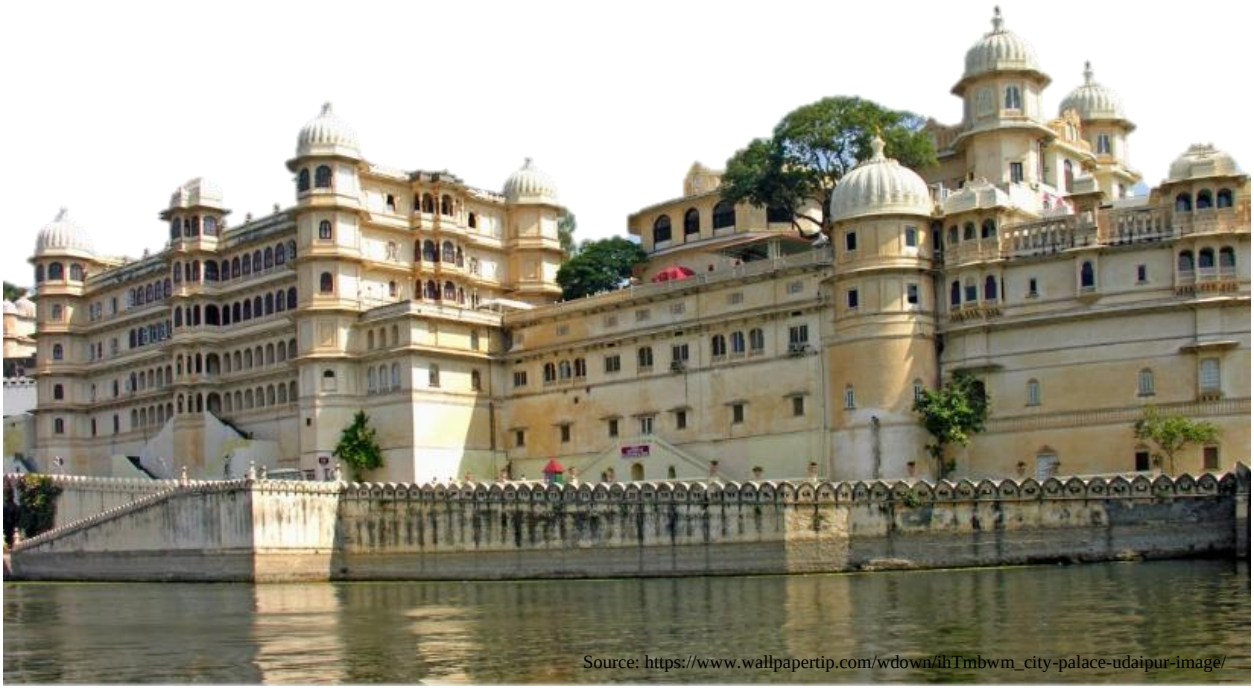
UDAIPUR DISTRICT ENVIRONMENT PLAN

"Earth provides enough to satisfy every man's needs, but not every man's greed."

— Mahatma Gandhi



Source: https://www.wallpapertip.com/wdown/ihTmbwm_city-palace-udaipur-image/

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LIST OF CONTENT

FOREWORD

Hon'ble National Green Tribunal in O.A. No. -360/2018, dated 26/09/2019 ordered regarding constitution of District Committee (as a part of District Planning Committee under Article 243 ZD) under Articles 243 G, 243 W, 243 ZD read with Schedules 11 and 12 and Rule 15 of the Solid Waste Management Rules, 2016.

In the above said order, it is stated that among others

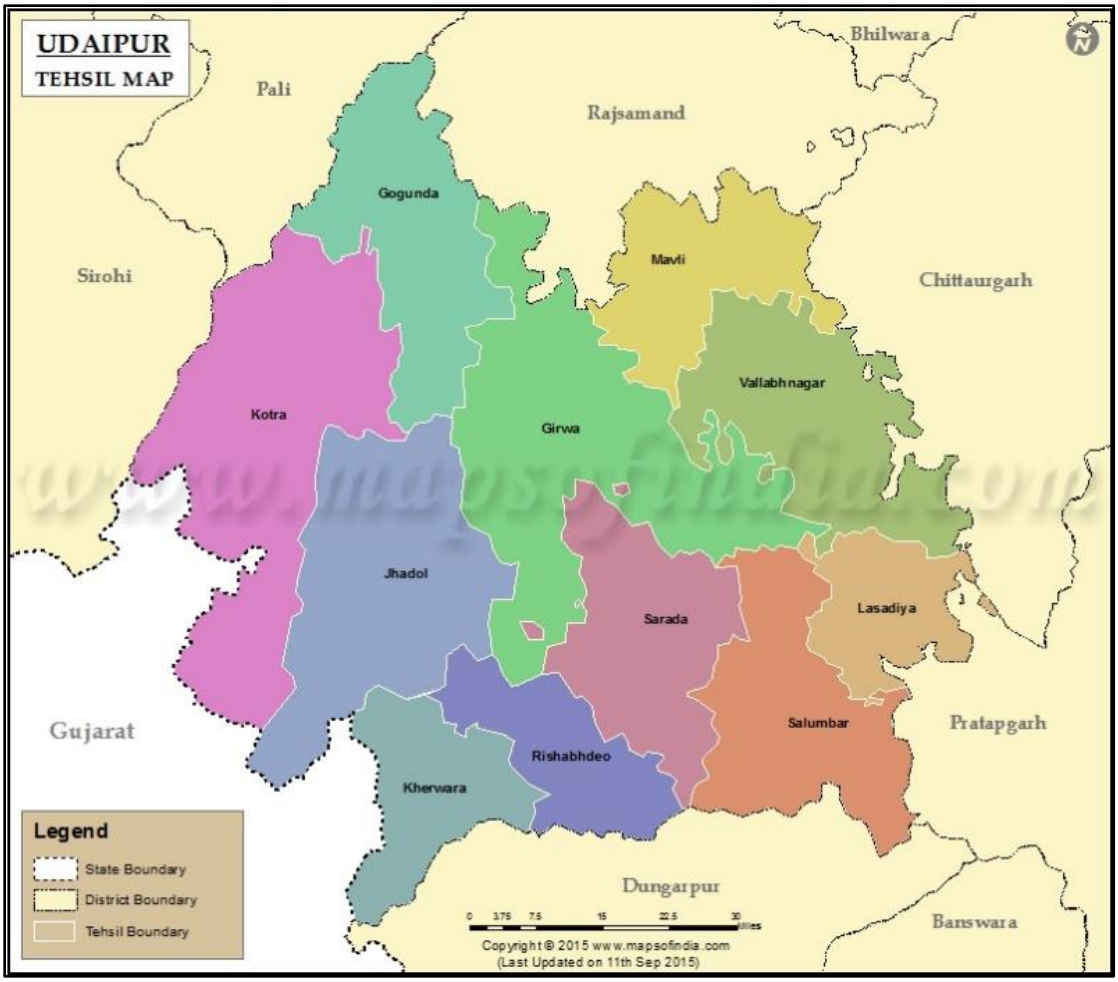
"Chief Secretaries may personally monitor compliance of environmental norms (including BMW Rules) with the District Magistrate once every month. The District Magistrates may conduct such monitoring twice every month. We find it necessary to add that in view of Constitutional provisions under Articles 243 G, 243 W, 243 ZD read with Schedules 11 and 12 and Rule 15 of the Solid Waste Management Rules, 2016 it is necessary to have a District Environment Plan to be operated by a District committee (as a part of District Planning Committee under Article 243 ZD)"

In this regard, Environment & Forest Department, Govt of Rajasthan vide dated 04th December 2019 instructed the Divisional Commissioners to prepare District Environmental Plans by constituting District Environment Committee (as per GoR vide letter no. 88 dated 17.09.2020) with representatives from concerned departments under chairmanship of the District Collector.

As per the directions, District Committee in respect of UDAIPUR district was formed to evolve and execute District Environmental Plan in the UDAIPUR District. District Environment Committee, Udaipur at minutes of meeting dated 16.12.2020.

A meeting of the District Committee to evolve the District Environmental Plan in respect of UDAIPUR District was held on 16.12.2020

This plan has been prepared in line with the model District Environment Plan (DEP) of CPCB and covers 7 thematic areas by capturing 64 action areas through about 220 data points which are essential part of this plan.



Source: - https://www.udaipurblog.com/wp-content/uploads/2019/07/udaipur-city-palace-148132813635-

1. DISTRICT UDAIPUR AT A GLANCE

1.1. GENERAL

Udaipur, the 'City of Lakes' was founded in 1599 by Maharana Udai Singh. The city hailed as the 'Venice of the East' set amidst the Aravali hills of South Rajasthan, is one of the most romantic destinations in India. Udaipur has a profusion of marble palaces, lakes, temples, cenotaphs and rugged hills. It's also proud of its heritage as a centre for the performing arts, painting and crafts. Famous historical personalities like Maharana Pratap, Rani Padmini and Meera Bai, the poetess and devotee of Lord Krishna hail from here. The enchanting marble palaces and scenic beauty makes it a most fantastic place for leisure.

1.2. LOCATION

Udaipur city lies between $24^0$28’49’’ and $24^0$42’56’’ N longitude and $73^0$36’51’’ and $73^0$49’46’’ E latitudes at a general elevation of about 598 meters above mean sea level in the Mewar region of Rajasthan. It is located in the southern region of Rajasthan and is close to Gujarat. The total geographical area of the city is 37 Sq. Km. the Udaipur district covers 14, 62,105 Hectares area with 28% of forest area. The total population of the city as per census 2011 city is 4, 51,735 including 2, 34,681 male & 2, 17,054 females with literacy of 90.66. It is expected to cross 8.0 Lac by 2022.

1.3. BOUNDARIES

It is bounded on the north by Rajasamand and Pali district, on the south by Dungarpur and Banswara, on the east by Bhilwara and Chittorgarh and on the west by Pali and Sirohi districts and Sabarkantha district (Gujarat). The district covers an area of 13618 sq. km.

1.4. PHYSIOGRAPHY

The district is surrounded by Aravalli ranges from North to East. The North part of the district consists generally of elevated plateaus while the eastern part has vast stretches of fertile plains. The southern part is covered with rocks, hills and dense forest. There are two important passages in the Aravalli range viz. Desuri Nal and Sadri which serve as a link between Udaipur and Jodhpur district.

1.5. DEMOGRAPHY

According to the 2011 census Udaipur district has a population of 3,068,420. The district has a population density of 7,048 inhabitants per square kilometer. Its population growth rate over the decade 2001-2011 was 15.8%. Udaipur has a sex ratio of 958 females for every 1000 males. The district has become one of the most densely populated districts in India. The literacy rate is 61.8% of which male 71.7% and female 48.04%. Mewari, and Hindi are the most widely spoken language in the district, and Hindi is the official language.

Total Population	3,068,420
Male Population	1566801
Female Population	1501619
Literacy Rate	61.8%
Male Literacy Rate	74.7%
Female Literacy Rate	48.04%
Sex Ration	958

*As per Udaipur District Census Handbook, 2011

1.6. ADMINISTRATIVE SET UP

Administratively the district is divided into 11 Sub-Divisions, 11 Tehsils and 11 Blocks, each sub-division under the charge of sub-divisional officer and Tehsil is administrated by the Tehsildar, vested with the powers of executive Magistrate, the ushering in of Democrat decentralization in 1959. Eleven Panchayat Samities were formed in the district. Panchayat Samities were guided by Zila Parishad under the Chairmanship of the Zila Pramukh and supervised by the District Collector.

For the purpose of the implementation of rural development projects/Schemes under Panchayati Raj System, the district is divided in the 11 Panchayat Samitis (Blocks). Block Development Officer or Vikas Adhikari is the Controlling Officer of each of the Panchayat Samiti to serve as extension and developmental executive at block level. The compositions of Panchayat Samities are as follows:

S. No.	Name of Panchayat Samiti	No. of Gram Panchayat	No. of Villages	Tehsil (s) (No. of Villages)	Census Towns
1	Mavli	42	179	Mavli (179)	Mavli (CT)
2	Gogunda	45	232	Gogunda (232)	Gogunda (CT)
3	Kotra	31	262	Kotra (262)	
4	Jhadol	45	283	Jhadol (283)	
5	Bargaon	26	108	Girwa (108)	Bedla (CT)
					Bargaon (Rural) (CT)
					Bhuwana (CT)
6	Girwa	48	217	Girwa (217)	Bichhri (CT)
7	Bhindar	52	305	Vallabhnagar (305)	
8	Lasadiya	19	114	Lasadiya (114)	
9	Salumbar	46	268	Salumbar (268)	
10	Sarada	44	219	Sarada (191)	Bhalariya (CT),
				Rishab deo (28)	NewaTalai (CT),
					Chawand (CT)
11	Kherwara	60	292	Rishabdeo (97)	Semari (CT) Kherwara Chhaoni (CT),
				Kherwara (195)	Rishabhdeo (CT)
	Total	458	2479		12 Census Towns

There are 5 statutory towns viz. Udaipur (MCL), Bhinder (M), Fatehnagar (M), Kanor (M) and Salumbar (M) in the Udaipur District.

*As per Udaipur District Census Handbook, 2011.

1.7. CLIMATE AND RAINFALL:

Udaipur city has particularly a tropical climate. The three main seasons, summer, monsoon and winter respectively, dominate the city of Udaipur. Being located in the desert lands of Rajasthan, the climate and weather of Udaipur is usually hot. The summer season runs from Mid-March to June and touches the temperature of 45°C. Monsoons arrive in the month of July heralded

by dust and thunderstorms. The city annually receives around 637 mm of rainfall. This scanty amount of rainfall makes Udaipur more humid. The humidity reaches to the extent of 90 % during the months of Monsoons. In Udaipur, winters are comparatively cooler than summers but not cold at all. The winter season prevails from the month of October till the month of March. Humidity, which prevails during monsoons, diminishes at the arrival of winters. The city observes pleasant sunny days and enjoyable cool nights. The temperature falls to the level of 11.6°C in the nights. Tourists arrive in numbers, anytime between mid-September to late March or early April.

1.8. FOREST, FLORA AND FAUNA

Udaipur district's major portion is covered with rocks & hills which are well stocked with forests. It covers about 297620 hectares under forests. The forests are valuable source of income and partly sustain the economy of the district. The tendu, katha, honey, wax, barks and grasses are economically important.

The forest in the district falls under the tropical dry deciduous. The district has large variety of flora. The common species found are Babul, Bargad, Dhok, Gugal, Khejri, Pipal,Neem, Salon, other tree found are Bahera, Hingota, Semal, Timru, Bans, Aak, Anwala,Thor, Karonda etc. The wild life found in the various areas of the district includes a large variety of animals, birds, and reptiles. Among the principal ones are panther, tiger, wild boar, sambhar, wolf, jack and stripped hyaena etc. There are game sanctuaries at Jaisamand and Sajjangarh.

1.9. ENVIRONMENT

Environment is the complex of biotic and abiotic factors that act upon an organism or on ecological community and ultimately determine its form and survival. Literally, environment means all that which surrounds us. Biotic components or factors can be described as any living components that affect other organisms or shape the eco systems. Abiotic factors are non-living chemical and physical parts of the environment that affect living organisms and the functioning of the ecosystems.

1.10. CAUSES OF ENVIRONMENTAL DEGRADATION

Major causes of the environmental degradation are modern urbanization, industrialization, over-population growth, deforestation etc. Environmental pollution refers to the degradation of

quality and quantity of natural resources. Various types of human exercises are the fundamental reasons of environmental degradation. These have prompted condition changes that have turned out to be hurtful to every single living being. The smoke radiated by the vehicles and processing plants expands the measure of toxic gases noticeable all around. The waste items, smoke radiated by vehicles and ventures are the fundamental driver of contamination. Spontaneous urbanization and industrialization have caused water, air and sound contamination. Urbanization and industrialization help to expand contamination of the wellsprings of water. So also, the smoke discharged by vehicles and ventures like Chlorofluorocarbon, nitrogen oxide, carbon monoxide and other clean particles dirty air. Neediness still remains an issue at the base of a few ecological issues.

1.11. EFFECTS OF ENVIRONMENTAL DEGRADATION

There are very adverse effects of environmental degradation. These effects can be enumerated as:

1. **Water pollution and water scarcity**

2. Air pollution

3. Solid and hazardous wastes

4. Soil degradation

5. Deforestation

6. Loss of biodiversity

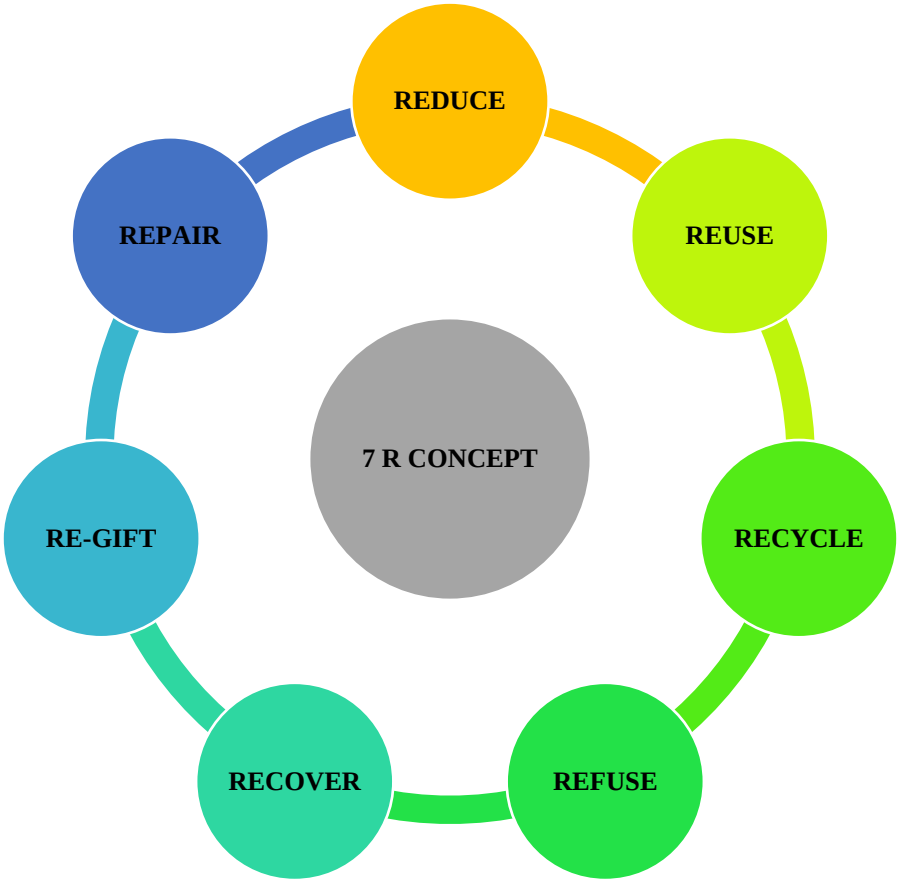
7. Atmospheric changes

1.12. CURRENT SITUATION OF ENVIRONMENT

Due to over exploitation of the natural resources, the situation of environment is so poor that could never be imagined by our old generations in previous time. This has led to various types of pollution i.e., Air, Water Soil and Noise Pollution. Settlements are the main reasons of increasing pollution which have resulted in various diseases and hampered the quality of life.

1.13. SOLUTIONS FOR ENVIRONMENT PROTECTION:

Solutions are many but all need proper action plan and support from all groups of people. Natural resources are key operators of natural cycle but due to over exploitation we have forgotten its importance. Thus, the first step to save our environment and natural resources as much as possible. Specially focus on SEVEN R' concept when using our natural resources. The concept of 7 R here:



The other measures are use of CNG Vehicles, proper implementation of bylaws of environment protection etc.

1.14. ECOSYSTEM-A BRIDGE BETWEEN SCIENCE & SOCIETY

An ecosystem is a community of living organisms in conjunction with the non-living components of their environment, interacting as a system. These biotic and abiotic components are linked together through nutrient cycles. Energy enters the system through photosynthesis and is incorporate into plant tissue. By feeding on plants and on one another, an animal plays an important role in the movement of matter and energy through the system. They also influence the quantity of plant and microbial biomass present. By breaking down dead organic matter decomposers

release carbon back to the atmosphere and facilitate nutrient cycling by converting nutrient stored in dead biomass back to a form that can be readily used by plants and other microbes.

Ecosystems are controlled by external and internal factors. External factors such as climate, soil and topography, control the overall structure of an eco-system but are not themselves influenced by the eco system Unlike external factors, internal factors are controlled, e.g., decomposition, root competition, shading, disturbance, succession, and types of specious present.

Ecosystems are dynamic entities. They are subject to periodic disturbance and are in the process of recovering from some past disturbance. When perturbation occurs, an eco-system responds by moving away from its initial state. The tendency of an eco-system to remain close to its equilibrium state, despite that disturbance is termed its resistance. On the other hand, the speed with which it returns to its initial stage after disturbance is called its resilience. Time plays a role in the development of soil from bare rock and the recovery of a community from disturbance.

1.15. POLLUTION

The word “POLLUTION” has been derived from the Latin word “POLLUTIONEM” which mean defilement. Pollution is an undesirable change in physical, chemical or biological characteristics of air, water and land. That may or will adversely affect human life and other life forms. Various types of pollution are caused but mainly the following lead to life threatening and adverse effects to humans in general.

Air Pollution- it is caused by the occurrence of foreign particles (aerosols or SPM) or gases in the atmosphere. It is caused by vehicular emission, dust from unpaved roads, burning of agriculture wastes, burning of fuels release, and release of hazardous gases from industries.

Water Pollution- it is the addition of some substances (Organic, Inorganic, Biological or Radiological) or factor (Heat, pH) which degrades the quality of water so that it either become health hazard or unfit for use. It is caused by sewage, dumping of municipal/solid based, biomedical waste, E-waste, C & D waste etc.

Noise Pollution- Increase in noise level needs to noise pollution. Noise is defined as unpleasant sound that has an adverse effect on the human. Major causes are the honking of moving vehicles, DJ at Marriage and loud music at religious places, running of machines at sites, radio, TV etc.

Soil Pollution- Soil contamination or soil pollution as part of land degradation is caused by the presence of Xenobiotic (Human-made) chemicals or other alteration in the natural soil environments. It is typically caused by industrial activity, agriculture chemicals or improper disposal of waste.

1.16. ENVIRONMENTAL MANAGEMENT

There are two main approaches for environmental management.

1. Management based on standards.

2. Management based on best practicable means.

The first approach requires statutory provisions for standards for each pollutant for air, water and noise and soil pollution. In this approach, each polluter could choose a suitable for pollution control, based on their evaluation for technical feasibility and economic viability.

The second approach is based on best practicable means. In this case the industry is free to adopt any suitable method which is technically feasible as well as economically viable.

1.17. PP PRINCIPLE (PPP)

The “Polluter Pays Principle” is the common accepted practice that those who produce pollution should bear the cost of managing it to prevent damage to human health or environment. This principle underpins most of the regulation of pollution affecting land, water and air.

2. CAUSES OF POLLUTION IN RESPECT TO UDAIPUR

Udaipur city falls under Non-Attainment Cities. The City is prone to various environmental issues. The Key Issues and Concerns are:

1. Increasing air pollution majorly due to increased vehicular movements and traffic, cutting of roads, construction activities, burning of fuels etc.

2. Polluted water bodies: lakes and river

3. Ground water pollution due to Industrial activities, septic tanks, leakage, and overflow of sewerage pipelines.

4. The city faces high risk of fire accidents in the core city area due to congestion and narrow roads, restricting the movement of firefighting services.

5. The city is prone to natural disasters like drought.

2.1. STATUS AIR POLLUTION IN UDAIPUR

The major sources of air pollution in Udaipur are road dust, vehicular Emission, construction and demolition activities, industrial emissions etc. For monitoring ambient air quality in the Udaipur, State Board have installed one Continuous Ambient Air Quality Monitoring Station at Court Circle, Udaipur in July 2017. At this Station Particulate Matter (PM10 and PM2.5), Gaseous pollutants – SO2, NOx, CO, CO2, VOC, O3 and NH3 and Meteorological parameters like Temperature, Relative Humidity, Wind Speed, Wind Direction, Pressure, Solar Radiation etc. are measured continuously. Besides it, 03 Manual Stations under the National Air Quality Monitoring Program are running at following locations for the parameters RSPM, So2 and Nox and monitored by

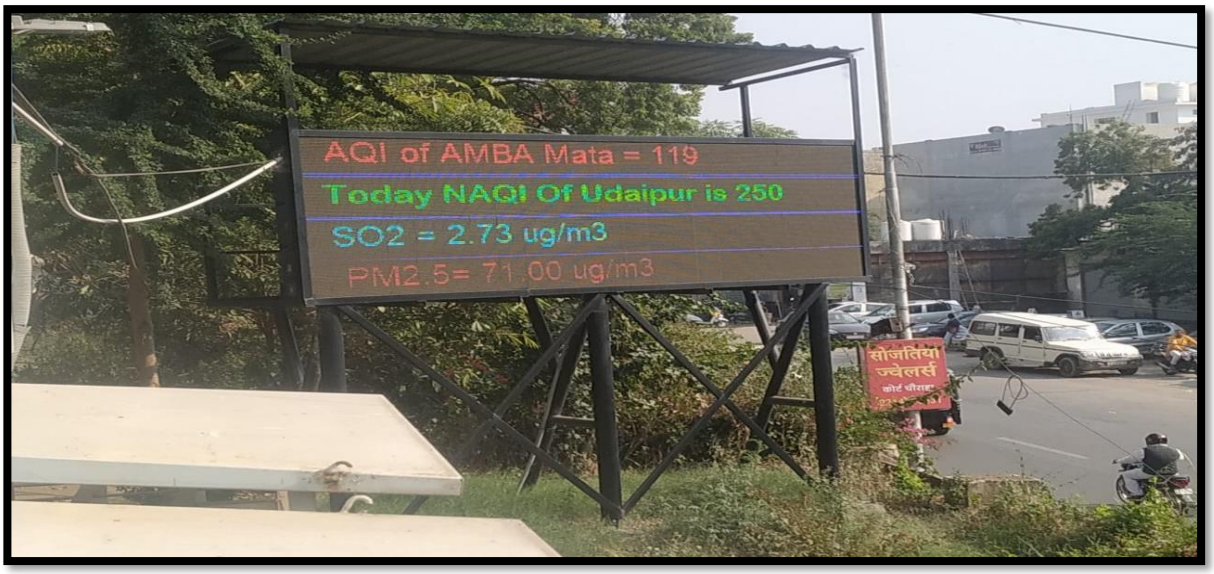
State Board: -

1. Amba Mata, Udaipur

2. Regional Office, Udaipur

3. Town Hall, Udaipur


Envirotech
NEW IMPROVED
RESPIRABLE DUST SAMPLER
Envirotech APM 460DXNL


AQI of AMBA Mata = 119
Today NAQI Of Udaipur is 250
SO2 = 2.73 ug/m3
PM2.5= 71.00 ug/m3

Rajasthan lies in the arid and semi-arid agro-climatic zone of the country and hence presence of dust due to dry climatic conditions coupled with strong hot air movement is common. Presence of Particulate Matter in the atmosphere goes particularly high during summer months and during winters when the phenomenon of thermal inversion occurs. As per the available data, level of gaseous pollutants like SO2 and NO2 are well within the prescribed limit of 80 µg/M^3.

Due to the dry conditions prevailing over a major part of the year, levels of PM10 are found to be in excess of the prescribed limit of 100 µg/M3.

Total no. of vehicles registered as on March, 2017 in Udaipur District with Transport Department is 814490 (Truck: 32623, Bus 6270, Car: 73491, Taxi: 9237, Jeep: 203705, Three-Wheeler: 8057, Two-Wheeler: 632370, Tractor: 18295, Trailers: 5117, Tempo (Pass): 3291, Tempo (Goods): 3201 and others: 2167).

In April 2018, the environment ministry released a draft of the National Clean Air Programme (NCAP). Its main goal is "to meet the prescribed annual average ambient air quality standards at all locations in the country in a stipulated timeframe." Given the state of air quality in India, any initiative by the Government of India is a welcome one, especially given the lack of monitoring data in the research space and the lack of enforcement of existing laws to curb emissions. The current NCAP draft is essentially a research programme designed to build institutional and technical capacity of central and the state pollution boards. The timeline of all proposals concludes in less than two years from the start. There is also no mention of a time-bound ambient air quality target to achieve or how. A review of the draft is presented here.

