutional frameworks at the block and cluster level.

(2) Component Profiling:

14 desirable components have been listed out as ideal components for the cluster, however giving flexibility to the States to decide other relevant components required to develop the cluster.

DEMOGRAPHIC PROFILE OF CLUSTER							
Details		GP-1	GP-2	GP-3	GP-4	GP-5	Total
1	Total Population	8,570	4,868	8,355	1,963	5,765	29,521
2	Decadal Growth Rate in Rural Population(%)(2001-2011)	8.03%	4.53%	23.04%	14.22%	30.04%	14.48%
3	Household Size	2,110	1,017	2,023	491	1,241	4434
		4.06	4.79	4.13	4.00	4.65	4.68
4	Sex Ratio	1023	937	953	990	996	976
5	Age Profile						
	0-15	2545	329	2178	210	1674	7809
	16-59	3285	434	2228	482	2383	9761
	>60	740	105	126	622	709	2302
6	Total Land Area	2035.37	199.84	834.75	1614.05	424.35	5108.36
	Under Agriculture	1649.35	164.23	752.4	1414	367.9	4347.88
	Under Forest	0	0	0	0	0	0

SOCIAL PROFILE OF CLUSTER							
Details		GP-1	GP-2	GP-3	GP-4	GP-5	Total
1	Literacy Rate(Asper census 2011)	56.46	70.27	72.49	72.27	52.36	63.02
2	SC Population	2135	0	418	1423	467	4443
3	ST Population	337	283	51	357	2337	3365
5	Education Levels						
	% with Higher Secondary and above	36.33	28.25	30.7	28.39	33.3	32.05
	% with Secondary Secondary and above	21.35	42.1	25.1	21.4	22.4	26.95
	% with Primary Education and above	42.32	33.45	44.2	50.21	44.3	42.36
6	% of Population-Disabled	2.1	0.5	1.1	0.75	0.3	0.94
7	% of Single Women	3.6	6.3	9.6	5.6	9.5	6.35

ECONOMIC PROFILE OF CLUSTER							
Details		GP-1	GP-2	GP-3	GP-4	GP-5	Total
	Occupational Structure						
	Farm Work Force	4059	688	1174	2341	2356	10618
	Women as a % of Work Force	39.13%	35.12%	29.50%	39.95%	37.50%	36.24%
	Occupation by Industry(Industry in which majority of the work force is engaged in)	1181	107	609	1086	317	3300
	Average Distance to work place for majority of the work force in GP	10	12	12	10	15	12
	Any homebased or traditional Industry	190	25	30	51	152	448

ADMINISTRATIVE PROFILE OF CLUSTER		
Details		Total
1	No of Grama Panchayath in cluster	5
2	Name of Block Headquarter	Hunsur
3	Name of the BDO	NA
4	Distance of the Block Headquarter from the largest settlement in the cluster(in KM)	8 km
5	Agencies Providing Key services	Grama Panchayath
	Water Supply and Sanitation	
	Village streets and Drains	

(2) Component Profiling:

COMPONENT PROFILING	
Type of Amenity	Component Details
Basic Amenities	Sanitation
	Provision of Piped Water Supply
	Solid & Liquid Waste Management
	Village Streets and drains
	Inter Village Connectivity
	Public Transport
	LPG Gas Connections
Social Amenities	Fully Equipped Mobile Health Unit
	Upgrading School/Higher Education Facilities
Economic Amenities	Skill Development Training linked to economic Activities
	Agro Processing, Agri-Services, Shortage and Warehousing
Digital Amenities	Digital Literacy
	Citizen Service Centers-For Electronic Delivery of citizen centric services/E-Grama Connectivity

STEP 4: SWOT Analysis & Vision:

SWOT ANALYSIS	
STRENGTH	1.Location: <ul style="list-style-type: none"> ❖ It is situated along the Mysore-Hassan highway, providing good connectivity to major cities like Mysore and Hassan ❖ Proximity to Hunsur enhances its potential as a satellite town. 2.Agricultural Base: Fertile land supports agricultural activities, especially Ragi and tobacco
WEAKNESSES	1.Inadequate Infrastructure: <ul style="list-style-type: none"> ❖ Roads and public transport require improvements to meet growing demands. ❖ Limited healthcare facilities and specialized medical services. 2.Limited Industrial Development: <ul style="list-style-type: none"> ❖ Lack of industries and job opportunities in the town leads to migration to nearby cities.
OPPORTUNITIES	1.Agro-Based Industries: Establishing food processing units and sugarcane mills & Tobacco can boost local employment and economy. 2.Eco-Tourism and Cultural Promotion: <ul style="list-style-type: none"> ❖ Lakes and traditional rural settings can be promoted for eco-tourism. ❖ Potential to develop cultural and religious tourism.
THREATS	1.Economic Migration: Continued migration to urban areas may lead to a declining population and reduced local workforce. 2.Lack of Skilled Workforce: Absence of vocational training centers hinders the development of a skilled labor force.

