

BEFORE THE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE

OA No. 29/2020 (WZ)

Suraj Pradip Ajmera
Applicant

...

V.

Aurangabad Municipal Corporation & Ors.
Respondents

...

**REPLY ON BEHALF OF RESPONDENT NO. 1,
AURANGABAD MUNICIPAL CORPORATION**

Aniruddha S Kulkarni

Advocate for Respondent No. 1
14, Rambaug Colony, Agasti,
Opposite Krishna General Hospital,
Pauç Road, Kothrud,
Pune - 411 038
Mobile No. 90287-36209
Email ID : aniruddha1488@gmail.com

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Reply Affidavit on behalf of respondent number 1,
Aurangabad Municipal Corporation

I, Bhagwat Dinkar Phad, working as Incharge Executive Engineer (Drainage), I am well aware with the facts of the present case and I am competent to swear and file this reply affidavit.

1. We are in receipt of the present original application and I have noted the contents there of. The present application pertains to the underground sewage system in the city of Aurangabad under the jurisdiction of Aurangabad Municipal Corporation (shortened to AMC henceforth). Respondent no. 2 & 3 come under the supervision of this Respondent no. 1. This reply is being given by Respondent no. 1 on behalf of respondent no. 1 - 3, and hence no separate reply is being filed on behalf of respondent no. 2 and 3.
2. Before giving parawise reply to the present application, this respondent would like to bring on record certain facts supported by records and information available in this office.
3. Aurangabad Municipal Council was established in the year 1936, the municipal area was around 54.5 Sq.Kms. It was elevated to the status of a Municipal Corporation on 8 December 1982 and simultaneously including 18 peripheral villages making total area under its jurisdiction to 138.5 sq.kms.
4. Previously open drainage system was found to be seen in major parts of the city. However since the year 2014, AMC has started undertaking

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Adv. Rajesh.S. Ghuge
Notary Govt. of India
Regd. No. 15067, Aurangabad. (M.S.)

Bhagwat Dinkar Phad

laying down of underground drainage system and sewage treatment facilities in the municipal area under Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) Scheme of Central Government of India to later on the same is converted into AMRUT Scheme.

5. Aurangabad city's population is approximately, 11.26 lac according to the census of 2011. In the year 2016 the municipal limits of Aurangabad city expanded exponentially due to merging of 02 villages into the principal areas. The Satara-Deolai village area was under the jurisdiction of two independent gram panchayats which got merged into to the Aurangabad city consequently putting strain onto various aspects of municipal administration including providing underground sewage facilities and sewage treatment facilities.
6. In paragraph number 4.E, this applicant states that he has already filed a writ petition in the Hon'ble Bombay High Court, judicature at Aurangabad, bearing Writ Petition number 7533 of 2019 and thereby this applicant prays for cleaning of drainage lines and for removing the encroachments if any done on the beds of nala in the City and the said petition is pending.

In reply to this, this respondent would like to state this clearly shows that the present applicant is doing forum hunting and is dragging this despondent into various Courts. The applicant is filing multiple proceedings in different courts on the same issue and therefore this particular application is barred by the principle of res judicata. This respondent has not received any notice in that proceeding.

7. In paragraph number 4F this applicant has stated that he submitted an online Right to Information Act application on 22nd February 2020, and respondent number 3 has replied to the said complaint on 2nd March 2020, and taking help of these two dates, to explain as the first cause of action, and thereby is claiming that the present application is within limitation.

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To this particular contention, this respondent would like to state that there are catena of judgements explaining the concept of cause of action and limitation especially at this Hon'ble Tribunal, and the date of first instance regarding cause of action which the present applicant is claiming to be can by no way of imagination be considered as valid.

8. I hereby submitting the recent development that, Aurangabad municipal corporation and Aurangabad Smart City has been invited to lead and participate in the "River Cities Alliance" by the Government of India, 30 cities from across India have been invited to the initiative, the selection criteria was based on various parameters. Primarily, the foundational work and commitment displayed by the administration in matters of climate change particularly concerning water.

This invitation recognises the brilliant efforts underway by the Municipal Corporation Aurangabad and Aurangabad Smart City and Associated partners. It is pertinent to note that, these recognitions are one of many bestowed upon the civic administration for its tireless efforts towards the cause of our environment.

9. Under UNFCCC Aurangabad is now signatory to a net zero target which goes well beyond national and international commitments -Paris climbing chain record various initiatives underway are targeting that Aurangabad reaches net zero emissions by mid-century.

This is testimony to the relentless efforts by the Aurangabad Municipal Corporation and Aurangabad Smart City to comprehensively address the issues of climate change the Hon'ble Tribunal would be pleased to know that Aurangabad Smart city are not only committed to systematically tackling pollution but also addressing the biggest challenge that humanity faces today

Copy of letter dated 28/09/2021 about insertion of Aurangabad Municipal Corporation in "River Cities Alliances" with Minutes of Meeting dated 04/10/2021 are marked and annexed as Annexure R1/A.

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Adv. Rajesh.S. Ghuge
Notary Govt. of India
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10. Plan of underground sewage system for Aurangabad city under the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT), a component of JNNURM -

A. Currently according to the provisions made in the year 2019 funds which have been released from the Central Government and State Government and from the contribution made by the AMC, under the UIDSSMT, underground sewage system has been implemented for which a total amount of Rs. 373.03 crores has been spent. According to the earlier financial arrangement of the scheme the contribution ratio is 80:10:10 (Central Government : State Government : AMC). Later on the said scheme was included into the 2016 AMRUT plan (Atal Mission for Rejuvenation and Urban Transformation) and accordingly the financial contribution ratio has been rearranged as 60:20:20.

B. As per March 2019 the set plan has been finalized and accordingly provisions have been made for operation and maintenance of whole scheme for a period of 10 years. For the set period of 10 years approximate expenditure is Rs. 64.33 crores and AMC is doing it. Under the said scheme 3 STPs at Kanchanwadi - 161 MLD, Pedgaon - 10 MLD, Ward No. 98 - 14 MLD etc., Rising Main -3.34 kms., 50 kms underground sewage line under the main sewage line of 68 kms, these work have been completed. Total cost for this particular plan is Rs. 373.03 crores, out of which Central Government has contributed Rs. 219.94 crores, State Government has contributed Rs. 73.13 crores and AMC contribution is Rs. 54.47 crores.

C. Aurangabad city is a mixed topography of hills and lands and according to the natural availability of land locations have been selected for installation of STP and SPS. Therefore the SPS of 211 MLD capacity at Golwadi and Waladgaon (old ward no. 98) are located outside the municipal city limits.

D. In the city of Aurangabad 9 Main Sewer Lines are flowing and their entire work has been undertaken under the UIDSSMT. The main

(Signature)

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drainage lines upon which the work has been done in the scheme details of which are given below as follows -

Sr. No.	Name of the sewer lines	Description of the sewer lines
1.	A - 4600 meter	Bibi ka Maqbara to Pedgaon
2.	B - 12737.50 meter	Himayatbaug - Siddharth Garden - Banewadi - Golwadi
3.	C - 7545 meter	Majnu Hill-City chowk - Barudgarnala - Saraswat Bank - Nageshwarwadi - Siddharth Garden
4.	D - 3800 meter	MGM - Jafergate - Dalalwadi - S B Colony
5.	E - 2612.50 meter	Forest Department Office - Padmapura - Kham river
6.	F - 3147.50 meter	Saint Francis School - Tilak Nagar - Vedant Nagar - M.I.T. College
7.	K - 11756 meter	High Court - Gajanan Maharaj Mandir - Jawahar Colony Police Station - Shahnoorwadi - M.I.T. College - Nath Seeds - Golwadi
8.	L - 9262.50 meter	Diapli Hotel - Zalta STP
9.	M - 10785.50 meter	Piasadevi Road - Jhalta STP
	Total - 66266.50 meter 66.26 KMs (110.44%) Max then Estimated expenditure	

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Rajesh S. Ghuge

Adv. Rajesh.S. Ghuge
Notary Govt. of India
Regd. No. 15067, Aurangabad. (M.S.)

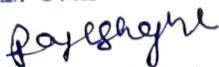
Details about financial contribution

Sr. No.	Drainage Scheme	Under UIDSSMT Scheme		Under AMRUT Scheme	
		Percentage Share (Perceived)	Contributed Amount (Cr)	Percentage Share	Contribution
1.	GOI	80%	292.55	60	219.41
2.	GOM	10%	36.57	20	73.13
3.	AMC	10%	36.57	20	73.13
	TOTAL		365.69		365.67

E. AMC has achieved capacity of 211 MLD sewage treatment at 4 STP's. This includes the previous build Dr Salim Ali STP. Capacity of Kanchanwadi STP has been enhanced from 136.50 MLD to 161 MLD. Capacity of Zalta STP has been increased from 15 MLD to 35 MLD. Construction of both the STPs is completed. Therefore according to the proposed plan 4 STP with the total capacity of 211 MLD have been built as per this design the capacity to treat sewage water is upto 473.50 MLD.

F. At present 155 MLD water is supplied from NathSagar situated at Jayakwadi Dam, Paithan, Dist. Aurangabad and around 135 MLD water reaches the city. According to the CHEEPCO manual of the Central Government, 80% of 135 MLD, that is 108 MLD sewage generated. The STPs which have been constructed in the City under the UIDSSMT, its total capacity is 206 MLD including the existing operational Dr. Salim Ali STP SMLD is of 211 MLD capacity, it has to be treated. The current operational STP is treating 75 to 85 MLD.

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Adv. Rajesh S. George
Notary Govt. of Maharashtra
Regd. No. 15067, Aurangabad (M.S.)

Copy of Aurangabad underground sewerage project under the UIDSSMT is being marked and hereby annexed as **Annexure R1/B.**

9. Taking into consideration the rising population and speed of development in newly added area of Satara Deolai in AMC limits which is around 34.7 sq.kms., for a further period of 30 years. For this additional area detailed and composite survey has been done and accordingly a dense network of underground sewage lines, construction of sewage pumping stations and other allied activities have been included in the project report which has been prepared under the guidance of Maharashtra Jeevan Pradhikaran. The said project report for the works is amounting to Rs. 223.81 crores and same has been submitted for technical approval to Chief Engineer, Maharashtra Jeevan Pradhikaran as the nodal agency. After getting approval from them the detailed project report will be submitted to the State Government for release of the funds.
10. Following aspects have been included in the Detailed Project Report (DPR) by the approved Project Management Consultant.

1.	Project Report Cost	Rs. 223.81 Crores
2.	Current population of the ward	52,916 (according to census of 2011 - 50,577) 5,79,345 (proposed population for 2055)
3.	Total Area	33.17 sq.kms.

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4/10/2024

Adv. Rajesh.S. Ghuge
Notary Govt. of India
Regd. No. 15067, Aurangabad. (M.S.)

4.	Expected water requirement and expected sewage generation	Expected Water requirement	Sewage generation
		Year 2025 – 35.12 MLD	28.63 MLD
		Year 2040 – 64.13 MLD	51.85 MLD
		Year 2055 – 86.03 MLD	69.37 MLD
5.	Diameter and total length of proposed sewage line	200 mm to 1200 mm – 270.15 kms	
6.	Sewage pumping station	6 MLD – 1 No. (MHADA colony Deolai) 0.60 MLD – 1 No. (Sudhakar Nagar Satara)	
7.	Expected tenements	35,000	
8.	Inspection chamber	17,500	
9.	Proposed number of manhole chamber lids	10,000	
10.	Other provisions	1. Utility Shifting 2. Road restoration 3. Suction cum jetting machine 4. Financial provision for GST 5) Financial provision for Royalty charges	

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Rajesh S. Ghuge

Adv. Rajesh.S. Ghuge
Notary Govt. of India
Id. No. 15067, Aurangabad. (M.S.)

11.	Project achievements	1. Environment improvement 2. Clean and healthy environment 3. 23 MLD sewage water will be transported to STP via enclosed sewage line
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Copy of DPR for the underground drainage system for Satara Deolai town is being marked and hereby next as **Annexure R1/C.**

11. **Cross connection**

Apart from this the Municipal Corporation has taken steps to avoid open sewage coming into the River or Nallas directly from nearby areas and in illegal development areas. Project Management Consultant has been appointed and he has submitted the project report of Rs. 08.17 Crores to which sanction has been given under 15th Finance Commission Grant received to AMC. The further procedure in this regard is in progress.

Copy of DPR for Cross Connections of Open Drainage through Sukhna river, Kham river and main Nala flowing through the Aurangabad city is being marked and hereby annexed as **Annexure R1/E.**

12. Aurangabad Municipal Corporation has undertaken the following works taking into consideration the natural topography of the city -

A. Wherever citizens staying along the riverside are directly discharging the sewage into the river, sewage lines are being laid in that area and connected to the main sewer lines and all efforts are being undertaken to completely stop discharge of sewer into the rivers.

B. Desalting and removal of garbage debris and other obstructions from the natural water way of the rivers is a continuous activity. The removed material is disposed of scientifically, so that water doesn't gets accumulated during heavy rainfall. Similarly all efforts are taken to ensure that the sewage water doesn't get into the houses of the

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 Adv. Rajesh.S. Ghuge
 Notary Govt. of India
 Regd. No. 15067, Aurangabad. (M.S.)

Rajesh Ghuge

people residing nearby and wherever while removing the debris from the river basin damage has been caused to the Civil Lines they are repaired promptly.

C. Anti-Social elements steal the manhole covers, such manhole covers are regularly replaced and due care is taken that such chambers don't remain open to avoid any mishaps or spillage of sewage out in the open.

D. Implementation of sewage lines in Gunthewari and unauthorised development –

In the Gunthewari areas and Areas where there are unauthorized developments there is no proper sewage transportation and treatment facilities. AMC has decided to lay down underground sewage lines in those areas as well. Appointment of Project Management Consultant for the said facility is already in progress and very soon detailed project report is expected to prepared by the PMC.

E. Apart from these activities AMC undertakes regular maintenance of existing drainage system of Rs. 08.45 Crores budgetary provision has been made for the year 2021-22.

13. The Government of Maharashtra through the Environment Department is implementing Majhi Vasundhara Abhiyan in the entire state. Under the scheme, various environmental parameters are being improved which includes sewage treatment facilities and scientific treatment and disposal of municipal solid waste in all Municipal and other local body areas.

14. Following are the major highlights of the Majhi Vasundhara Abhiyan -

- Improving the quality of Earth
- Improving the quality of air
- Protection and conservation of natural water sources
- Improvement of green energy

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Adv. Rajesh.S. Ghuge
Notary Govt. of India
Regd. No. 15067, Aurangabad. (M.S.)