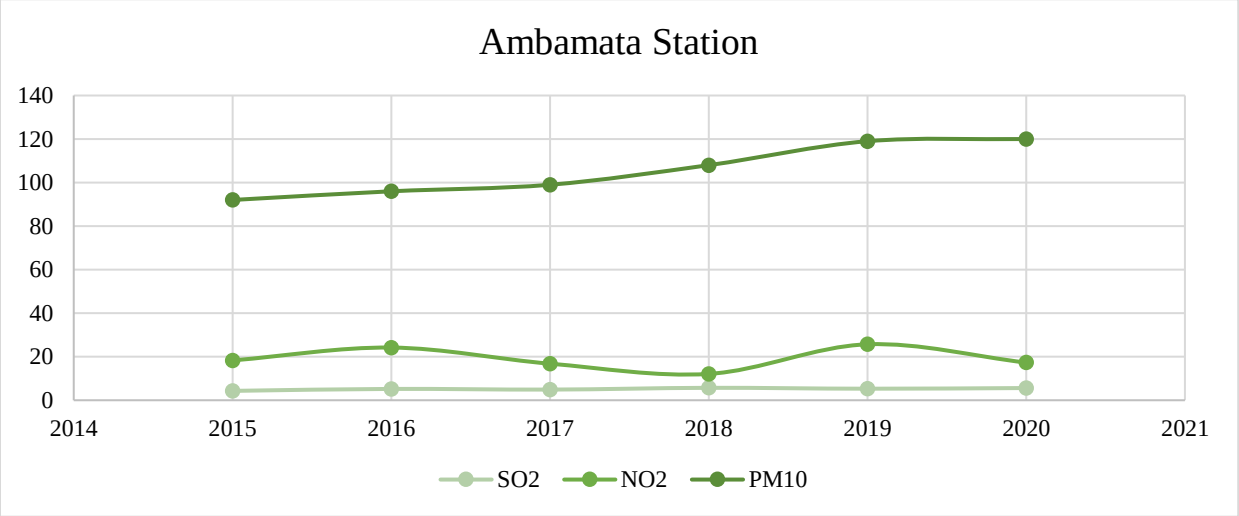
In 2019, full program proposal was released and this includes 122 non-attainment cities, who are required to submit an action plan to reduce their respective air pollution levels in 2024 by at least 20%. Udaipur is one of them.

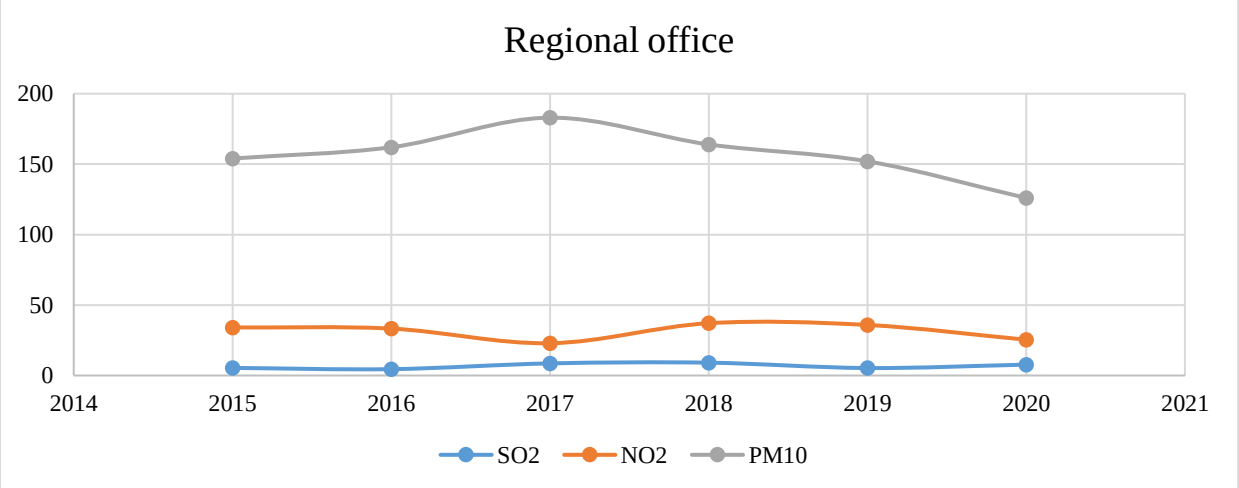
COMPARATIVE STATEMENT

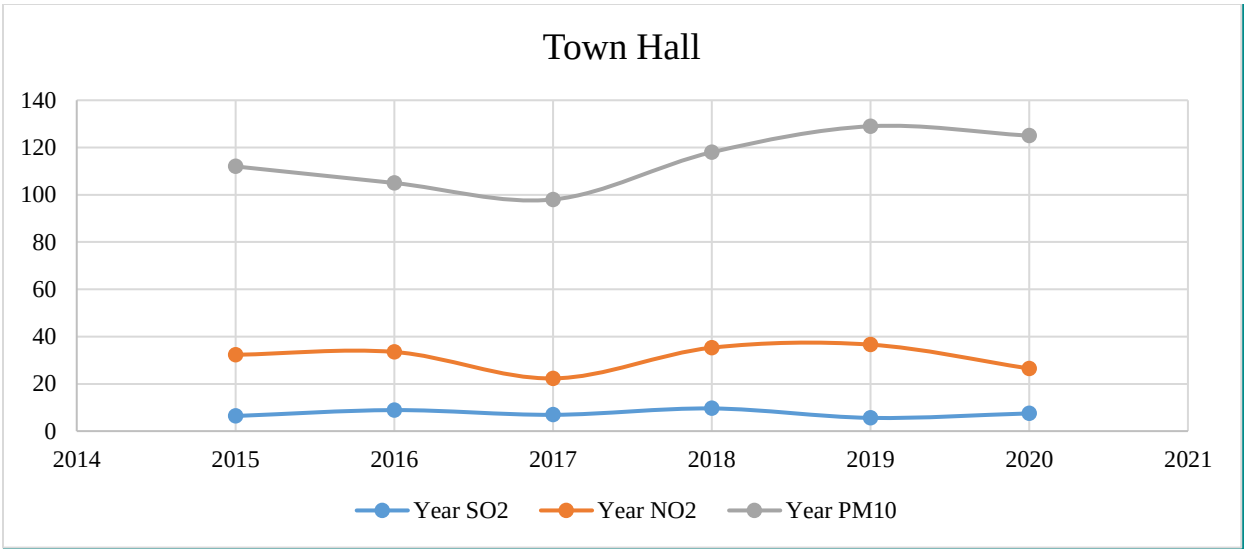
AMBIENT AIR QUALITY MONITORING DATA OF UDAIPUR CITY-
YEARLY AVERAGE LEVEL AT 3 DIFFERENT MONITORING STATIONS-MANUAL

MONITORING SITES		Amba mata Udaipur			Regional Office				Town Hall			
S. No.	Year	MONTHLY AVERAGE IN (µg/m3)			Year	MONTHLY AVERAGE IN (µg/m3)			Year	MONTHLY AVERAGE IN (µg/m3)		
		SO2	NO2	PM10		SO2	NO2	PM10		SO2	NO2	PM10
1	2015	4.3	18.3	92	2015	5.4	34.1	154	2015	6.4	32.3	112

2	2016	5.2	24.2	96	2016	4.5	33.3	162	2016	8.9	33.5	105
3	2017	4.9	16.8	99	2017	8.6	22.9	183	2017	6.9	22.3	98
4	2018	5.7	12.1	108	2018	9.1	37.11	164	2018	9.6	35.3	118
5	2019	5.3	25.7	119	2019	5.3	35.86	152	2019	5.6	36.6	129
6	2020	5.6	17.3	120	2020	7.7	25.4	126	2020	7.5	26.5	125
	AVERAGE	**5.1**	**19.06**	**106**	**AVERAGE**	**6.76**	**31.4**	**157**	**AVERAGE**	**7.4**	**31.0**	**114**







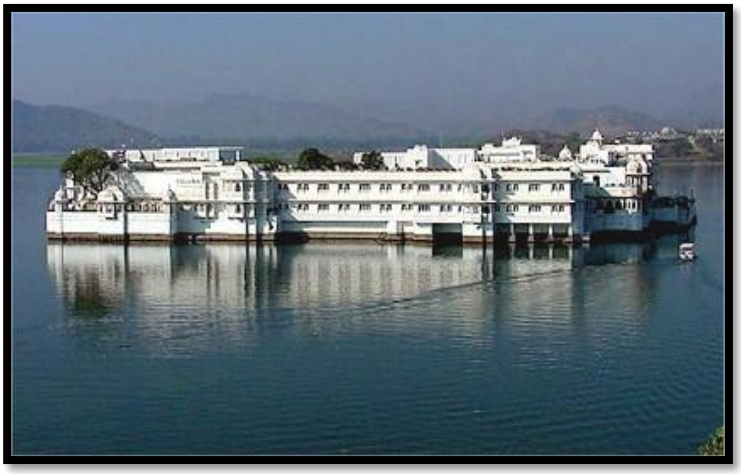
2.2. WATER ENVIRONMENT

Water supply of Udaipur depends upon surface and underground water sources of water such as lakes, step wells, tube wells, wells etc. These sources of water supply obtain water during the rainy season. Udaipur has numerous lakes in its vicinity that are Pichhola, Fateh Sagar, Udai Sagar, Goverdhan Sagar, Bari and Jaisamand lakes. These lakes along with step wells, tube wells have been Udaipur's major sources of drinking water. The biggest attractions of these lakes are the gardens and monuments built amidst these lakes. However, the lack of rain in the last few years has prevented the natural overflow and with a lot of filth being thrown in, there have been serious effects on the lake ecosystem.

2.2.1. LAKE WATER QUALITY

Udaipur is dependent on its lake system, which is directly, or indirectly the life source of the city in terms of surface water resources, tourism, and the ecosystem at large. Most of the tourists come to the city primarily because of the placid beauty of the lakes. The lakes attract an increasing number of young adventurous tourists' especially foreign tourists' who provide foreign exchange, thus strengthening the local economy. The Udaipur lake system comprises Lake Pichola, Rang Sagar, Swaroop Sagar, Fateh Sagar, Badi, Madar and Udai Sagar. All the lakes of Udaipur form a chain in the saucer shaped Udaipur valley.

Due to availability of limited underground sewerage network and treatment facilities, sewage is discharged into lakes, leading to an increase in bacterial and organic load in lake water. 73 Ghats situated on the banks of lakes are traditionally used for bathing and washing purposes. This releases a large amount of detergents into the lakes, which increases phosphate content. Similarly, increased commercial activity, especially hotels in the vicinity of lakes, is also contributing considerably to water pollution. In the catchment area of Fateh Sagar Lake, chemical effluents from synthetic fiber mills are discharged.



2.2.2. HOTELS AROUND THE LAKES

The hotels having more than 100 beds situated around the lakes have installed full-fledged sewage treatment plants consisting of primary secondary and tertiary units and maintaining zero discharge status by recycling the treated wastewater. Other hotels have installed oil/grease trap for kitchen wastewater and septic tank and filtration system before discharging the wastewater into the municipal sewer line.

CLASS OF WATER BODIES AS PER CPCB WATER QUALITY CRITERIA

NWMP COMPARATIVE STATEMENT (Year 2015 to 2020)

S.N.	Station Code no.	Name of Water Body Location/Station	CPCB Water Quality Criteria Class of Water					
			2015	2016	2017	2018	2019	2020
1	1286	Lake Udai sagar, near intake point of M/s HZL zinc Smelter, Debari, udaipur	C	C	B	B	C	B
2	1285	Lake Pichola, near intake point of PHED, Udaipur	B	B	B	B	B	B
3	1481	Lake Fateh sagar, near intake point of PHED, udaipur	B	A	B	B	B	A
4	2940	Lake Gape Sagar, Dungarpur	B	C	B	B	B	C
5	2941	Lake Jaisamand, Point -I	A	B	A	A	B	B
6	2942	Lake Jaisamand, Point -II	A	B	A	A	A	B

7	4177	Swaroop Sagar Lake, Near Shiksha Bhawan Circle, Udaipur	-	-	-	A	B	C
8	4178	Goverdhan Sagar Lake, in front of Saras Dairy, Ahmedabad Road, Udaipur	-	-	-	C	C	C
9	4179	Badi ka Talab, Udaipur	-	-	-	A	A	B
10	2019	Hand Pump, Near UIT Bridge, Udaipur	A	A	A	A	A	A
11	2020	Hand Pump, Near Fatehpura, 200 Ft. From Panchwati Nallah, Udaipur	A	A	A	A	A	A
12	2021	Hand Pump, Near shri Mohan Nagda, Alu Factory, Kacchi Basti, Udaipur	A	A	A	A	A	A
13	2022	Hand Pump, Near Rana Pratap Nagar Railway Station, Udaipur	A	A	A	A	A	A
14	2023	Open Well of Hotel Orinet Palace, Subhash Nagar, Udaipur	A	A	A	A	A	A
15	4795	Nela Talab, Sector 14 Hiran Magri, Udaipur	-	-	-	-	B	B
16	4796	Open Well of Saras Dairy, Goverdhan Vilas, NH-8, Udaipur	-	-	-	-	A	A
17	4797	Bore Well of Main Gate City Palace, Near Sheetla mata gate, Udaipur	-	-	-	-	A	A
18	4798	Bore Well of BSNL Office, Sector-3, Hiran Magri, Udaipur	-	-	-	-	A	A

CPCB Water Quality Criteria	
A	Drinking Water Source without conventional treatment but after disinfection
B	Outdoor bathing (Organized)
C	Drinking water source after conventional treatment and disinfection

<u>Common Sewage Treatment Plant, C/o Hindustan Zinc Ltd., Eklingpura, Girwa, Udaipur</u>:

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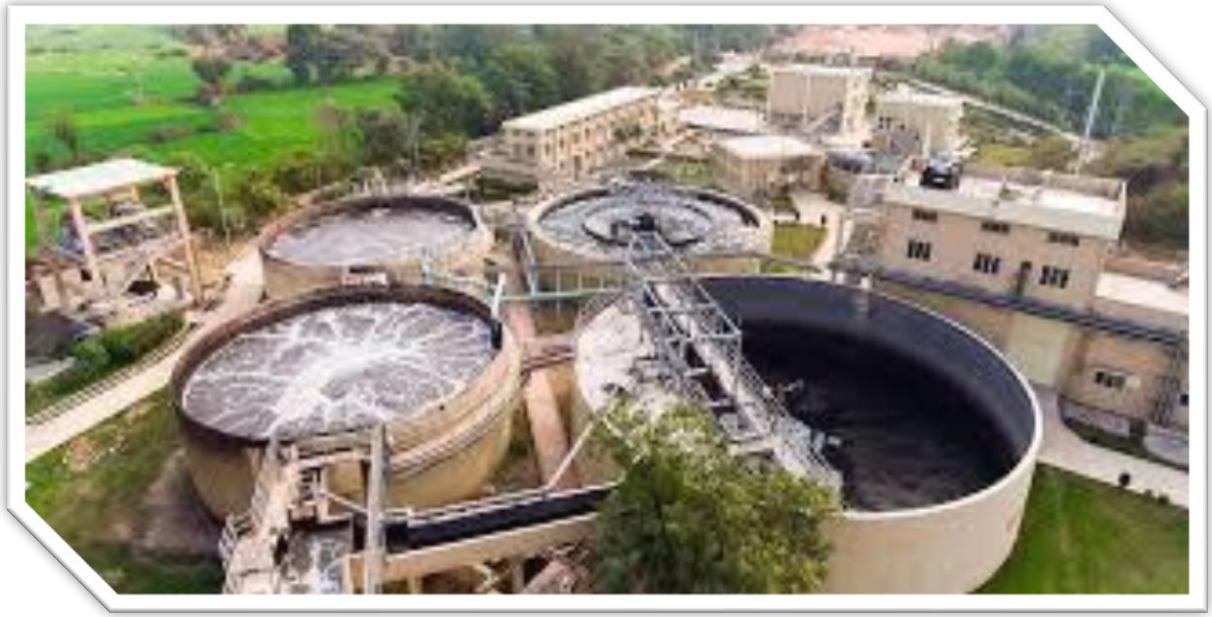
M/s Hindustan Zinc Ltd, has done the tripartite agreement with UIT and UMC for setting up a 60 MLD (20+25+10+5 MLD Common Sewage Treatment Plant on DBOOT (Design, Built, Own, Operate and transfer) at vill- Eklingpura (20+45 KLD), Near FCI (10 MLD) and Near Pulan (05 MLD) for Udaipur City.

The plant is designed to take peak load and seasonal fluctuations with an average treatment capacity of 60 MLD against average sewerage generation 57 KLD based on (Moving Bed Bio Reactor) MBBR technology.

The treated waste water is taken to Debari Plant of M/s Hindustan Zinc Ltd., through pipe line laid by M/s HZL. From Debari plant the treated water is also diverted to their Dariba Plant in Rajsamand District by gravity, as and when required.



2.2.3. LAKE CONSERVATION MEASURES

A city level monitoring committee, Jheel Samvardhan and Vikas Samiti, functions under the chairmanship of Divisional Commissioner Udaipur to monitor the progress of work done under the National Lake Conservation Project (NLCP).Works are carried out related to municipal solid waste management around the lakes (installation of dust bins), diversion of sewage away from the lakes by installation of new sewer lines & repairing of existing ones, proposal for plying of boats in the lakes which are solar/electric operated to prevent pollution, beautification of parks in and around the lakes, action against unauthorized construction around the lakes, proposals related to developments of Ayar river and establishment of sewage system in entire city of Udaipur, construction of earmarked Dhobi Ghats, toilets and idol immersion points, cleaning of lakes manually and through de weeding machine, installation of floating fountain in Pichola lake and forestation in its catchments, monitoring water quality of lakes, functioning of Lake Patrol team

(inter departmental) for enforcing ban on plastic carry bags and lake pollution control and soliciting public participation for keeping the lakes clean

Pichola Lake

Pichola Lake

Goverdhan Sagar Lake

Fatehsagar Lake

3. OUTCOMES OF INVENTORIES

In district Udaipur there are 01 Municipal Councils and 04 Nagar palikas given as below:

Sr. No.	City	Type
1	Udaipur	Municipal Corporation
2	Bhinder	Nagar palika
3	Salumber	Nagar palika
4	Kanod	Nagar palika
5	Fatehnagar-Sanwar	Nagar palika

The Ministry of Environment, Forest and Climate Change, Govt. of India has notified that SWM Rules 2016. As per the rules, the role of local body has been specified as per rule 15 of SWM, 2016 and as per rule 16 of the said rules, RSPCB shall enforce the rules through local bodies.

4. SOLID WASTE MANAGEMENT

4.1. MUNICIPAL SOLID WASTE

Solid waste is an obligatory function of the Municipal Council of Udaipur. However, this service is not properly performed, resulting in problems of health, sanitation and environmental degradation. Lack of financial resources, Institutional weakness, Improper choice of technology, Improper site of solid waste, Lack of trained manpower, Lack of local capacity to plan a proper system and Poor public participation and cooperation are the major factors affecting the Municipal Solid Waste Management. With the growth of population and huge influx of the tourists in the town, the problem of solid waste is getting deteriorated. Collection and transportation is being done in open vehicles creating an ugly look and littering on travelled roads. Proper landfill site has not been developed by MCU. Presently it is crudely dumped at Baleecha but there is no designed and scientific disposal facility.

a) Special task force (STF) constituted as per the direction of Hon'ble NGT and STF meeting is regularly conducted viz dated 26.10.2020, 30.09.2020, 25.08.2020, 29.07.2020, 03.01.2020, 30.08.2019, 26.07.2019, 20.06.2019 and 12.04.2019.

b) MCU identified 2 dumping sites at Tithardi village and Balicha village for setting up solid waste processing facilities as per census 2011, population of Udaipur city was 451,100. Current population of the city is 5 lakh (Approx.) and households under jurisdiction are 1.27 lakh (Approx.).

c) 100% Door to Door collection/transportation 100% Door to Door collection and transportation- MCU has 115 auto tippers for door-to-door waste collection in all 70 wards. All vehicles are being monitored by a GPS system.

d) 100% source segregation is being done in 62 wards (90 % of total wards) of MCU

e) 30 TPD MRF plant at Tithardi is functional.

f) 60 TPD wet waste composting plant at Tithardi is operational.

g) 50 TPD MRF plant is under construction.

h) 20 TPD biomethanation plant at BALICHA is operational.

i) Annual report of all ULB's has been received and compiled and sent to H.O. RPCB.

The following Action areas has positive outcomes for ULB's

Sr. No.	Action Areas	Outcome
1	Segregation of Waste	PARTLY
2	Door to Door Collection	100%
3	COMPOSTING OF WET WASTE	100 %
4	RDF (REFUSE DERIVED FUEL)	INITIATED

The following action areas have to be improved or they have to be included in the future action plans:

Sr. No.	Action Areas	Outcome
1.	**MECHANICAL ROAD SWEEPING**	**INITIATED**
2.	**BIO-METHANATION**	**INITIATED**
3.	**USE OF SANITARY LANDFILLS**	**INITIATED**
4.	**LINKAGE WITH RECYCLERS**	**INITIATED**
5.	**AUTHORIZATION OF WASTE PICKERS**	**NOT INITIATED**
6.	**ISSUANCE OF ID CAR**	**NOT INITIATED**

4.2. SWM IN RURAL AREAS

The rural areas in District Udaipur can be divided into two parts:

Part A: Rural Areas without Industries

Part B: Rural Areas with Industries/Tourism units and mining activities.

In rural areas generally the waste material is Kitchen Waste, Agriculture Waste, Horticulture Waste and domestic animal dung.

All these materials are being used for making manure by the farmers.

There is industrialization in Udaipur district and rural areas mainly having tourism units and mining activities there is a problem of Solid Waste Management. As the areas are scattered there is no mechanism finalized by the local bodies for their segregation and disposal in a scientific way. This area needs improvement.

LANDFILL CAPPING AT TITARDI (MSW)

MRF

BIO-METHANATION-2 TPD (WET GARBAGE)

BIO-MINING AT BALICHA

UDAIPUR ULB

SOLID WASTE MANAGEMENT

Sr. No.	Action Point	**Present Status**	Gap	Timeline	Department
1.	Door to Door Collection of Solid Waste	100% at Udaipur Municipal Corporation	0%	-	LSG Department (Municipal Bodies)
2	Segregation, Transport, Disposal as per Rules	100% at Udaipur Municipal Corporation	0%	-	LSG Department (Municipal Bodies)
3.	Segregation at Source	90% at MCU Agencies have been hired for IEC activities	10%	May 2021	LSG Department (Municipal Bodies)
4	Road Sweeping and Disposal of Waste Collected	100 % at MCU	0%	-	LSG Department (Municipal Bodies)
5	Material Recover Facility	Yes, available at MCU. 30 TPD operational MRF at Tithari and one 50 TPD MRF Plant under construction att Balicha	30%	Gap will be covered once construction of other MRF will be done. (October 2021)	LSG Department (Municipal Bodies)
6	Recycling of materials	Recycling of Dry waste like Paper, Metal, Glass, Cardboard, Clothes etc. is done on monthly basis	0%	-	LSG Department (Municipal Bodies)

		by Finish Society and Srajan Sewa Sansthan. Yes, Revenue is Generated out of it.			
7	Composting & utilization of Compost	60 TPD operational waste to compost Plant is at Tithari, Udaipur Yes, Revenue is generated.	0%	-	LSG Department (Municipal Bodies)
8	Waste to Energy Plant or Linkage	2TPD operational Bio methanation Plant at Madri and one 20 TPD plant is under construction. Revenue Generation (Yes/No)	40%	Gap will be covered once construction of 20 TPD plant will be done. (September 2021)	LSG Department (Municipal Bodies)
9	Landfill Availability	No Landfill available in the ULB	0%	-	LSG Department (Municipal Bodies)
10.	Reclamation of old dumpsite (If available)	Reclamation of Tithari site has completed and land capping has been done. Balicha Site reclamation is under progress.	40%	October 2021	LSG Department (Municipal Bodies)
11	Strengthening of Manpower as required in ULBs	Sanitation Staff – 1600, Operators - 30	0%	MCU has enough amount of staff to handle things.	LSG Department (Municipal Bodies)
12	Authorization of Waste Pickers (Issuance of ID cards)	Waste Pickers has been indentified and authorized at MCU. They are well placed at MRF plants. ID card has been issued to them.	0%	-	LSG Department (Municipal Bodies)
13	IEC Activity	Yes, it has been done by Finish Society, Srajan Sewa Snasthan and Supereme Constructions in all the wards at MCU.	0%	-	LSG Department (Municipal Bodies)

SALUMBER ULB

SOLID WASTE MANAGEMENT

Sr. No.	Action Point	Present Status	Gap	Timeline	Department
1.	Door to Door Collection of Solid Waste	100 % Door to Door Collection	Nil	Already Started	Nagar Palika Salumber
2	Segregation, Transport, Disposal as per Rules	Segregation – 50% Transportation – 100% Disposal – Nil	Segregation – 50% Transportation – 0 Disposal – 100%	Segregation-may 2021 Disposal – May 2021	Nagar Palika Salumber
3.	Segregation at Source	Segregation at Source- 50% Palika Conducted IEC activity at regular interval to motivate citizen.	Segregation at Source- 50%	May 2021	Nagar Palika Salumber
4	Road Sweeping and Disposal of Waste Collected	Road Sweeping -100 % Disposal of Waste Collected - Nil	Disposal of Waste Collected – 100%	May 2021	Nagar Palika Salumber
5	Material Recover Facility	Yes	-	May 2021	LSG Nagar Palika Salumber
6	Recycling of materials	Nil No	100%	May 2021	Nagar Palika Salumber
7	Composting & utilization of Compost	What is being done in ULBs (Name of ULBs) -Nil Revenue Generation (Yes/No) -No	Not available in (Name of ULBs) 100%	July 2021	Nagar Palika Salumber
8	Waste to Energy Plant or Linkage	What is being done in ULBs (Name of ULBs) Nil Revenue Generation (Yes/No)	100%	-	Nagar Palika Salumber

		No			
9	Landfill Availability	Nil	-	-	Nagar Palika Salumber
10.	Reclamation of old dumpsite (If available)	N/A	-	-	Nagar Palika Salumber
11	Strengthening of Manpower as required in ULBs	Manpower Required	_	_	Nagar Palika Salumber
12	Authorization of Waste Pickers (Issuance of ID cards)	Yes	_	_	Nagar Palika Salumber
13	IEC Activity	Being done in ULBs -Yes -By Conducting Swachhata Rally -By Painting poster related to Swachhata	Not being done in ULBs -	-	Nagar Palika Salumber

BHINDER ULB

SOLID WASTE MANAGEMENT

Sr. No.	Action Point	Present Status	Gap	Timeline	Department
1.	Door to Door Collection of Solid Waste	Available in all ULBs/ All in (name of ULBs) 100 % Door to Door Collection	Not Available in (Name of ULBs) Nil	Already Started	LSG Department Nagar Palika Bhinder
2	Segregation, Transport, Disposal as per Rules	Available in all ULBs/ All in (name of ULBs) Segregation – 60% Transportation – 100% Disposal – Nil	Not Available in (Name of ULBs) Segregation – 40% Transportation – 0 Disposal – 100%	Segregation-may 2021 Disposal – May 2021	LSG Department (Municipal Bodies) Nagar Palika Bhinder
3.	Segregation at Source	Available in all ULBs/ All in (name of ULBs) Segregation at Source- 50%	Not Available in (Name of ULBs) Segregation at Source- 50%	May 2021	LSG Department (Municipal Bodies) Nagar Palika Bhinder

		Steps taken to implement Palika Conducted IEC activity at regular interval to motivate citizen.			
4	Road Sweeping and Disposal of Waste Collected	Available in all ULBs/ All in (name of ULBs) Road Sweeping -100 % Disposal of Waste Collected - Nil Steps taken to implement	Not Available in (Name of ULBs) Disposal of Waste Collected – 100%	May 2021	LSG Department (Municipal Bodies) Nagar Palika Bhinder
5	Material Recover Facility	Available in all ULBs/ All in (name of ULBs) Yes	Not available in (Name of ULBs) -	May 2021	LSG Department (Municipal Bodies) Nagar Palika Bhinder
6	Recycling of materials	What is being done in ULBs (Name of ULBs) Nil Revenue Generation (Yes/No) No	Not available in (Name of ULBs) 100%	May 2021	LSG Department (Municipal Bodies) Nagar Palika Bhinder
7	Composting & Utilization of Compost	What is being done in ULBs (Name of ULBs) Nil Revenue Generation (Yes/No) No	Not available in (Name of ULBs) 100%	July 2021	LSG Department (Municipal Bodies) Nagar Palika Bhinder
8	Waste to Energy Plant or Linkage	What is being done in ULBs (Name of ULBs) Nil Revenue Generation (Yes/No) No	Not available in (Name of ULBs) 100%		LSG Department (Municipal Bodies) Nagar Palika Bhinder
9	Landfill Availability	Available in all ULBs/ All in (name of ULBs) Yes	Not available in (Name of ULBs) -		LSG Department (Municipal Bodies) Nagar Palika Bhinder
10.	Reclamation of old dumpsite (If available)	Reclamation done for (…) N/A	Not Done -		LSG Department (Municipal Bodies) Nagar Palika Bhinder
11	Strengthening of Manpower as required in ULBs	Required staff available in ULBs Manpower Required	Not Available in ULBs _		LSG Department (Municipal Bodies) Nagar Palika Bhinder

12	Authorization of Waste Pickers (Issuance of ID cards)	Available in all ULBs/ All in (name of ULBs) No	Not Available in (Name of ULBs) _		LSG Department (Municipal Bodies) Nagar Palika Bhinder
13	IEC Activity	Being done in ULBs Yes By Conducting Swachhata Rally By Painting poster related to Swachhata	Not being done in ULBs -		LSG Department (Municipal Bodies) Nagar Palika Bhinder