Vision:

The cluster is proposed to be an agrarian cluster which will promote Allied activities and Agro based industries within the cluster to increase the productivity, income and employment in the sector, also focusing on upgrading the existing basic amenities as per the Standards

STEP 5: Deficiency Analysis & Identification of Needs:

The assessment will aim at understanding the reasons for the growth in the economy of the region, identify the key economic growth drivers, assess the basic strengths of the cluster and identify the opportunities for economic growth of the cluster.

Economic Activities		A	B	C	D
	Desirable Component	Desired Levels	Existing Situation	Deficit (A-B)	Gaps Assuming A=100
1	Skill Development training Linked to Economic Activities	At-least 70 percent household with one beneficiary in each household.	Existing skills in the villages (Handicraft/Handloom/Industrial etc) No of skilled members at the HH level	67.34%	2,986
		6,880	3,912		
2	Agri-services and Processing	1 acre of organic farm per farmer 1 agri service industry per farmer	Detail the existing Agri services and processing industries present in the cluster.	60.11%	6,383
		10,618	4,235		

Basic Amenities		A	B	C	D
	Desirable Component	Desired Levels	Existing Situation	Deficit (A-B)	Gaps Assuming A=100
1	24x7 Piped Water Supply	70 liters per capita per day (lpcd) of safe drinking water for every households throughout the year	Existing levels of water supply at the household level.	21.42%	15 LPCD
		70 LPCD	55 LPCD		
2	Sanitation	100% HH with Individual Household Latrines	Coverage of Individual Toilets in the villages at the household level	31.98%	1,418
		6,880	5,462		
3	Solid and Liquid Waste Management	Collection at HH level Treatment at Cluster Level	Existing arrangement for solid and liquid waste management at the Household/Village and Cluster level.	70.98%	3,148
		6,880	3,732		
4	Access to Village Streets with Drains	All village streets to be covered with drains	Existing coverage of village streets and drains.	45%	43.26
		95.52	52.26		
5	Village Street Lights	All village streets to be covered with street lights as per norms	Coverage of village streets with lights	54.17%	2,402
		6,880	4,478		
6	Inter village roads connectivity	Ensure connectivity between all villages	Connectivity between villages within the cluster with roads and public transport	15%	15%
		100%	85%		
7	Public transport	Inter village connectivity with adequate frequency of public transport	Existing levels of availability w.r.t Public Transport facilities both intra and inter village	0%	100%
		8 Villages	8 Villages		
8	LPG Gas Connections	Access to LPG connections to all households	No of households with access to LPG gas connections	31.98%	1,418
		6,880	5,462		

Social Amenities		A		B	C	D
	Desirable Component	Desired Levels		Existing Situation	Deficit (A-B)	Gaps Assuming A=100
1	Health	Sub Centers/Dispensaries(1 in 5,000 Population)	6	5	25.00%	1
		Maternity Homes(1 in 15,000 Population)	2	2	0	0
		Primary Health Center((1 in 30,000 Population)	1	10	0	0
		Veternary Centers((1 in 5,000 Animal Population)	6	6	0.00%	0
2	Up gradation of primary, secondary and higher secondary schools	Anganwadi(1 in 1,000 Population)	30	25	25.00%	5
		Primary School(1 in 5,000 Population)	6	14	0.00%	0
		Secondary School(1 in 7,500 Population)	4	8	0%	0

Digital Amenities		A	B	C	D
	Desirable Component	Desired Levels	Existing Situation	Deficit (A-B)	Gaps Assuming A=100
1	Digital Literacy	At least one e- literate person in every household.		27.49%	1,219
		6,880	5,661		
2	Citizen Service Centres	One ICT enabled front end Common Service Centre (CSC) per 2 to 3 villages	50%	50%	50%

STEP 6: Prioritization of Needs:

Basic Amenities		Score-D	Weightage X	Overall Weightage	Weighted Score= X*D
	Desirable Component	Gaps Assuming A=100			
1	24x7 Piped Water Supply	21.42%	25%	35%	9%
2	Sanitation	31.98%	20%		3%
3	Solid and Liquid Waste Management	70.98%	15%		5%
4	Access to Village Streets with Drains	45%	15%		3%
5	village street	54.17%	10%		5%
6	Inter village roads connectivity	15%	10%		3%
7	Public transport	15%	5%		3%
8	LPG Gas Connections	31.99%	10%		3%
			100%		34.00%