- Development of environment in a healthy way
 - Implementing rainwater harvesting for improving ground water table
 - Preparation and maintaining of biodiversity register
 - Development of New Green zones and conservation of existing green zones
 - Implementing initiatives for encouraging citizens to reduce and subsequently stop the use of firecrackers
 - Scientific disposal of construction and demolition debris.
15. Implementing the above highlights AMC will be able to improve sewerage and sanitation facilities and this will also help in reducing the number of instances where municipal solid waste and other garbage is been thrown in rivers and nalas.
16. The above improvement programs are being undertaken by the administration by engagement with civil society. Such works are being done through the funds which are being given by the State Government and from the coffers of the AMC. Works under the Majhi Vasundhara Abhiyan will be undertaken in two phases. 2020 -2021 and 2021 - 2022.
17. Under the Phase 1 few works have been undertaken with the help of civil society which includes widening of the river basin of Kham river, desilting of the river and removing other encroachments, removal of plastic thermocol and other other hazardous waste material, and installing iron nets to arrest dumping of such material, employment of skilled labour for doing such works, laying down of jogging track on the river banks, improving, underground water table, planting of trees which will help in desilting of harmful minerals, making convenient public sitting, providing facility, especially for women, construction of sanitation facilities, etc. Civil society and citizens of Aurangabad city are

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Rajesh Ghuge
 Adv. Rajesh.S. Ghuge
 Notary Govt. of India
 Regd. No. 15067, Aurangabad. (M.S.)

Rajesh Ghuge

voluntarily joining hands with AMC for improving the conditions of the rivers and nallas and for reducing the overall pollution in them.

18. Kham River rejuvenation program -

A. Kham river is the main river flowing through Aurangabad city, it originates at Jatavada village in the hills and it reaches river Godavari at Paithan. Length of the river is approximately 30 kms and the length of the river passing through the city is around 7.73 kms. During the summer months on an average 38 to 40 MLD water flows through the river and during monsoons it is around 110 to 120 MLD. Kham river passes through 30 ward areas in the city.

B. At present in the river there are encroachments at few places, sewage is getting discharged, municipal solid waste is dumped and there is even sewage which is coming from various cow and buffalo dairy farms located in various areas which is polluting the river. In addition to this, people who are living on the banks of the river are directly discharging their domestic sewage into the river which is affecting the fertility of the land downstream and underground water of Wells and borewells is also getting polluted.

C. Such pollution of soil which is affecting the fertility of the earth is even affecting farm produce which is directly affecting the health of the citizens. It is decided by the AMC that plans will be made to arrest such discharge of sewage into the river and consequently take all efforts for stopping the pollution of river as well as underground water which is supplied to be Wells and borewells. To redress all such issues, a project management consultant has been appointed for preparing DPR. Following are the important highlights of the DPR -

- Identifying factors causing river pollution
- To suggest solutions for the same
- To suggest efficient water utilisation programs considering Aurangabad city e located in drought prone area
- To tackle local issues

(Signature)

BEFORE ME

(Signature)

Adv. Rajesh
Notary
No. 1504

- To remove all possible encroachments in the river and restoring the natural flow of the river
- To do stone pitching to avoid landslide in the river
- To plant trees for improving and recharge in groundwater table
- To stop all discharge of untreated sewage into the river
- To collect all garbage, plastic, carry bags, thermocol and all other garbage which is haphazardly thrown in the river and to install iron nets to prevent dumping of the same in future.

D. Aurangabad city is known to be the capital of Marathwada region and it is known for various historical monuments like Paanchakki, Bibi ka Maqbara, Khultabad, Ajanta and Ellora Caves, Daulatabad fort, etc. in addition to this Aurangabad is also having many educational institutions and MIDC at Waluj. The city is ever expanding and a lot of people migrate to this particular City. AMC is striving for water conservation and water recycling. AMC is working on to arrest unnecessary wastage of water and for generating awareness among the citizens.

E. For all these activities, the project management consultant has prepared a DPR of rupees 817 crores and the State Government has made available Rupees 15 crores for which works are in progress by issuing tenders.

Copy of Majhi Vasundhara Abhiyan report regarding rejuvenation of rivers in Aurangabad City is marked and annexed as **Annexure R1/D.**

Copy of photographs of before and after situation regarding removal of encroachments in the rivers, removal of MSW etc., are collectively marked and annexed as **Annexure R1/E.**

19. Now this respondent will give parawise replies to the original application.

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Adv. Rajesh S. Ghur
Notary Govt. of India
Regd. No. 15067, Aurangabad



20. In reply to paragraph number 1 & 2 this respondent has no comments.
21. In reply to paragraph numbers 3, 4.A, and 4.B detailed explanation has been given above.
22. In reply to paragraph number 4.C, this respondent would like to state that during inspection on 25/09/2020, It is observed that due to household outlets of sewage discharge by the adjoining property owners, a little quantity of sewage water was seen flowing into the Nala. This was witnessed even by the MPCB. During this survey various Nalas, river, STP plants have been visited, water samples have been collected, photos have been generated. Minor quantity of plastic carry bags bottles have been seen flowing within these Nala. Also it has been seen that the Aurangabad Municipal Corporation ward engineer number 2 has maintained this particular Nala quite properly by undertaking regular desalting and cleaning programs. During the joint inspection, garbage, animal bones, etc., have not been observed. The same has been even witnessed by other residents of the Samarth Nagar locality too. Hence the statement made by the applicant is not true and not as per the facts observed on the site.
23. In reply to paragraph number 4.D, this respondent would like to state that On the day of the actual site visit no such Situation has been observed in the Nala such as Arif Colony, Samartha Nagar, Kat Kat Gate, Aurangapura, Nandanvan colony, Bhavsingpura. Some quantity of sewage is getting mixed into the Nala because the nearby residents are directly discharging the sewage. However AMC have already taken serious cognizance and sanction the DPR at its level of which further procedure is going on in this regard as mentioned above.
24. In reply to paragraph number 4 F, this respondent would like to state that whole scheme is already completed in March 2019 and further action has been taken by this deponent in view of the additional area,



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MLD sewage is being treated every day since the time it came into operation.

29. In reply to paragraph number M, The distance of Aurangabad up to Paithan is 51.4 Kms. and 42.50 Kms. from Nakshatrawadi MBR. Therefore after jurisdiction of Municipal Corporation limits this deponent is not responsible for any activity.
30. In reply to paragraph number N, This respondent would like to state that no serious situation as claimed by the applicant was observed at Samartha Nagar nalla and prima facie a problem can never happened due to to water pollution and Nala nuisance and moreover this Nana itself was found in properly clean condition. None of the other residents have any complaints of eye infection due to Nalla pollution.
31. In reply to paragraph number Q, This respondent would like to state that AMC regularly does pre monsoon Nala and river cleaning works. Every year around, rupees 5 lacs are spent for such cleaning and desalting works. Apart from that throughout the year Nala channelization is being done by AMC at regular intervals during non-rainy season thereby minimizing the problems of that order in the interest of citizens at large.
32. In reply to paragraph number S, This respondent would like to state that AMC has already executed the sewerage project and efficiently treating at all 4 STPs. It is agreed that some quantity of sewage water still flows within these Nala as and within the Kham river the reason is already mentioned in the foregoing paragraphs. AMC is very strict and is taking drastic action 'against those residents who are illegally discharging sewage into open nalas and rivers. Details regarding DPR had already been explained about in detail and not reproduced here to avoid repetition.

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BEFORE ME

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Adv. Rajesh S. Chitambar
Notary General
Regd. No. 1107, Aurangabad

33. In reply to paragraph number 4T, this respondent would like to state that UIDSSMT scheme has been first scrutinized by Maharashtra Jeevan Pradhikaran and also verified from design point of view Mumbai IIT Mumbai, based upon their comments and recommendations all the technicalities have been complied and accordingly the scheme has been implemented and executed. Also as ordered by the State Government, third party inspection has also been done for this scheme and Government College of Engineering Aurangabad through their experts have also inspected and have given the latest updates to the state government. They have observed that all the schemes are functioning in and working properly and efficiently. The detailed report of visit dated 25/09/2020 have been is already submitted to the Hon'ble Tribunal.
34. In reply to paragraph number 5, Which respondent would like to state that the present application is barred by limitation and continuing cause of action doesn't apply to the proceedings before this Hon'ble Tribunal.
35. This respondent would like to state that they are implementing an efficient and underground sewage network line, sewage treatment plants, municipal solid waste handling and processing system and other environmentally friendly initiatives under the Majhi Vasundhara Abhiyan of the Government of Maharashtra. It is not the case of the applicants that the respondent is sitting idle and doing nothing. This respondent is working hard to complete the works undertaken for restoring degraded environment at various places, due to various causes and is showing results on ground. Citizens of the city of Aurangabad are voluntarily coming forward to take part in various public engagements for improving the overall environment of the city and this respondent is undertaking serious efforts in providing a better and healthy environment to the citizens of Aurangabad.

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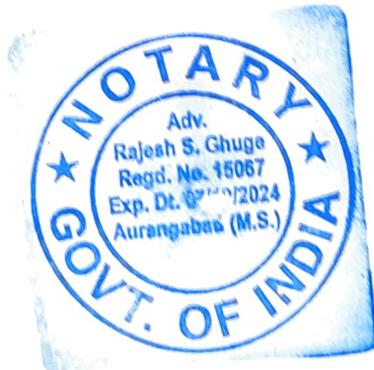
Adv. Rajesh S. Ghugre
Notary Govt. of India
Regd. No. 1507/Aurangabad

36. That in light of the above submissions it is respectfully prayed that just answering respondent no. 1, Aurangabad Municipal Corporation Shall abide by any orders or directions issued by the Hon'ble Tribunal, as appropriate.

Deponent



(Bhagwat S/o Dinkar Phad)



BEFORE ME


Adv. Rajesh S. Ghuge
Notary
Regd. No. 15067

VERIFICATION

That whatever is stated above is true and correct to the best of my knowledge ability and the information which is available with the office of this respondent.

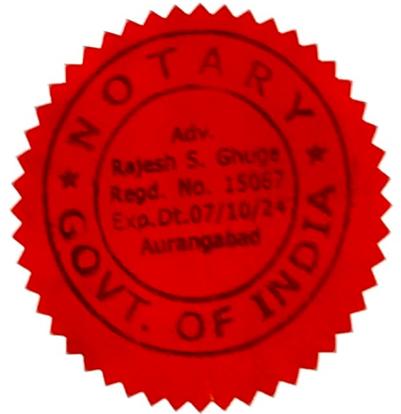
Verified at Aurangabad on this 04th October, 2021.

Deponent

(Bhagwat S/o Dinkar Phad)

IDENTIFIED & DRAFTED
BY ME:

Qazi Imtiaz Sahel



AFFIDAVIT

Bhagwat S/o Dinkar Phad

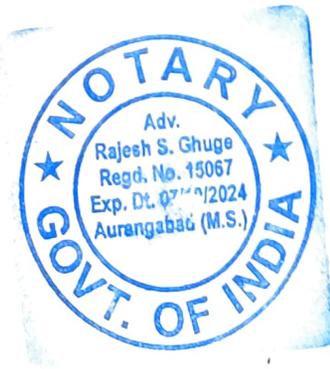
Aged... Occ... SERVICE...

R/O... Aurangabad

Do Hereby State on Oath. That the contents of Documents are True and Correct to the best of my knowledge & belief.

Hence Verified on.. 04/10/2021 at Aurangabad

Adv. Rajesh S. Ghuge
Notary Govt. of India
Regd. No. 15067 Aurangabad
Mob.7588161537



BEFORE ME

4/10/2021

Adv. Rajesh S. Ghuge
Notary Govt. of India
Regd. No. 15067, Aurangabad. (M.S.)

RIVER CITIES ALLIANCE

A city led movement



CONCEPT NOTE

THE RATIONALE

Rivers are among the most productive natural ecosystems providing a variety of environmental, economic, and social benefits. Cities that are located on the banks of rivers, or having rivers flowing through them, are distinctly placed to reap these benefits. However, most cities have just harnessed a fraction of this potential. Worse, in many cities development pressures have had a detrimental impact on the urban river stretches. The need for sustainable management of urban rivers, therefore, is paramount.

Traditionally, the management of rivers has been looked from a basin scale, which is captured in the philosophy of integrated river basin management. While this is certainly the ideal approach, the actual operationalization of the philosophy will need to happen in cities, especially in India. This is because urban areas are largely responsible for the deteriorated state of rivers in most parts of the country. Hence, since the cities have been part of the problem, they have a vital role to play in the solution as well.

Managing urban rivers is an emerging paradigm in India. The National Mission for Clean Ganga (NMCG) and the National Institute of Urban Affairs (NIUA) along with other partners have pioneered the work in this regard and have created several enabling frameworks and guidance documents for proliferating river-sensitive development in our cities. Namami Gange through its integrated and comprehensive framework on river rejuvenation has been leading the cause in Ganga river basin and has been chosen as a successful model for replication in other River basins of India. The stage is now set for on-the-ground action.

As cities start to implement the river-sensitive development agenda, there is a unique opportunity for them to learn from each other, while at the same time inspire others to take up progressive action on this front. The River Cities Alliance (RCA) has been conceptualized to serve as an avenue for precisely this purpose.

THE PURPOSE

The core objective of RCA is to provide the member cities with a platform to discuss and exchange information on aspects that are vital for sustainable management of urban rivers.

The supplementary objective of RCA is for NMCG, NIUA and partners to provide dedicated technical and handholding support to the member cities as they implement interventions for river-sensitive development.

THE INSPIRATION

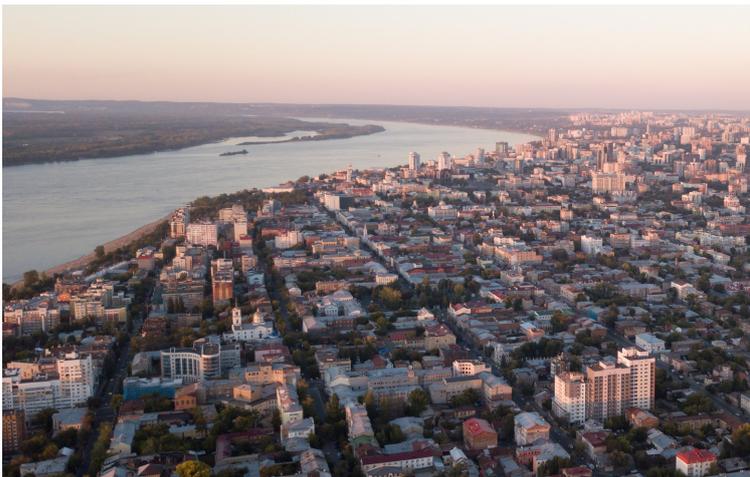
The ambitious call for river-sensitive development, was recognized by Hon'ble Prime Minister of India. In the 1st meeting of the National Ganga Council in December 2019, the Hon'ble Prime Minister stated that, **“There is need for a new river centric thinking in planning for cities on the banks of rivers. Cities should be responsible for rejuvenating their rivers. It has to be done not just with the regulatory mindset but also with developmental and facilitatory outlook”.**

THE OPERATING MODALITY

RCA has been envisaged as a city-led movement for promulgating river-sensitive planning and development. Hence, the agenda and operations for RCA will be determined by the member cities.