KANORE ULB

SOLID WASTE MANAGEMENT

Sr. No.	Action Point	Present Status	Gap	Timeline	Department
1.	Door to Door Collection of Solid Waste	Available in all ULBs/ All in (name of ULBs) 100 % Door to Door Collection	Not Available in (Name of ULBs) Nil	Already Started	LSG Department Nagar Palika Kanore
2	Segregation, Transport, Disposal as per Rules	Available in all ULBs/ All in (name of ULBs) Segregation – 55% Transportation – 100% Disposal – Nil	Not Available in (Name of ULBs) Segregation – 45% Transportation – 0 Disposal – 100%	Segregation- may 2021 Disposal – May 2021	LSG Department (Municipal Bodies) Nagar Palika Kanore
3.	Segregation at Source	Available in all ULBs/ All in (name of ULBs) Segregation at Source- 50% Steps taken to implement Palika Conducted IEC activity at regular interval to motivate citizen.	Not Available in (Name of ULBs) Segregation at Source- 50%	May 2021	LSG Department (Municipal Bodies) Nagar Palika Kanore
4	Road Sweeping and Disposal of Waste Collected	Available in all ULBs/ All in (name of ULBs) Road Sweeping -100 % Disposal of Waste Collected - Nil Steps taken to implement	Not Available in (Name of ULBs) Disposal of Waste Collected – 100%	May 2021	LSG Department (Municipal Bodies) Nagar Palika Kanore
5	Material Recover Facility	Available in all ULBs/ All in (name of ULBs) Yes	Not available in (Name of ULBs) -	May 2021	LSG Department (Municipal Bodies) Nagar Palika Kanore

6	Recycling of materials	What is being done in ULBs (Name of ULBs) Nil Revenue Generation (Yes/No) No	Not available in (Name of ULBs) 100%	May 2021	LSG Department (Municipal Bodies) Nagar Palika Kanore
7	Composting & Utilization of Compost	What is being done in ULBs (Name of ULBs) Nil Revenue Generation (Yes/No) No	Not available in (Name of ULBs) 100%	July 2021	LSG Department (Municipal Bodies) Nagar Palika Kanore
8	Waste to Energy Plant or Linkage	What is being done in ULBs (Name of ULBs) Nil Revenue Generation (Yes/No) No	Not available in (Name of ULBs) 100%		LSG Department (Municipal Bodies) Nagar Palika Kanore
9	Landfill Availability	Available in all ULBs/ All in (name of ULBs) Yes	Not available in (Name of ULBs) -		LSG Department (Municipal Bodies) Nagar Palika Kanore
10.	Reclamation of old dumpsite (If Available)	Reclamation done for (…) N/A	Not Done -		LSG Department (Municipal Bodies) Nagar Palika Kanore
11	Strengthening of Manpower as required in ULBs	Required staff available in ULBs Manpower Required	Not Available in ULBs _		LSG Department (Municipal Bodies) Nagar Palika Kanore
12	Authorization of Waste Pickers (Issuance of ID cards)	Available in all ULBs/ All in (name of ULBs) No	Not Available in (Name of ULBs) _		LSG Department (Municipal Bodies) Nagar Palika Kanore
13	IEC Activity	Being done in ULBs Yes By Conducting Swachhata Rally By Painting poster related to Swachhata	Not being done in ULBs -		LSG Department (Municipal Bodies) Nagar Palika Kanore

FATEH NAGAR ULB

SOLID WASTE MANAGEMENT

Sr. No.	Action Point	Present Status	Gap	Timeline	Department
1.	Door to Door Collection of Solid Waste	• Available in all ULBs/ All in (Nagar palika Fatehnag sanwad Udaipur) (100 % Door to Door Collection)	NIL		LSG Department (Name of Municipal Body)
2	Segregation, Transport, Disposal as per Rules	• Available in all ULBs/ All in (Nagar palika Fatehnag sanwad Udaipur)	NIL		LSG Department (Municipal Bodies)
3.	Segregation at Source	• Available in all ULBs/ All in (Nagar palika Fatehnag sanwad Udaipur) • Segregation is being done	NIL		LSG Department (Municipal Bodies)
4	Road Sweeping and Disposal of Waste Collected	• Available in all ULBs/ All in (Nagar palika Fatehnag sanwad Udaipur) • It is being done well	NIL		LSG Department (Municipal Bodies)
5	Material Recover Facility	• Available in all ULBs/ All in (Nagar palika Fatehnag sanwad Udaipur) Material is sufficient for sell	NIL		LSG Department (Municipal Bodies)
6	Recycling of materials	• What is being done in ULBs (Nagar palika Fatehnag sanwad Udaipur) • No need for recycling • Revenue Generation (Yes)	NIL		LSG Department (Municipal Bodies)
7	Composting & Utilization of Compost	• What is being done in ULBs (Nagar palika Fatehnag sanwad Udaipur) • Composing is being done and after sufficient qty collection it will sell • Revenue Generation (No)	NIL		LSG Department (Municipal Bodies)
8	Waste to Energy Plant or Linkage	• What is being done in ULBs (Nagar palika Fatehnag sanwad Udaipur) • No need • Revenue Generation (No)	NIL		LSG Department (Municipal Bodies)
9	Landfill Availability	• Available in all ULBs/ All in (Nagar palika Fatehnag sanwad Udaipur) • Land available	NIL		LSG Department (Municipal Bodies)
10.	Reclamation of old dumpsite (If available)	• Reclamation done for (It is under process …)	Not Done	After A & F sanctioned	LSG Department (Municipal Bodies)
11	Strengthening of Manpower as required in ULBs	• Required staff available in ULBs • No	Nil		LSG Department (Municipal Bodies)

12	Authorization of Waste Pickers (Issuance of ID cards)	• Available in all ULBs/ All in (Nagar palika Fatehnag sanwad Udaipur) • ID cards have been issued	NIl		LSG Department (Municipal Bodies)
13	IEC Activity	• Being done in ULBs	NIl		LSG Department (Municipal Bodies)

Solid Waste Management Plan (for each ULB)									
Sr. No.	**Action Areas**	**Details of Data Requirement**	**Units of Measurable Outcome**	**Please enter Measurable Outcome for District**	**ULB1**	**ULB2**	**ULB3**	**ULB4**	**ULB5**
	Name of Urban Local Body (ULB)		[name of ULB]		**Udaipur**	**Fatehnagar Sanwad**	**Salumber**	**Bhinder**	**Kanore**
	No of ULBs in the District		5						
	Population		[Nos as per 2011 census]		**4.51 lacks**	**22788**	**16426**	**17878**	**14650**
SW 1	Report on inventory of total solid waste Generation								
SW 1a		Total solid waste Generation	[in MT/Day] or [Not estimated]		**180**	**2.5**	**5.5**	**0.59**	**4.5**
SW 1b		Qty. of Dry Waste segregated	[in MT/Day] or [Collection Not initiated]		**90**	**2.5**	**1.0**	**0.262**	**0.06**
SW 1c		Qty. of Wet Waste segregated	[in MT/Day] or [Collection Not		**81**	**1**	**1.5**	**0.262**	**0.083**

			initiated]						
SW 1d		Qty. of C&D Waste segregated	[in MT/Day] or [Collection Not initiated]		**20**	**not initiated**	**Collection Not initiated**	**not initiated**	**0**
SW 1e		Qty. of Street Sweeping	[in MT/Day] or [Not estimated]		**Twise**	**Twise**	**1.75**	**0.2**	**0.02**
SW 1f		Qty. of Drain Silt	[in MT/Day] or [Not estimated]		**Daily**	**Daily**	**1**	**Not Estimated**	**0**
SW 1g		Qty. of Domestic Hazardous Waste (DHW) collected	[in MT/Day] or [No Facility]		**1T**	**No Facility**	**0**	**No Facility**	**0**
SW 1h		Qty. of Other Waste (Horticulture, sanitary waste, etc.)	[in MT/Day] or [Qty not estimated]		**0**	**Not Estimated**	**0.25**	**Not Estimated**	**0.01**
SW 1i		No of Old dump sites	[Nos] or [None]		**2**	**4**	**Nil**	**Nil**	**1**
SW 1j		Qty stored in dumpsites	[MT] or [Not estimated]		**2 to 3**	**1882.5**	**Nil**	**Not Estimated**	
SW 1k		No of Sanitary landfills	[Nos] or [None]		**under construction**	**nil**	**Nil**	**nil**	**0**
SW 1l		No of wards	[nos]		**70(New)**	**20**	**20**	**20**	**15(20)**
SW 2	Compliance by Bulk Waste Generators								

SW 2a		No of BW Generators	[numbers] or [inventory not done]		**9**	**NIl**	**Nil**	**0**	**0**
SW 2b		No of on-site facilities for Wet Waste	[numbers] or [No data]		**8**	**NIl**	**Nil**	**nil**	**0**
SW 3	Compliance in segregated waste Collection SW Collection								
SW 3a		Total generation	[Automatic] from SW1a		**1T**	**NIl**	**5.5**	**0.262**	**4.5**
SW 3b		Wet Waste	[in MT/Day] or [Collection Not initiated]		**0.8T**	**NIl**	**3.5**	**0.262**	**2.5**
SW 3c		Dry Waste	[in MT/Day] or [Collection Not initiated]		**0.2T**	**NIl**	**2.0**	**Not Initiated**	**2**
SW 3d		C&D Waste	[in MT/Day] or [Collection Not initiated]			**not initiated**	**Collection not initiated**		**0**
SW 4	Waste Management Operations								
SW 4a		Door to Door Collection	[100%] / [partial %] / [not initiated]		**100%**	**100%**	**100%**	**100%**	**100%**

SW 4b		Mechanical Road Sweeping	[100%] / [partial %] / [not initiated]		**4 lane road only**	**50%**	**0**	**Not Initiated**	**nil**
SW 4c		Manual Sweeping	[100%] / [partial %]		**100% road**	**100%**	**100%**	**100%**	**yes**
SW 4d		Segregated Waste Transport	[100%] / [partial %] / [not initiated]		**60%**	**100%**	**60%**	**Not Initiated**	**yes**
SW 4e		Digesters (Bio-methanation)	[% of WW] / [not initiated]		**1(2TPD)**	**N.A.**	**0**	**Not Initiated**	**nil**
SW 4f		Composting operation	[% of WW] / [not initiated]		**20 TPD (supreme)**	**NIL**	**Not initiated**	**Not Initiated**	**nil**
SW 4g		MRF Operation	[MRF used] / [not installed]		**30 TDP (operation)**	**Installed**	**Construction under progress**	**Civil work completed**	**constrcsan in progress**
SW 4h		Use of Saniatry Landfill	[% of SW collected] / [no SLF]		**under construction**	**N.A**	**No SLF**	**Nil**	**nil**
SW 4i		Reclamation of old dumpsites	[initiated] / [not initiated]		**MLP being send to plant**	**N.A.**	**Not initiated**	**Not Initiated**	**notification and Implementation of By-Laws**
SW 4j		Linkage with Waste to Energy Boilers / Cement Plants	[initiated] / [not initiated]		**yes**	**Initated**	**Not initiated**	**Not Initiated**	**not initiated**

SW 4k		Linkage with Recyclers	[initiated] / [not initiated]		**yes**	**Not Initiated**	**Not initiated**	**Not Initiated**	**not initiated**
SW 4l		Authorization of waste pickers	[initiated] / [not initiated]		**yes**	**yes**	**Not initiated**	**Not Initiated**	**not initiated**
SW 4m		Linkage with TSDF / CBMWTF	[initiated] / [not initiated]			**Not Initiated**	**Not initiated**	**Not Initiated**	**not initiated**
SW 4n		Involvement of NGOs	[initiated] / [not initiated]		**yes**	**Not Initiated**	**Yes**	**Not Initiated**	**not initiated**
SW 4o		Linkage with Producers / Brand Owners	[initiated] / [not initiated]		**[initiated] / [not initiated]**	**Not Initiated**	**Not Initiated**	**Not Initiated**	**not initiated**
SW 4p		Authorisation of Waste Pickers				**Not Initiated**	**Not Initiated**	**Not Initiated**	**not initiated**
SW 4q		Issuance of ID Cards	[initiated] / [not initiated]		**[initiated] / [not initiated]**	**Not Initiated**	**Not initiated**	**Not Initiated**	**not initiated**
SW 5	Adequacy of of Infrastructure								
SW 5a		Waste Collection Trolleys	[Nos. Required] / [Nos. Available]		**9**	**5**	**2**		**60**
SW 5b		Mini Collection Trucks	[Nos. Required] / [Nos. Available]		**110**	**90**	**0**	**80**	**2**
SW 5c		Segregated Transport	[yes] / [no] / [% area covered]		**60%**	**100%**	**60%**	**3**	**yes**

SW 5d		Bulk Waste Trucks	[Nos. Required] / [Nos. Available]		**10**	**1**	**0**	**Yes**	**not recvayrd**
SW 5e		Waste Transfer points	[Nos. Required] / [Nos. Available] /[Not available]		**1**	**Not available**	**0**	**Not required**	**not avelabal**
SW 5f		Bio-methanation units	[Nos. Required] / [Nos. Available]		**1**	**0**	**0**	**Not available**	**nil**
SW 5h		Composting units	[Nos. Required] / [Nos. Available]		**1**	**1**	**0**	**Not available**	**nil**
SW 5i		Material Recovery Facilities	[used or installed] / [not available]		**1**	**1**	**Installed**	**work in progress**	**work in progress**
SW 5k		Waste to Energy (if applicable)	[Required] / [Nos. Available]		**1**	**0**	**0**	**Nil**	**nil**
SW 5l		Waste to RDF	[Required] / [Nos. Available]			**0**	**0**	**Nil**	**nil**
SW 5m		Sanitary Land fills	[Nos] / [Nos. Available]		**1 under construction**	**0**	**0**	**Nil**	**nil**
SW 5n		Capacity of sanitary landfills	[MT] / / [Nos. Available]		**0.80 lacks Cum**	**0**	**0**	**Nil**	**nil**

SW 5o		Waste Deposit Centers (DHW)	[Nos] / [Nos. Available]		**[Nos] / [Nos. Available]**	**0**	**0**	**Nil**	**nil**
SW 5p		Other facilities	[give or select from list]		**[give or select from list]**	**0**	**Nil**	**Nil**	**nil**
SW 6	Notification and Implementation of By-Laws								
SW 6a		Notification of By-laws	[done] / [in progress] / [not initiated]		**yes**	**Not Initiated**	**Notified**	**Yes**	**yes**
SW 6b		Implementation of by-laws	[done] / [in progress] / [not initiated]		**yes**	**Not Initiated**	**In progress**	**Not Initiated**	**in progress**
SW 7	Adequacy of Financial Status of ULB								
SW 7a		CAPEX Required	[INR] / [Not required]		**[INR] / [Not required]**	**not required**	**50.0 Lacs**	**not required**	
SW 7b		OPEX	[INR per Year] / [% of requirement]		**[INR per Year] / [% of requirement]**	**not required**	**30.0 Lacs**	**60%**	
SW 7c		Adequacy of OPEX	[Yes] / [No]		**[Yes] / [No]**	**not required**	**No**	**Yes**	

5. PLASTIC WASTE MANAGEMENT PLAN (PWM)

5.1. Action for compliance of Ban on polythene carry bags

In reference to the notification dated 21 July 2010, Department of Environment, Rajasthan regarding a complete ban on use of plastic carry-bags all over the State this office has deputed two officials in the team' Lake patrol' constituted by district administration for carrying out seizures of polythene carry bags in various areas of Udaipur. 3 tonnes of carry bags have been seized so far and 9 cases have been filed by this office out which 3 have been decided and penalty have been imposed on three units of Rs500, Rs 500 and Rs 1000. The Lake Patrol team is also collecting penalties on each seizure which is deposited at local authority level.

i. Ban of plastic bags implementation is in progress regularly.

ii. Plastic waste management rules, 2016 are adopted.

iii. The MC, Udaipur has given the contract to M/s Nepra Resource Management Pvt Ltd, Gujarat for disposal of plastic waste. According to rules, 2016 amount of plastic carry bag given to NEPRA ltd. cement plant is 5.2 tonne.

iv. For the installation of cloth bags vending machines for effective implementation of ban on plastic carry bags. Eight locations in the municipal area have been identified and progress for installation is under progress which is under progress at the level of H.O.

v. Plastic bottle crushing machine has been installed by M/s HZL at celebration mall, Udaipur and 4 machines have been installed under Smart City Project, Udaipur at Fateh Sagar, Bus stand, Saheliyo ki Bari and Sukhadia Circle. The crushed plastic waste was taken by the company (the manufacturer of the machine), which is reused to make the garments. Further detail may be updated by MCU.

vi. Plastic/carry bag sized till date 5400 kg. by lake patrolling team. Further detail may be updated by MCU.

In terms of PWM, the following action areas have positive outcomes in r/o ULB's in District Udaipur

Sr. No.	Action Areas	Outcomes
1	Door to Door collection	100%
2	Prohibiting Sale of Carry Bags less than 50 micron of thickness	100% ban on all type of plastic carry bags
3	Ban on Single use Plastic	Implemented

The following action areas have to be improved or to be included in the action plan for PWM:

Sr. No.	Action Areas	Outcomes
1	Authorization of PW Pickers	initiated in MC, Udaipur
2	Pw collection Centres	Initiated in MC, Udaipur
3	Linkage with NGO's	Not Initiated
4	Use of Poly Waste	Needs Improvement

5.2. PWM IN RURAL AREAS:

In Rural areas of District, Udaipur there are no collection and in Part B areas having industries/tourism units and mining activities this problem is causing threat in present and future. Only PW Pickers/ Garbage Collector/Kabadi are collecting the Plastic Waste from Local people.

PLASTIC PROCESSING MACHINE

PLASTIC WASTE (FOR EACH ULB)

UDAIPUR ULB

PLASTIC WASTE MANAGEMENT

Sr. No.	Action Point	Present Status	Gap	Timeline	Department
1.	Plastic recovered from solid waste	• Yes, plastic has been recovered at MCU. RDF has been created too out of it.	0%	-	LSG Department (Municipal Bodies)

2	Recycling through Pyrolysis	• No recycling through pyrolysis.	100%	Planning is under progress.	LSG Department (Municipal Bodies)
3.	Recycling through use in Roads	• No recycling through use in Roads • Feasibility check is under process.	100%	Planning is under progress.	LSG Department (Municipal Bodies)
4	Co processing in Kilns	• No • Under review	100%	Planning is under progress.	LSG Department (Municipal Bodies)
5	Ban on <50-micron plastic production and sales as notified by State Government	• Yes, complete Ban • Notification has been issued for penalty clauses.	0%	-	LSG Department (Municipal Bodies)
6	Plastic polyethene /carry bag seize inspection	• Inspection done by District Collectors/authorized officials			District Collector/through nominated officials as per rules

SALUMBAR ULB

PLASTIC WASTE MANAGEMENT

Sr. No.	Action Point	Present Status	Gap	Timeline	Department
1.	Plastic recovered from solid waste	Recovered in all ULBs/ All in (name of ULBs) -Yes (Partially)	Not recovered in (Name of ULBs) -		Nagar Palika Salumber
2	Recycling through Pyrolysis	Available in all ULBs/ All in (name of ULBs) -No	Not Available in (Name of ULBs) _		Nagar Palika Salumber
3.	Recycling through use in Roads	Available in all ULBs/ All in (name of ULBs) - -No Steps taken to implement	Not Available in (Name of ULBs) -		Nagar Palika Salumber
4	Co processing in Kilns	Available in all ULBs/ All in (name of ULBs) - -No Steps taken to implement –No	Not Available in (Name of ULBs) -		Nagar Palika Salumber
5	Ban on <50-micron plastic production and sales as notified by State Government	Available in all ULBs/ All in (name of ULBs) - -Yes Utilization of facility of other ULBs	Not available in (Name of ULBs) -		Nagar Palika Salumber
6	Plastic polyethene /carry bag seize inspection	Inspection done by District –No Collectors/authorized officials	Not Done		Nagar Palika Salumber

BHINDER ULB

PLASTIC WASTE MANAGEMENT

Sr. No.	Action Point	Present Status	Gap	Timeline	Department
1.	Plastic recovered from solid waste	Recovered in all ULBs/ All in (name of ULBs) Yes (Partially)	Not recovered in (Name of ULBs) -		LSG Department (Municipal Bodies) Nagar Palika Bhinder
2	Recycling through Pyrolysis	Available in all ULBs/ All in (name of ULBs) No	Not Available in (Name of ULBs)		LSG Department (Municipal Bodies) Nagar Palika Bhinder
3.	Recycling through use in Roads	Available in all ULBs/ All in (name of ULBs) - No Steps taken to implement	Not Available in (Name of ULBs) -		LSG Department (Municipal Bodies) Nagar Palika Bhinder
4	Co processing in Kilns	Available in all ULBs/ All in (name of ULBs) - No Steps taken to implement	Not Available in (Name of ULBs)		LSG Department (Municipal Bodies) Nagar Palika Bhinder
5	Ban on <50-micron plastic production and sales as notified by State Government	Available in all ULBs/ All in (name of ULBs) - Yes Utilization of facility of other ULBs	Not available in (Name of ULBs) -		LSG Department (Municipal Bodies) Nagar Palika Bhinder
6	Plastic polyethene /carry bag seize inspection	Inspection done by District –No Collectors/authorized officials	Not Done		District Collector/through nominated officials as per rules

KANORE ULB

PLASTIC WASTE MANAGEMENT

Sr. No.	Action Point	Present Status	Gap	Timeline	Department
1.	Plastic recovered from solid waste	Recovered in all ULBs/ All in (name of ULBs) Yes (Partially)	Not recovered in (Name of ULBs)		LSG Department (Municipal Bodies) Nagar Palika Kanore
2	Recycling through Pyrolysis	Available in all ULBs/ All in (name of ULBs) No	Not Available in (Name of ULBs)		LSG Department (Municipal Bodies) Nagar Palika Kanore
3.	Recycling through use in Roads	Available in all ULBs/ All in (name of ULBs) - No Steps taken to implement	Not Available in (Name of ULBs)		LSG Department (Municipal Bodies) Nagar Palika Kanore

4	Co processing in Kilns	Available in all ULBs/ All in (name of ULBs) - No Steps taken to implement	Not Available in (Name of ULBs)		LSG Department (Municipal Bodies) Nagar Palika Kanore
5	Ban on <50 micron plastic production and sales as notified by State Government	Available in all ULBs/ All in (name of ULBs) - Yes Utilization of facility of other ULBs	Not available in (Name of ULBs)		LSG Department (Municipal Bodies) Nagar Palika Kanore
6	Plastic polyethene /carry bag seize inspection	Inspection done by District –No Collectors/authorized officials	Not Done		District Collector/through nominated officials as per rules

FATEH NAGAR ULB

PLASTIC WASTE MANAGEMENT

Sr. No.	Action Point	Present Status	Gap	Timeline	Department
1.	Plastic recovered from solid waste	• Recovered in all ULBs/ All in (Nagar plika Fatehnag sanwad Udaipur)	NIL		LSG Department (Municipal Bodies)
2	Recycling through Pyrolysis	• Available in all ULBs/ All in (Nagar plika Fatehnag sanwad Udaipur)	No need		LSG Department (Municipal Bodies)
3.	Recycling through use in Roads	• Available in all ULBs/ All in (Nagar plika Fatehnag sanwad Udaipur) • Steps taken to implement	No need		LSG Department (Municipal Bodies)
4	Co processing in Kilns	• Available in all ULBs/ All in (Nagar plika Fatehnag sanwad Udaipur) • Steps taken to implement	No need		LSG Department (Municipal Bodies)
5	Ban on <50 micron plastic production and sales as notified by	• Available in all ULBs/ All in (Nagar plika Fatehnag sanwad Udaipur)	No need		LSG Department (Municipal Bodies)

	State Government	• Utilization of facility of other ULBs			
6	Plastic polyethene /carry bag seize inspection	• Inspection done by District Collectors/authorized officials			District Collector/through nominated officials as per rules

Plastic Waste Management (for each ULB)									
No.	**Action Areas**	**Details of Data Requirement**	**Measurable Outcome**	**Please enter Measurable Outcome for District**	**ULB1**	**ULB2**	**ULB3**	**ULB4**	**ULB5**
	Name of ULB		[name of ULB]		**udaipur**	**fatehnagar sanwar**	**salumber**	**Bhinder**	**kanod**
	Population		[Nos as per 2011 census]		4.51 lakhs	**22788**	16426	**17878**	**13269**
PW 1	Inventory of plastic waste generation								**0**
PW 1a		Estimated Quantity of plastic waste generated in District	[MT/day] / [Not Estimated]		**Not estimated**	**0.084**	**Not Estimated**	**Not estimated**	**Not Estimated**
PW 2	Implementation of Collection								
PW 2a		Door to Door collection	[100%] / [partial %] / [not initiated]		100%	**100%**	**100%**	**Not Initiated**	**100**
PW 2b		Segregated Waste collection	[100%] / [partial %]		100%	**20%**	**60%**	**0%**	**0**
PW 2c		Plastic waste collection at Material Recover	[MRF used] / [not installed]		MRF Installed	**MRF Installed**	**MRF Installed**	**not installed**	**MRF under construction**

		y Facility							
PW 2d		Authorization of PW pickers	[Nos] / [not initiated]		**not initiated**	**3**	**Not initiated**	**not initiated**	**Not intiated**
PW 2e		PW collection Centers	[Nos] / [not established]		[Nos] / [not established]	**N.A.**	**Not initiated**	**not established**	**Not established**
PW 3	Establishment of linkage with Stakeholders								
PW 3a		Established linkage with PROs of Producers	[Nos] / [not established]		[Nos] / [not established]	**not established**	**Not initiated**	**not established**	**Not established**
PW 3b		Established linkage with NGOs	[Nos] / [not established]		[Nos] / [not established]	**not established**	**Not initiated**	**not established**	**Not established**
PW 4	Availability of facilities for Recycling or utilization of PW								
PW 4a		No. of PW recyclers	[Nos]		[Nos]	**0**	**0**	**0**	**0**
PW 4b		No Manufacturers	[Nos]		[Nos]	**0**	**0**	**0**	**0**
PW 4c		No of pyrolysis oil plants	[Nos]		[Nos]	**0**	**0**	**0**	**0**
PW 4d		Plastic pyrolysis	[Quantity in MT sent per Month]		[Quantity in MT sent per Month]	**0**	**0**	**0**	**0**

PW 4e		Use in road making	[Quantity MT used per Month]		[Quantity MT used per Month]	**0**	**0**	**0**	**0**
PW 4f		Co-processing in Cement Kiln	[Quantity in MT sent per Month]		[Quantity in MT sent per Month]	**0**	**125 kg sent to cement plant from january to novemb er**	**0**	**0**
W5	Implementation of PW Management Rules, 2016								
W5 a		Sealing of units producing < 50-micron plastic	[All sealed] / [Partial] / [no action]		[All sealed] / [Partial] / [no action]	**partial**	**No action**	**not action**	**0**
PW 5b		Prohibiting sale of carry bags < 50 micron	[Prohibited] / [Partial] / [no action]		[Prohibited] / [Partial] / [no action]	**no action**	**Prohibited**	**no action**	**0**
PW 5c		Ban on Carry bags and other single use plastics as notified by State Government	[Implemented] / [Partial] / [no action] / [No Ban]		[Implemented] / [Partial] / [no action] / [No Ban]	**no action**	**implemented**	**no action**	**Implemented**
PW 6	Implementation of Extended Producers Responsibility (EPR) through Producers/					**no**		**no**	

	Brand-owners								
PW 6a		No of Producers associated with ULBs	[Nos] / [None]		[Nos] / [None]	**0**	**0**	**no**	**Nil**
PW 6b		Financial support by Producers / Brand owners to ULBs	[Nos] / [None]		[Nos] / [None]	**0**	**0**	**no**	**0**
PW 6c		Amount of PRO Support	[Rs…]		[Rs…]	**0**	**0**	**no**	**0**
PW 6d		Infrastructure support by Producers / Brand owners to ULBs	[Nos of Producers] / [None]		[Nos of Producers] / [None]	**0**	**0**	**no**	**Nil**
PW 6e		No of collection centers established by Producers / Brand owners to ULBs	[Nos] / [None]		[Nos] / [None]	**0**	**0**	**no**	**nil**

6. C&D (CONSTRUCTION AND DEBRIS) WASTE MANAGEMENT IN R/O ULB'S IN UDAIPUR DISTRICT:

- Machineries for 50 TPD of C&D waste plant has been commissioned by MCU at Balicha and started trial run also.
- Land for C&D waste collection centre in the city is identified at Kumharo ka bhatta road.
- MCU notify Service helpline number to collect and transport C&D waste in the city. At present all C&D waste is being dump at malla talai low line area.

It consists of unwanted material produced directly or incidentally by the construction. It may also contain hazardous substances. In terms of CDWM, there is positive outcome yet in the following action areas:

Sr. No.	ACTION AREAS	OUTCOME
1.	Issuance of Permission by ULB's	initiated
2.	CD Deposition Points	Notifying
3	Establishment of Deposition Points	Initiated in MC, Udaipur
4	CD waste Recycling Plant	Initiated @50 TPD at Balicha

So the following Action Areas needs improvement: in Nagar Palika's

Sr. No.	ACTION AREAS	OUTCOME
1.		
2.		

6.1. CDWM IN RURAL AREAS:

There is no mechanism for CDWM in Rural Areas of Udaipur district. There is no points specified for the debris.