Economic Activities		Score-D	Weightage X	Overall Weightage	Weighted Score= X*D
	Desirable Component	Gaps Assuming A=100			
1	Skill Development training Linked to Economic Activities	67.34%	45.0%	30%	13%
2	Agri-services and Processing	60.11%	55%		11%
			100%		24.00%

Social Amenities		Score-D	Weightage X	Overall Weightage	Weighted Score= X*D
	Desirable Component	Gaps Assuming A=100			
1	Health	25.00%	50%	25%	12%
2	Up gradation of primary, secondary and higher secondary schools	25.00%	50%		12%
			100%		24%

Digital Amenities		A	B	C	D
	Desirable Component	Desired Levels	Existing Situation	Deficit (A-B)	Gaps Assuming A=100
1	Digital Literacy	At least one e- literate person in every household.		27.49%	1,219
		6,880	5,661		
2	Citizen Service Centres	One ICT enabled front end Common Service Centre (CSC) per 2 to 3 villages	50%	50%	50%

STEP 7: Proposals:

PROPOSED AMENITIES FOR 2041				
Desirable Component	Population	Area Required	Proposed Nos 2041(49,406)	Area Proposed
Skill Development training Linked to Economic Activities	5,000	500 Sq.M	10	5,000
Agri-services and Processing	1 for 10,000	500 Sq.M(Ground Coverage 60%)	5	2,500
Warehouse for Storage	1 for 10,000	1,000 Sq.M(Ground Coverage 60%)	5	5,000
Sub Centers/Dispensaries	1 for 5,000	500 Sq.M	10	5,000
Anganwadi	1 for 1,000	500 Sq.M	50	25,000
Waste Water Treatment System	5,000	500 Sq.M	10	2,500
Solid and Liquid Waste Management Unit	5,000	500 Sq.M	10	2,500
Vermi Composting Plant	5,000	500 Sq.M	10	2,500
Common Service Centre	5,000	500 Sq.M	10	2,500

SOCIAL PROFILE OF CLUSTER						
Details	GP-1	GP-2	GP-3	GP-4	GP-5	Total
1 Population(2011 Census)	8,570	4,868	8,355	1,963	5,765	29,521
2 Population(2021)	9,195	5,596	10,279	2,242	7,518	34,830
3 Population(2031)	9,933	6,432	12,651	2,560	9,804	41,380
3 Population(2041)	10,730	7,394	15,570	2,924	12,788	49,406

SCHEMES FOR THE PROPOSED AMENITIES				
SL NO	Desirable components	Desirable Outcome	Potential Scheme for convergence	
			Name	Brief
1	Skill Development training Linked to Economic Activities	At-least 70 percent household with one beneficiaries in each households	Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)	1) Outcome led design 2) Guaranteed Placement for at least 75% trained candidates 3) Shift in emphasis from training to career progression 4) Industrial Internships
2	(i) Agri services and Processing	Support to the Agriculture and Allied Activity components as per RKVY.	Rashtriya Krishi Vikas Yojna (RKVY)	Intends to incentivize the States so as to increase public investment in Agriculture and allied sectors. The scheme gives autonomy to the States to draw up plans for executing Agriculture and allied sector schemes taking into consideration the agro-climatic conditions, availability of technology, natural resources and cropping patterns in the respective districts.
3	Digital Literacy (access to digital resources for all citizens)	At-least one e-literate person in every household.	Digital India	It helps them seek better livelihood opportunities and become economically secure.
4	24 x 7 Piped Water Supply	70 liters per capita per day (lpcd) of safe drinking water for every households throughout the year	National Rural Drinking Water Programme (NRDWP)	Provision of Piped water supply to households, ensuring sustainability in drinking water schemes and convergence of all water conservation programmes. By 2022
5	Sanitation	100% HH with Individual Household Latrines	Swachh Bharat Mission-Gramin	1) To achieve universal sanitation coverage and focus on sanitation, 2) To improve the levels of cleanliness in rural areas through Solid and Liquid Waste Management activities, 3) Making Gram Panchayats Open Defecation Free (ODF), clean and sanitized.
8	Inter village roads connectivity	Ensure connectivity between all villages.	Pradhan Mantri Gram Sadak Yojana (PMGSY)	1) All-weather road connectivity to unconnected rural habitations 2) Accessibility of unconnected habitations to the services (educational, health, marketing facilities etc.), which are not available in the unconnected Habitation.