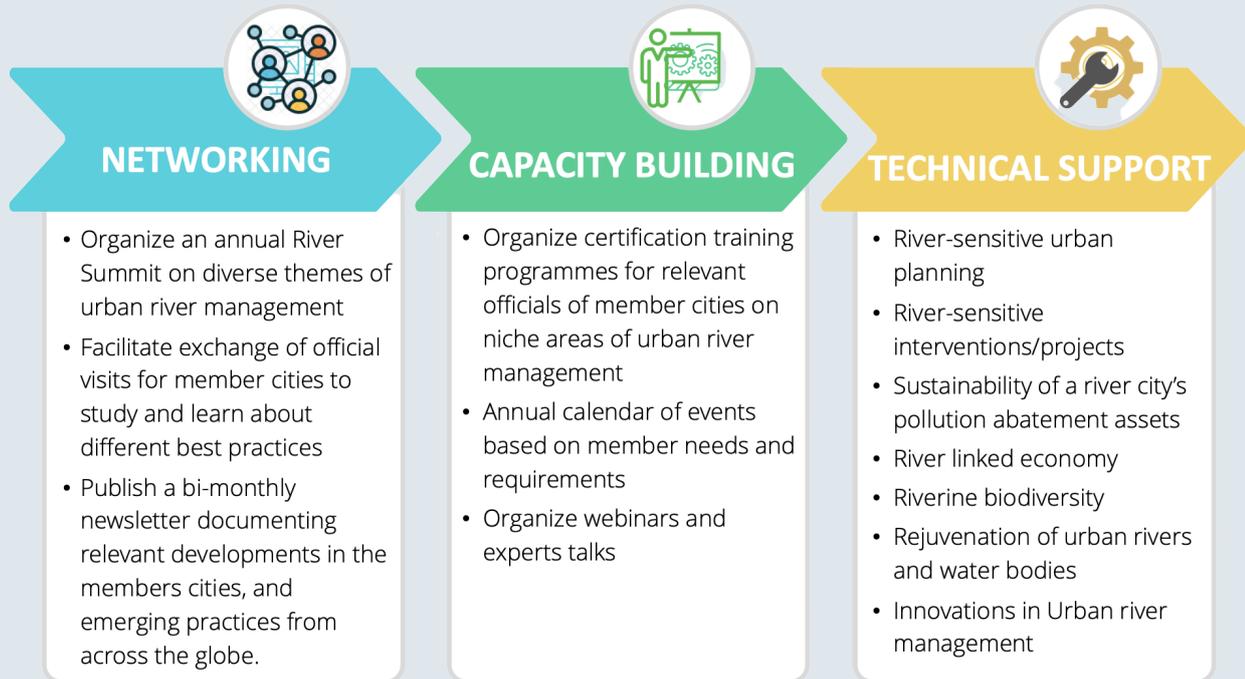
However, to allow member cities enough time to set up their own structure for managing the Alliance, a Secretariat will be established at NIUA in collaboration with NMCG to take on this responsibility for a period of 3 years.

Initially, the Alliance is being established with select River cities of Ganga basin and River cities from other river basins of India. The Alliance is however, open to all river cities of India.



THE ACTIVITIES

The activities that RCA will organize fall under three broad themes:



THE BENEFITS FOR MEMBER CITIES

RCA provides a number of tangible and intangible benefits for the member cities. These include:

- Opportunity to be part of the first of its kind initiative in the world.
- Opportunity for city commissioners to have interactions with peers and exchange know-how on practical aspects of river management.
- Opportunity to strengthen governance aspects for river cities.
- Access to state-of-the-art knowledge, frameworks, and tools for urban river management.
- Opportunity to participate in niche and unique capacity building programmes.
- Access to technical support for planning and implementing interventions for urban river management.
- Opportunity to serve as the site for unique demonstration projects that will be implemented by NIUA and NMCG.
- Advise on funding options for different interventions.
- Access to international partners working with NIUA and NMCG.
- Improve the liveability of the city thereby attracting external economic investments



THE COMMITMENT REQUIRED FROM MEMBERS

The Secretariat at NIUA will manage and coordinate most of the activities of RCA in the initial phase (3 years). It is expected that the Commissioner/Executive Officer to serve as the representative of the city in RCA. Additionally, it is expected that the member cities shall provide the following support to help in smooth functioning.

- Nominate a nodal officer/s for communications and facilitating all activities related to RCA.
- Implement the activities decided by collective consensus of member cities and through the annual calendar.
- Contribute to the newsletters whenever relevant
- Nominate appropriate staff for the capacity building programmes
- Participate in the webinars and experts talks organized by the Secretariat.
- Provide organizational support to the Secretariat

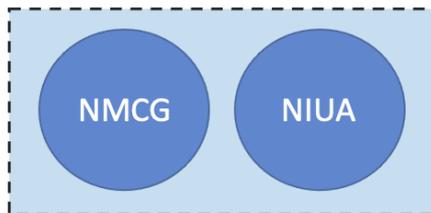
THE STRUCTURE

ADVISORY BOARD

1. DG, NMCG (Chair)
 2. Director, NIUA
 3. Principal Secretaries (UD) of selected states
 4. Renowned expert/s



SECRETARIAT



EXTERNAL PARTNERS

1. Centre for Science and Environment
2. World Resources Institute
3. School of Planning and Architecture, Delhi
4. CEPT University
5. Indian National Trust for Art and Cultural Heritage
6. Indian Institutes of Technology
7. Wildlife Institute of India
8. GIZ
9. US Army Corps of Engineers
10. Stockholm International Water Institute
11. Los Angeles Department of Water and Power
12. Asian Institute of Technology
13. Town and Country Planning Organisation
14. Donor Agencies
15. Others



MEMBER CITIES





RIVER CITIES ALLIANCE
A city led movement



161



National Institute of Urban Affairs

National Mission for Clean Ganga (NMCG) & National Institute of Urban Affairs (NIUA) invite you to the formal launch ceremony of

River Cities Alliance

First-of-its kind, dedicated platform for river cities in India to ideate, discuss and exchange information for sustainable management of urban rivers

25TH NOVEMBER 2021, 4:00 P.M TO 5:30 P.M

Launch by the Hon'ble Minister of Jal Shakti,
Government of India
Shri. Gajendra Singh Shekhawat

VENUE: BANQUET HALL, 3RD FLOOR, ASHOK
HOTEL, CHANAKYAPURI, NEW DELHI

For more details, please contact us on urvers@niua.org



09:00–10:00	Registration
10:00–11:30	Session 1: Operationalising the River Cities Alliance <ul style="list-style-type: none"> • Presentation on the Urban River Management Plan for Kanpur • Moderated discussion with Commissioners/Executive Officers of 30 member cities of the River Cities Alliance
11:30–12:00	Coffee Break
12:00–13:15	Session 2: Towards Holistic Urban River Management Roundtable discussion with Dr. Suresh Rohilla (CSE), Mr. Ritesh Kumar (Wetlands Alliance), Dr. Madhu Verma (WRI-India), Mr. Manu Bhatnagar (INTACH)
13:15–14:15	Lunch
14:15–15:15	Session 3: Forging synergies for the River Cities Alliance Panel discussion with International representatives
15:15–15:50	Coffee Break
16:00–17:25	Launch Ceremony of the River Cities Alliance
16:00–16:05	Welcome Remarks Sh. Hitesh Vaidya, Director, NIUA
16:05–16:15	Introducing the River Cities Alliance Sh. Rajiv Ranjan Mishra, Director General, NMCG, Ministry of Jal Shakti
16:15–16:20	Special Message Smt. Sunita Narain, Director General, Centre for Science and Environment
16:20–16:30	Reflections on the River Cities Alliance Sh. Pankaj Kumar, Secretary, Ministry of Jal Shakti
16:30–16:40	Reflections on the River Cities Alliance Sh. Durga Shanker Mishra, Secretary, Ministry of Housing and Urban Affairs
16:40–16:45	Unveiling the River Cities Alliance video Sh. Gajendra Singh Shekhawat, Hon'ble Minister for Jal Shakti
16:45–16:50	Unveiling the Urban River Management Plan for Kanpur Sh. Gajendra Singh Shekhawat, Hon'ble Minister for Jal Shakti
16:50–17:05	Keynote Address Sh. Gajendra Singh Shekhawat, Hon'ble Minister for Jal Shakti
17:05–17:15	Signing the declaration of the Alliance by member cities Member cities
17:15–17:25	Group picture Dignitaries and representatives of the member cities of the River Cities Alliance
17:25–17:30	Vote of thanks and closing remarks Sh. Ashok Kumar Singh, Executive Director (Projects), NMCG

दुर्गा शंकर मिश्र
सचिव
Durga Shanker Mishra
Secretary



भारत सरकार
आवासन और शहरी कार्य मंत्रालय
निर्माण भवन, नई दिल्ली-110011
Government of India
Ministry of Housing and Urban Affairs
Nirman Bhawan, New Delhi-110011

D.O. No. E-430/2021/Dir_NIUA

September 28, 2021

Dear

[Handwritten Signature]

The Ministry of Housing and Urban Affairs (MoHUA) through its nodal organisation National Institute of Urban Affairs (NIUA) is working with National Mission for Clean Ganga (NMCG) under the Ministry of Jalshakti on promulgating river-sensitive development in cities.

2. NIUA and NMCG have developed several frameworks and tools for planning and managing urban river stretches. These are already being implemented in cities of the Ganga River Basin.
3. In order to take forward the agenda of river sensitive cities, it is envisaged to have a platform '**River Cities Alliance**' for river cities to interact and share best practices for a sustainable unified vision of healthy rivers in India through active dialogues and partnerships. The attached **concept note** has all details.
4. The Empowered Task Force, chaired by Hon'ble Minister (MoJS) has approved the formation of the River Cities Alliance and has requested State authorities and cities to actively associate.
5. Thirty cities across India have been chosen initially to be part of the River Cities Alliance. In due course, more cities will be invited to join. From Maharashtra, **Pune** and **Aurangabad** are among the selected cities.
6. An onboarding workshop with all selected cities is proposed for 04th October at 3.00 p.m. through Zoom Meeting (Meeting ID - 867 3013 4234, Passcode - 298516)
7. You may kindly direct the city Commissioner to attend this meeting.

Contd..2/-

-2-

8. A line of confirmation may be shared with Mr. Rahul Sachdeva (rsachdeva@niua.org) and Shivani Saxena (shivanisaxena@nmcg.nic.in)

I look forward to immediate action on your part and a fruitful meeting with selected river cities.

Regards,

Yours Sincerely



(Durga Shanker Mishra)

Shri Bhushan Gagrani
Principal Secretary
Urban Development Department
Govt. of Maharashtra.

KHILARI INFRASTRUCTURES PVT. LTD.

AURANGABAD UNDERGROUND SEWERAGE PROJECT UNDER UIDSSMT



Summary of the Project Cost approved by Ministry of Urban Development (MOUD), Govt. of India

Sr. No.	Details of Sub-Work	Project cost under UIDSSMT
	Capital Expenditure	(In. cr.)
1	Collection System	234.84
2	Construction of Sewage Treatment Plant	104.34
3	Terminal Pumping Station	20.18
4	Intermediate Pumping Station at Ward No.98 near junction of 5 Nallas	1.04
5	Rising Main from Golwadi SPS to Nakshatrawadi and Ward No.98 to STP	5.29
	Total Project Cost	365.69

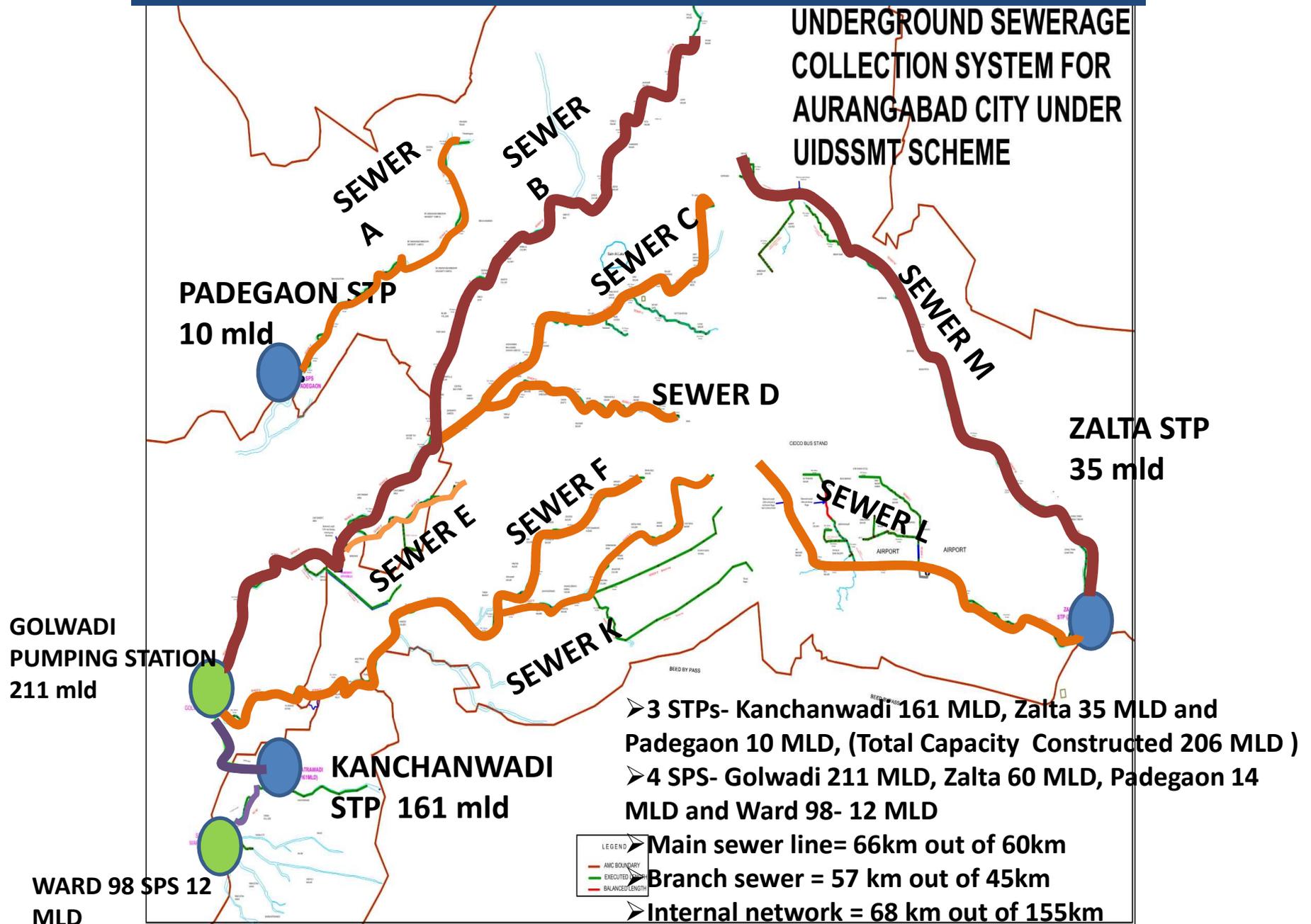
Accepted Tender Cost Rs. 464 Cr.