C&D WASTE MANAGEMENT (FOR EACH ULB)

1. Quantity and composition of construction and demolition waste including any deconstruction waste		
a.	Total quantity of construction and demolition waste generated during the whole year in metric ton	7.3 metric tonne
	Any figures for lean period and peak period generation per day	Nil
	Average generation of construction and demolition waste (TPD) –	20 TPD
	Total quantity of construction and demolition waste collected per day Processing / Recycling Facility set up R the city	C&D Plant of capacity -50
	Any Processing / Recycling Facility set up R the city	TPD has been constructed
	Status of the facility	Plant is under trial run process
b.	Total quantity of construction and demolition waste processed / recycled (in metric ton)	Total quantity of construction and demolition waste processed / recycled (in metric ton)
	Non-structural concrete aggregate:	0.5
	Manufactured sand	
	Ready-mix concrete (RMC) Paving blocks	
	GSB	1
	Others, if any, please specify	Soling/Masoniystone (1.5 Metric tonne)
c.	Total quantity of Construction & Demolition waste disposed by land filling without processing (last option) or filling low lying areas	
	No of landfill sites used	03 (Back side of Sikh colony, sajjan nagar, tekri)
	Area used	2 Hectare
	Whether weigh-bridge:	No
	Facility used for quantity estimation?	

d.	Whether construction and demolition waste used in sanitary landfill (for solid waste) as per Schedule:	No (sanitary landfill is under construction process, Applied for environmental clearance from State pollution control board, Jaipur)		
2. Storage facilities				
	a. Area or location or plot or societies covered for collection of Construction and Demolition waste:	1 No		
	b. No. of large Projects (including roadways project) covered	Nil		
	c. Total quantity of Construction & Demolition waste disposed by land filling without processing (last option) or filling low lying areas	No		
	d. Storage Bins	No		
		Specification (Shape & Size)	Existing Number	Proposed for Future
	(i) Containers or receptacle (Capacity)	N/A	N/A	N/A
	(ii) Others, please specify	Truck Hydraulic (6.00 cum)	1 no.	3 no.
	e. Whether all storage bins/collection spots Are attended for daily lifting	yes		
	f. Whether lifting of Construction & Demolition Waste from Storage bins is manual or mechanical	yes		
	(i) please specify mode and Others, and equipment used (specify equipment)	Mechanical (J CB)		
3. Transportation				
		Existing	**Actually Required / Proposed no.**	
	Truck			
	Truck-Hydraulic Tricycle	1 no.		
	Tractor-Trailer			
	Dumper-placers			
	Tricycle			
4. Whether any proposal has been made to improve Construction and Demolition waste management practices:		No		
5. Have any efforts been made to involve PPP for processing of Construction & Demolition waste:		No		
	Processing / recycling Technology (Quantity to be processed)	Steps taken		
	Dry Process	No		
	Wet Process	No		
	Others, if any, please specify	No		
6. What provisions are available to check unauthorized operations of:				
	Encroachment on river bank or wet bodies:	Continuous monitoring is done by revenue section of nagar nigam udaipur		

	Unauthorized filling of low line areas:	Nigam has provided grating at the junction of drain and water body.
	Mixing with solid waste:	Encroachment in Parks, Footpaths etc.
7. How many slums are provided with construction and demolition waste receptacles facilities:		
8. Are municipal magistrates appointed for, taking penal action for non -compliance with these rules:		
[If yes, how many cases registered & settled during last three years (give year wise details)]		

C&D Waste Management									
No.	**Action Areas**	**Details of Data Requirement**	**Measurable Outcome**	**Please enter Measurable Outcome for District**	**ULB1**	**ULB2**	**ULB3**	**ULB4**	**ULB5**
	Name of ULB		[name of ULB]		**Udaipur**	**Fatehnagar Sanwad**	**salumber**	**Bhinder**	**Kanore**
	Population		[Nos as per 2011 census]		**4.51 lac**	**22788**	**16426**	**17878**	**13269**
CD 1	Inventory of C&D waste generation								
CD 1a		Estimated Quantity	[Kg/Day] / [Not estimated]		**20 TDP**	**Not Estimated**	**Not Estimated**	**Not Estimated**	**0**
CD 2	Implement scheme for permitting bulk waste generators				**Segregated wast into five categories**				
CD 2a		Issuance of Permissions by ULBs	[Initiated] / [Not initiated]		**[Initiated] / [Not initiated]**	**Not Initiated**	**Not Initiated**	**Not Initiated**	**Not initiated**
CD 3	Establishment of C&D Waste Deposition centers								
CD 3a		Establishment of Deposition Points	[Yes] / [No]		**yes**	**No**	**No**	**No**	**No**
CD 3b		C&D Deposition point identified	[Yes] / [No]		**yes**	**NO**	**Yes**	**NO**	**No**

CD 4	Implementation of By-Laws for CD Waste Management				**under process**				
CD 4a		Implementation of By-laws	[notified] / [not notified]		**will be notified**	**not notified**	**notified**	**not notified**	**not notified**
CD 4b		Collection of Deposition / disposal Charges	[Initiated] / [Not initiated]		**notified**	**not notified**	**Not initiated**	**not notified**	**Not initiated**
CD 5	Establishment of C&D Waste recycling plant or linkage with such facility				**under construction**				
CD 5a		Establishment CD Waste Recycling Plant	[Established] / [Sent to shared Facility] / [No facility exists]		**under construction**	**Not facility exists**	**No facility exist**	**Not facility exists**	**No facility**
CD 5b		Capacity of CD Waste Recycling Plant	[MT/Day] / [Not available]		**50 TDP**	**Not available**	**Not available**	**Not available**	**Not available**

7. BIOMEDICAL WASTE MANAGEMENT (BWM)

M/s Envision Enviro Engineering Pvt. Ltd was established in May 2005. It covers 190 biomedical waste generating units of Udaipur district and 7 of Dungarpur district.

M/s Envision Enviro Engineering Pvt. Ltd is operating at Village umarda, Udaipur established in May 2005. It covers 915 biomedical waste generating units of Udaipur, Chittorgarh, Rajsamand, Banswara, Pratapgarh, pali, Sirohi and Durgapur districts.

Incinerator	Capacity: 50kg/hr.	CTO is valid up to 31.03.2023.
Autoclave	Capacity: 100 lit/batch	
Shredder	Capacity: 50kg/ hr.	
ETP	5 KLD	

The MOEFC, GOI vide notification GIR-343 (E) date 26-3-2016 has notified Biomedical Waste Management rules 2016. For the collection, transportation and disposal of Biomedical Waste Treatment facilities at Village-xyz, District Udaipur has facility of Common Bio Medical Waste Disposal Facility (CBMWDF) catering to Biomedical Waste of HCF's of Distt. Udaipur. The following Action Areas have positive outcomes:

In terms of BMWM the Distt. Udaipur has following positive outcomes:

Sr. No.	Action Areas	Outcome
1	Linkage with CBMTFs	100 %
2	Compliance to Standards	The CBWTF is located at Umarada complied with the all conditions of CTO/Authorization issued.
3	Barcode tracking by HCFs	All the HCFs connected with CBWTF have been covered by M/s enviro. Engineers CBMWTF under the Bar-Coding system. However, at present Barcoding is being done at CBWTF level not at HCF level.

i. The hospitals, nursing homes and other biomedical waste generating institutions are having membership of CBWTDF namely M/s Envision Enviro Engineering Pvt Ltd, Umarada, Udaipur. The biomedical waste is collected every day by CBWTDF and disposed of at above locations.

ii. Total Authorization was issued 331 HCF (bedded and non-bedded including one time authorization).

iii. Total Authorization was issued to Govt. HCF is 146 and pending application is 03 at HO.

iv. Total Authorization was issued to private HCF is 179 and pending application is 03.

v. The barcode system for disposal of bio medical waste for Government hospitals (35 nos) has been done and for private hospitals and clinics is under progress. Regarding this a committee has been constituted by the ACS, medical & health on dated 11.02.2020 and latest status may be updated by the CMHO.

A meeting was conducted on 13.08.2020 and it was decided that Integrated Health Management System (IHMS) shall develop an extra module for Bar coding and issue a unique Id no. to all HCF and all HCF shall purchase a weighing machine with scanner and provide a barcode on waste disposal waste which finally disposed to CTDF.

The following action areas in terms of BMWM are lacking:

Sr. No.	Action Areas	Outcome
1	Barcode at HCF level	Under process

BIO MEDICAL WASTE FACILITY

BIOMEDICAL WASTE MANAGEMENT (FOR EACH ULB)

Sr. No.	Action Point	Present Status	Gap	Timeline	Department
1.	Inventorisation of Medical facilities producing Bio-Medical Waste	All ULBs, Udaipur, Slumber, Kanore, Bhinder and Fatehnager	Not identified		Medical & Health Department
2	Authorization of such facilities by SPCB/PCCs	All ULBs, Udaipur, Slumber, Kanore, Bhinder and Fatehnager	Total identified unit is 331, in which 182 is private 149 government	Vaid authorization form RPCB is 325 out of reach private 179 and Government 146	RSPCB
3.	Availability of CBMWTFs or Linkage	All ULBs, Udaipur, Slumber, Kanore, Bhinder and Fatehnager connected with CBMWTFs	• Not done in (Name of ULBs)		Med. & Health Dpt.
4	Regular Inspection of CBMWTFs	Yes	• Not done		Team decided by District Collector
5	Regular Inspection of HCFs	Yes	• Not done		Team decided by District Collector
6	Bar Code System	RPCB have been provided are bar codes unit registration and send to Jaipur for further processing	Pending		Med & Health Dpt.

(iv) Biomedical Waste Management (for each ULB) Udaipur									
No.	**Action Areas**	**Details of Data Requirement**	**Measurable Outcome**	**Please enter Measurable Outcome for District**	**ULB1**	**ULB2**	**ULB3**	**ULB4**	**ULB 5**
	Name of ULB Udaipur		[name of ULB]		**Udaipur**	**Fatehnagar Sanwad**	**salumber**	**Bhinder**	**Kanore**
	Population		[Nos as per 2011 census]		**4.51 lac**	**22788**	**16426**	**17878**	
BMW 1	Inventory of Biomedical Waste Generation								
BMW 1a		Total no. of Bedded Hospitals	248		**145**	**4**	**2**	**2**	**1**
BMW 1b		Total no. of non-bedded HCF	151		**123**	**1**	**0**	**2**	**-**
BMW 1c		Total no. Clinics	48		**32**	**1**	**4**	**-**	**-**
BMW 1d		No of Veterinary Hospitals	3		**3**	**-**	**1**	**-**	**-**
BMW 1e		Pathlabs	32		**24**	**-**	**1**	**2**	**-**
BMW 1f		Dental Clinics	56		**56**	**-**	**3**	**-**	**-**
BMW 1g		Blood Banks	2		**2**	**-**	**-**	**-**	**-**
BMW 1h		Animal Houses	2		**2**	**-**	**-**	**-**	**-**
BMW 1i		Bio-research Labs	0		**0**	**-**	**-**	**-**	**-**
BMW 1j		Others	8		**3**	**-**	**-**	**-**	**-**
BMW 2	Authorization of HCFs by SPCBs / PCCs								
BMW 2a		Bedded HCFs	242						

BMW 2b		Non-bedded HCFs	26						
BMW 3a	Biomedical Waste Treatment and Disposal Facilities (CBMWTFs)								
BMW 3a		No of CBMWTFs	1						
BMW 3b		Linkage with CBMWTFs	Yes						
BMW 3c		Capacity of CBMWTFs	[Adequate] 2000 kg/day as per consent condition						
BMW 3d		Requirements of CBMWTFs	not required						
BMW 3e		Captive Disposal Facilities of HCFs	None						
BMW 4	Compliance by CBMWTFs								
BMW 4a		Compliance to standards	Yes						
BMW 4b		Barcode tracking by HCFs / CBMWTFs	Under process						
BMW 4c		Daily BMW lifting by CBMWTFs	[450 Kg / day]						
BMW 5	Status of Compliance by Healthcare Facilities								

BMW 5a		Pre-segregation	[partly %]						
BMW 5b		Linkage with CBMWTFs	100%						

8. HAZARDOUS WASTE MANAGEMENT (HWM)

- To ensure the compliance of Hazardous Waste (Management & Handling) Rules 1989 and subsequent amendments, Common Treatment, Storage and Disposal Facility (CTSDF) was developed for the scientific disposal of hazardous waste, generated by the various industries in the State. Udaipur Chamber of Commerce and Industries (UCCI), Udaipur identified a site near Village Gudli, Teh, Mavli District Udaipur.
- The Common Hazardous Waste Management Treatment Storage Disposal Facility, operated by Rajasthan Waste Management Project (RWMP, Udaipur) a division of M/s RAMKY Enviro Engineers Ltd., Hyderabad was established by the combined efforts of Rajasthan State Pollution Control Board, Jaipur and Udaipur Chamber of Commerce and Industry, Udaipur under directives of Supreme Court dated 14th Oct 2003 that every State/UTs should ensure setting up Common Hazardous Waste disposal facility. In 2005, RWMP, Udaipur has developed the first Common Secured Landfill along with the stabilization/treatment unit and the necessary infrastructure at Gudli, Udaipur.
- The total Project area is 21 acres near Village - Gudli, Tehsil - Mavli, and District - Udaipur. The land was provided by District Collector, Udaipur on lease basis for 99 years to setup on BOOT basis for 25 years of operation and 30 years of Post – Closure and Monitoring. This Project has been developed as per the Hazardous Waste Rules 1989 and amendments there off- and as per CPCB guidelines. Details of TSDF is as follows:

Sr. No.	DESCRIPTION	STATUS
1	Location	Udaipur
2	Project Promoter	Udaipur Chamber of Commerce & Industry
3	Area of land for TSDF (Acres)	21 Acres
4	Facilities (Landfill / Incinerator)	Landfill
5	SLF	04 cell
		(Cell-4 Under operation)

6	Authorized Qty to handle waste	18000 TPA
7	Waste Qty handled (till Sept 20)	2,56,001.98.1495 MT
8	Total number of Industries enrolled with TSDF	1195 (12th November 2020)

- CTO is valid form 01-04-2017 to 31-03-2022
- Authorization is valid form 01-4-2017 to 31-03-2022
- Transport Authorization is valid form 01-4-2019 to 31-03-2024
- EC has been granted on dated 15th January 2019 for Plant Expansion of CHWTSDF to ICHWTSDF

It involves reducing the amount of hazardous substances produced, treating hazardous wastes to reduce their toxicity, and applying methods to reduce or eliminate exposures to their wastes.

In terms of HWM the followings are positive outcomes:

Sr. No.	Action Areas	Outcome
1	Industries Linked with TSDF	All the hazardous waste generating Industries in the District Udaipur has been linked to common authorized facility i.e. M/s Rajasthan waste Management facility, Gudli, Udaipur

RAJASTHAN WASTE MANAGEMENT FACILITY (CTDF)

8.1. MARBLE SLURRY DISPOSAL SITE

The site is approx. 30 Km from Udaipur at near NH-76 located in Chor Bawdi, Araji no.3423,3491 and 3520 approx. 56.2 hector area in deep valley having huge area and marble slurry is presently dumped at this site. Total no of industry is 200.

MARBLE SLURRY DISPOSAL SITE

HAZARDOUS WASTE MANAGEMENT

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
HW1	Inventory of Hazardous Waste			FY 2019-2020
HW1a		No of HW Generating Industry		[Nos.] 70
HW1b		Quantity of HW		[MT/Annum] 30701.33
HW1c		Quantity of Incinerable HW		[MT/Annum] 140.23
HW1d		Quantity of land-fillable HW		[MT/Annum] 1974.52
HW1e		Quantity of Recyclable / utilizable HW		[MT/Annum] 205.909 (Recyclable) 28380.68 (Utilizable)
HW2	Contaminated Sites and illegal industrial hazardous waste dumpsites			
HW2a		No of HW dumpsites		Nil
HW2c		Probable Contaminated Sites		Nil
HW3	Authorization by SPCBs/PCCs			
HW3a		No of industries authorized		70
HW3b		Display Board of HW Generation in front of Gate		70
HW3	Availability of Common Hazardous Waste TSDF			
HW3a		Common TSDF		Yes, RWMP-CTDF, Gudli, Udaipur
HW3b		Industries linkage with TSDF		Yes-70
HW4	Linkage of ULBs in District with Common TSDF			
HW4a		ULBs linked to Common TSDFs for Domestic Hazardous Waste		No

9. E-WASTE MANAGEMENT (EWM)

E-waste or electronic waste is created when an electronic product is discarded after the end of its useful life. The rapid expansion of technology and the consumption driven society results in the creation of a very large amount of e-waste every minute. E-waste describes discarded electrical or electronic devices. In terms of EWM the ULB's of Distt. Udaipur has no Positive Outcomes So all the action Areas in terms of EWM needs to be improved as per detail below.

Sr. No.	Action Areas	Outcome
1	Toll Free No. for deposition of E-Waste	To be initiated
2	Collection Centres	To be established
3	Authorized E-Waste Recyclers	Linkage to be made
4	Involvement of NGO's	To be initiated
5	District. Level Awareness Campaign	To be initiated

E-WASTE MANAGEMENT

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
EW1	Status of facilitating authorized collection of E-Waste			
EW1a		Does the citizen are able to deposit or provide E-Waste through Toll-free Numbers in the District	yes	To be provided
EW1c		Collection centres established by ULB in District	yes	Total identified 19 collection centre in Udaipur city
EW1d		Collection centres established by Producers or their PROs in the District	Yes	19 no.
EW1e		Does the district has linkage with authorized E-Waste recyclers / Dismantler	Yes	Yes, CPCB registered recycler
EW1f		No authorized E-Waste recyclers / Dismantler	-	-
EW2	Status of Collection of E-Waste			
EW2a		Authorizing E-Waste collectors	Yes	Under process
EW2b		Involvement of NGOs	Yes	Yet to be involved

EW2c		Does Producers have approached NGOs/ Informal Sector for setting up Collection Centres.	-	-
EW2d		Does ULBs have linkage with authorized Recyclers / Dismantlers	No	-
EW4	Control E-Waste related pollution			
EW4a		Does informal trading, dismantling, and recycling of e-waste exist in District	No	as per record 2 unit registered as bulk producer and sent e waste to CPCB registered recycler
EW4b		Does the administration closed illegal E-Waste recycling in the District	No	Nil
EW4c		No of actions taken to close illegal trading or processing of E-Waste	N/A	Nil
EW5	Creation of Awareness on E-Waste handling and disposal			
EW5a		Does PROs / Producers conducted any District level Awareness Campaigns	Yes	Yes
EW5c		Does District Administration conducted any District level Awareness Campaigns	Yes	Yes

10. WATER QUALITY MANAGEMENT PLAN: (WQMP)

In terms of WQMP the following action areas have positive outcomes:

Sr. No.	Action Areas	Outcome
1	Regular sampling of all the water bodies and their tributaries on monthly basis.	Done. The sampling of all water bodies is being done regularly by RSPCB.
2	Regular sampling of hand pumps/ borewell on half yearly basis.	Done. The regular sampling of hand pumps/bore wells is being done by RSPCB
3	Installation of Continuous Water Quality Monitoring Station	Not Initiated
4	Permission for Borewell have been brought under control IPH.	--
5	Monitoring Cell for UG water & Quality Assessment	--
6	RWH in Govt. Buildings	--
7	Awareness Campaign for Water conservation Quality	--
8	Proper plan for immersion of idols and worship materials in Rivers, Nallahas/ Water Bodies in District Udaipur	

In terms of WQMP the following action areas has negative outcomes:

Sr. No.	Action Areas	Outcome
1	Domestic Sewage Management in Rural Areas	Not initiated
2	River side open Defecation in Udaipur Area	At some places due to Immigrant laborers.
3	Water Quality in Industrial Areas	Under specifications

WATER QUALITY MANAGEMENT PLAN

Sr. No.	Action Points	Strategy and approach	Stake holders responsible
1	Inventory of water resources in District	Inventory of water resources in District covering Rivers and other natural water bodies, Nalas/ Drains meeting Rivers	CEO Zilla Parishad DFO ULBs

		Lakes / Ponds, etc. which is to be completed within Nov,2019 Total Quantity of sewage and industrial discharge are also to be assessed	
2	Collection of Water Quality Data	A monitoring cell with representatives from PHE, WR, UWS etc. will be constituted. The cell will be updated action will be taken accordingly. Under NWMP programme, RPCB Udaipur is being collected the surface water body samples. Total 10 surface water bodies have been identified in this programme out of which 4 water bodies sample (Udai Sagar, swaroop Sagar, Goverdhan Sagar and Nela talab collected in every month and 6 water bodies samples i.e. Lake Pichola, Lake Fateh sagar, Lake Gape Sagar, Dungarpur, Lake Rajsamand point 1 & 2, Badi ka Talab,) As per analysis results & Class of Water bodies as per CPCB water quality criteria, result enclosed.	EE PHE,
3	Control of Groundwater Water Quality & Quantity	EE PHE, ULBs Under NWMP programme, RPCB Udaipur is being collected the surface water body samples. Total 8 ground water (Open well. Tube well and Hand pump) have been identified in this programme and in every six-month samples have been collected to the quality of ground water from Hand Pump, Near UIT Bridge, Hand Pump, Near Fatehpura, 200 Ft. From Panchwati Nallah, Hand Pump, Near shri Mohan Nagda, Alu Factory, Kacchi Basti, Hand Pump, Near Rana Pratap Nagar Railway Station, Open Well of Hotel Orient Palace, Subhash Nagar, Open Well of Saras Dairy, Goverdhan Vilas, NH-8,	Ground Water Department

		Bore Well of Main Gate City Palace, Near Sheetla mata gate and Bore Well of BSNL Office, Sector-3, Hiran Magri) As per analysis results & Class of Water bodies as per CPCB water quality criteria, result enclosed.	
4	Control of River side Activities	River side activities like River Side open defecation, Dumping of SW on river banks, Idol immersion etc. to be controlled. Every year RPCB Udaipur have been carried out noise and water sampling on the occasion of Idol immersion from Lake Pichola and Govardhan Sagar Lake before, during, after 24 hr. and after 7 days to know the noise level and water quality status in occasion of Idol immersion.	Dist. Admin EE PHE, BDOs EO of ULBs
5	Awareness Activities	District level campaigns on protection of water quality and Control of Water Pollution in Rivers	EE PHE BDOs
6	Protection of Flood plains	Encroachment of flood plains to be regulated.	Dist. Admin Circle Officers,
7	Rainwater Harvesting	A separate Action plan for Rain water harvesting in line with Govt policy would be prepared.	
8	Repair and treatment of water bodies/Talab	214 water bodies have been identified so far for restoration/ repair/and treatment work	Dist. Admin BDOs Forest Dept. ULB officials CEO zila Parishad Land and water resource dept.

NWMP COMPARATIVE STATEMENT (Year 2015 to 2020)

Sr. No.	Station Code no.	Name of Water Body Location/Station	CPCB Water Quality Criteria Class of Water					
			2015	2016	2017	2018	2019	2020
1	1286	Lake Udai sagar, near intake point of M/s HZL zinc Smelter, Debari, Udaipur	C	C	B	B	C	B
2	1285	Lake Pichola, near intake point of PHED, Udaipur	B	B	B	B	B	B

3	1481	Lake Fateh sagar, near intake point of PHED, Udaipur	B	A	B	B	B	A
4	2940	Lake Gape Sagar, Dungarpur	B	C	B	B	B	C
5	2941	Lake Jaisamand, Point -I	A	B	A	A	B	B
6	2942	Lake Jaisamand, Point -II	A	B	A	A	A	B
7	4177	Swaroop Sagar Lake, Near Shiksha Bhawan Circle, Udaipur	-	-	-	A	B	C
8	4178	Goverdhan Sagar Lake, in front of Saras Dairy, Ahmedabad Road, Udaipur	-	-	-	C	C	C
9	4179	Badi ka Talab, Udaipur	-	-	-	A	A	B
10	2019	Hand Pump, Near UIT Bridge, Udaipur	A	A	A	A	A	A
11	2020	Hand Pump, Near Fatehpura, 200 Ft. From Panchwati Nallah, Udaipur	A	A	A	A	A	A
12	2021	Hand Pump, Near shri Mohan Nagda, Alu Factory, Kacchi Basti, Udaipur	A	A	A	A	A	A
13	2022	Hand Pump, Near Rana Pratap Nagar Railway Station, Udaipur	A	A	A	A	A	A
14	2023	Open Well of Hotel Orinet Palace, Subhash Nagar, Udaipur	A	A	A	A	A	A
15	4795	Nela Talab, Sector 14 Hiran Magri, Udaipur	-	-	-	-	B	B
16	4796	Open Well of Saras Dairy, Goverdhan Vilas, NH-8, Udaipur	-	-	-	-	A	A
17	4797	Bore Well of Main Gate City Palace, Near Sheetla mata gate, Udaipur	-	-	-	-	A	A
18	4798	Bore Well of BSNL Office, Sector-3, Hiran Magri, Udaipur	-	-	-	-	A	A

CPCB Water Quality Criteria	
A	Drinking Water Source without conventional treatment but after disinfection
B	Outdoor bathing (Organised)
C	Drinking water source after conventional treatment and disinfection

Water Quality Management Plan				
No.	**Action Areas**	**Details of Data Requirement**	**Measurable Outcome**	**Please enter Measurable Outcome for District**
WQ1	Inventory of water resources in District			Udaipur
WQ1a		Rivers	[Nos] and [Length in Km]	8
WQ1b		Length of Coastline	[in Km]	522.20km

WQ1c		Nalas/Drains meeting Rivers	[Nos]	202
WQ1d		Lakes / Ponds	[Nos] and [Area in Hectares]	168 and 59105 ha. 7 No. (Pichola lake- 39.404 Ha), (Fathesagar lake-25.00 Ha), (Govardhan sagar lake-3.0 Ha), (Swaroop sagar lake- 1.20 Ha), (Rang sagar-1.04 Ha), (Kumhariya talab-0.35 Ha), (Dodhtalai-0.28 Ha)
WQ1e		Total Quantity of sewage and industrial discharge in District	[Automatic] (SW1a+IW1b) **Industrial Discharge- Nil**	Total Quantity of sewage and industrial discharge in Udaipur city- 60 MLD
	Control of Groundwater Water Quality			
WQ2a		Estimated number of bore-wells	[Nos]	40622
WQ2b		No of permissions given for extraction of groundwater	[Nos]	127
WQ2c		Number of groundwater polluted areas	[Nos]	272
WQ2d		Groundwater Availability	[adequate] / [not adequate]	not adequate (101.76%) Over exploited
WQ3	Availability of Water Quality Data			-
WQ3a		Creation of monitoring cell	[Yes] / [No]	Yes (distristlavel lab is functional)
WQ3b		Access to Surface water and groundwater quality data at DM office	[Available] or [Not available]	available
WQ4	Control of River side Activities			-
WQ4a	Control of River side Activities	River Side open defecation	[Fully Controlled] / [Partly controlled] /[no Measures taken]	-
WQ4b		Dumping of SW on river banks	[Fully Controlled] / [Partly controlled] /[no Measures taken]	Nil
WQ4c		Control measures for idol immersion	[Measures taken] / [Measures taken post immersion] / [No Measures taken]	Municipal corporation has construsted various ponds like two ponds near dodhtalai, one at ambapole pump house, one at govardhansagar
WQ5	Control of Water Pollution in Rivers			

WQ5a		Percentage of untreated sewage	[%] (automatic SM1g/SM1a)	(35MLD) 58% (STP of 10&5 MLD work in progress)
WQ5b		Monitoring of Action Plans for Rejuvenation of Rivers	[Monitored] / [Not monitored] [not applicable]	for Rejuvenation of Aayad river work plan is under progress (Annexure 1)
WQ5c		No of directions given to industries for Discharge of Untreated industrial waste water in last 12 months	nos	8
WQ6	Awareness Activities			-
WQ6a		District level campaigns on protection of water quality	[Nos in previous year]	-
WQ6b	Oil Spill Disaster Contingency Plan			-
WQ6a		Creation of District Oil Spill Crisis Management Group	[Created] / [Not Created]	-
WQ6b		Preparation District Oil Spill Disaster Contingency Plan	[Prepared] / [Not Prepared]	-
WQ7	Protection of Flood plains			-
WQ7a		Encroachment of flood plains is regulated.	[Yes] / [No]	Yes
	Rainwater Harvesting			
WQ8a		Action plan for Rain water harvesting	[Implemented] / [Not implemented]	Rain water harvesting structures have been made in Most of the government building. Also, there are norms not to provide water connection to buildings having more than 3200 sq ft area, if they do not have rain water harvesting structures.

11. DOMESTIC SEWAGE MANAGEMENT PLAN (DSMP)

Domestic Sewage is a type of waste water that is produced by a community of people and is characterized by volume of flow, physical condition, chemical and toxic constitute and its bacteriologic status.

In terms of DSMP, the following action areas have positive outcomes in Udaipur:

Sr. No.	Action Area	Outcome
1	60 MLD Common Sewage Treatment Plant	In operation
2	Sewerage scheme in Udaipur.	Under Process

In terms of, the following action areas have negative outcomes:

Sr. No.	Action Area	Outcome
1	Lacking of STP's in Industrial Area and Maximum area of District	

DOMESTIC SEWAGE MANAGEMENT PLAN

DOMESTIC SEWAGE MANAGEMENT PLAN OF UDAIPUR

Sr. No	Action Points	Strategy and approach	Stake holders responsible
1	Inventory of Sewage Management	Survey and identification all Households to ensure proper drainage and management of sewage. (water consumption and waste water generation as per population)	Name of ULB Udaipur
2	Adequacy of Available Infrastructure for Sewage Treatment	1. Some Household may have its own Sewage management infrastructure so as to pull down this water to maintain water level in earth and to reuse this water at various other domestic works after removing contaminants. i.e., Grey water after removing contaminants may be used in gardens, toilet flushing etc. 2. All households has been connected to sewage management infrastructure either at home or through proper drain across ULB to Sewage treatment Plant. • CSTP of capacity 60 MLD has been provided to treat the waste water generated from the city Available	Yes
3	Adequacy of Sewerage Network	Proper drains constructed with proper technique connecting with all Households under ULB to ensure total sewage management.	Yes

		• CSTP of capacity 60 MLD has been provided to treat the waste water generated from the city Available	
4	Inventory of Sewage Management	Survey and identification all Households to ensure proper drainage and management of sewage. • CSTP of capacity 60 MLD has been provided to treat the waste water generated from the city Available	Yes
5	Adequacy of Available Infrastructure for Sewage Treatment	1. Maximum 58 MLD waste water is been generated from Udaipur city. 2. All households has been connected to sewage management infrastructure either at home or through proper drain across ULB to Sewage treatment Plant. CSTP of capacity 60 MLD (25 MLD + 20 MLD at ekling pura, 10 MLD near FCI Godown at Udaisagar Road and 5 MLD near Pulan) has been provided to treat the waste water generated from the city Available	Yes

DOMESTIC SEWAGE MANAGEMENT PLAN OF SALUMBER

Sr. No	Action Points	Strategy and approach	Stake holders responsible
1	Inventory of Sewage Management	Survey and identification all Households to ensure proper drainage and management of sewage. (water consumption and waste water generation as per population)	Name of ULB Salumber
2	Adequacy of Available Infrastructure for Sewage Treatment	1. Some Household may have its own Sewage management infrastructure so as to pull down this water to maintain water level in earth and to reuse this water at various other domestic works after removing contaminants. i.e., Grey water after removing contaminants may be used in gardens, toilet flushing etc. 2. All households should be connected to sewage management infrastructure either at home or through proper drain across ULB to Sewage treatment Plant. • STP Not Available	Beneficiary, ULB Salumber
3	Adequacy of Sewerage Network	Proper drains constructed with proper technique connecting with all Households under ULB to ensure total sewage management. • STP and Sewerage network not available	ULB Salumber

4	Inventory of Sewage Management	Survey and identification all Households to ensure proper drainage and management of sewage. • No treatment facility available	ULB Salumber
5	Adequacy of Available Infrastructure for Sewage Treatment	1. Some Household may have its own Sewage management infrastructure so as to pull down this water to maintain water level in earth and to reuse this water at various other domestic works after removing contaminants. i.e., Grey water after removing contaminants may be used in gardens, toilet flushing etc. 2. All households should be connected to sewage management infrastructure either at home or through proper drain across ULB to Sewage treatment Plant. • No STP available	Beneficiary, ULB Salumber

DOMESTIC SEWAGE MANAGEMENT PLAN of BHINDER

Sr. No.	Action Points	Strategy and approach	Stake holders responsible
1	Inventory of Sewage Management	Survey and identification all Households to ensure proper drainage and management of sewage. • (water consumption and waste water generation as per population) • NIL	Name of ULB Bhinder
2	Adequacy of Available Infrastructure for Sewage Treatment	1. Some Household may have its own Sewage management infrastructure so as to pull down this water to maintain water level in earth and to reuse this water at various other domestic works after removing contaminants. i.e., Grey water after removing contaminants may be used in gardens, toilet flushing etc. 2. All households should be connected to sewage management infrastructure either at home or through proper drain across ULB to Sewage treatment Plant. • STP Not Available • NIL	Beneficiary, ULB Bhinder
3	Adequacy of Sewerage Network	Proper drains constructed with proper technique connecting with all Households under ULB to ensure total sewage management. • STP and Sewerage network not available	ULB Bhinder
4	Inventory of Sewage Management	Survey and identification all Households to ensure proper drainage and management of sewage. • No treatment facility available	ULB Bhinder
5	Adequacy of Available Infrastructure for Sewage Treatment	1. Some Household may have its own Sewage management infrastructure so as to pull down this water to maintain water level in earth and to reuse this water at various other domestic works after removing contaminants. i.e., Grey water after removing contaminants may be used in gardens, toilet flushing etc.	Beneficiary, ULB Bhinder

		2. All households should be connected to sewage management infrastructure either at home or through proper drain across ULB to Sewage treatment Plant. • No STP available	

DOMESTIC SEWAGE MANAGEMENT PLAN of KANORE

Sr. No	Action Points	Strategy and approach	Stake holders responsible
1	Inventory of Sewage Management	Survey and identification all Households to ensure proper drainage and management of sewage. • (water consumption and waste water generation as per population) • NIL	Name of ULB Kanore
2	Adequacy of Available Infrastructure for Sewage Treatment	1. Some Household may have its own Sewage management infrastructure so as to pull down this water to maintain water level in earth and to reuse this water at various other domestic works after removing contaminants. i.e., Grey water after removing contaminants may be used in gardens, toilet flushing etc. 2. All households should be connected to sewage management infrastructure either at home or through proper drain across ULB to Sewage treatment Plant. • STP Not Available • **NIL**	Beneficiary, ULB Kanore
3	Adequacy of Sewerage Network	Proper drains constructed with proper technique connecting with all Households under ULB to ensure total sewage management. • STP and Sewerage network not available	ULB Kanore
4	Inventory of Sewage Management	Survey and identification all Households to ensure proper drainage and management of sewage. • No treatment facility available	ULB Bhinder
5	Adequacy of Available Infrastructure for Sewage Treatment	1. Some Household may have its own Sewage management infrastructure so as to pull down this water to maintain water level in earth and to reuse this water at various other domestic works after removing contaminants. i.e., Grey water after removing contaminants may be used in gardens, toilet flushing etc. 2. All households should be connected to sewage management infrastructure either at home or through proper drain across ULB to Sewage treatment Plant. • No STP available	Beneficiary, ULB Kanore

DOMESTIC SEWAGE MANAGEMENT PLAN of FATEH NAGAR

Sr. No	Action Points	Strategy and approach	Stake holders responsible
1	Inventory of Sewage Management	Survey and identification all Households to ensure proper drainage and management of sewage.	Nagar palika Fateh nag sanwad Udaipur

		(water consumption and waste water generation as per population)	
2	Adequacy of Available Infrastructure for Sewage Treatment	1. Some Household may have its own Sewage management infrastructure so as to pull down this water to maintain water level in earth and to reuse this water at various other domestic works after removing contaminants. i.e., Grey water after removing contaminants may be used in gardens, toilet flushing etc. 2. All households should be connected to sewage management infrastructure either at home or through proper drain across ULB to Sewage treatment Plant. • (Stp Available or not) • (If Stp available then drains connected with stp)	Nagar palika Fateh nag sanwad Udaipur
3	Adequacy of Sewerage Network	Proper drains constructed with proper technique connecting with all Households under ULB to ensure total sewage management. (Public Drain or close conduit pipe line connected to stp)	Nagar palika Fateh nag sanwad Udaipur
4	Inventory of Sewage Management	Survey and identification all Households to ensure proper drainage and management of sewage. • (Quantity of sewage generation) (Treatment facility)	Nagar palika Fateh nag sanwad Udaipur
5	Adequacy of Available Infrastructure for Sewage Treatment	1. Some Household may have its own Sewage management infrastructure so as to pull down this water to maintain water level in earth and to reuse this water at various other domestic works after removing contaminants. i.e., Grey water after removing contaminants may be used in gardens, toilet flushing etc. 2. All households should be connected to sewage management infrastructure	Nagar palika Fateh nag sanwad Udaipur

		either at home or though proper drain across ULB to Sewage treatment Plant. • (Details of Stp) • (Reuse of Treated Water) (connectivity With Stp)	

11.1. COMMON SEWAGE TREATMENT PLANT- UDAIPUR

Common Sewage Treatment Plant established at Near Government Primary School, Vill-Eklingpura, Girwa, and Udaipur. M/s Hindustan Zinc Ltd, has done the tripartite agreement with UIT and UMC for setting up a 60 MLD Common Sewage Treatment Plant on DBOOT (Design, Built, Own, Operate and transfer) Total CSTP are as under: -

Eklingpura	45 MLD (25and 20 MLD)	Consent is valid up to 31.12.2021-20 MLD and 31.10.2023-25 MLD
Near FCI, Udai Sagar Road	10 MLD	Consent is valid up to -31.08.2024
Pulan, Udaipur City	05 MLD	Consent is under consideration at HO level

The treated waste water is taken to Debari Plant of M/s Hindustan Zinc Ltd., through pipe line laid by M/s HZL. From Debari plant the treated water is also diverted to their Dariba Plant in Rajsamand District by gravity, as and when required.

Domestic Sewage Management Plan				
No.	**Action Areas**	**Details of Data Requirement**	**Measurable Outcome**	**Please enter Measurable Outcome for District**
SM 1	Inventory of Sewage Management			
SM 1a		Total Quantity of Sewage generated in District from Class II cities and above	[MLD]	60MLD
SM 1b		No of Class-II towns and above	[Nos]	-
SM 1c		No of Class-I towns and above	[Nos]	-
SM 1d		No of Towns needing STPs	[Nos]	-
SM 1e		No of Towns STPs installed	nos	4 STP (in Udaipur city)

SM 1f		Quantity of treated sewage flowing into Rivers (directly or indirectly)	[MLD]	5 MLD
SM 1g		Quantity of untreated or partially treated sewage (directly or indirectly)	[Automatic]	35 MLD
SM 1h		Quantity of sewage flowing into lakes	[MLD]	Nil
SM 1i		No of industrial townships	[Nos]	
SW 2	Adequacy of Available Infrastructure for Sewage Treatment			
SM 2a		% sewage treated in STPs	[Automatic]	42%
SM 2b		Total available Treatment Capacity	[MLD]	45 MLD
SM 2c		Additional treatment capacity required	[MLD]	15 MLD (under construction)
SM 3	Adequacy of Sewerage Network			
SM 3a		No of ULBs having partial underground sewerage network	[Nos]	Udaipur has 40% sewerage network
SM 3b		No of towns not having sewerage network	[Nos]	2
SM 3c		% population covered under sewerage network	[Automatic]	38%

12. INDUSTRIAL WASTE WATER MANAGEMENT PLAN: (IWMP)

There is only one industrial area in Distt. Udaipur. In terms of IWMP the following Action Areas has positive outcomes:

Sr. No.	Action Areas	Outcome
1	Inventorization of Water polluting industries	Done
2	Captive ETPs/STPs in Water Polluting Industries.	Provided and being monitored by RSPCB regularly.
3	Reusing of treated effluent by Industries	100%
4	Direction and action to be taken against the industry for improving the conditions of existing Water Pollution Control Devices and increase in vigilance	Being done. Regular inspection and monitoring of all industries is being carried out by RSPCB. If any violation is observed. RSPCB is taking strict action against them under Water Act, 1974.
5	Adoption of ZLD by industries	Adapted

NEGATIVE OUTCOMES:

Sr. No.	Action Areas	Outcome
1	No common ETP/STP in industrial Area	Not initiated

1.This office is submitting monthly status report of STP, CETP & ETP to HO RPCB for further submission to CPCB.

2.Reports for month till October 2020 have been sent to HO Jaipur.

3.Besides this, a meeting was held under the chairmanship of Member Secretary, RSPCB on 24.02.2020 with stakeholder departments/ agencies responsible for operation & maintenance of the STPs. The responsible agencies/ authorities were directed to:

A. Improve operation & maintenance of the STPs.

B. Upgrade all the STP to achieve prescribed standards

C. Explore the possibility of reuse of treated water of STP for gainful purposes and by nearby industrial units.

4.There is no CETP in Udaipur district.

5.Total industry requires to install the ETP and 50 units have installed the ETP except 01 (SCN issued).

6.Total industries/hotel required/installed STP are 111 out of which 111 units have complying the norms remaining units served SCN for improving the STP.

<table>
<tr><th>Sr. No</th><th>Action Points</th><th>Strategy and approach</th><th>Stake holders responsible</th></tr>
<tr><td>1</td><td>Inventory of Industrial emission</td><td>Survey and identification all industries to ensure inventory of emission.
<table>
<tr><th>Sr No.</th><th>Industry Category</th><th>Total no. Of Industry</th></tr>
<tr><td>1</td><td>17 Categ.</td><td>30</td></tr>
<tr><td>2</td><td>Red</td><td>153</td></tr>
<tr><td>3</td><td>Orange</td><td>1121</td></tr>
<tr><td>4</td><td>Green</td><td>420</td></tr>
</table></td><td>RSPCB</td></tr>
<tr><td>2</td><td>Adequacy of Available Infrastructure for Pollution Control</td><td>Air Pollution Monitoring and Control
RPCB Udaipur have established a Regional Laboratory in 2001 with facilities to collect and analyze the Air (AAQM & Stack emission).
CAAQMS (Continuous Ambient Air Quality Monitoring Station) has been installed at DMG office, court circle, Udaipur and data of the same is being regularly displayed at website as well as on screen.
Board has also operated the manual air quality monitoring station under National Ambient monitoring programme (NAMP) at three sites i.e., RO office-MIA, Town hall and Satellite hospital-Amba Mata. Air Quality Index is being calculated and disseminated to the people through website and other media.
Board has also carried out noise monitoring at four stations at three sites i.e., RO office-MIA, Town hall, Satellite hospital-Amba Mata and MB hospital. The data is being calculated and disseminated to the people through website and other media.
Online monitoring system (OCEMS/OCEQMS) has been installed by the 17 category industries as per CPCB guideline. Where the emissions/effluent data are being transferred regularly to CPCB/RPCB server.
Industrial Waste water monitoring and Control
RPCB Udaipur has established a Regional Laboratory in 2001 with facilities to collect and analyze the water and waste water samples.
Under NWMP programme, RPCB Udaipur is being collected and analyze the surface/ ground water samples. Total 18 samples out of which surface water bodies-10 samples and ground water source-08 samples have been identified in this programme.
Online monitoring system (OCEMS/OCEQMS) has been installed by the 17 category industries as per CPCB guideline. Where the emissions/effluent data are being transferred regularly to CPCB/RPCB server.
Hazardous Waste Monitoring and Control
To ensure the compliance of Hazardous Waste (Management & Handling) Rules 1989 and subsequent amendments, Common Treatment, Storage and Disposal Facility (CTSDF) was developed for the scientific disposal of hazardous waste, generated by the various industries in the State. Udaipur Chamber of Commerce and Industries (UCCI), Udaipur identified a site near Village Gudli, Teh. Mavli District Udaipur.
The Common Hazardous Waste Management Treatment Storage Disposal Facility, operated by Rajasthan Waste Management Project (RWMP, Udaipur) a division of M/s RAMKY Enviro Engineers Ltd., Hyderabad was established by the combined efforts of Rajasthan State</td><td>RSPCB</td></tr>
</table>

<table>
<tr><td></td><td></td><td>Pollution Control Board, Jaipur and Udaipur Chamber of Commerce and Industry, Udaipur under directives of Supreme Court dated 14th Oct 2003 that every State/UTs should ensure setting up Common Hazardous Waste disposal facility. In 2005, RWMP, Udaipur has developed the first Common Secured Landfill along with the stabilization/treatment unit and the necessary infrastructure at Gudli, Udaipur.
72 hazardous waste generating industries were identified and all are connected to the CTDF site for disposal of the hazardous waste.
Regular inspection has carried out to ensure the compliances.</td><td></td></tr>
<tr><td>3</td><td>Gap in Capacity</td><td>NIL</td><td>RSPCB</td></tr>
<tr><td>4</td><td>Environment Compensation</td><td>
<table>
<tr><th>Sr. No.</th><th>Name of Industry</th><th>Date of EC & amount issued</th><th>Status of EC deposited</th><th>Remark</th></tr>
<tr><td>1</td><td>M/s Narayan Sewa Sanstha, Chikalwas, Udaipur (hospital)</td><td>20.08.2019 Rs. 3.95 lakh</td><td>Unit deposited Rs. 3.95 lakh on dated 13.09.2019 vide DD no. 190663 dated 09.09.19 drawn on PNB</td><td>--</td></tr>
<tr><td>2.</td><td>M/s Vineet Udhyog P. Ltd, Dhelana, Udaipur (Mine)</td><td>20.08.2019 Rs. 3.0 lakh</td><td>Not deposited at this office so far, may be verified at HO level.</td><td></td></tr>
</table>
</td><td>RSPCB</td></tr>
<tr><td>5</td><td>Utilization of Environment Compensation for pollution Control</td><td>Under process, policy matter</td><td>RSPCB</td></tr>
</table>

Industrial Wastewater Management Plan				
No.	**Action Areas**	**Details of Data Requirement**	**Measurable Outcome**	**Please enter Measurable Outcome for District**
IWW 1	Inventory of industrial wastewater Generation in District			
IWW 1a		No of Industries discharging wastewater		Nil
IWW 1b		Total Quantity of industrial wastewater generated		Nil

IWW 1c		Quantity of treated IWW discharged into Nalas / Rivers		Nil
IWW 1d		Quantity of un-treated or partially treated IWW discharged into lakes		Nil
IWW 1e		Prominent Type of Industries		metallergy, chemicals, dyes, fertilizers, mineral grinding, marble processing etc.
IWW 1f		Common Effluent Treatment Facilities		NIL
IWW 2	Status of compliance by Industries in treating wastewater			
IWW 2a		No of Industries meeting Standards		42
IWW 2b		No of Industries not meeting discharge Standards		5
IWW 2c		No of complaints received or number of recurring complaints against industrial pollution in last 3 months		4
AW W4	Status of Action taken for not meeting discharge standards			
IWW 4a		No industries closed for exceeding standards in last 3 months		3
IWW 4b		No of industries where Environmental Compensation was imposed By SPCBs		2 (I industry and 1 mine)

13. AIR QUALITY MANAGEMENT PLAN (AQMP)

Air Quality Management refers to all the activities a regulatory authority undertakes to help protect human health and the environment from the harmful effects of air pollution to successfully achieve the air quality goals, air quality managers need to implement programme for pollution control strategies.

The following action areas in terms of AQMP have positive outcomes:

Sr. No.	Action Areas	Outcomes
1	Action Plan in Non-Attainment cities.	Submitted.
2	Establishment of AQM stations	3 AAQM stations manually operated in Udaipur city and 01 CAAQMS at Court Chouraha.
3	Proper identification of AIR Polluting Sources	Identified,
4	Control Open Burning Stubble	Identified and notices issued to the industries as well as RIICO
5	Control of Forest Fires	Partially
6	Up gradation of Air Pollution Control Devices	All air polluting industries have provided APCDs i.e., Cyclones, Bag filters, wet scrubbers etc. and shall be upgraded as per revised stringent norms.
7	Maintenance of roads to control fugitive emissions	Partially
8	Plantation	Forest Department has carried out plantation activity and also created bio diversity eco parks RIICO/UIT have also carried out plantation along industrial roads
9	Vehicle Monitoring Camps	Conducted with police officials.

The following action areas in terms of AQMP has negative outcomes

Sr. No.	Action Areas	Outcome
1	Assessment of carrying capacity of industrial area	Needs to be done
2	Stack emission levels should be stringent than the existing standards in terms of the identified critical pollutants	Needs to be done

3	CEMS to be installed in all large/medium red category industries (air pollution)	Installed in 17 categ/GPI
4	Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.	Regularly inspection carried out
5	Encourage use of cleaner fuels (pet coke/furnace oil/LSHS may be avoided)	No unit using pet coke/furnace oil in Udaipur district.

- Meeting on Air pollution for non-attainment city have been conducted quarterly, latest meeting was held on dated 26.10.2020, 29.07.2020 and 27.02.2020.
- Total air polluting industries identified -174
- Regular inspection and monitoring is being carried out and SCN notice has been issued to the non-complying units. So far from January 2020 to October 2020 total 96 units has been inspected and 02 non complying units were closed after issued the direction.
- CAAQMS (Continuous Ambient Air Quality Monitoring Station) has been installed at DMG office, court circle, Udaipur and data of the same is being regularly displayed at website as well as on screen.
- Board has also operated the manual air quality monitoring station under National Ambient monitoring programme (NAMP) at three sites i.e., RO office-MIA, Town hall and Satellite hospital-Amba Mata. Air Quality Index is being calculated and disseminated to the people through website and other media.
- Board has also carried out noise monitoring at four stations at three sites i.e., RO office-MIA, Town hall, Satellite hospital-Amba Mata and MB hospital. The data is being calculated and disseminated to the people through website and other media.
- Online monitoring system (OCEMS/OCEQMS) has been installed by the 17 category industries as per CPCB guideline. Where the emissions/effluent data are being transferred regularly to CPCB/RPCB server.
- The Central Pollution Control Board vide letter No. B-29016/04/06/PCI-1/7179, 02.03.2015 had issued directions keeping in view strengthening of the monitoring mechanism for effective compliance through self-regulatory mechanism and install online stack emission

monitoring system and online effluent quality monitoring system for 17 categories of industry.

- To adjudge the performance of the pollution control measures installed to control the water pollution and air pollution, the State Board has installed common servers of facilitating the data transfer and 21 industries have installed the online systems.

As per the DoE letter dated 03.06.2019 "District Environmental committee" under the chairmanship of District collector shall conduct the meeting for the purpose of order and designated as District level implementation committee in compliance to MoEF guidelines.

AIR QUALITY MANAGEMENT PLAN

Source group	Action Points	Implementation period	Time Frame for implementation	Responsible agency (ies)	Action Taken Report
Vehicle Emission Control	1. Launch extensive drive against polluting vehicles for ensuring strict compliance and regular checking of vehicular emission and issue of PUC certificate.	Short Term	April -2019	Dept. of Transport Traffic Police	**RTO-** Flying squads are taking actions against violators and in the month April to September 2020 total 179 Chalan given for violation of PUC norms. This checking is done continuously. **Traffic Police-** Vehicular PUC is being constantly checked and from January 2020 to September 2020 total 63 Chalans are being made of rupees 53850/- if there is no PUC of vehicle.
	2. Launch Public awareness campaign for air pollution control, vehicle maintenance, minimizing use of personal vehicle, lane discipline, etc.	Short Term	April -2019	Dept. of Transport Traffic Police	**Traffic Police-** The people are being made aware of pollution and being aware of lane discipline. **RTO**-Brochure and Pamphlet are distributed to create awareness among people. Banners and posters were distributed to the workshop of the authorized vehicle dealers for the

					compulsory of Pollution Control Certificates to the vehicle owners.
	3. Prevent parking of vehicles in the non-designed areas.	Short Term	April -2019	Traffic Police	**Traffic Police-** Flying squads are taking actions against violators and in the month January 2020 to September 2020 total 5166 Chalan and (Rupees 1137250/- collected against violation of parking in non-designed area. This checking is done continuously.
	4. Initiate steps for retrofitting of particulate filters in diesel vehicles, when BS-V fuels are available	Long Term	Dec-2020	Dept. of Transport	**RTO-** It being policy matter is to be decided at HO level.
	5. Prepare action plan to check fuel adulteration and random monitoring of fuel quality data.	Short Term	April 2019	Dept. of Food & Supplies	**DSO-** Surprise inspection is conducted by DSO for checking quality of fuel at petrol pumps as per rules.
	6. Prepare plan for widening of road and improvement of Infrastructure for decongestion of road.	Mid Term	Dec-19	LSG, Developing Authorities Municipal Corporation –UIT in their Jurisdiction	**MCU-** UMC has completed the work with allotted budget of Rs. 10.00 crore and 5.0 crore by GoR (Annexure A&B). City Traffic Master plan will be prepared with detailed survey and traffic study for widening and decongestion of 30 KM (approximate) roads by Jan-2020. District Collector constituted a committee to prepare the traffic management plan to resolve the traffic congestion problem (copy attached) Annexure c). As per the decision taken in traffic management

					committee, tenders for construction of fly over at Kumharo ka bhatta circle, alternate road from Chanpole to Brahmpole, and elevated road at Sevashran Choraha have been floated.
	7. Prepare Plan for construction of expressways/bypasses to avoid congestion due to non-destined vehicles.	Long Term	Dec 2019	NHAI PWD	**PWD-** Bye pass under progress by NHAI. Ring road proposed by UIT. **NHAI-** 1. In PIU Udaipur construction of six lanes Greenfield Udaipur Bypass (connection between NH-76 at 118+500 at Debari to NH-8 km 287+400 at Kaya village- length 23.883 km) alignment is under implementation and likely to be completed by 31.12.2020 2. Six laning of Chittorgarh-Udaipur section of NH-76 from Km 212.000 to km118.500 in the state of Rajasthan (length 93.500Km) is to be completed by 31.12.2020 3. Six laning of Udaipur-Ratanpur-Shamlaji Section of NH-8 from Km 287.400 to Km 401.200 section of NH-8 in the state of Rajasthan & Gujarat (Approx. length 113.800 Km) to be completed by 31. 12..2020.
	8.Steps for promoting battery	Short Term	April-2019	Dept. of Transport	**RTO-**The compliance of departmental order

	operated vehicles/promotion & operational of E-Riksha				8/2018 is being done. At present 52 E-Rikshas and 33 E-Karts are registered.
	9. Install weigh in motion bridge at boarders of cities/towns and States to prevent overloading of vehicles.	Long Term	Dec 2019	NHAI PWD	**PWD-** No city road is maintained by PWD in Udaipur City. City road are maintained by UIT and MCU. **NHAI-** All toll plazas under the jurisdiction of this PIU are equipped with weigh in motion bridge except toll plaza of Khandi Obri at NH-8 for which installation will be done in the new toll plaza premises.
	10. Synchronize traffic movements /introduce intelligent traffic systems for lane-driving.	Long Term	Dec-2019	Traffic Police	**Traffic Police-** Compliance of lane driving and smooth traffic are being done.
	11. Installation of remote sensor-based PUC system.	Long Term	Dec-2019	Traffic Police	**Traffic Police-** Pending
	12. Restriction on plying & phasing out of 15 years old commercial diesel driven vehicles.	Long Term	March-2020	Dept. of Transport	**RTO-**In the cradle of order 35/2016 received from the headquarter, the series of 15-year-old vehicles up to 31.03.2001 in the first phase has been canceled by office order 9346-54 dated 09.01. 2018.list is below RJ27-R 1to 2904 RJ27-E 1 to 1904 RJ27-C ALL RJ27-1C 1 to 2138 RJ27-P 1 to 4393 RJ27-G 1 to 5957 RJ27-T 1 to 1409 RST 6001 to 7000 In the second phase, the series up to date 11.03.2004 vehicles has been cancelled. List is below RJ27-12M All RJ27-13M All

					RJ27-14M 1 to 1830 RJ27-G 2958 to 8049 RJ27-T 1410 to 1864 RJ27-R 2905 to 3980 RJ27-E 1905 to 2456 RJ27-1C 2139 to 7349 RJ27-P 4394 to 5122 In the third phase, notice has been given to the vehicle owners up to 31.12.2004 through a release in the local newspaper for re-registration and renewal of the vehicle. List is below RJ27-14 1830 to 9999 RJ27-15 0001 to 8907 RJ27-1C 7750 to 8960 RJ27-G 8050 to 9999 RJ27-T 1865 to 2805 RJ27-E 2457 to 2684 RJ27-R 3981 to 4404 RJ27-P 5123 to 6251 RJ27-1G0001 to 1640
	13. Introduction of cleaner fuel for CNG/LPG Vehicles	Long Term	April 2020	Dept. of Transport Food & Supplies	**DSO-** Not related to jurisdiction of this office, we are authorized to take action on trade articles only and CNG/LPG vehicles are not related to trade issues. **RTO-** Vehicle registered for petrol/LPG-11332 and Petrol/CNG-77 nos, only LPG-10 & CNG-02 nos
	14. Plan for restriction on the registration on diesel driven Auto-rickshaw & Tempo.	Mid Term	Dec-2019	Dept. of Transport	**RTO-** It being policy matter is to be decided at HO level. The decision to limit the number of vehicles in Udaipur city has been sent to the state government after taking a decision in the meeting of the district level traffic management committee. And HO

					orders are awaited in this regard.
	15. Monitoring on vehicle fitness	Mid Term	Sept-2019	Dept. of Transport	**RTO-**Regular fitness testing of vehicles has been done by the flying squads. no challan were recovered from the months of April to September 2020 for vehicles found without fitness. From April to September 2020, a total of 3676 vehicles have been checked for fitness.
	16. Periodic calibration test of vehicular emission monitoring instrument.	Mid Term	July-2019	Dept. of Transport	**RTO-**Periodic calibration is done by instruments of the vehicle which are fit and being monitored. Pollution testing centres are being checked by the flying squads as per rule. At present, a total of 79 pollution testing centres are operating in Udaipur district. The calibration of 79 pollution testing centres has been done. Defaulter Centre were directed to take action accordingly.
	17. Preparation of plan for green development Multi level Parking	Long Term	Dec.2019	UDH Development authorities in their jurisdiction	----------
Re -Suspension Dust and other Fugitive Emission Control	1. Prepare plan for green buffers along the traffic corridors.	Mid term	Sept 2019	NHAI PWD Urban Local Body	**MCU-** Following Two major roads have been taken up as Smart road by Udaipur Smart City Ltd. – (1) From Sevashram to Jadav nursery (2) From Saras dairy to