Brief Overview of the Scheme

- Aurangabad City Underground Sewerage Scheme has been completed under UIDSSMT .
- 191 km Sewerage collection Network of RCC/HDPE/DI Pipes ranging from 150 mm to 2000 mm diameters including 66 km of main sewer network completed.
- 4 Terminal Sewage Pumping Stations at Padegaon, Golwadi, Zalta, and One Intermediate Pumping Station at Ward No. 98
- STPs at 3 different locations for the total capacity of 206 MLD completed.

Name of STP	Change in Capacity (MLD)
Kanchanwadi	161.00
Padegaon	10.00
Zalta	35.00
Total Capacity (MLD)	206.00

Main Sewers Completed Under UIDSSMT



Completed Works Under UIDSSMT

Sr. No.	Sanctioned Works	Completed Works	Remarks
1	STPs- Kanchanwadi 161 MLD, Zalta 35 MLD and Padegaon 10 MLD,	206 MLD	Design and Construction of Sewerage Treatment Plant on Sequencing Batch Reactors Technology with PLC SCADA System at Kanchanwadi, Zalta & Padegaon
2	SPS's- Golwadi 211 MLD, Zalta 60 MLD, Padegaon 14 MLD and Ward 98-12 MLD	297MLD	
3	Rising Main – 3.7Km	3.7km	Completed
4	Main sewer line= 60km	66Km	Completed
5	Branch sewer = 45 km	54Km	Completed
6	DWC internal Sewer -155km	68km	Completed

SCOPE OF WORK:-

Main Sewers

- 1. Main Sewer A: Western part of Bibi KaMaqbara to University to Padegaon.**
- 2. Main Sewer B: Part of Kham River flowing through Himayat BaghNallah – Siddharth Garden– Banewadi – Golwadi.**
- 3. Main Sewer C: Majnu Hill – City Chowk – Barudgar Nala- Saraswat Bank-Nageshwarwadi – Varad Ganesh – Siddharth Garden.**
- 4. Main Sewer D: Nallah flowing through MGM – Jafar gate - Dalalwadi - S.B. Colony- Nageshwarwadi – Varad Ganesh – Siddharth Garden.**
- 5. Main Sewer E: Forest Office – Padampura - Kham River.**
- 6. Main Sewer F: Nallah flowing through St.Francis High School - Tilaknagar – Vedant Nagar –MIT College.**
- 7. Main Sewer K: High court – Gajanan Maharaj Mandir - Jawahar Colony Police Station – Shahnourwadi – MIT college – Nath Seeds- Golwadi.**
- 8. Main Sewer L: Deepali Hotel to Zalta STP**
- 9. Main Sewer M: Pisadevi Road to Zalta STP.**

Sewer Pipeline Including Main Sewers

Sr No.	MOC of Pipe	DIAMETER(mm)	Proposed Sewer Length(m)	Total Length (m)
1	DWC	200	18873.643	67512.643 Mtrs of DWC Pipe Total Length)
2		250	20930.97	
3		300	27708.03	
4	RCC	400	43998.93	120188.05 Mtrs of RCC Pipe Total Length)
5		450	1974.8	
6		500	16758.88	
7		600	16129.77	
8		700	6738.6	
9		800	4109.75	
10		900	9706.8	
11		1000	4036.22	
12		1200	2745	
13		1400	6369.8	
14		1600	995	
15		1800	6134.5	
16		2000	490	
Total(m)			187700.693	

FINANCIAL STATUS/FUNDING PATTERN

Approved project cost = Rs.365.69 Cr./Accepted Tender Cost Rs. 464 Cr.

Sr.no.	Details of expenditure	Amount
Funds Received		
1	Total Fund (GOI 60% + GOM 20%)	292.57 Cr.
2	AMC's Share 20% (73.13Cr.)	46.75 Cr.
3	Interest Amount	24.49 Cr.
Total		363.81Cr
Project Completion Amount : Rs 373.03 Cr		



Primary Unit at 161MLD STP



161MLD STP at Kanchanwadi



Chlorine Contact tank at 161MLD STP



Sludge Handling Units at 161MLD STP



35MLD STP at Zalta



Admin Building at 35MLD STP



Primary Unit at 35MLD STP at Zalta



HT-Sub station at 35MLD STP at Zalta

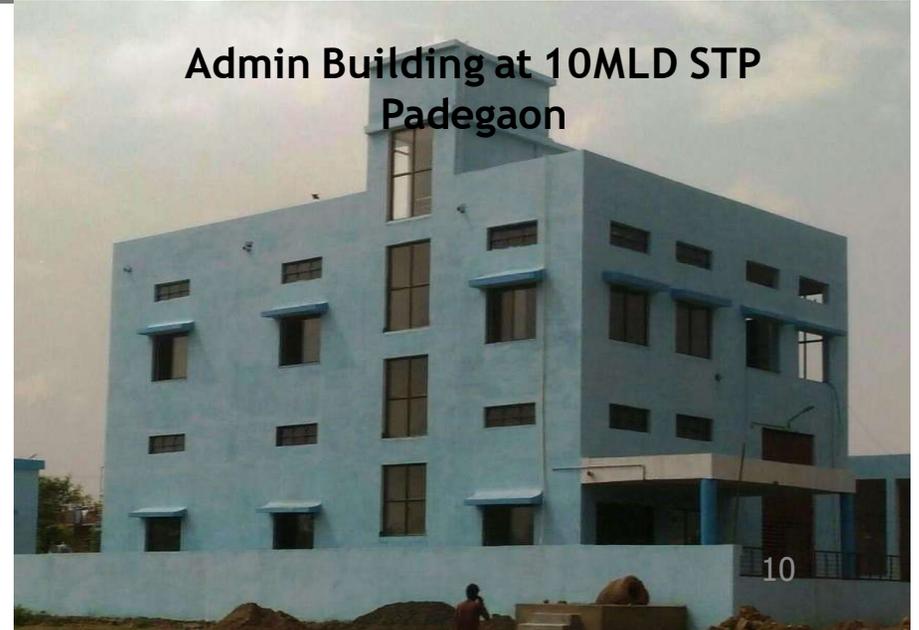
10 MLD STP Padegaon



Chlorine Contact tank at MLD STP Padegaon



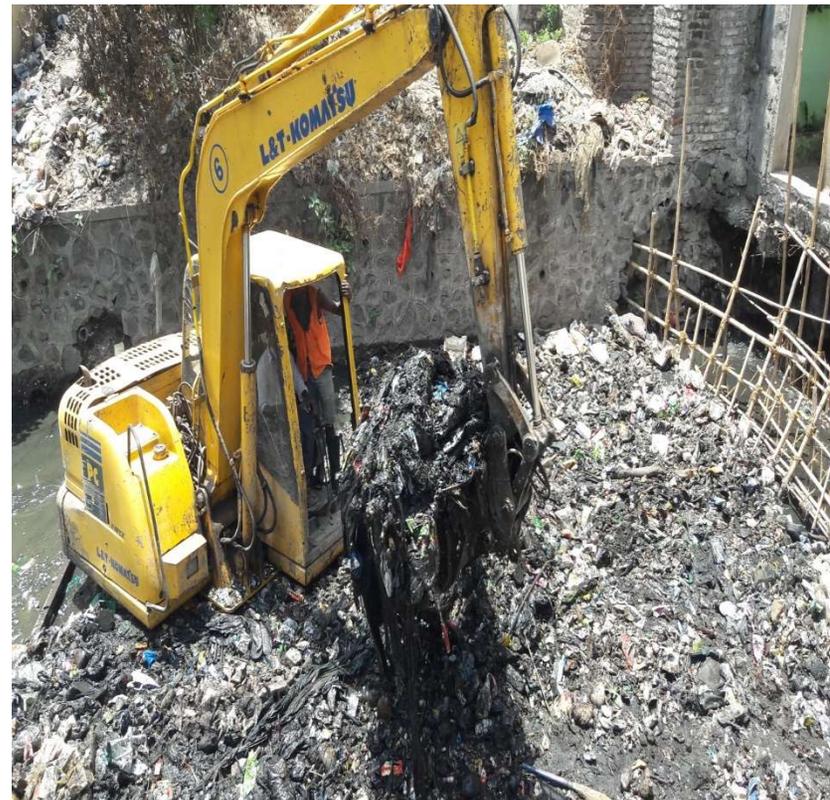
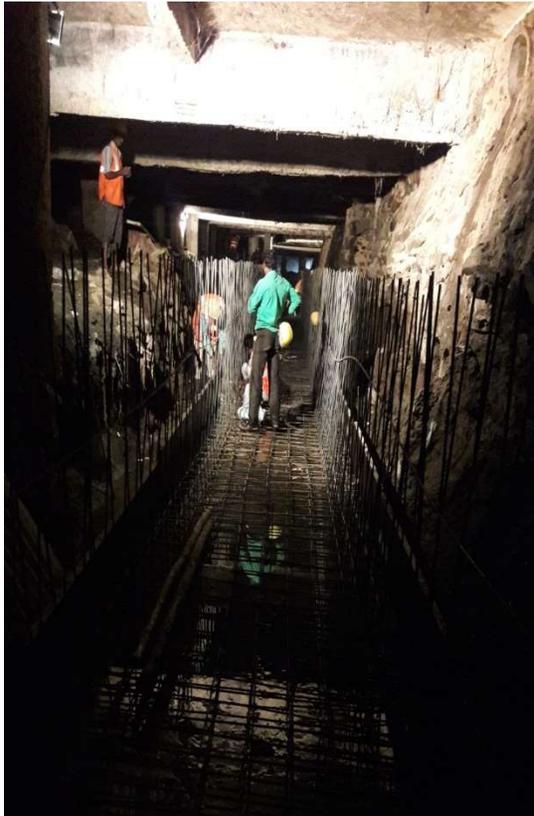
Admin Building at 10MLD STP Padegaon



Railway Crossing works by Trenchless Technology



PIPELINE WORKS - CRUCIAL CONDITION



PIPELINE WORKS - CRUCIAL CONDITION



PIPELINE WORKS - CRUCIAL CONDITION





Thank You

















































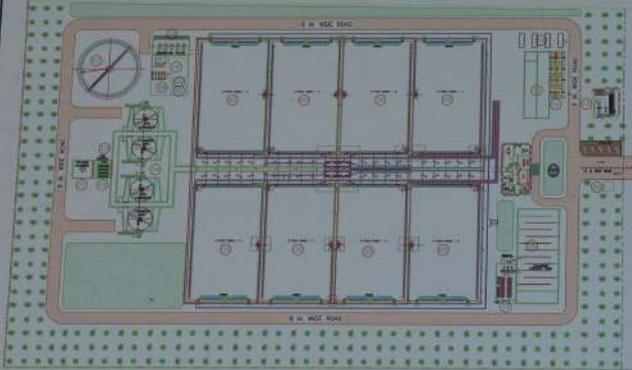








KHILARI INFRASTRUCTURE PVT. LTD. 101, NEW PRABHAT CENTER, SECTOR 1A, CBD BELAPUR, NAVI MUMBAI- 400614



NO.	DESCRIPTION	SIZE/CAPACITY	UNIT	REMARKS
01	INLET CHANNEL	3000 x 6000 x 2000 SAG	SI	
02	PRELIMINARY FINE SCREEN CHANNEL	3000 x 1800 x 1500 SAG	SI	
03	COARSE FINE SCREEN CHANNEL	3000 x 1800 x 1500 SAG	SI	
04	FINE SCREENS	12000 x 12000 x 900 SAG	SI	
05	GRASS	17000 x 3000 x 3000 SAG	SI	
06	GRASS	12000 x 3000 x 3000 SAG	SI	
07	GRASS	12000 x 3000 x 3000 SAG	SI	
08	GRASS	12000 x 3000 x 3000 SAG	SI	
09	GRASS	12000 x 3000 x 3000 SAG	SI	
10	GRASS	12000 x 3000 x 3000 SAG	SI	
11	GRASS	12000 x 3000 x 3000 SAG	SI	
12	GRASS	12000 x 3000 x 3000 SAG	SI	
13	GRASS	12000 x 3000 x 3000 SAG	SI	
14	GRASS	12000 x 3000 x 3000 SAG	SI	
15	GRASS	12000 x 3000 x 3000 SAG	SI	
16	GRASS	12000 x 3000 x 3000 SAG	SI	
17	GRASS	12000 x 3000 x 3000 SAG	SI	
18	GRASS	12000 x 3000 x 3000 SAG	SI	
19	GRASS	12000 x 3000 x 3000 SAG	SI	
20	GRASS	12000 x 3000 x 3000 SAG	SI	

NO.	DESCRIPTION	SIZE/CAPACITY	UNIT	REMARKS
21	ITC BUILDING	2000 x 2000 x 4000 HT	SI	
22	DE PLATFORM	7000 x 3500	SI	
23	PLANT PLATFORM	7000 x 3500	SI	
24	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
25	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
26	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
27	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
28	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
29	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
30	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
31	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
32	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
33	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
34	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
35	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
36	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
37	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
38	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
39	POWER HOUSE	20000 x 10000 x 8000 HT	SI	
40	POWER HOUSE	20000 x 10000 x 8000 HT	SI	