					Balicha Both road work has been started and will be completed by October-2020. Provision of Green buffer in median and in between main road and service road have been kept. (Annexure D) **PWD-** No city road is maintained by PWD in Udaipur City. City road are maintained by UIT and MCU. **NHAI-** 1. Median Plantation and road side plantation on completed projects (Gomati Chouraha-Udaipur section of NH-8 and Swaroopganj-Pindwara-Udaipur section of NH-76 & 14) is being done as per the contract agreement and the same is being maintained by the O&M agency regularly. 2. Median plantation and road side plantation on under implementation project (Chittorgarh- Udaipur section of NH-76, Green field Udaipur bypass and Udaipur-Ratanpur- Shamlji section of NH-8) is under progress.
	2. Maintain potholes free roads for free roads for free flow of traffic	Mid term	Sept 2019	NHAI PWD Urban Local Body	**MCU-** Municipal corporation Udaipur is regularly maintaining the potholes. Fund

					received from Govt. of Rajasthan has been utilized and work has been done. MCU also have work orders (Rs. 1.21 crore) to repair the road cuts and pot holes and same work has been completed for the FY 2019-20. In Financial year, Work order has also been issued amounting to 1.5 crore and work is under progress. UMC also have a departmental labor Gang which is engaged on regular basis in making roads pothole free. **PWD-** No city road is maintained by PWD in Udaipur City. City road are maintained by UIT and MCU. **NHAI-** All section (under implementation and O&M sections) is in traffic worthy condition and being maintained regularly by the respective concessionaire and contractor.
	3. Introduce water fountain at major traffic intersection wherever feasible	Mid Term	Sep-19	Urban Local Body Development Authorities Municipal Corporation UIT in their in their Jurisdiction	**MCU-** 9 Major junctions at most vulnerable roads already have water fountains and running daily. Municipal corporation Udaipur is maintaining these on routine schedule.
	4. Greening of open areas, gardens, community places, schools and housing	Mid Term	Sep-19	Urban Local Body Dept. of Education	**MCU-** Greenery being developed and Maintained under MJSA at following open spaces-

	societies				• TikhimagriChotia • Banki forest • Barbadia mahadev • Badlia • Eklinggarh Chavani, Machlamagri • Segra In Udaipur under MJSA 31467 Trees were planted in FY 16-18 and also around 10000 trees were planted by nagar nigam Udaipur in a long road side and various parks in FY 18-20. MCU has planned to plant 4500 trees in FY 2020-21.
	5. Blacktopping metaled road including pavement of road shoulders.	Mid term	Sept 2019	NHAI PWD Urban Local Body	**MCU-** Roads in Almost all the wards under jurisdiction of Municipal corporation Udaipur have been blacktopped except the road of colonies settled on agriculture land and UMC issued work order of cost Rs 1.0 Crore for providing paver block on shoulders at present work in progress at Ashok nagar Samshan, New polo ground and roadways bus Stand Udaiya pole (Annexure F) **PWD-** No city road is maintained by PWD in Udaipur City. City road are maintained by UIT and MCU. **NHAI-** Not applicable.
	6. Widening of roads and construction of pucca footpath along main roads (RIICO Industrial	Long Term	March, 2021	RIICO as per requirement and feasibility	**RIICO-**The road no. B, wedinging of roads at industrial area MIA, Udaipur proposed in FY 2020-21 for length of 1 K.M. from 5.5

	Areas)				Mtr. To 7 Mtr. Due to Heavy traffic and dust problem. Further Industrial area Pratap Nagar proposal is sanction for carrying out work order under special maintenance for strengthening of road also construction of paving tiles at road site at housing Colony MIA (Extn.), Udaipur work order is given. Further In Udaipur almost all roads of RIICO industrial Areas have sufficient width of 5.5 mtr (intermediate lane) or above therefore, at present no need for widening of roads at other locations.
	7. Regular cleaning of Road (RIICO Industrial Areas)	Long Term	Dec.,2021	RIICO UDH	**RIICO-**Tender for jungle clearance & removal of garbage & berm cleaning along road. The work is under progress.
	8. Tree plantation along the roads (RIICO Industrial Areas)	Long Term	March, 2021	RIICO	**RIICO-**Tree plantation along the work has been started at site with the help of entrepreneurs & Industrial Associations. About 2000 plants are planted on central verge at I/A Bhamashah Kaladwas and about 500 plants have been planted along road side at MIA. Further RIICO has distributed about 5000 plants to entrepreneurs & Industrial Associations for plantations in their premises.
Control of Emission from Biomass/Crop	1. Launch extensive drive against open burning of bio-	Short Term	Apr-19	Urban local body	**MCU-** The entire field staff of UMC - sanitary inspectors and jamadar has been ordered to ensure no

Residue/ Garbage/Municipal Solid Waste Burning	mass, crop residue, garbage, leaves, etc.				burning at any dustbin / place of garbage collection and daily monitoring by all health staff is taking place to stop open burning. For garden waste, garden compositing is being done in 40 gardens. (Annexure G)
	2. Regular check and control of burning of municipal solid waste.	Short Term	Apr-19	Urban local body	**MCU-** Health officer and sanitary inspectors are instructed to start proper monitoring and to impose penalties for open burning of MSW in their areas. The mixed waste has been dumping at Balicha dumping site since 2008. So that it is possible of MSW burning either naturally (due to methane pockets created naturally in open dump) or by waste pickers at dumping site. UMC has appointed 2 home guards at the site and strictly monitoring is taking place. A fire-brigade has also been stationed at the site. As SWM 2016 rules, burning of old dump at dumping site can only be stop through treating old dump by Biomining/bio remediation process so that USCL has made contract of 1 lakh cum of old legacy waste at Balicha dumping site approx. 60 % work has been completed and mcu has also issued work order for another 1.00 Lac cum legacy waste and work will completed at the end of November 2020. (Annexure F, G, H)

					MCU has also issued work order of the door-to-door collection and processing of commercial waste from commercial properties.
	3.Ensure ban on burning of agriculture waste crop residues and its implementation	Long Term	Dec 2019	Department of Agriculture Revenue	**AGRICULTURE DPTT. -** 1. Print Media (Leaflet) 5000 -7th July, 20th July 2019. 2. Discussion regarding the burning of crop residue in the various Choupals organized by the department of Agriculture and its damage- 7th July, 30th Nov 2019. 3. Kishan Goshthi, Training Program, Enrichment of the Knowledge of the Farmers at Farm- July, Dec 2019 4. Management of crop residue by promoting use of advanced agriculture machinery such as Rotavator, Reaper etc. by the farmers - July, Dec 2019
	4. Plan for construction of advanced waste management Site.	Mid Term	Dec-20	Urban local body	**MCU- Under process of implementation** • 100% Door to Door Collection and transportation by covered vehicles; • Landfill site has been identified and work order for construction of Sanitary Landfill has been issued and after getting EC from SPCB work will be commenced. • At present, waste processing facilities of 60TPD and 30 TPD MRF plant at Tithardi is running and 2 TPD biomethanation plant

					is also running at purohito ki madri. Civil work of 60 TPD MRF and 20 TPD plant biomethanation plant at Balicha is under progress. • 100 % Segregation is being done in 35 wards out of 70 wards by outsourcing, for remaining wards, tender has been floated and after rate justification work order will be issued by the end of first week. • Collection, transportation and processing of waste from 35 wards has been doing by outsourcing. • Bioremediation/ Bio mining work of 1 lakh cum of old legacy waste has been started at balicha dumping site approx 60% work has completed and USCL/MCU has also issued another 1.00 Lac cum legacy waste and work will completed at the end of November 2020. (work delayed due to covid -19 pandemic) Land reclaimed after bio mining of dump shall be utilized to set up waste processing plants on it. Work order for Establishment of Sanitary landfill at Balicha has been issued from smart city udaipur: Work order of having Environmental clearance for Establishment of Sanitary landfill at Balicha has been

					issued. 2 TPD Decentralized Biomethanation Plant at Madari is running. Collection transportation and processing work of organic waste from commercial, institutes have been outsourced. Collection transportation works are being done from March 2019. Work is allotted for period of 2 years. (Annexure I,J,K,L,M)
	5. Restriction on open burning of Biomass and plastic	Short Term	Regular activity	RIICO Urban local body	**MCU-** Health officer and sanitary inspectors monitor their dedicated wards to stop burning of MSW and plastic. Compliance by UMC. **RIICO-** For restriction on open burning in RIICO Industrial Areas concern ASE/ARM are being appointed for regular inspection and to restrict such activity.
	6. Immediate lifting of solid waste generated from desilting and cleaning of drains for its disposal (RIICO Industrial Areas)	Short Term	March, 2021	RIICO Urban local body	**MCU-** Health officer and Sanitary inspectors have been instructed to plan cleaning schedule for drainage cleaning and immediate lifting of silts from the road after cleaning. Separate dedicated vehicles for silt collection have been deployed and rout charts for these vehicles has being prepared. **RIICO-** Instructions are given to contractors for immediate lifting of solid waste generated

					from desilting and cleaning of drains and compliance are being made.
	7. Transportation of solid waste, construction material and debris in covered system. (RIICO Industrial Areas)	Short Term	March, 2021	RIICO Urban local body	**MCU-**115 nos d2d vehicles, 7 dumper, 6 compactors are deployed to collect MSW in covered vehicles whereas C&D waste is being collected through tractors. Instruction has been given to garage department and other private operators to start collection and transportation of C&D waste in covered vehicles. **RIICO-** Regular monitoring is being done for transportation of solid waste. Construction material and debris in covered system in industrial areas. The concerned contractors, have also been instructed
Control of Industrial Emissions	1. Identification of brick kilns and their regular monitoring including use of designated fuel and closure of unauthorized units.	Mid Term	Sept 2019	RSPCB	**RSPCB-**There is no brick kiln in the area following under the non-attainment cities area of Udaipur.
	2. Conversion of natural draft brick kilns to induced draft	Mid Term	Sept 2019	RSPCB	**RSPCB-** As above
	3. Action against non-complying industrial units.	Short Term	Regular Activity	RSPCB	**RSPCB-**Show cause notice for non-compliance been issued to 08 industries recently for non-compliance. AAQM/Fugitive emission monitoring was conducted in the

					month of July-September 2020 (36 units) out of which 08 unit (M/s Ganesh Mineral, MIA, Madri, M/s Kundan Mineral, MIA, Madri, M/s Ucron India, MIA, Madri, M/s Vardhman Mineral, MIA, Madri, M/s Sisidiya Mineral Industries, MIA, Madri, M/s Shrinath Chemical, MIA, Madri, M/s Keshav Madhav Mineral, MIA, Madri, M/s Shreeji Mineral, MIA, Madri) is not complying with the standard, SCN has been issued to the unit.
	4. Regulation on setting up of new air polluting industries in industrial areas located in urban limits of these 5 cities	Mid Term	March, 2021	RSPCB RIICO	**RSPCB-** Committee has been constituted vide HO order no. F.11 (530)/RSPCB/Lab/61-72 dated 09.04.2019 to submit report on regulation on setting up of new air polluting industries in industrial areas located in urban of these 5 cities including Udaipur. First meeting of committee convened on 18.04.2019 and last meeting held on dated 29.07.2020. **RIICO-** No allotment is being made for setting up of new air polluting industries in industrial areas located in urban limits further industries have to take CTO & CTE from

					State pollution Control Board.
Control of Air Pollution from Constructing and Demolition Activities	1. Enforcement of Construction and Demolition Waste Rules	Short Term	Regular activity	Urban Local Bodies, Development Authorities under their Jurisdiction	**MCU-** 50 TPD C&D waste processing plant at balicha is installed and plant is under trial run.
	2. Control measures for fugitive emissions from material handling-conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units.				**MCU-** All the Control measures for fugitive emissions from material handling-conveying and screening operations shall be taken care of during waste processing as per the guidelines issued by GOI.
	3.Ensure carriage of construction material in closed / covered vessels. (RIICO Industrial Areas)	Short Term	Apr.-19	Urban Local Bodies RIICO	**MCU-** As per the direction, UMC via its garage department has started collection and transportation of C&D waste in covered vehicles. **RIICO-** Monitoring is being done to ensure carriage of construction material in closed/covered vessels in RIICO Industrial Area.
	4.Covering of construction sites and Restriction on storage of construction materials along the road. (RIICO Industrial Areas)	Long Term	Mar-20	Urban Local Bodies RIICO	**MCU-** Compliance will be done by UMC, listing of all construction sites is under progress and action will be taken as per the direction of DLB/GOR. **RIICO-** Monitoring is being done for covering of construction sides and notices issued to the allottee if it is found that the storage of construction material is along the road sides.
	5. Restriction on storage of construction	Short Term	April 2019	Urban Local	**MCU-** Compliance will be done by UMC,

	material along the road.			Bodies RIICO	listing of all construction sites is under progress and action will be taken as per the direction of DLB/GOR. **RIICO-** Notices are issued to the allottee if it is found that the storage of construction material/raw material is along the road sides.
Other Steps to control Air pollution	1. Air Quality index to be calculated and disseminated to the people through website and other media.(on maximum weekly basis for	Short Term	Regular Activity	RSPCB	**RSPCB** -AQI is being displayed on display Board of all the 3 manual operated monitoring station (weekly Basis) and online of real time basis for CRTAQMS.
	2. Establish an Air Quality Management Division at SPCB/PCC head Quarters to oversee air quality management activities in the state and interact CPCB.	Short Term	April 2019	RSPCB	**RSPCB-** It being policy matter is to be decided at HO level.
	3. Set-up and publicize helpline in each city/town as well as SPCB/PCC HQ for complaints against reported non-compliance	Short Term	April 2019	RSPCB	**RSPCB-** This office telephone no. 0294-2491269 and Sampark portal (181) of the Govt. of Rajasthan is the Complaint helpline
	1. Engage with concerned authorities on continual basis for maximizing coverage of LPG/PNG for domestic and commercial cooking with target of 100% coverage.	Short term	April-2019	State Govt	----------
	2. Monitoring of DG sets and action against violations.	Short Term	July 2019	RSPCB	**RSPCB -**Most of the DG sets installed in the jurisdiction of RO Udaipur are of less

					than 1000KVA capacity for which parameters are not prescribed. They are checked for height of stack and acoustic enclosure. Total 06 nos of industries have been identified so far for DG monitoring more than 1000 KVA. P I Industries Reliance Jio Infocomm Limited Riddhi Siddhi Infra Projects Pvt. Ltd. (Lake City Mall) Bharti Hexacom Ltd. Lake Palace Hotels & Motels Hotel Leela Venture Limited, the Leela Palace. DG Set of 1500 KVA Monitoring Conducted of M/s PI Industries, Udai sagar Road in 9th July 2020 and found within norms.
	3. Involvement of industrial associations awareness program (RIICO Industrial Areas)	Mid Term	March, 2021	RIICO	**RIICO-**In meetings with industrial Associations it is being informed for cleanliness & non pollution in industrial areas.
	4. Development/Maintenance of green areas gardens and parks (RIICO Industrial Areas)	Long Term	March, 2021	RIICO	**RIICO-**RIICO has developed wood land in MIA & IID Centre Kaladwas. One park in IT park MIA (Extn.) has been development/maintenance by M/s ARC Gate. Further development/maintenance of green areas/gardens and park will be taken up with the help of Industrial lists/Associations.

AIR QUALITY MANAGEMENT PLAN OF SALUMBER ULB

Source group	Action Points	Implementation period	Time Frame for implementation	Responsible agencies
Vehicle Emission Control	1. Prepare plan for widening of road and improvement of Infrastructure for decongestion of road.	Mid Term		LSG Development Authorities Municipal Corporations UITs in their jurisdiction
	2.Launch Public awareness campaign for air pollution control, vehicle maintenance, minimizing use of personal vehicle, lane discipline, etc.	Short Term		Dept. of Transport Traffic Police
Re-Suspension of Road Dust and Other Fugitive Emission Control	1. Prepare plan for green buffers along the traffic corridors.	Mid Term		NHAI PWD Urban local body
	2. Maintain potholes free roads for free roads for free flow of traffic	Mid Term		NHAI, PWD, and Urban local body
	3. Introduce water fountain at major traffic intersection wherever feasible	Mid Term		Urban local body Development Authorities Municipal Corporations UITs in their jurisdiction

	4. Greening of open areas, gardens, community places, schools and housing societies	Mid Term Short Term		Urban local body Dept. of Education
	5. Blacktopping metaled road including pavement of road shoulders.	Mid Term		NHAI PWD Urban local body
Control of Emissions from Biomass/Crop Residue/Garbage/Municipal Solid Waste burning	1. Launch extensive drive against open burning of bio-mass, garbage, leaves, etc.	Short Term		Urban local body
	2. Regular check and control of burning of municipal solid waste.	Short Term		Urban local body
	4. Construction of advanced waste management Site.	Mid Term		Urban local body
	6. Restriction on open burning of biomass and plastic	Short Term		Urban local body
	7. Immediate lifting of solid waste generated from desilting and cleaning of drains for its disposal	Short Term		RIICO Urban local body
	8. Transportation of solid waste, construction material and debris in covered system.	Short Term		RIICO Urban local body
Control of Air Pollution from Construction and Demolition activities	1. Enforcement of Construction and	Short Term		Urban Local Bodies Development

	Demolition Waste Rules			authorities under their jurisdiction
	2. Control measures for fugitive emissions from material handling-conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units.			
	3. Ensure carriage of construction material in closed / covered vessels.	Short Term		Urban Local Bodies RIICO
	4. Covering of construction sites and Restriction on storage of construction materials along the road	Long Term		RIICO Urban local body
	5. Restriction on storage of construction materials along the road.	Short Term		RIICO Urban Local Bodies

AIR QUALITY MANAGEMENT PLAN OF BHINDER ULB

Source group	Action Points	Implementation period	Time Frame for implementation	Responsible agency (ies)
Vehicle Emission Control	6. Prepare plan for widening of road and improvement of Infrastructure for decongestion of road.	Mid Term		LSG Development Authorities Municipal Corporations

				UITs in their jurisdiction
	2.Launch Public awareness campaign for air pollution control, vehicle maintenance, minimizing use of personal vehicle, lane discipline, etc.	Short Term		Dept. of Transport Traffic Police
Re-Suspension of Road Dust and Other Fugitive Emission Control	1. Prepare plan for green buffers along the traffic corridors.	Mid Term		NHAI PWD Urban local body
	2.Maintain potholes free roads for free roads for free flow of traffic	Mid Term		NHAI, PWD, and Urban local body
	3. Introduce water fountain at major traffic intersection wherever feasible	Mid Term		Urban local body Development Authorities Municipal Corporations UITs in their jurisdiction
	4. Greening of open areas, gardens, community places, schools and housing societies	Mid Term Short Term		Urban local body Dept. of Education
	5. Blacktopping metaled road including pavement of road shoulders.	Mid Term		NHAI PWD Urban local body
Control of Emissions from Biomass/Crop Residue/Garbage/Municipal Solid Waste burning	1.Launch extensive drive against open burning of bio-mass, garbage, leaves, etc.	Short Term		Urban local body
	2. Regular check and control of burning of municipal solid waste.	Short Term		Urban local body
	4. Construction of advanced waste management Site.	Mid Term		Urban local body

	6. Restriction on open burning of biomass and plastic	Short Term		Urban local body
	7. Immediate lifting of solid waste generated from desilting and cleaning of drains for its disposal	Short Term		RIICO Urban local body
	8. Transportation of solid waste, construction material and debris in covered system.	Short Term		RIICO Urban local body
Control of Air Pollution from Construction and Demolition activities	1. Enforcement of Construction and Demolition Waste Rules	Short Term		Urban Local Bodies Development authorities under their jurisdiction
	2. Control measures for fugitive emissions from material handling-conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units.			
	3. Ensure carriage of construction material in closed / covered vessels.	Short Term		Urban Local Bodies RIICO
	4. Covering of construction sites and Restriction on storage of construction materials along the road	Long Term		RIICO Urban local body
	5. Restriction on storage of construction materials along the road.	Short Term		RIICO Urban Local Bodies

AIR QUALITY MANAGEMENT PLAN OF KANORE ULB

Source group	Action Points	Implementation period	Time Frame for implementation	Responsible agency(ies)

Vehicle Emission Control	6. Prepare plan for widening of road and improvement of Infrastructure for decongestion of road.	Mid Term		LSG Development Authorities Municipal Corporations UITs in their jurisdiction
	2.Launch Public awareness campaign for air pollution control, vehicle maintenance, minimizing use of personal vehicle, lane discipline, etc.	Short Term		Dept. of Transport Traffic Police
Re-Suspension of Road Dust and Other Fugitive Emission Control	1. Prepare plan for green buffers along the traffic corridors.	Mid Term		NHAI PWD Urban local body
	2.Maintain potholes free roads for free roads for free flow of traffic	Mid Term		NHAI, PWD, and Urban local body
	3. Introduce water fountain at major traffic intersection wherever feasible	Mid Term		Urban local body Development Authorities Municipal Corporations UITs in their jurisdiction
	4. Greening of open areas, gardens, community places, schools and housing societies	Mid Term Short Term		Urban local body Dept. of Education
	5. Blacktopping metaled road including pavement of road shoulders.	Mid Term		NHAI PWD Urban local body
Control of Emissions from Biomass/Crop Residue/Garbage/Municipal Solid Waste burning	1.Launch extensive drive against open burning of bio-mass, garbage, leaves, etc.	Short Term		Urban local body
	2. Regular check and control of burning of municipal solid waste.	Short Term		Urban local body
	4. Construction of advanced waste management Site.	Mid Term		Urban local body

	6. Restriction on open burning of biomass and plastic	Short Term		Urban local body
	7. Immediate lifting of solid waste generated from desilting and cleaning of drains for its disposal	Short Term		RIICO Urban local body
	8. Transportation of solid waste, construction material and debris in covered system.	Short Term		RIICO Urban local body
Control of Air Pollution from Construction and Demolition activities	1. Enforcement of Construction and Demolition Waste Rules	Short Term		Urban Local Bodies Development authorities under their jurisdiction
	2. Control measures for fugitive emissions from material handling-conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units.			
	3. Ensure carriage of construction material in closed / covered vessels.	Short Term		Urban Local Bodies RIICO
	4. Covering of construction sites and Restriction on storage of construction materials along the road	Long Term		RIICO Urban local body
	5. Restriction on storage of construction materials along the road.	Short Term		RIICO Urban Local Bodies

AIR QUALITY MANAGEMENT PLAN OF FATEH NAGAR ULB

Source group	Action Points	Implementation period	Time Frame for implementation	Responsible agency(ies)
	6. Prepare plan for widening of road and improvement of	Mid Term	Possibility will be founded as far as	LSG Development Authorities

Vehicle Emission Control	Infrastructure for decongestion of road.			Municipal Corporations UITs in their jurisdiction
	2.Launch Public awareness campaign for air pollution control, vehicle maintenance, minimizing use of personal vehicle, lane discipline, etc.	Short Term	It will be done as far as	Dept. of Transport Traffic Police
Re-Suspension of Road Dust and Other Fugitive Emission Control	1. Prepare plan for green buffers along the traffic corridors.	Mid Term	No need because it is less population area	NHAI PWD Urban local body
	2.Maintain potholes free roads for free roads for free flow of traffic	Mid Term	As per need tender will be done	NHAI, PWD, and Urban local body
	3. Introduce water fountain at major traffic intersection wherever feasible	Mid Term	No need	Urban local body Development Authorities Municipal Corporations UITs in their jurisdiction
	4. Greening of open areas, gardens, community places, schools and housing societies	Mid Term Short Term	Already exist as per need	Urban local body Dept of Education
	5. Blacktopping metaled road including pavement of road shoulders.	Mid Term	Already as per need exist	NHAI PWD Urban local body
Control of Emissions from Biomass/Crop Residue/Garbage/Municipal Solid Waste burning	1.Launch extensive drive against open burning of bio-mass, garbage, leaves, etc.	Short Term	To aware the public by laws, IEC & penalty	Urban local body
	2. Regular check and control of burning of municipal solid waste.	Short Term	We will make a task force	Urban local body
	4. Construction of advanced waste management Site.	Mid Term	Proposal will be prepared as per need	Urban local body
	6. Restriction on open burning of biomass and plastic	Short Term	Task force will be made	Urban local body
	7. Immediate lifting of solid waste generated from desalting and cleaning of drains for its disposal	Short Term	Always vehicles are available	RIICO Urban local body
	8. Transportation of solid waste, construction	Short Term	Always available	RIICO Urban local body

	material and debris in covered system.			
Control of Air Pollution From Construction and Demolition activities	1. Enforcement of Construction and Demolition Waste Rules	Short Term	Prepared	Urban Local Bodies Development authorities under their jurisdiction
	2. Control measures for fugitive emissions from material handling-conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units.		Non need at present	
	3. Ensure carriage of construction material in closed / covered vessels.	Short Term	Task force is available	Urban Local Bodies RIICO
	4. Covering of construction sites and Restriction on storage of construction materials along the road	Long Term	Task force is available	RIICO Urban local body
	5. Restriction on storage of construction materials along the road.	Short Term	Penalty will be applied	RIICO Urban Local Bodies

Air Quality Management Plan				
No.	**Action Areas**	**Details of Data Requirement**	**Measurable Outcome**	**Please enter Measurable Outcome for District**
AQ1	Availability of Air Quality Monitoring Network in District			
AQ1a		Manual Air Quality monitoring stations of SPCBs /CPCB		3
AQ1c		Automatic monitoring stations Operated by SPCBs / CPCB		1
AQ2	Inventory of Air Pollution Sources			
AQ2a		Identification of prominent air polluting sources		[Large Industry] / [Small Industry] / [Unpaved Roads] / [Burning of Waste Stubble] / [Brick Kiln] / [Industrial Estate] / [Others] (Multiple selection)
AQ2b		No of Non-Attainment Cities		Yes
AQ2c		Action Plans for non-attainment cities		[Prepared]
AQ3	Availability of Air Quality Monitoring Data at DMs Office			

AQ3a		Access to air quality data from SPCBs & CPCB through Dashboard		Available
AQ4	Control of Industrial Air Pollution			
AQ4a		No of Industries meeting Standards		monitoring is being carried out regularly
AQ4b		No of Industries not meeting discharge Standards		8 nos in last 3 month
AQ5	Control of Non-industrial Air Pollution sources			
AQ5a		Control open burning of Stubble –during winter		Nil
AQ5b		Control Open burning of Waste – Nos of actions Taken		Nil
AQ5c		Control of forest fires		N o
AQ5d		Vehicle pollution check centers		65 nos
AQ5e		Dust Suppression Vehicles		2 nos
AQ6	Development of Air Pollution complaint redressal system			
AQ6a		Mobile App / Online based air pollution complaint redressing system of SPCBs.		SAMEER

14. MINING ACTIVITY MANAGEMET PLAN (MAMP)

There is no lime stone mining for lime stone in dist. Udaipur but general mining activities for collection of sand and pebbles is common in rivers and hill slope mining is being done in Distt-Udaipur.

In terms of MAMP the following action areas has positive outcomes:

Sr. No.	Action Area	Outcome
1	Controlling Mining Activity	Initiated
2	Complaints against Mining Pollution	----

In terms of MAMP the following action areas has negative outcomes:

Sr. No.	Action Areas	Outcome
1	Air Pollution caused due to mining	Monitoring of mines cluster done and all parameters were found within the norms.
2	Pollution of Water Bodies due to Mining	Unmeasured
3	Sound Pollution due to Mining Activities	Unmeasured/Uncontrolled

MINING ACTIVITY MANAGEMENT PLAN

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
MI1a	Inventory of Mining in District			
MI1a		Type of Mining Activity	Lead, Zinc, Marble, Soapstone, Quartzs, Dolamit	-
			Multiple selection in order of magnitude of operations	-
MI1b		No of Mining licenses given in the District	[Nos]	701
MI1c		Area covered under mining	[Sq. Km]	305.4731
MI1d		Area of District	[Sq. Km]	11724
MI1e		Sand Mining	[Yes] / [No]	nil
MI1f		Area of sand Mining	[River bed] / [Estuary] / [Non -river deposit]	nil
MI2	Compliance to Environmental Conditions			

MI2a		No of Mining areas meeting Environmental Clearance Conditions		642
MI2b		No of Mining areas meeting Consent Conditions of SPCBs / PCCs		642
MI3a	Mining related environmental Complaints			
MI3b		No of pollution related complaints against Mining Operations in last 1 year		2
MI4	Action against non-complying mining activity			
MI4a		No of Mining operations suspended for violations to environmental norms		1 (Vineet Udhyog)
MI4b		No od directions issued by SPCBs		1 (Vineet Udhyog)

15. SOIL AND AGRICULTURE LAND MANAGEMENT

Soil management is a key component to the success of site-specific cropping systems management. The application of chemicals in proper proportions is of environmental and economic concern to farmers. Unhealthy soil management methods have seriously degraded soil quality, caused soil pollution, and enhanced erosion. In addition to other human practices, the use of chemical fertilizers, pesticides, and fungicides has disrupted the natural processes occurring within the soil resulting in soil pollution. Soil pollution is a build-up of toxic chemical compounds, salts, pathogens, or radioactive materials that can affect plant and animal life. The concern over soil contamination stems primarily from health risks, both of direct contact and from secondary contamination of water supplies. All kinds of soil pollutants originate from a source. The source is particularly important because it is generally the logical place to eliminate pollution. After a pollutant is released from a source, it may act upon a receptor. The receptor is anything that is affected by the pollutant. The following sub-unit describes some of the most common sources of soil pollution.