161 MLD SEWAGE TREATMENT PLANT BASED ON SBR TECHNOLOGY AT KANCHWADI, AURANGABAD.





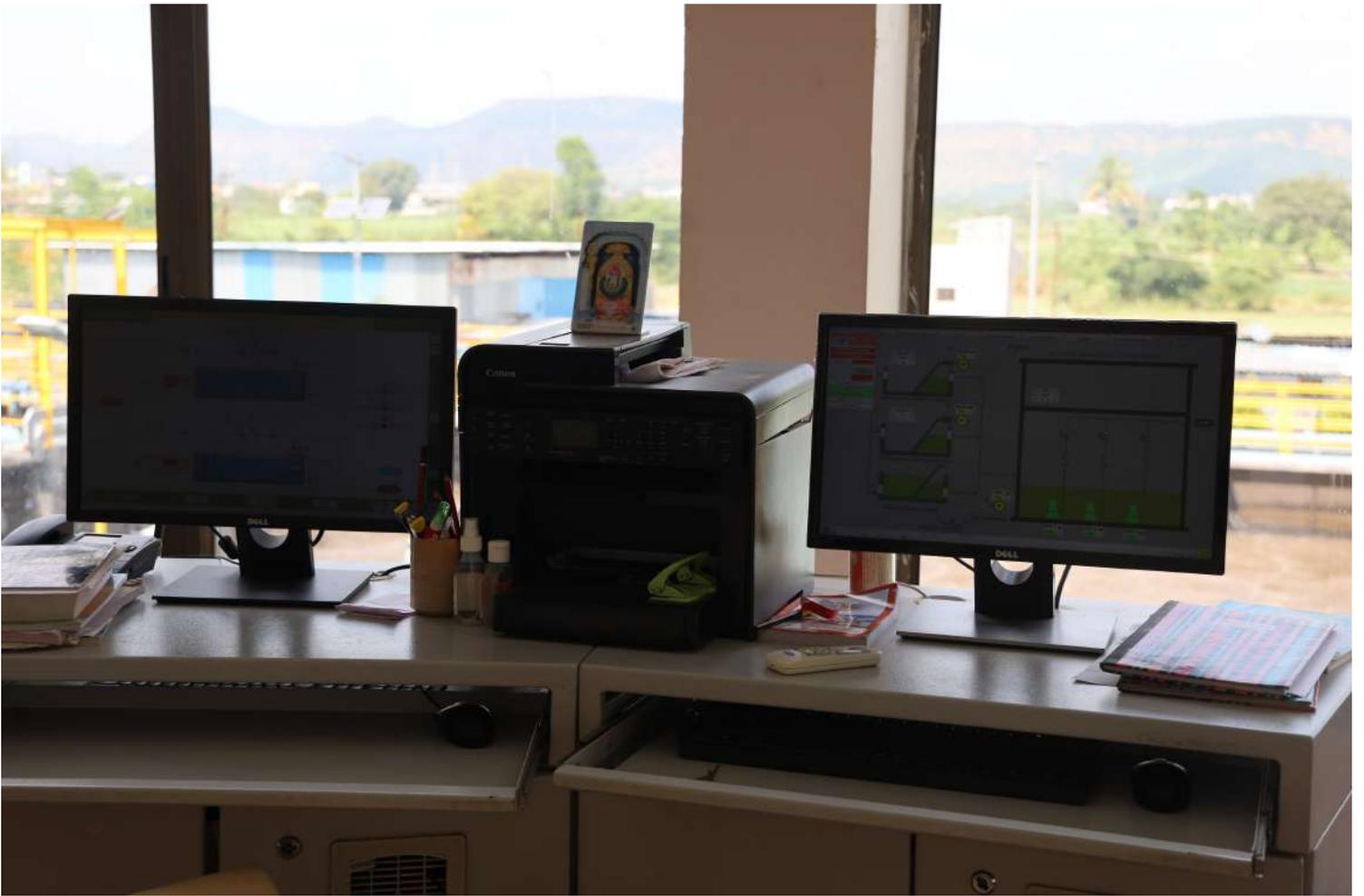








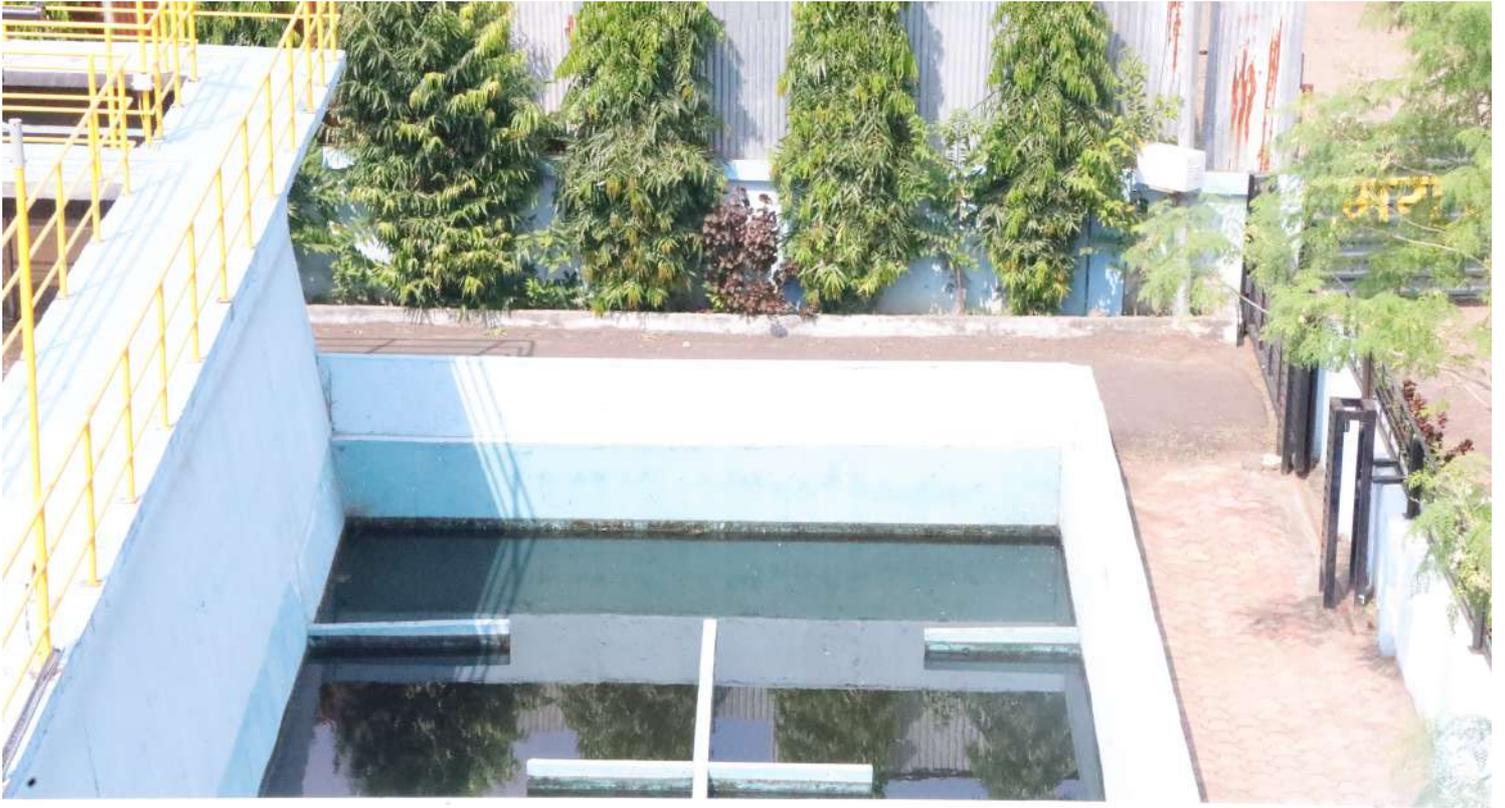




































KHILARI INFRASTRUCTURE PVT. LTD. 101, PRABHAT CENTER, SECT-1A, CBD BELAPUR, NAVI MUMBAI-400614







































Aurangabad Municipal Corporation

Underground Drainage System for Satara Deolai Town



YASH
INNOVATIVE
SOLUTIONS

Contents

- **Aurangabad City Introduction.**
- **Satara Deolai Information**
- **Draft Development Plan**
- **Existing Status and Project Need**
- **Population Adopted**
- **Project Component Details**
- **Key Plan**
- **Project Features**
- **Project Cost**
- **Benefits of Project**

SATARA DEOLAI – At A Glance



Satara Deolai were individual Gram Panchayat till 28.08.2014. Municipal Council formed on 28th August 2014. Later Merged in Aurangabad Municipal Corporation on 26.02.2016

Area of 33.17 Sqkm, Almost 25% of the existing area of Aurangabad. DP finalized by CIDCO.

Population in 2011 is 50577 as per census. Growth rate about 138% in last decade.

Proximity to Growth Engines surrounding Aurangabad

DMIC Shendre	10	DMIC Bidkin	20
Main City	3	Railway Station	2
Airport	6	Solapur Dhule NH 211	0

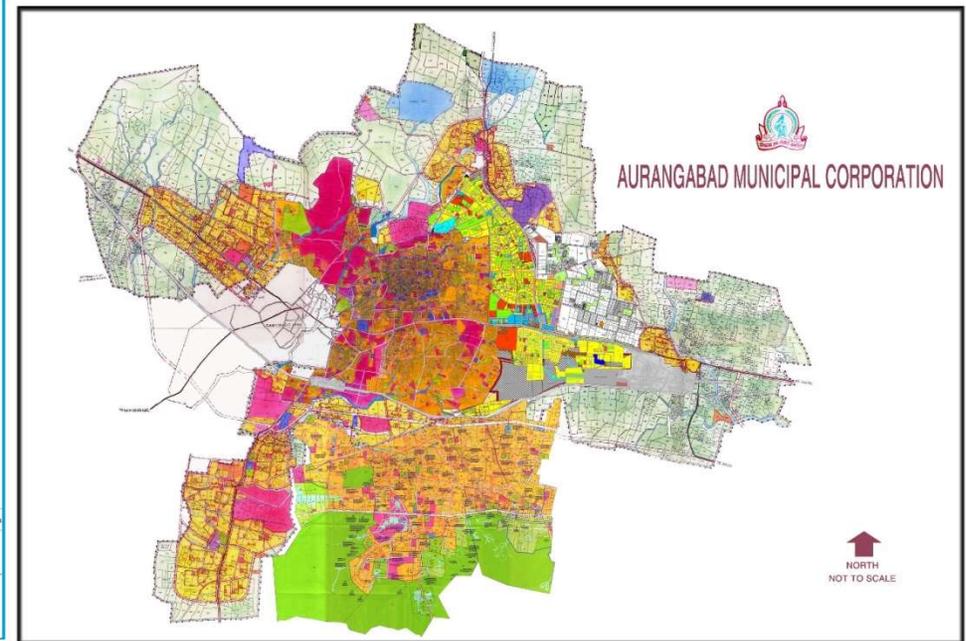
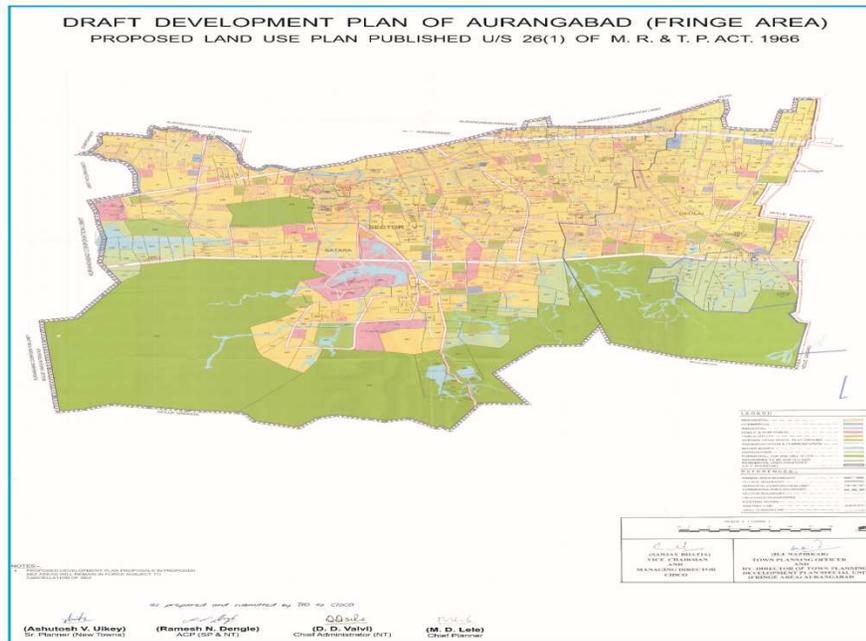


No planned water supply, sewerage and other basic infrastructure facilities.

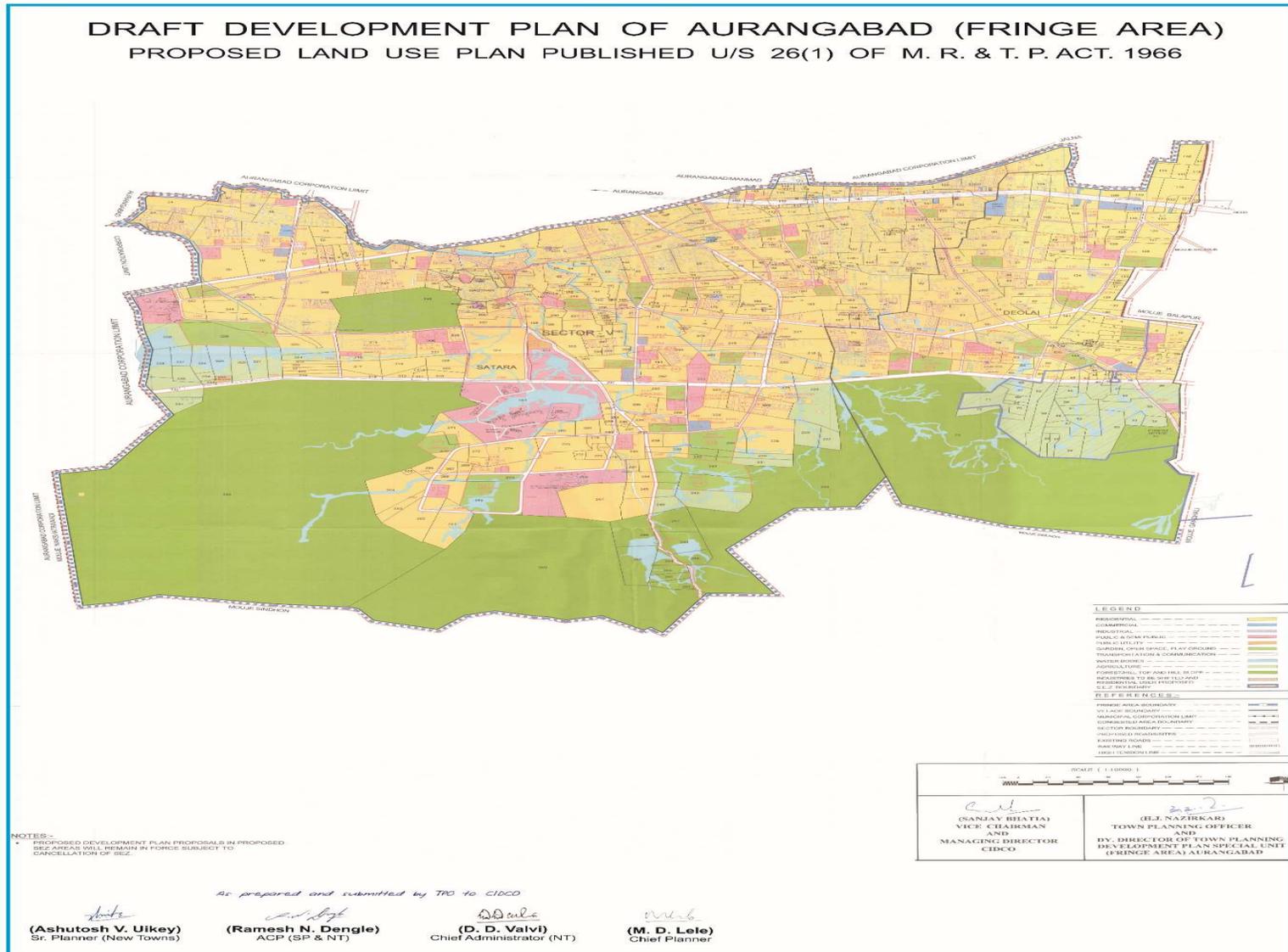
Satara Deolai - Details

- In 2013 CIDCO published the draft development plan for the fringe area consists of 28 villages around the AMC limit.
- Depending upon the trends of development, entire fringe area is divided into six planning units.
- Out of these, unit no 5 includes the area of Satara and Deolai.

Name of Village / Ward	Area As per Village Boundary in sq km	Population As per Village Boundary	Area As per Ward Composition in sq km	Population As per Ward Composition
Deolai (Ward no 114)	7.81	10610	10.30	27774
Satara (Ward no 115)	25.36	39948	24.25	25142
Total	33.17	50558	34.55	52916



Draft Development Plan



Existing Status and Project Need

- As there is no basic infrastructure present in Satara Deolai ward.
- To have an efficient and uninterrupted water supply, more hygienic living conditions and smooth transport facilities, well planned water supply, underground drainage system and DP Roads needs to be designed by Aurangabad Municipal Corporation.

Population

Sr. No	Year	Satara	Deolai	Total	Growth %
1	1971	2027	814	2901	
2	1981	2176	1423	3599	24.1
3	1991	3611	2180	5791	60.9
4	2001	18124	3217	21341	268.5
5	2011	39973	10604	50577	137.0

Population Projection

Sr.No	Year	Population Souls	Status of year
1	2011	50,577	Census Population
2	2025	2,36,489	Base Year (0 year)
3	2040	4,31,875	Intermediate Year (15 years)
4	2055	5,79,345	Ultimate Year (30 years)

Population Adopted

S.N.	Details	Area in Ha	Anticipated Density in Souls /Ha for 2025	Anticipated Population in Souls for 2025	Anticipated Density in Souls /Ha for 2040	Anticipated Population in Souls for 2040	Anticipated Density in Souls /Ha for 2055	Anticipated Population in Souls for 2055
1	Developed Residential Area (As per DP up to 2037)	600	110	66000	230	138000	325	180000
2	Present Undeveloped Residential Area (As per DP up to 2037)	709	175	124075	365	258785	450	319050
3	Total	1309		236489		431875		579345
4	Anticipated increase in Residential area after 2037 to 2055 (10%)	130					475	58500
5	Adopted Population			236489		431875		579345

Demand

Sewerage

Sr. No.	Year	Present Stage 2025	Immediate Stage 2040	Ultimate Stage 2055
1	Pop. In souls	236489	431875	579345
2	Demand in Mld with 135 LPCD	31926015	58303125	78211575
3	Demand in Mld	31.93	58.30	78.21
4	Institutional Demand in Mld	3.19	5.83	7.82
6	Total Daily Water Demand in Mld	35.12	64.13	86.03
7	Sewage Generated 80%	28.09	51.31	68.83
8	Infiltration (MLD)	0.54	0.54	0.54
9	Total Demand in Mld	28.63	51.85	69.37

Satara Deolai UGD Component Details

Sewer Pipeline Details

DIA in mm	LENGTH IN M	MATERIAL
200	207174.00	RCC
250	10011.00	RCC
300	5742.00	RCC
400	11590.00	RCC
500	11609.00	RCC
600	1604.00	RCC
700	1359.00	RCC
800	1085	RCC
900	4465	RCC
1000	1274	RCC
1200	1249	RCC
Total	257162	

Sewage Pump House Details

Description	Details of components
Wet well for Mhada Colony	Capacity- 5.30 MLD, Diameter -8.00m, Type: R.C.C construction Location: Gut No.74 At Mhada Colony
Manhole Pumping Station	Capacity – 0.6 MLD Location: At Sudhakar Nagar Gut No. 317

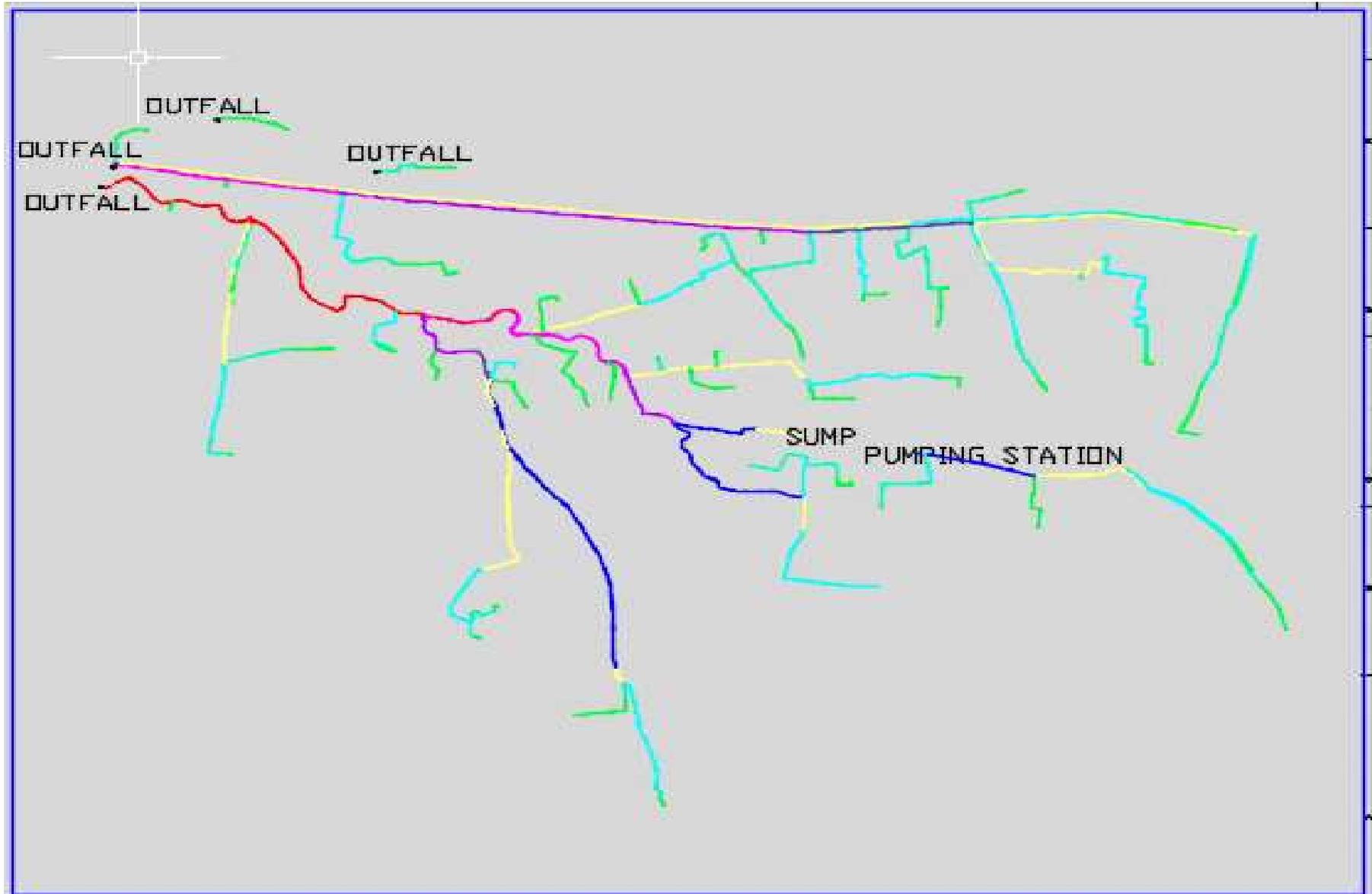
Sewage Pumping Details

Sr. No.	Name	Discharge(m ³ /hr)	Total Head (M)	No of Pumps	Recommended HP
1	Avg Flow	103	13	6	10

House Service Connection

Description	Details of components
Property Connections	Properties covered – 35000 Nos Inspection Chamber – 17500 Nos

Key Plan



Project Features

- There is a total of 257km of sewerage pipeline in Satara Deolai area. All the pipelines are RCC NP III and are proposed to be 200 mm to 1200 mm in diameter.
- There are outfalls in 9 places in total and it is proposed to connect all the pipelines to the existing 1400 diameter pipelines.
- Due to low lying area, a pumping station has been proposed at Deolai, a capacity of 5.3 MLD at Mhada Colony and a 0.6 MLD pre-fabricated manhole pumping station at Sudhakar Nagar II in Satara area.
- A Compound wall is proposed for the pumping station at Mhada Colony.
- The total number of manholes proposed is 10,000.
- As many as 17,500 property connections are proposed for 35,000 properties.

Project Features

- Utility Shifting is provided for repair or relocation of water supply pipelines, cables, etc. while working on the scheme.
- Road Restoration has been included for the maintenance of the road during the work of the scheme.
- Also included Suction cum Jetting Machine and Trial Run.
- There is no need to propose a new sewage treatment plant as the sewage at Satara and Deolai is being connected to the existing sewage treatment plant at Kanchanwadi 161 MLD through an existing 1400 mm pipeline.
- The total proposed cost of the scheme is Rs. 223.82 crores.

Recapitulation Sheet - Sewerage

Sub Work No.	Name of Sub Work	Total Cost of Components in Rs.	Cost In Rs Crores.
1	Working Survey - (for 257 km Length)	12512368.00	1.25
2	Collection system (Length - 257 Km)	1296805528.00	129.68
3	Sump (Near Ujwalatai Pawar School)	2293122.89	0.23
4	Rising Main 350mm DI K9, (Length - 200 M.)	1044037.00	0.10
5	Rising Main 200mm DI K9, (Length - 200 M.)	1171687.00	0.12
6	Pumping Station (Civil)	7576235.00	0.76
7	Mechanical Works of Pumping Station	9738079.13	0.97
8	Compound Wall (Length - 150 m)	2263601.00	0.23
9	House Service Connection (35000 nos)	361733113.65	36.17
10	Utility Shifting	13305936.00	1.33
11	Road Restoration	273321472.66	27.33
12	Special Purpose Vehicle Mounted Combination of Suction cum Jetting Machine	8204731.00	0.82
13	Trial and Run For Three Months	1403893.00	0.14
14	Prefabricated Manhole Pumping Station	4343000.00	0.43
	Total Cost Rs	1995716804.33	199.57
	Provision for 12% GST	239486016.52	23.95
	Total Net Cost	2235202821.00	223.52
15	Express Fedder	1751000.00	0.18
16	Royalty Charges for Natural Sand, Rubble stone above 40mm size & Hard Murrum of PWD Item	1198778.00	0.12
	Grand Total	2238152599.00	223.82

Anticipated Benefits of the UGD Project

- Improvement in Environment, sanitation condition
- Better hygienic condition and healthy environment for Citizens
- Decrease in River / Nalla pollution
- Network will prevent pollution on road and near human settlements
- Improved environment will attract more investment in the city due to its competitiveness



Aurangabad Municipal Corporation

CROSS CONNECTIONS OF OPEN DRAINAGE THROUGH SUKHNA RIVER, KHAM RIVER AND MAIN NALLA FLOWING IN THE AURANGABAD CITY



Contents

- **Aurangabad City Introduction.**
- **Existing Status and Project Need**
- **Sewer Line Leakage Problems**
- **Sewer Locations**
- **Project Cost**
- **Benefits of Project**

AURANGABAD– At A Glance



Aurangabad is one of the important districts of Maharashtra State located in the central part of the State

Aurangabad Municipal Corporation Area of 171.67 Sqkm, after addition of Satara Deolai area

Population in 2011 is 1165146as per census.

Proximity to Growth Engines surrounding Aurangabad

DMIC Shendre	10	DMIC Bidkin	20
Main City	3	Railway Station	2
Airport	6	Solapur Dhule NH 211	0

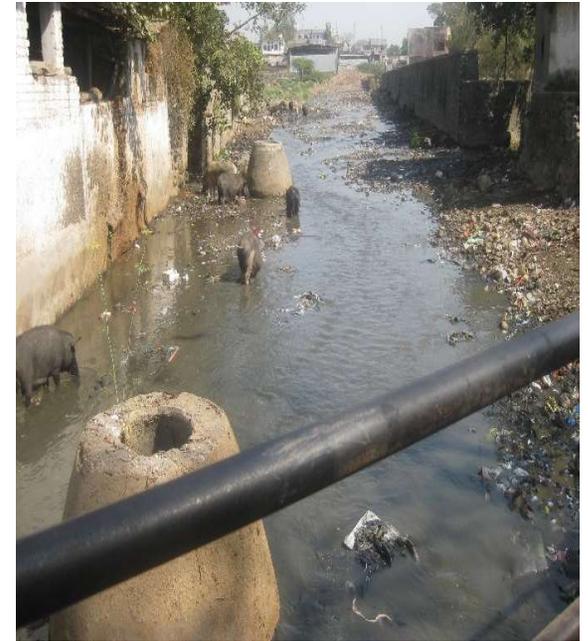


Aurangabad Municipal Corporation is responsible to provide basic Infrastructure

Existing Status and Project Need

- Aurangabad Municipal corporation have commissioned the underground drainage scheme under UIDSSMT State & Central funding for the Aurangabad city, but after commissioning of the scheme, it has been seen that sewage is flowing through the at many places in the nallas of the city.
- At most of the places, all households are discharging their sewage through open drains which ultimately find its way into the river.
- This waste water flow in the Kham river, ultimately reaching to the Jayakwadi Dam, thus polluting the water which is the only source of Aurangabad City
- The untreated waste water flow to the Kham River and Sukhana river, polluting the ground water, affecting the water quality of the borewells and open wells
- Also it is seen that the waste water is pumped by the farmers for agriculture purpose which will be a health issue.

Existing Status



Sewer Line Leakage Problems

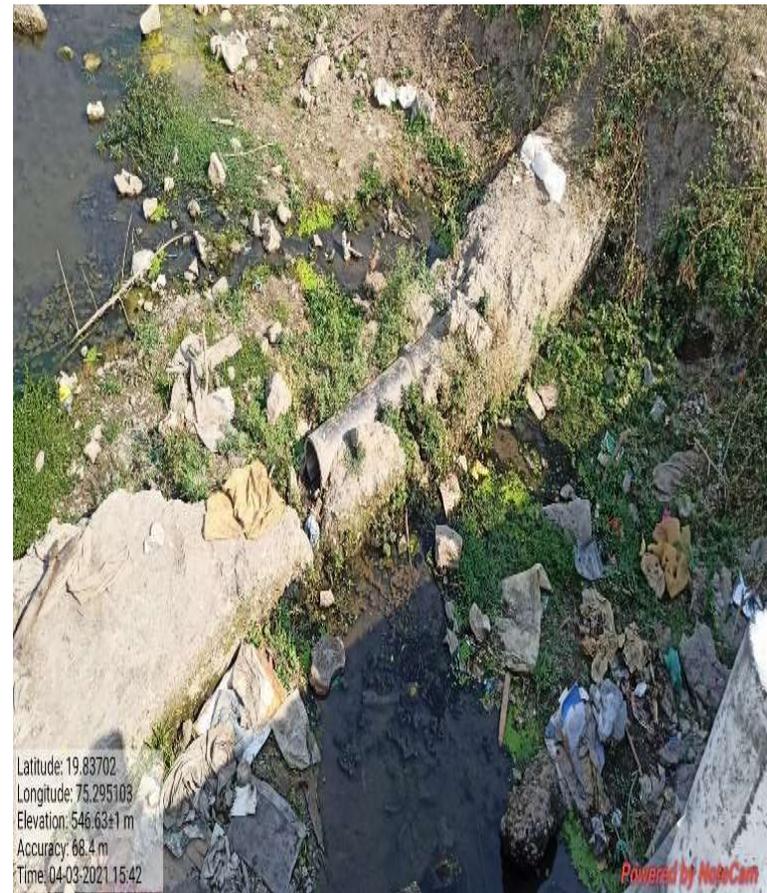
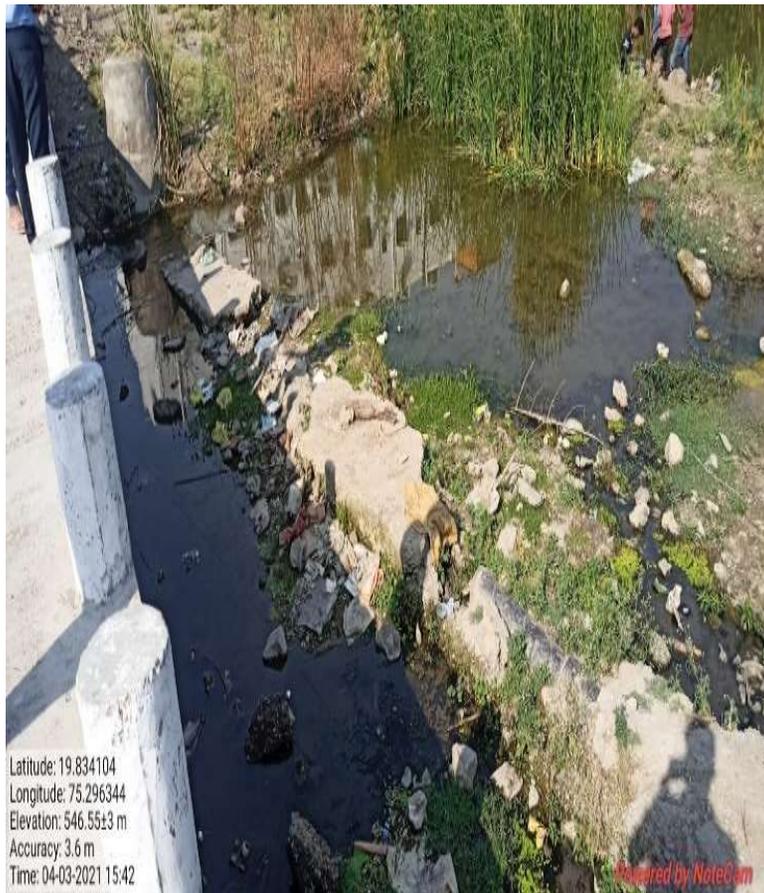
Our authorized representatives have walked over the streets, at the location of various works and along the alignment of all roads, existing drains etc., and Finds out the various problems along the each sewer line, among all the problems here are pointing out some few