Existence of the ecosystems requires existence of plants. Humans and animals cannot survive without plants. Soil is not only a source of nutrition but also a place for plants to stand. Pollution of agricultural soils is known to reduce agricultural yield and increase levels of these toxic heavy metals in agricultural products, and thus to their introduction into the food chain. Vegetables and

crop plants grown in such soils take up these toxic elements and pose health risk to humans and animals feeding on these plants. The major concern approximately soil pollution is that there are many sensitive lands uses where people are in direct contact with soils such as residences, parks, schools and playgrounds. Other contact mechanisms include contamination of drinking water or inhalation of soil contaminants which have vaporized. There is a very large set of health consequences from exposure to soil contamination depending on pollutant type, pathway of attack and vulnerability of the exposed population.

As part of the biosphere, forests are very important for maintaining ecological balance and provide many environmental benefits. In addition to timber and paper products, forests provide wildlife habitat, prevent flooding and soil erosion, help provide clean air and water, and contain tremendous biodiversity. Forests are also an important defense against global climate change. Forests produce life-giving oxygen and consume carbon dioxide, the compound that is claimed to be the most responsible for global warming through photosynthesis, thereby reducing the effects of global warming.

Soil Health Data of Udaipur District:

Major soils of Udaipur district have developed in situ on Aravali metamorphic and alluvium. The hills and ridges of the district are mainly covered by rock outcrops associated with very shallow well drained, skeletal soils occurring on steep slopes and are severely eroded. Soils on foot slopes and pediments are shallow to moderately shallow, well drained, loamy in texture and moderate to severely eroded. In eastern parts of the district, the soils are alluvium in nature and deep, well drained, fine textured occurring on gently sloping plains. Salinity and sodicity in patches have developed in the depression and basin like land forms.

Soil Depth

In Udaipur district the very shallow to shallow soils constitute 19 percent area, moderately shallow soils to moderately deep 43.9 percent and deep soils 8.9 percent area. The rock out crops covers an area of 27.5 percent.

Particle size class

Particle size class distribution of Udaipur district shows 45.4 percent fine loam to clay and 8.3 percent coarse loam to loam soils. Skeletal soils constitute 18.2 percent of the area besides 27.5 percent rock outcrops.

Water erosion

The water erosion in Udaipur district shows 32.6 percent and 39.0 percent area is affected by moderate and severe erosion, respectively.

Salinity

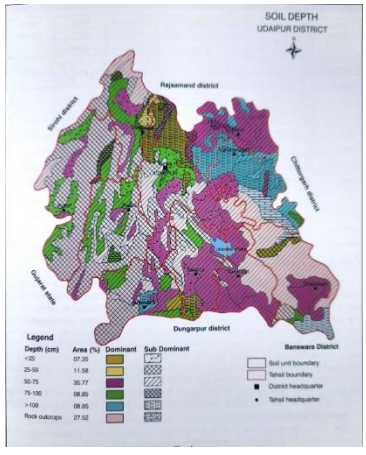
The salinity in soils in Udaipur district shows 3.0 percent area with pockets of moderate salinity extending upto 33 percent whereas 1.1 percent area of the district has pockets of severe salinity extending upto 50 percent area.

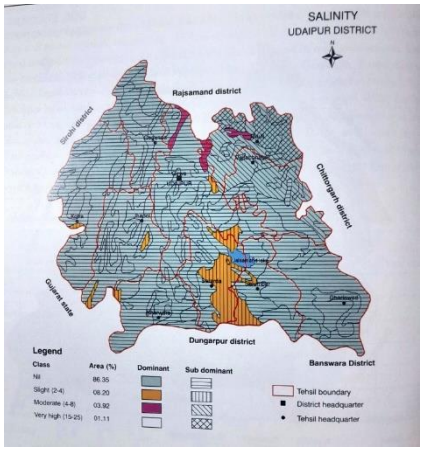
Sodicity

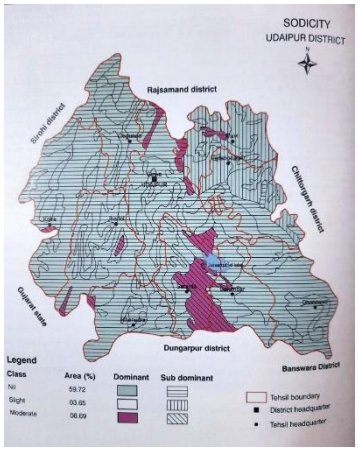
Sodicity distribution in soils of Udaipur district shows 8.7 percent area in pockets to the extent of 33 percent is affected by moderate sodicity. Sodicity problem is only of moderate level predominantly in areas receiving irrigation from major and minor irrigation projects in Sarada and Salumber tehsil.

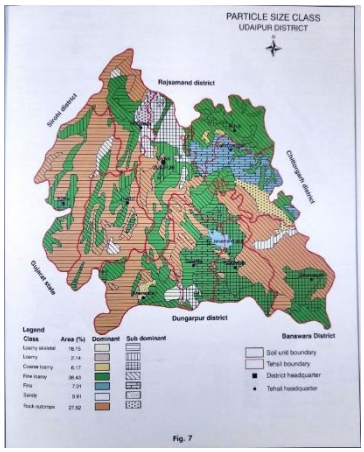
Soil distribution and classification

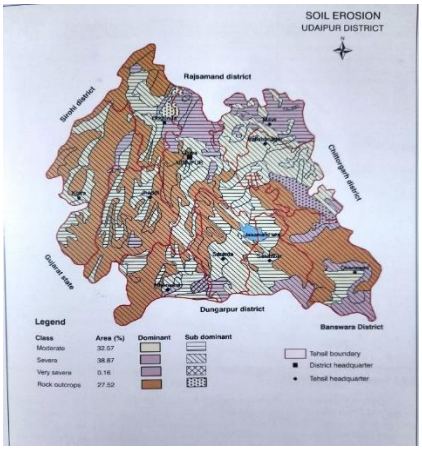
Soils of Udaipur district have been classified according to USD soil taxonomy. Inceptisols and Entisols are dominantly observed covering 47.0 percent and 18.4 percent area, respectively. Vertisols and Alfisols occupy minor area and constitute 2.7 and 3.7 percent area of the district. Rock outcrops which constitutes 27.5 percent area of the district has Lithic Ustorthents.

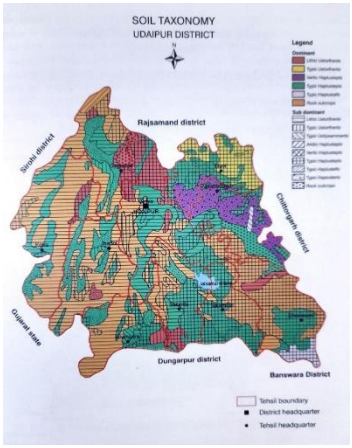












Policy Intervention for Micro-irrigation (Sprinkler & Drip Irrigation)

India is an agrarian society and the agricultural sector accounts for 18% of India's gross domestic product (GDP) while providing employment to 50% of the country's workforce.

The increasing demand of water from other sectors along with inefficient methods of irrigation has aggravated the problems of water scarcity. In order to tackle water scarcity situation in India, particularly in the agriculture sector, Government of India has come up with many irrigation programmes and schemes from time to time. Earlier most of them were based on the open canal system concept, but there is a drastic shift in current and upcoming irrigation programmes and schemes from the traditional irrigation method based on canal flood irrigation to the modern micro irrigation system that uses drip and sprinkler irrigation methods.

There is a huge scope for micro irrigation systems (drip and sprinkler) and many micro irrigation schemes offer subsides ranging from 50% to 95%. There have been various success stories and projects on community-based approach for supplying irrigation water to agricultural areas that were earlier under rainfed agriculture and faced crop failures due to scanty rainfall showcasing the benefits of increased crop production and reduced cost of production with minimal water and power consumption through micro irrigation method adaptation.

As agriculture is the main water guzzling sector in India, there is a need for water management in water-scarce regions and other regions overall for meeting the water needs of agriculture in future. Irrigation sector currently consumes 80% of the total water use. Owing to competing demands

from other sectors, it is expected that water consumption in this sector will probably reduce to about 70% by 2050.

The Goal 4 of National Water Mission, 2008 of India highlights the main objective of NWM, which is to improve water use efficiency at least by 20% in all sectors, including domestic, industrial, agricultural and commercial. This objective can be attained by enhancing the efficiency of the demand side and the supply side in agriculture sector by the use of micro irrigation techniques.

Micro irrigation ensures conservation and the efficient use of water, minimal wastage of water and higher productivity of crops with less water consumption by the usage of the drip irrigation method and the sprinkler irrigation method, respectively. For optimal and efficient use of surface and groundwater sources for irrigation, micro irrigation method usage is one of the effective ways to grow more crops with less water.

Micro irrigation includes the usage of drip and sprinkler systems. Micro irrigation could be one of the solutions to the challenges and issues faced by Indian agriculture. The water use efficiency of the flood method of irrigation in India is estimated to be only around 40%. This is mainly due to the significant losses through conveyance, distribution and evaporation, whereas micro irrigation systems can provide water use efficiency from 80% to 95%. The reason for this difference is because transmission loss is nominal, while losses through evaporation, run-off and deep percolation are also reduced significantly by using micro irrigation methods. Efficient water use results in additional benefits such as an increase in the area coverage under irrigation with the same amount of water as well as increasing the potential usage of marginal/degraded land using micro irrigation systems. Listed below are several major reasons for adopting micro irrigation:

*Water use efficiency

* Reduction in energy consumption

* Reduction in fertilizer consumption

* Productivity enhancement of fruits/crops and vegetables

* Irrigation cost saving & Increase in Farmers' income

In spite of the well-known benefits of modern irrigation methods such as surface or sub-surface drip and sprinkler irrigation systems, they are not widely adopted on large scale by farmers because

of high capital cost, non-reliable sources of water for the system, marginal and scattered agricultural landholdings, unavailability of subsidy at the required time or the delayed release of funds for installation of MIS that have already been approved, and the absence of easy financing mechanisms for farmers. Another hindrance for the poor adoption of these technologies is due to farmers' preference for traditional methods of irrigation owing to lack of knowledge of the benefits of MIS and lack of a dedicated team to support micro irrigation on field for farmers.

In Udaipur district every year sufficient targets are allotted for purchase on subsidy by farmers, of water saving devices like irrigation pipeline under PMKSY and of sprinklers, mini sprinklers, micro sprinklers, drip irrigation under National Horticulture Mission (NHM).

Policy Interventions for Reduction in use of Pesticide

Pesticides play a sensitive role in food systems: they are applied in order to protect crops, but they can have negative impacts on environment and human health. While global pesticide use has grown to 3.5 billion kg active ingredients per year, a significant portion of the chemicals applied has proved to be excessive, uneconomic or unnecessary both in industrialized and developing countries. For society as a whole it would be desirable to gradually reduce pesticide use to a level where negative impacts – externalities like health hazards, biodiversity loss or water pollution – at least do not outweigh the value added in terms of yields or cost savings in production.

Today there is a consensus among a wide range of stakeholders that pesticide use needs to be gradually reduced to a level that is effectively required to ensure crop production, and that risks of pesticide application need to be reduced as far as possible. Experience across the world shows that pesticide use can be reduced considerably without unduly reducing yields or increasing costs of production. A step-wise reduction of pesticide use is feasible already within the current production systems and with the knowledge, technologies and alternatives available today.

There is a large body of scientific evidence that the current use of pesticides has unwanted side effects on human health and environment. These externalities are particularly grave in some developing countries and emerging economies because of the widespread use of highly hazardous pesticides, the low level of awareness on risks and the lack of protective equipment. Phasing out of highly hazardous pesticides is therefore absolutely necessary also in these countries.

Farmers do not apply pesticides without reason but in order to ensure productivity, to manage entrepreneurial risks and to compete in the market in terms of quality and price. Pesticide use is often cheaper than using alternatives like biocontrol or mechanical pest and weed management. Traders, retailers and consumers expect cheap and visually perfect products. The amount of pesticides needed to protect crops depends on the robustness of the farming system. Over the past decades diversity in farming systems has been greatly reduced in terms of crops and varieties grown as well as in natural habitats. In order to succeed with pesticide reduction, it is therefore essential to bring diversity back into agriculture. Farming systems need to be redesigned or adjusted based on the available knowledge on agro-ecology. Suitable 5 agronomic practices like crop rotation and the use of resistant varieties are key preventive measures. Breeding strategies are needed to create robust varieties that facilitate the introduction of agro-ecological farming systems at large scale. In addition, farmers need to avail of various means to effectively manage pests, diseases and weeds. Biocontrol, the use of botanical extracts and other organic farming methods offer promising options and need to be strengthened. More public research is needed in order to advance the design of better farming systems and the development of alternatives to synthetic pesticides. Agro-ecology, integrated pest management and the use of alternatives need to be integrated in vocational education, training and technical advice to farmers. Best practice from different approaches needs to be identified in order to design more resilient farming systems and better management practices. As farmers mainly learn from practical experience it is important to demonstrate alternatives in plot trials and pilot farms and to facilitate the exchange of knowhow. In addition, it is important that farmers are made aware of the risks associated with pesticide use and get equipped with feasible measures to reduce these risks. Pesticide reduction is a shared responsibility of the overall society, including scientists, farmers, consumers, governments and the private sector. Food brands, processors and retailers take a crucial role in increasing the demand for low- or no-pesticide products which is an essential driver for pesticide reduction. They can demand that their suppliers do not use hazardous pesticides and that measures are taken to gradually reduce pesticide use. They are well placed to promote resistant varieties and to raise awareness among consumers. An increase in demand for organic products and for products from integrated production significantly contributes to reduce pesticide use. Increasing the product range and the sales of organic products is therefore an important contribution to pesticide reduction. In addition, brands and retailers can convert entire products to compliance with

minimum sustainability standards that address pesticide use to some extent. There is a need for more awareness raising among consumers with regard to what is “good food” - a product that is safe, healthy, tasty, good for the environment and good for those who produce it, but not necessarily visually perfect. Fact-based information on pesticide issues and on ways to reduce pesticide use and risks also needs to be conveyed to scientists, government offices, public health and consumer organizations, the management of relevant companies, investors etc. so that all stakeholder pull in the same direction. Governments have a range of policy instruments to find a responsible balance between enabling judicious pesticide use where needed, and reducing the adverse health, environmental and agronomic risks. When health and environmental costs are factored in, pesticide application is only economical at a much lower threshold than what is commonly practiced. A pesticide tax is therefore a worthwhile tool to internalize and minimize externalities of pesticide use. However, to be effective, the tax needs to differentiate between levels of toxicity or hazard. The income generated through the tax should be used to support alternatives. Pesticide use is already highly regulated by national legislation and international conventions and policies. The long-term effects of using multiple pesticides, however, need to be better understood, and transparency in registration processes needs to be improved in order to allow informed weighing of risks against benefits of pesticides. By revisiting regulations and policies governments can set a conducive environment for pesticide reduction. The development of national action plans to reduce pesticide risks is an important opportunity for reducing externalities and for promoting alternatives. They can enhance enforcement of existing legislation and boost efforts and innovations. It is important, however, that action plans include binding and measurable reduction goals as well as milestones to get there.

How to approach pesticide reduction

It is obvious that there is no single or quick solution to reduce pesticide use and the associated risks. There is a consensus that pesticide reduction requires a set of changes in current production systems, value chains and in the policy environment. Three factors are required to work together (see figure below): availability of and know-how on alternatives, increasing demand for low-/no-pesticide products and conducive legislation and policies.

Joint responsibility

Pesticide reduction is a joint responsibility that cannot be burdened on the farmer alone. Pesticide reduction positively affects public goods and reduces costs currently borne by society. Therefore, the investment of public funds for pesticide reduction is justified. It also is in the interest of the private sector as it can result in competitive advantage or offer new business opportunities. Investments of the private sector in the development and promotion of alternatives is crucial. Pesticide reduction will only succeed if there is collaboration among different kinds of stakeholders, particularly of stakeholders along the value chain from producers to consumers.

Addressing trade-offs

When pursuing pesticide reduction, it is important to openly address possible trade-offs. It is most critical to de-couple pesticide use and long-term yields. Pesticide reduction is not a reasonable option for a country if it coincides with substantial reduction of yields and increased import from places where pesticides are used indiscriminately. Pesticide reduction also needs to be compatible with the need to secure farm incomes and to keep production risks low. There are also possible trade-offs between pesticide reduction and other objectives like soil conservation (no-till farming may require herbicide use) and reducing greenhouse gas emissions (mechanical weeding may require more energy) that need to be openly discussed.

Re-designing farming systems based on agro-ecology

In order to reduce reliance on pesticides it is crucial to get diversity back into crops, farming systems and landscapes. Farming systems need to be redesigned or adjusted based on the available knowledge on agro-ecology. Additional research is required to increase the understanding of how diversity can be used to protect crops. Farmers need to avail of various preventive and curative means to effectively manage pests, diseases and weeds (including management of resistance). Agricultural diversity is enhanced when diverse farming systems are co-existing in a region (i.e. integrated and organic systems).

Advancing alternative crop protection methods There is a broad consensus that more alternatives are needed that are scalable. Biocontrol options through augmentation of predators, release of beneficial organisms or application of microbes still offer an important potential that needs to be used. Botanical extracts and microorganisms show many beneficial impacts and present a huge opportunity to develop “safer” active ingredients. However, their potential hazards need to be thoroughly tested in order to avoid unintended consequences. In order to develop,

register and commercialize these new products considerable investments are needed. New ways of funding the development of alternative crop protection methods and new business models for crop protection services are needed.

In Udaipur district the annual consumption of pesticides in agriculture is very much non-significant, hence environment pollution here due to these chemicals is not a serious threat here right now or in future too. Field staff of agriculture department in Udaipur regularly teaches farmers for consumptive use of chemicals. Also, the department is promoting organic farming among farmers through various schemes like PKVY and ZBNF.

Policy Interventions for Reduction in use of Chemical Fertilizers:

In the mid-1960s, when projections of global starvation were common, no one questioned the role of mineral fertilizer (plant nutrients, mainly nitrogen, phosphorus, and potassium from inorganic sources) in promoting food production in the food-deficit countries. On the contrary, fertilizer use was an integral part of the technological trinity--improved seed, irrigation, and fertilizer--responsible for bringing about the Green Revolution that helped many densely populated countries, including India and China, achieve food self-sufficiency in the short span of 20 to 25 years. In the early 1990s, however, fertilizer became a target of criticism mainly because of heavy use in the developed countries, where it was suspected of having an adverse impact on the environment through nitrate leaching, eutrophication, greenhouse gas emissions, and heavy metal uptakes by plants. Consequently, fertilizer use per se was mistakenly identified as an enemy of the environment.

The Need for Fertilizer

Although fertilizer use can contribute to environmental contamination unless managed properly, it is often an indispensable source of the nutrients required for plant growth and food production. Unless the nutrients removed are replaced in proper amounts from both organic and inorganic sources, crop production cannot be sustained: the soil will become degraded. In many developing countries, especially in Sub-Saharan Africa, nutrient mining has become a serious problem: nutrient removal exceeds nutrient replenishment by a factor of 3 to 4. Because crop residues are used for fuel, fodder, and construction material, nutrient supply from organic sources is limited, and supply from external sources become essential. Even for leguminous crops, which can fix nitrogen from the atmosphere, phosphorus and potassium must be externally supplied.

Environmental and Energy Concerns

Fertilizer use requires judicious management. Improper and excessive use can harm the environment. High levels of nitrates in drinking water can be harmful to human health, especially for infants less than six months old. Nitrate leaching has been highly correlated with nitrogen applications higher than the agronomic maximum. Eutrophication is caused by the deposits of nitrate and phosphate in lakes, ponds, and other water bodies, leading to excessive growth of algae, which can result in oxygen depletion and fish mortality. Plants take up cadmium from phosphate fertilizer derived from cadmium rich phosphate rocks, but how cadmium is transferred from phosphate fertilizer to food crops and then to human beings is not well established. These environmental are caused by excessive amounts of nitrate and phosphate in soil or water bodies. While mineral fertilizer is one possible source of these nutrients, other sources include organic fertilizer, animal manure, and industrial and urban wastes. High levels of nitrate in the water have largely been linked to animal manure in many European countries. In the developing countries, high nitrate levels are also linked to sewage disposal, septic tank drainage, and industrial wastes. Thus, the issue is one of integrated management of all sources of nutrients in agricultural areas, so that total nutrient supply is below the agronomic maximum. Prevention of erosion and runoff is another management strategy that reduces pollution and maintains soil productivity. In the past, the emphasis has been on increased use of fertilizer; the approach now must shift to educating farmers to use organic, inorganic, and biological fertilizer optimally. Today, the dominant use of nitrogen-based fertilizer in developing countries has led to an imbalance of nutrients in soils. To improve the efficiency of nitrogen fertilizer, use and to minimize adverse environmental effects, nutrient balance should be improved by promoting the use of phosphate and potash fertilizers. Moreover, 50 to 60 percent of applied fertilizer nutrients are lost to the atmosphere. Nutrient losses can be reduced by proper timing, application, and placement of fertilizer products and by controlling soil erosion and water runoff. Reducing nutrient losses will promote economic efficiency and protect the environment. Although fertilizer use has increased rapidly in the last few decades, especially in East Asia, fertilizer use is still too low to cause environmental damage in many developing countries. In some areas, such as Java in Indonesia, Punjab in India, and the Delta region in Egypt, where application rates are high, measures to monitor environmental impact are required to avoid potential damage. Because of low percolation rates, nitrate leaching does not occur from flooded paddy fields, which account for 60 to 70 percent of nitrogen fertilizer use in

the East Asian countries, but nitrate contamination of rivers and lakes caused by nitrogen runoff from such fields warrants special attention. High applications of nitrogen in irrigated and high-rainfall areas with light-textured soils and vegetable crops should be managed carefully because such conditions promote nitrate leaching. The World Health Organization has established that nitrate levels in the drinking water should not exceed 50 milligrams per litre of water; where levels are higher, location-specific programs should be introduced.

Fertilizer production, especially nitrogen production, is energy-intensive, and critics argue that scarce energy resources should not be wasted in producing fertilizer. However, fertilizer accounts for only a small fraction of global energy use--2 percent in 1990. For every 1 million Btus of energy used in the fertilizer sector (equivalent to the energy used in driving a car from Washington, D.C., to New York City), an additional 218 kilograms of grain--enough to provide the minimum calorie intake for one person per year--could be produced. In 1990 the price of natural gas averaged about a dollar per million Btus in many energy-exporting countries.

Therefore, converting energy into food security through fertilizer use offers a cost-effective and humane alternative for use of the world's energy resources.

Reforming the Fertilizer Sector

Fertilizer production, import, and marketing has in most developing countries been a public sector function due to underdeveloped private markets, lack of private investment, and concerns about food security. The fertilizer sector has been characterized by protection, subsidies, and price controls. Although this has helped develop fertilizer markets, inefficiencies in resource use and unsustainable fiscal burdens now mandate a change.

In countries where fertilizer use levels are high and the private sector and financial markets are well developed, markets should be liberalized, subsidies removed, and the sector privatized to increase efficiency. Policy and organizational reforms are needed to make fertilizer markets more competitive, including gradual liberalization of trade policies to allow the private sector to compete in the international market. Proper sequencing and phasing of these reforms may pose a challenge because the simultaneous introduction of various policy reforms, including devaluation, subsidy removal, and closure of public sector enterprises, can lead to a drastic reduction in fertilizer use, as happened in Ghana, Poland, Russia, and Zambia. More research is needed to understand the dynamics of policy and organizational reforms.

Where fertilizer subsidies or crop price support programs have promoted excessive fertilizer use, the removal of subsidies and support measures will lead to the convergence of economic and environmental goals by promoting resource use efficiency, reducing fiscal deficits, and minimizing environmental damage. Although energy consumption is essential for fertilizer production, energy use efficiency must be improved. While a modern plant uses about 30 million Btus per ton of ammonia production, fertilizer plants in many developing and reforming countries use 37 to 61 million Btus. Proper operation and maintenance, revamping of plants, and replacement of old technologies with new energy efficient technologies are essential.

The Policy Environment

The policy challenge over the next few years is to manage environmental problems in high-use areas, without losing the productivity benefits of fertilizer. In low-use areas the challenge is to increase fertilizer use in an environmentally sustainable manner. The following measures are appropriate to create a conducive and stable policy environment for promoting fertilizer use and supply:

- Macroeconomic stability, especially stability in the exchange rate, is essential for promoting growth in fertilizer use and supply. Rapid devaluation of domestic currency reduces both fertilizers use and supply by increasing costs and reducing investor confidence. Since many developing countries are not self-sufficient in fertilizer supplies, adequate and timely allocation of foreign exchange for fertilizer imports should receive high priority.
- Pricing policy should be managed so that it generates adequate incentives for fertilizer use by small farmers. Any price distortions should be eliminated. Although fertilizer subsidies should be carefully phased out, a case can be made for a temporary subsidy in those landlocked and food-deficit countries where markets are distorted, infrastructure is inadequate, environmental externalities are positive, and poverty is all-pervasive.
- Efficient and appropriate organizations should be created to ensure that fertilizer reaches the farm on time, in adequate amounts, and at minimal cost. The private sector should have the primary responsibility for marketing and distribution of fertilizer. The government should develop and implement appropriate regulatory and quality control measures for efficient functioning of the fertilizer markets. In those areas where markets

are underdeveloped, the government may take the lead in developing markets and supporting infrastructure.

- Limited availability of funds for farmers to purchase fertilizers is a major constraint on fertilizer use. The growing participation of the private sector in fertilizer marketing and distribution mandates that fertilizer dealers also have access to financial resources. Every effort should be made to ensure adequate funds at reasonable interest rates for both farmers and fertilizer dealers.
- To encourage capital investment in fertilizer production and imports, the government should create a market-friendly environment. Fertilizer self-sufficiency per se should not be a cherished goal. Joint ventures between technology-rich developed countries and resource-rich developing countries should receive greater attention.
- Adequate research, extension, and educational support should be provided to farmers. Soil testing and new technologies suitable for targeted application of fertilizer should be encouraged.
- Environmental monitoring mechanisms should be instituted and corrective measures should be introduced. The adoption of appropriate practices and technologies should be encouraged to minimize adverse environmental effects. Fertilizer use will remain an essential component of future strategies for ensuring food security and protecting the natural resource base. In fulfilling that role, however, fertilizer use should be approached differently in the future. Emphasis should be on growth with management rather than on growth per se, so that the broader goals of food security, agricultural growth, and environmental protection are not sacrificed.

In Udaipur district chemical fertilizer use in agriculture sector is very much under the recommendations as per package of practice of crops. Farmers are being trained here to use fertilizers in their crops as per recommendations issued in Soil Health Cards (SHC). Farmers are promoted regularly by department of agriculture to apply more of organic matter to their fields in form of organic manures and green manures. To reduce the fertilizer load, the farmers are also trained regularly under various schemes like PKVY, ZBNF etc. for promotion of organic farming, wherein they are taught to apply organic nutrient supplements to their soils in place of chemical supplements.

Policy Intervention in Reduction in Stubble Burning

India, the second largest agro-based economy with year-round crop cultivation, generates a large amount of agricultural waste, including crop residues. In the absence of adequate sustainable management practices, crop waste is burned every year in India, causing excessive particulate matter emissions and air pollution. Crop residue burning has become a major environmental problem causing health issues as well as contributing to global warming. Composting, biochar production and mechanization are a few effective sustainable techniques that can help to curtail the issue while retaining the nutrients present in the crop residue in the soil. The government of India has attempted to curtail this problem, through numerous measures and campaigns designed to promote sustainable management methods such as converting crop residue into energy. However, the alarming rise of air pollution levels caused by crop residue burning in the city of Delhi and other northern areas in India observed in recent years. The solution to crop residue burning lies in the effective implementation of sustainable management practices with Government interventions and policies.

In Udaipur district Stubble Burning is no problem at all. As land holding size here is mostly small and marginal, so very small quantity of crop residues are generated during every season which in turn is utilized as animal fodder. With increasing population pressure and increased fodder demand, Udaipur will not face problem of stubble burning in future too. Side by side Department of Agriculture Extension functionaries too regularly teaching farmers about the ill effects of Stubble burning.

16. NOISE POLLUTION MANAGEMENT PLAN (NPMP)

Noise Pollution also known as Environmental Noise or Sound Pollution is the propagation of Noise with harmful impact on the activity of Human or Animal Life. The sources of Noise Pollution may be Machines, Transport or Propagation Systems.