Point no.A9 – Upto This point nalla are dry but at this point BBM Manhole & 300 mm DWC pipe damaged. This Flow directly fall into nalla It should Connect to Nearest RCC Manhole @20m Distance and encasing. This is the main Reason to increase the flow of nalla.



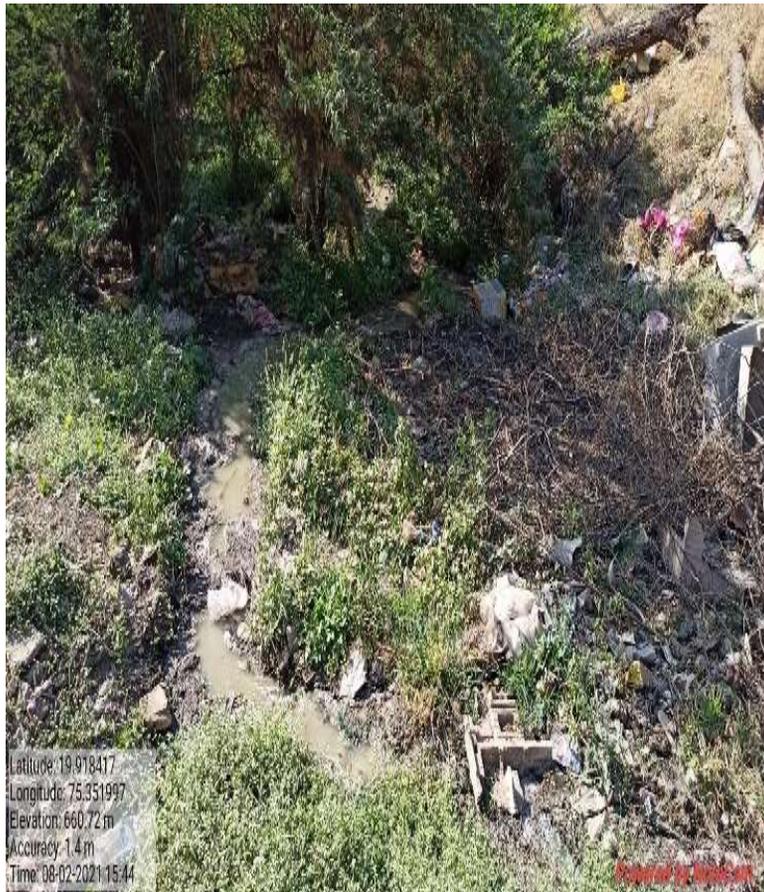
Sewer Line Leakage Problems

Point no.W98-1 – At This point flow in nalla are from Natural Lake. Also 150 mm SWG pipe are Damaged. It Should Connect to Nearest BBM Manhole@25 m with encasing. Also 300 mm RCC line directly fall into nalla it should Connect to the nearest manhole @180 m.



Sewer Line Leakage Problems

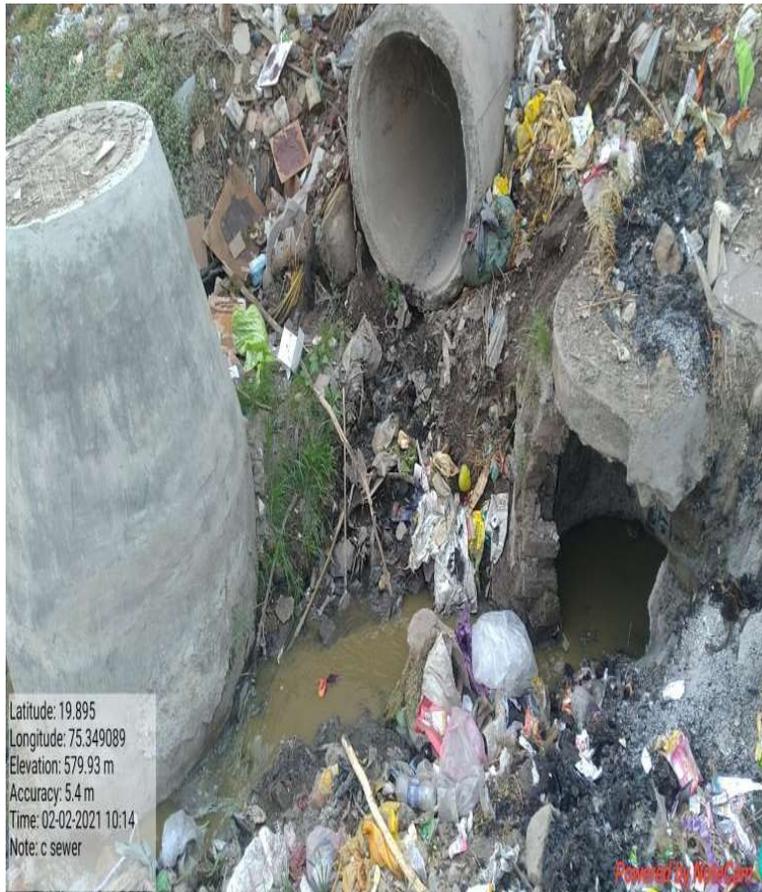
Point no.B5 – Central Jail outlet directly Came into Nalla. Now the Connection Work is In progress. But due to old Manhole damage near to Rajdhani Hotel , Harsul Road which is the Major reason to increase the flow of nalla from this point. It should be reconstruct and provide 350 mm RCC line



Sewer Line Leakage Problems

Point no.C6-1- Aurangabad Public High school Hattesinghnagar

At this point house hold connection directly fall into the nalla. BBM manhole also broken which leads to increase of flow. Manhole should be repaired and house hold outlets should be connect to the main sewer line



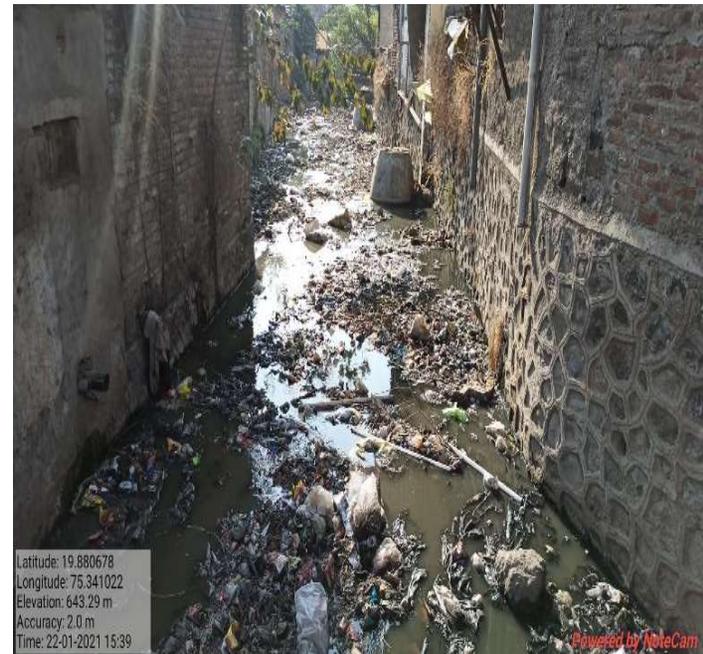
Sewer Line Leakage Problems

Point no.D13 – one small branch nalla come from Bhavani nagar area it should connect to main sewer line with catch pit and connect to RCC Manhole @60m with 350mm RCC line.

Some House Outlets are directly fall into nalla.it should Connect to the nearest manhole with the help of

1.100 mm SWR pipe directly Fall into nalla it should connect to Nearest BBM manhole @20m distance.

2.100 mm SWG pipe directly Fall into nalla it should connect to BBM manhole @20m distance.



Sewer Line Leakage Problems

Point no.F3 – Upto this point nalla Dry. Due to BBM Manhole Leakage problem form this point nalla has some flow. It should be repair. It is the main reason of nalla flow increases from this point.



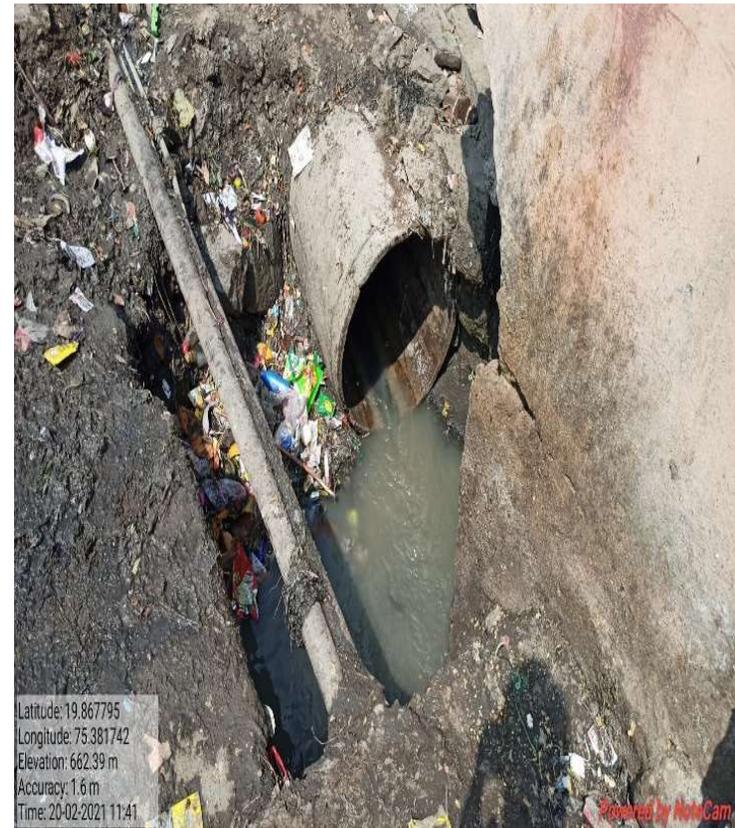
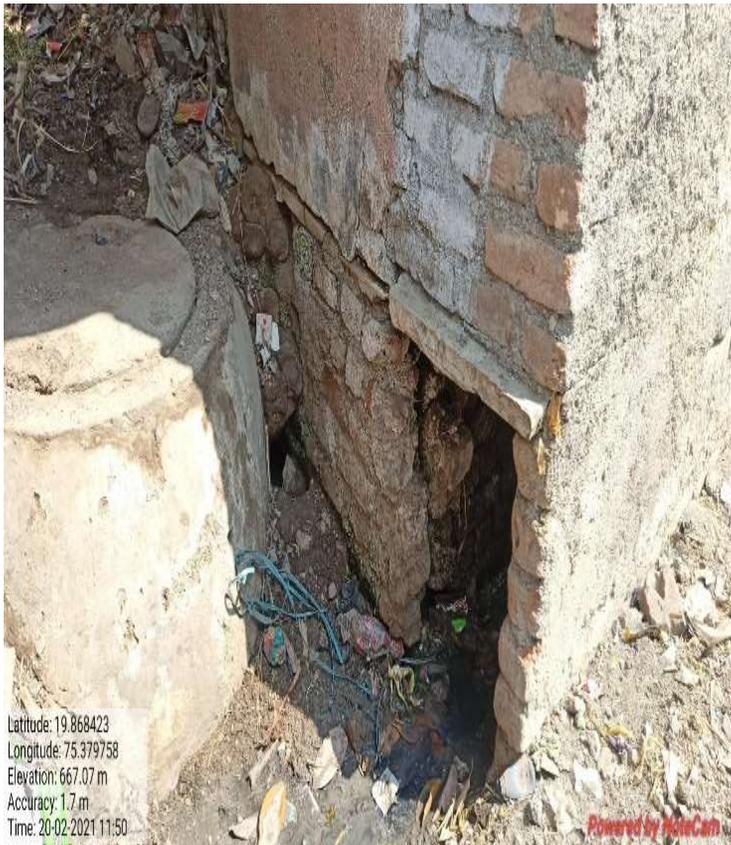
Sewer Line Leakage Problems

Point no.K3- 300 mm RCC pipe flow directly fall into nalla . It Should Connect to the Nearest RCC manhole which is at a Distance of 6 m. upstream side of this Nalla are dry.



Sewer Line Leakage Problems

Point no.L5 – At this point 1 old manhole Leakage Problem and this flow directly come to Jay Bhavani nagar to Ramnagr road. It is the main reason to increase the flow of nalla. We should repair it.