Board has also carried out noise monitoring at four stations at three sites i.e., RO office-MIA, Town hall, Satellite hospital-Amba Mata and MB hospital. The data is being calculated and disseminated to the people through website and other media

In terms of NPMP the following Action Areas have positive outcomes:

Sr. No.	Action Areas	Outcome
1	Noise Monitoring	Being conducted regularly on monthly basis day/night at four location i.e. Town Hall, MB Hospital, Amba Mata residential area and MIA, Madri
2	Sign Boards in Towns	To be implement
3	Implementation of ambient noise standards and court orders in residential/silent zones	Implemented

In terms of NPMP the following action areas have negative outcomes:

Sr. No.	Action Areas	Outcome
1	Sign Boards in the town	To be implement

COMPARATIVE STATEMENT

NOISE MONITORING DATA OF UDAIPUR CITY

MONITORING SITES		Regional Office		Amba mata (Satelite Hospital)			Townhall			MB Hospital		
S. No.	Year	MONTHLY AVERAGE		Year	MONTHLY AVERAGE		Year	MONTHLY AVERAGE		Year	MONTHLY AVERAGE	
		(Leq. day)	(Leq.night)		(Leq. day)	(Leq. night)		(Leq day)	(Leq.night)		(Leq. day)	(Leq.night)
1	2015	65.3	58.9	2015	66.8	57.2	2015	73.4	62.6	2015	65.3	55.4
2	2016	68.8	54.6	2016	60.1	55.8	2016	72.1	58.3	2016	63.1	59.8

3	2017	69.4	53.1	2017	66.9	52.3	2017	70.3	60.8	2017	62.2	49.6
4	2018	62.2	60.1	2018	63.8	59.9	2018	69.6	51.2	2018	64.2	50.8
5	2019	70.9	57.7	2019	65.9	57.0	2019	73.5	61.2	2019	65.6	53.7
6	2020	69.9	61.3	2020	67.7	58.4	2020	75.3	63.5	2020	62.5	56.6
	AVERAGE	**67.7**	**57.6**	**AVERAGE**	**65.2**	**56.7**	**AVERAGE**	**72.3**	**59.6**	**AVERAGE**	**63.8**	**54.3**

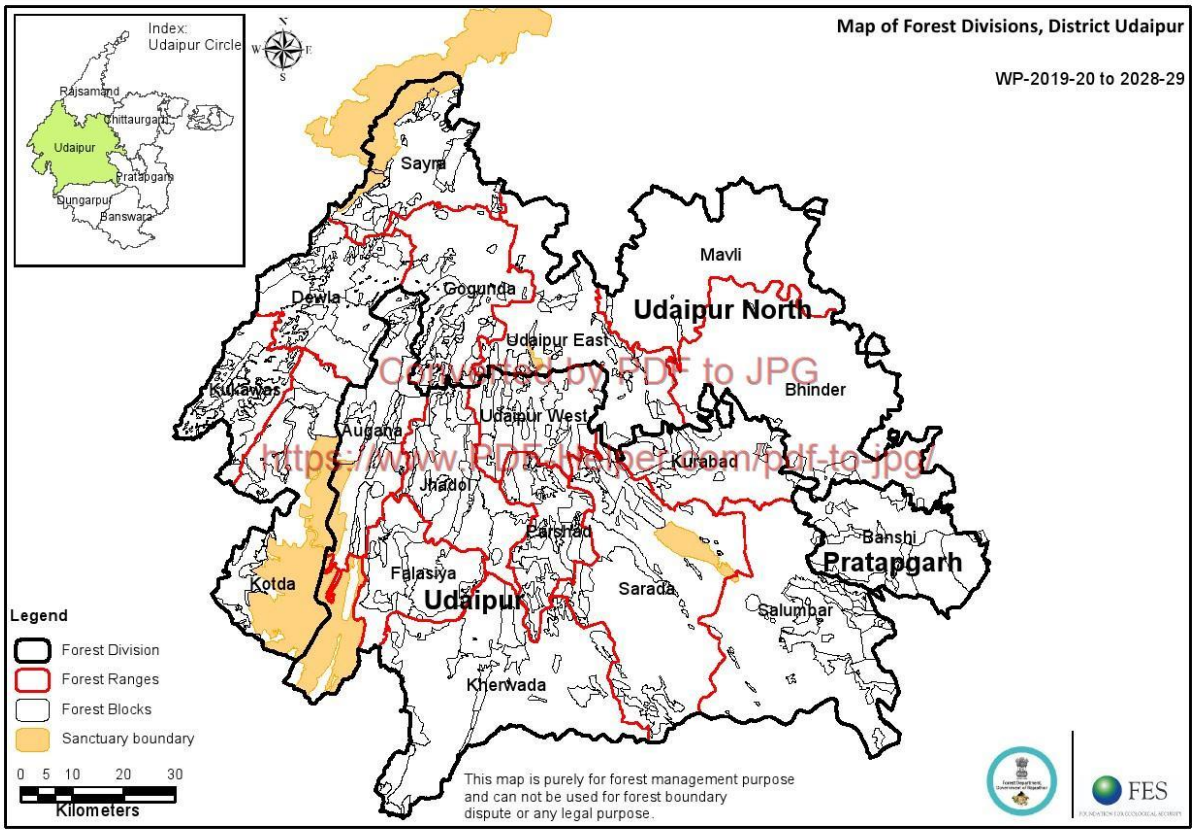
NOISE POLLUTION MANAGEMENT PLAN

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
NP1	Availability Monitoring equipment			
NP1a		No. of noise measuring devices with district administration		Nil
NP1b		No. of noise measuring devices with SPCBs		3 nos
NP2	Capability to conduct noise level monitoring by State agency / District authorities			
NP2a		capability to conduct noise level monitoring by State agency / District authorities		[Available]
NP2	Management of Noise related complaints			
NP2a		No of complaints received on noise pollution in last 1 year		NIL
NP2b		No of complaints redressed		NIL
NP3	Compliance to ambient noise standards			
NP3a		Implementation of Ambient noise standards in residential and silent zones		[Regular Activity] -Monthly basis
NP3b		Noise monitoring study in district		[carried out] - Udaipur City
NP3c		Sign boards in towns and cities in silent zones		installed

17. FOREST CONSERVATION PRACTICES

Udaipur is a southern district of Rajasthan, known as 'Mewar' situated among the Aravali terrains which is rich of natural flora and fauna of Rajasthan. It lies between north latitude 23˚46′ and 25˚5′ and East longitudes 73˚9′ and 74˚35 at an average altitude of 579.4 m above sea level, covering an area of about 12596 sq. km. Udaipur is bound in the north by Rajsamand and Pali districts, in south by Dungarpur and Banswara, in the east by Bhilwara and Chittorgarh and on the west by pali and sirohi districts and sabarkantha district of Gujarat.

The total reported geographical area of the district is 14, 62,105 ha. The area under forest is about 4, 14,485 ha (28% of total area). The forest area 3, 46,732 ha managed by territorial division and remaining area are in four sanctuaries Sajjangarh, Jaisamand, Kumbhalgarh, Phulwari kin al and Baghdara Nature Park managed by wildlife division.



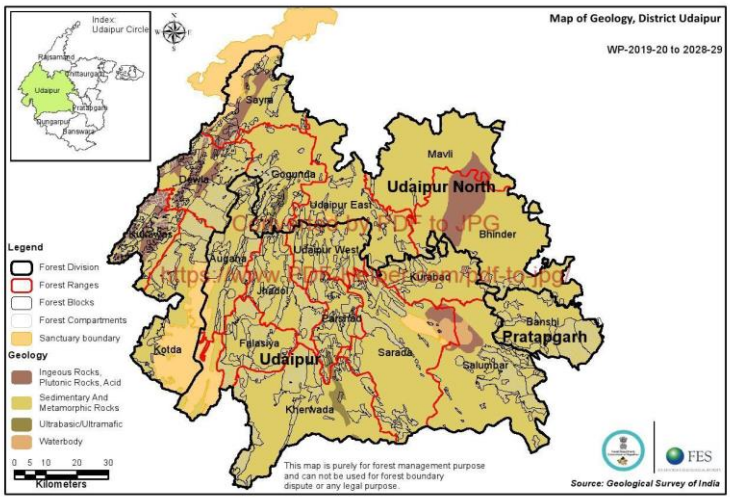
17.1 CONFIGURATION OF THE GROUND: -

Aravali mountain range is spread over the widest in Udaipur district. The western southern part of the district is predominantly a hilly region (87.8%) consisting of mountain ranges of different elevations. Beds and streams. The slope of the mountains varies from gentle to very steep. The area of east of the district is almost flat (12.2%)

17.1.1 Geology and Rocks -

The main rock types and geology encountered in Udaipur are

1. Basement granite, granite gneiss and amphibolites
2. Green schist amphibolite
3. Conglomerate
4. Quartzite
5. Carbonaceous phlite
6. Metadolerite and metagabbro



The Mewar gneiss, popularly known as the banded gneissic with pockets of paleosols, are the oldest rocks.

17.1.2 Minerals – The important minerals in Udaipur includes overs of lead, zinc, copper, silver, cadmium, iron, rock phosphate, asbestos, talc, soap stone, calcite china clay, lime stone, wollastonite, dolomite, marble

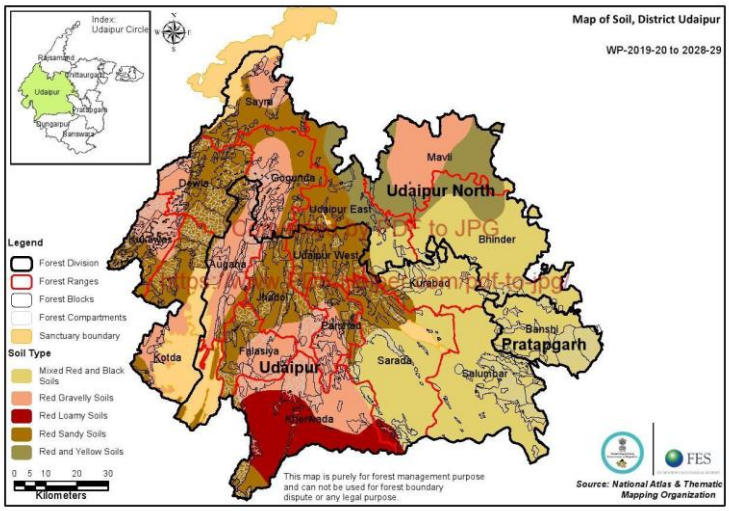
17.1.3 Climate and rain fall- Average rain fall- 763.15mm, Average temp min – 17.5˚, Average temp max – 31.6˚C, Average rainy days (July to Sep.) – 35 days, Hot wind Blow (May to June)

Humidity - 40%- 84%, Mean wind speed - 9.1 km/h

17.1.4 Pedology – Physiographically, Udaipur has undulating and rocky topography with high and low hills. The hills and ridges of the area are mostly covered with rock out crops associated with shallow, well drained, skeletal soils occurring on slopes and are prone to soil erosion. The soil on the foot hill and highlands are shallow to moderately shallow, well drained and prone to erosion. The texture varies from sandy loan to clay loam.

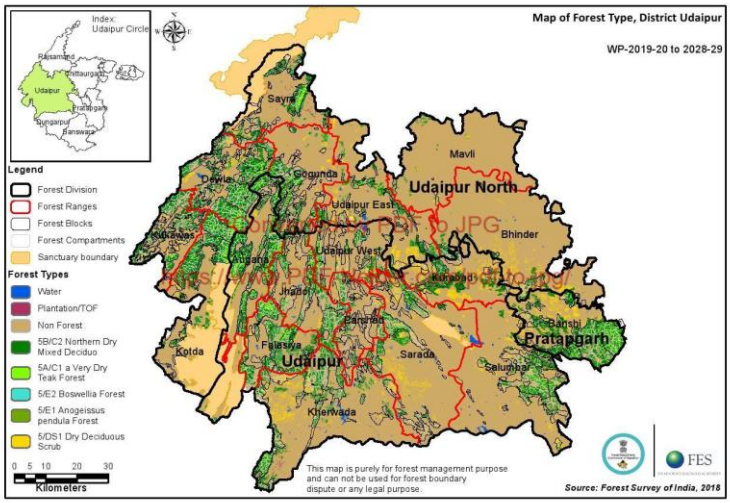
Soil can broadly grouped into

1. Mixed red and black soil
2. Red Gravelly soil
3. Red Loamy soil
4. Red sandy soil
5. Red and yellow soil



The soils of area are saline to alkaline and have normal EC values, low potash and phosphate concentration. Organic carbon contents show wide variation having medium to high organic carbon status.

17.2 WATER SUPPLY AND DRAINAGE PATTERN-



The main sources of water in this area are river, drain, pond, lakes well and step wells, the main rivers are Banas, Bedach, Som, Sei, Wakel, Sabarmati, Ayad, Gomati and Jhakham of these, Banas and Bedach joins the Chambal river flowing in the eastern regions. The rivers Sei, Mansi and Wakel flows into the Sabarmati flowing from the western and south western regions. The continuous flow of water in these rivers lasts till February-march. Subsequently in the summer the water is filled in some pits and low places during this period, the water flows below the surface of the rivers remains below ground which is the main source of water for man, cattle and wild life.

The area comprises depressions in the form of lakes such as Pichola, Fateh sagar, Rang sagar, Swaroop sagar, Udai sagar, Jaisamand, Mansi Wakel, Jakham, Tidi, Som-kamla-amba, Kagdar, Badi, Daya and other 234 water bodies are important source of drinking water and irrigation.

The depth of underground water ranges from 5-15 m below land surface.

Forest Types - variation in the structure of forest falling in this region are clearly visible due to different conditions such as location, nature, soil, water logging pressure, micro environment, hill slopes' elevation and changes biotic.

In the hills and rocks As a result, teak forests, Dhok forest and mixed forests are found here. In terms of scientific management, the following categories of forest are found-

1. Teak forest

2. Mixed forest

3. Salar-godal forest

4. Bamboo forest (mixed)

5. Degraded forest and open area

Forest classification-

According to Champion & Seth classification of forest this region are under "Dry tropical forest sub division and groups of this classification areas.

1. 5A southern tropical dry deciduous.

    C1 Dry teak-bearing forest

    C1a very dry teak forest

    C1b Dry teak forest

2. 5B Northern tropical dry deciduous forest

    C2 northern dry mixed deciduous forest

3. Degraded dry deciduous forest stages

    (a) D-S-1 Dry Deciduous forest scrub

    (b) D-S-3 Euphorbia scrub

4. Common soil type of dry deciduous forests

E/D-S-1 Anogeisses pendula scrub forest

E-2 salai boswellia serrata forest

E-5 butea monosperma forest

E-6 Aegle marmelos forest

E-8 Phoenix sylvestris forest

E-9 Dendrocalamus strictus

Forest land – In Udaipur district forest land under Territorial division (in hectare).

Sr. No.	Name of division	PF	RF	UC	total
1	Udaipur	81109.1	110415.68	724.17	192248.95
2	Udaipur North	43107.61	85011.7	480.91	128600.29
3	Bansi Range	5437	20446	-	25883.00
Total		**215873.45**	**129653.71**	**1205.089**	**346732.25**

Forest Management – It is process of planning and implementing practices for the conservation, utilization or both in sustainable manner.

Objectives of Management

1- Protection, conservation and consolidation of forests and wild life.

2- Quantitative and qualitative enhancement forest cover.

3- Sustainable management of forest with fulfillment of present and future demands.

4- Biodiversity conservation and restoration of RTE species.

5- Enhancing forest and trees cover through people participation for meeting local people's needs and ecological goods and services.

6- Reducing dependency on natural resources specially forest through livelihood activity generation.

17.3 FOREST MANAGEMENT PRACTICES-

In Udaipur district forest are quite diverse due to geographical diversity, Rock structure, elevation, Temperature, soil, rainfall, sand and other factors. For this reason, the entire region cannot we managed by same type management activity in terms of forestry development and conservation of forest and it can be classified as

1. Dense forest

2. Moderately Degraded forest

3. Highly Degraded and open forest

4. Wild life areas

Management of the forest areas of the district above point of view classified into two principal working circle and 13 overlapping working circle.

Principal working circle have been formed to fulfill the general objectives of management.

1- Natural forest management working circle
2- Restoration working circle

Overlapping working circle in addition to above keeping in view the technical treatment and specific treatment requirement of forest areas.

1- **Soil and water conservation overlapping working circle -** This forest areas are defined as a result of continuous harvesting, grazing and biotic pressure. In these areas, various structures such as check dam, trench anicut etc. will be built for conservation.
2- **Joint forest management (overlapping) working circle -** It has also described the methods of establishing and strengthening the Joint forest management in all the proposed works in the forest area or non-forest area of the district and the protection and promotion of forest / wildlife with the participation of the local people. Attention has also been drawn to conduct income generating activities through self-help groups to keep the local people active connected with forests.
3- **Bamboo management working circle-** It mainly covers the forest areas in which bamboo is found in abundance.
4- **Wild Life management (overlapping) working circle** – management are also made for the development of wildlife sanctuaries and other areas. (Water reservoir, water hole construction) habitat improvement and security according to their needs.

5- **Non Timber forest produce management working circle** – It includes scientific management, development and sustainable harvesting of MFP.

6- **Eco-tourism and Urban forestry management working circle** – Identify location for eco-tourism and emphasizing and motivate the people through eco-tourism, conservation of forest and wild life, develop green pockets near habitation.

7- **Bio-diversity conservation working circle** – The measures of protection and promotion of various species found in district have been prepared and the major species have also been listed.

8- **Grass and grazing management working circle** – to meet the demand of grass and grazing for local people.

9- **Tendu working circle** – It includes the Tendu forest area.

10- **Riparian species working circle** – Conservation of vegetation found in the banks of rivers and streams flowing in the district and moist areas.

11- **Invasive species management working circle** – In the forest areas of the district, the ill effects of invasive species as Juli-flora, Lantana, jungli Tulsi etc. are increasing. Measures have been suggested to control and eradicate invasive species and prevent their adverse effects on local vegetation.

12- **Umbrella species management working circle** – Measures of conservation and promotion of the most useful species found in forest area such as Mango, Mahua, Baheda, Peepal etc. are given in this working circle. There species have been importance for local people and wild life.

13- **RTE species management working circle** – The rare, threatened and endangered species of the district have been listed. Propagation method and conservation plan have been proposed.

17.4 THREAT TO FOREST AND FOREST LAND – Major threat to forest are deforestation and degradation of the forest. Deforestation leads to loss not just of biomass and plant species, but also of habitats of animals. Deforestation is also said to be a driver of climate change as trees that normally absorbs Carbon dioxide are no longer there. A region that loses its biodiversity, become more vulnerable to other environment elements and natural ecological balance disrupted due to deforestation. The main causes of deforestation and degradation are.

1- **Forest Fire: -** Forest fires poses threat not only to the forest wealth but also to the entire regime to founa and flora seriously disturbing the biodiversity, ecology and the environment to a region. Forest fire usually takes place from February to till pre monsoon season. Approximately 40% of the total forest area of the district is forest fire sensitive. In 2018-19, 202 fire incidence takes place 4532-hectare area was affected by the fire.

Natural and anthropogenic reasons for fire are responsible. The main reason among the human caused reasons is the following.

1. Non timber forest produce collection- Mahua flower, honey and fruit collection.
2. Growth in grass
3. Customs and Traditions like magra snan
4. Encroachment
5. Electric line
6. Marriage seasons of forest community
7. To take revenge

Types of Fires: -

1. Ground Fire
2. Crown Fire
3. Underground Fire
4. Root Fire

The Ill effects of Fire: -

1. Adverse effects on forest products in environmental services
2. Loss of wild life and there habitat
3. Loss of close carbon in biomass
4. Grass crisis

5. Loss of newly planted plants

6. Loss of natural germination

8. Loss of Moistures and productivity of soil

9. Loss of biodiversity and extinctions of plants and animals

10. Change in micro climate of the area with unhealthy living conditions

OBJECTIVE: -

To control, empower communities living near forest area.

To encourage the forest department to assist in fire accidence.

Redaction fire incidents

Suggesting fire control majors

Proposed remedies for fire control

1. Construction and maintenance of fire lines
2. Constriction of fire watch and barracks
3. Arrangement of firefighting equipment, purchase of vehicle, communication equipment's
4. Provisions of safety equipment of forest personal
5. Public awareness of fire in the local community
6. Target group- farmers, woman group, shepherds, NTFP collectors etc.
7. Media- Radio, T.V. social Media, Meetings, Chopal discussions etc.
8. Empowerment and accountability of forest VFPMC
9. Capacity building of VFPMC
10. Facilities- Fire biters, water bottles, protective cloths, helmet, torch, power blower.
11. Weed Management
12. Development of Strong forest fire detection and alert system

13. Training to forest staff and VFPMS member to control forest fire

14. Engage fire watchers in fires sensitive areas

15. Develop fire management and extension programs

16. Introduce well-coordinated and integrated fire management program

FIRE PREVENTION-

1. Don't leave fire un-attended
2. No fueling in stove, lantern etc. when it is very hot.
3. Don't thrown burning cigarette.
4. Remove the grasses along road side
5. Allow control grazing
6. Awareness about Forest Fire

CAUSES OF FOREST FIRE

1. Global climate change
2. Droughts
3. Insect out breaks
4. Pollution (Air, Water, Soil and aced rain)
5. Invasive species (Juli-flora, Lantana, Jungli Tulsi, Puwad, gajar ghass)
6. Over exploitation of forest resources (medicinal plants, foods, fibers etc.)
7. Habitat loss / destruction
8. Disease
9. Illegal wild life trade and hunting
10. Over grazing
11. Natural calamities, Flood, hurricane etc.
12. Soil erosion
13. Encroachment (by Legal and Illegal activity)
14. Loss of eco-system
15. Human - wild animal conflict

16. Illegal felling, loping, and open pit mining
17. Biotic pressure on forest
18. Traditional misdeeds (Magra Jalana, Adda pratha)
19. Lack of public awareness about the forest
20. Mismanagement of forest resources
21. Scattered forest right dwellers
22. Unplanned development works, Road, Dam etc.
23. Unmuted forest land
24. Increasing human population, urban expansion poverty
25. Unplanned waste disposal
26. Loss of biodiversity
27. Rising temperatures
28. Industrial activities and pollution
29. Human behavior
30. Scarcity of food - water in protected area
31. Forest conversion for permanent agriculture and pasture
32. Large road and infrastructure projects
33. Chemical defoliants
34. Small scale mining and associated pollution
35. Over harvesting for fuel wood
36. Fragmentation from small roads

AFFORESTATION ACTIVITY ON FOREST LAND -

Forests play important role in mitigation and adaptation of climate change. Forests sequester and store more carbon than any other terrestrial ecosystem and are important natural 'brake' on climate change. Carbon sequestration by forests has attracted much interest as a mitigation approach, as it has been considered as relatively inexpensive means of addressing climate change.

Forests and climate change are intimately intertwined. Forest regulate the climate, rain, ground water and soil of the earth. Forests are both sources and sinks of carbon. A growing forest captures carbon from the atmosphere and a mature forest is a store house of carbon.

In the Udaipur district 255869.18 hectare forest areas are, highly degraded, under degraded, shrub and tree less open land. There is a need to increase tree cover in this type of forest land. Plantation works were carried out mainly in the following different schemes in Udaipur district for the purpose of environmental protection, increasing NTFP, meeting the demand of forest produces and employment generation for local people, increasing tree cover.

- Rajasthan forestry and Biodiversity Project (RFBP)
- State Plan
- CAMPA
- District Mineral Foundation Trust (DMFT)
- Local Body Fund
- NABARD

The details of tree plantation done in the last 10 years in the district are as follow.

S. No.	Year of Plantation (Area in Ha.)	Udaipur (North)	Udaipur	Bansi Range
1	2010-11	410	692	250
2	2011-12	950	1960	300
3	2012-13	890	950	100
4	2013-14	4007.32	4005	858
5	2014-15	3059.65	3332.34	500
6	2015-16	3552.14	2534.86	550
7	2016-17	2087.5	1404.45	400
8	2018-18	1020	2354.65	250
9	2018-19	1186.87	1256.03	400
10	2019-20	581.83	750	-
	Total	**17745.31**	**19239.33**	**3600**

= 40584.64 Ha.



Eco Tourism Sites- Development of the Eco tourism site Udaipur district being a forest area multiplicity, having a unique topography, being famous as a tourism destination on the map has immense potential for eco-tourism. Keeping this in mind, day by day, many eco-tourism destination have been developed. Not only this, some site has become self-sufficient due to the development of thrilling activity at some site. Some sites are being managed effectively by the local village forest management committee. In collaboration with the forest department. Similar management is proposed to be done at other site as well as possible. The major eco tourist sites of the district are as follow.

Sajjangarh Wildlife sanctuary	Fulwari ki nal, Wildlife sanctuary
Jaisamand Wildlife sanctuary	Baghdra Nature Conservation Reserve
Neemuch Mata	Thur Magra
Badi Talab	Machla Magra
Jungle Safari Park, Lake Pichola, Sisarma	Goverdhan Sagar

Van Anusandhan Kendra, Banki	Nandeshwer ji
Kevde ki nal	Gupteshwar ji
Jhameshwar ji	Jhamri dam
Ambika Mata Mandir, Jagat	Taneshwar Mahadev
Jawar Mataji Mandir, Jawar	Nal Sandol
Kamalnath, Jhadol	Ogana dam
Gotemeshwar ji	Jarga ji
Eco Tone Park, Badi Talab	Mewar Biodiversity Park, Amberi
Mahatma Gandhi Nagar Van Udhyan, Phulon ki ghati, Chirwa	Pratap Van, Pratap nagar
Biological Park, Sajjangarh	Ubeshwar ji

MITIGATION EFFORTS TO REDUCE ENVIRONMENTAL POLLUTION BY USING RELEVANT TO THE DISTRICT

AFFORESTATION –

Promoting tree outside forest

Trees outside forest (TOF) are located on the lands other than forest, including agricultural lands (e.g., agro- forestry systems, farm forestry industrial plantations, Roadside plantation etc.) built-up areas such as settlements and infrastructure (e.g., street trees, parks, urban plantation etc.). They not only contribute nearly on fourth of the total growing stock of the country but also have become major source of wood in India. TOF has played significant role in combating urban and industrial pollution. Urban parts and city forest are proven lungs of urban population.

Promoting Social forestry

To raise plantation in degraded and non-forest waste land to provide vegetative cover, improve land productivity and to meet timber, fuel wood, fodder and other needs of forest fringe villages, thereby reducing pressure on traditional forest areas.

Promoting Urban Forestry

Urban green spaces are integral component of urban ecosystem, contributing to enhanced environmental quality, quality of life and sustainable urban development.

- Urban parks, gardens, natural landscapes provide several intangible benefits to urban population.
- Promoting avenue plantation and green cover in Universities, Colleges, Schools, Aanganwadis and Townships etc.
- Urban parks can be developed in lines of Smriti van.

Promoting Avenue Plantation

Avenue plantation is important practice of growing tree species along the Road side and Canal side flowering and semi evergreen plants sps. Can be used in this.

Roadside Plantation

Roadside plantation is one of the most important constituent of landscaping. Roadside plantation not only stabilizes roads from erosion but also enhances the aesthetic quality. While selecting the species of trees for landscaping a great care should be taken to choose the native species, which are locally available.

Promoting the Plantation in other area

Industrial areas, Water bodies, Religious Places, Fair places, Railway Stations, Shamshan Ghat, Near Dhaba Place, seed spreading on degraded hills in Rainy season, Planting medicinal plant in house, develop Panchwati, Nakshtravan, rashivan, Grahvatika etc.

Promoting the Plantation on Mining and Revine Area

Promoting Tree Farming as Block Plantation

The sooner a cleared area is reforested, the quicker the ecosystem can start to repair itself

Forestry Activities to increase environmental awareness among people –

1- Celebrating the ceremony for public awareness –

1. World Wetland day	- 2 February
2. World forestry day	- 21 March
3. World Water day	- 22 March
4. World Earth day	- 22 April
5. International Biodiversity day	- 22 May
6. World Environment day	- 5 June
7. World Ozone day	- 16 September
8. World Habitat day	- 5 October
9. Van Mahotsav	- 1 to 7 July

Village forest Protection and Management Committee-

The forest department has been managing the forest through joint forest management by forming the VFPMC related to the forest area where the local forest dwellers provide continues and sustainable employment opportunities the department is striving to increase the livelihood of the

tribal by the enhance there skills capacity development by training. 550 such VFPMCs are working in District forest areas**.**

Promoting Ecotourism-

Forest Excursion, Cycling in Forest Area

Propaganda for the conserving environment in village and urban areas

Conserve the environment through social traditions has Kesar Chhanta, Dev Van,

Promoting the Organic Products

Promoting the fuel as gas in rural and the urban area in instead of fuel wood

Promoting the Eco camp and jungle safari of the students

Provide training for local people as nature guide

Developing interpretation centre, view point, walking trail in forest area.

Other Activities –

Udaipur is a city of lakes, ponds and other water bodies. Water bodies are dynamic aquatic system that support and maintain balance community of diverse species and the functional organization of all the organism supports a biotic integrity Planktons constitute an important link in the aquatic food webs, transferring energy from producer to aquatic carnivores.

Algae produce 50% to 70% of atmospheric oxygen and are the base of aquatic food chance for fish mammals. They occur as endosymbionts in lichens and corals.

Fungi offer eco system services as saprophytes, parasites, symbionts.

Lichens grown stones and rocks or on barks of trees and bushes.

Ferns can serve as indicators of disturbance or forest quality as many species show clear habitat differentiation with regards to light conditions and humidity so protecting endangered species and cleaning over lakes.

Allowing the forest eco system to regenerate over time.

Eradicate obnoxious plants Parthenium, lantana, juliflora

“Nature is the art of God”

Let us join hands to conserve and flourish it.