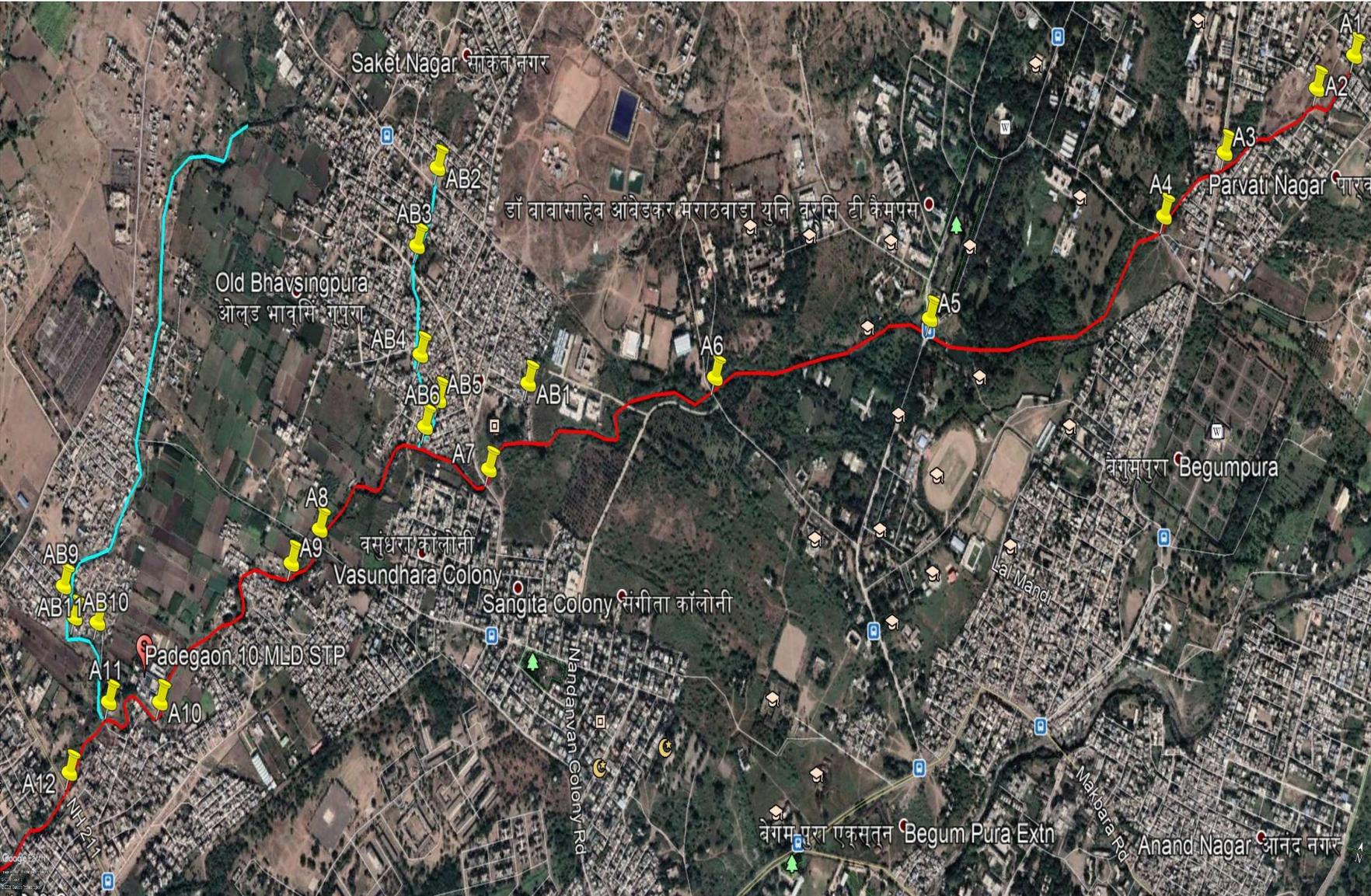


Sewer Line Leakage Problems

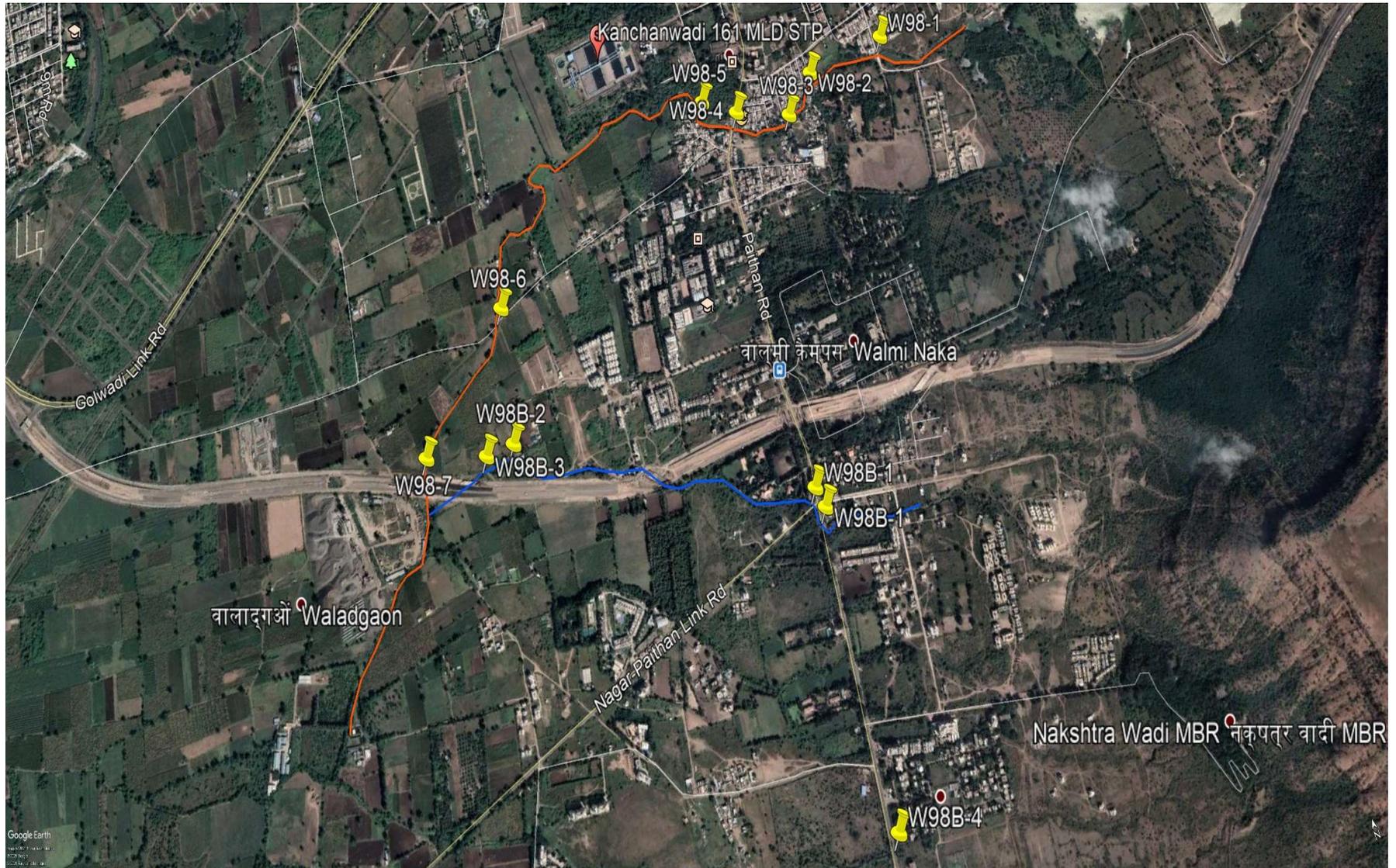
Point no.M10 – At this point 1 old Manhole damage it should be repair. And connect to nearest BBM manhole @20m with 300 mm RCC line. Also 1 open drain Directly fall into nalla. It should connect to manhole with 1 catch pit and 350 mm Rcc pipe of 40m length.



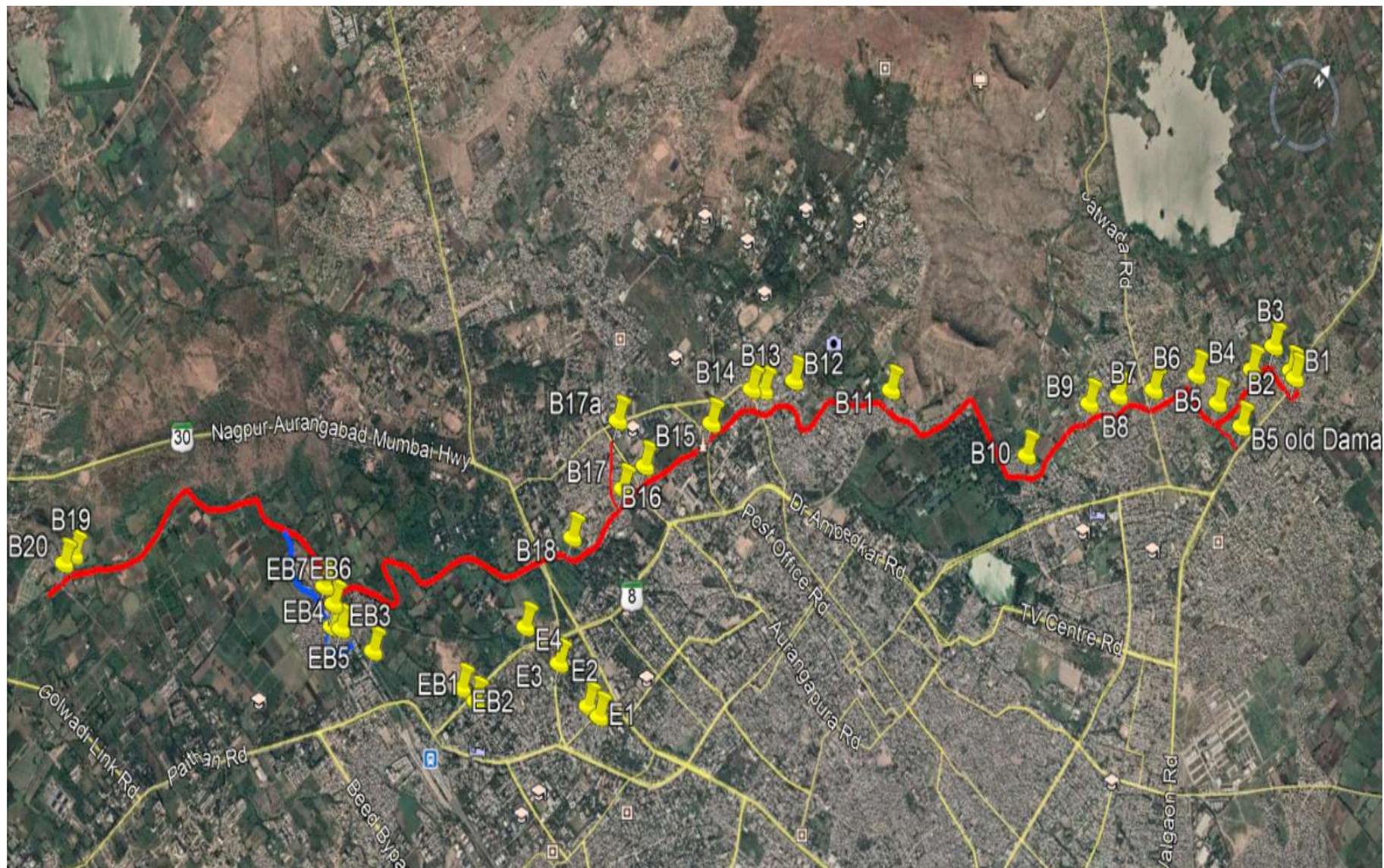
Sewer Locations – A Sewer



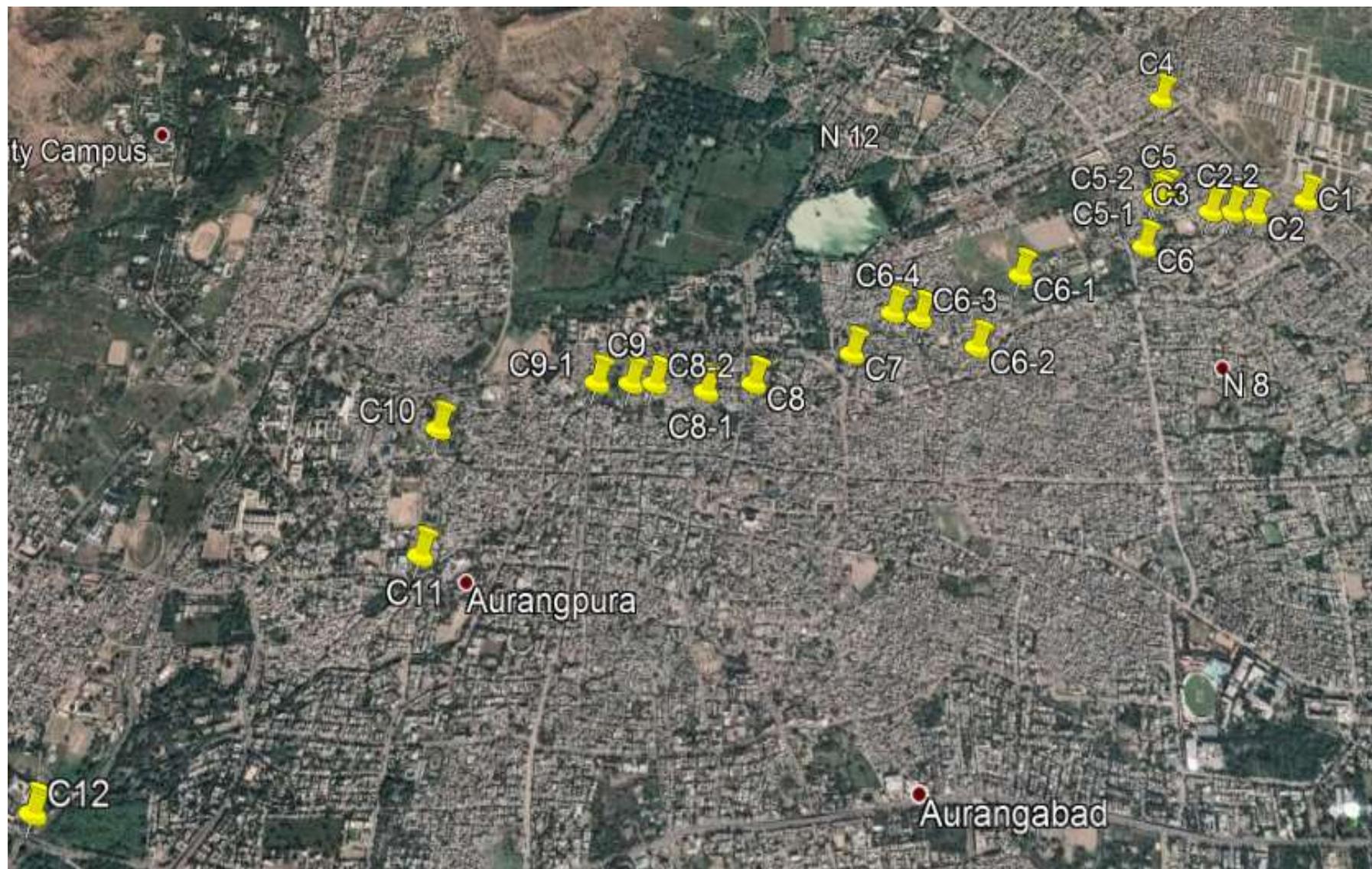
Sewer Locations – W98 Sewer



Sewer Locations – B Sewer



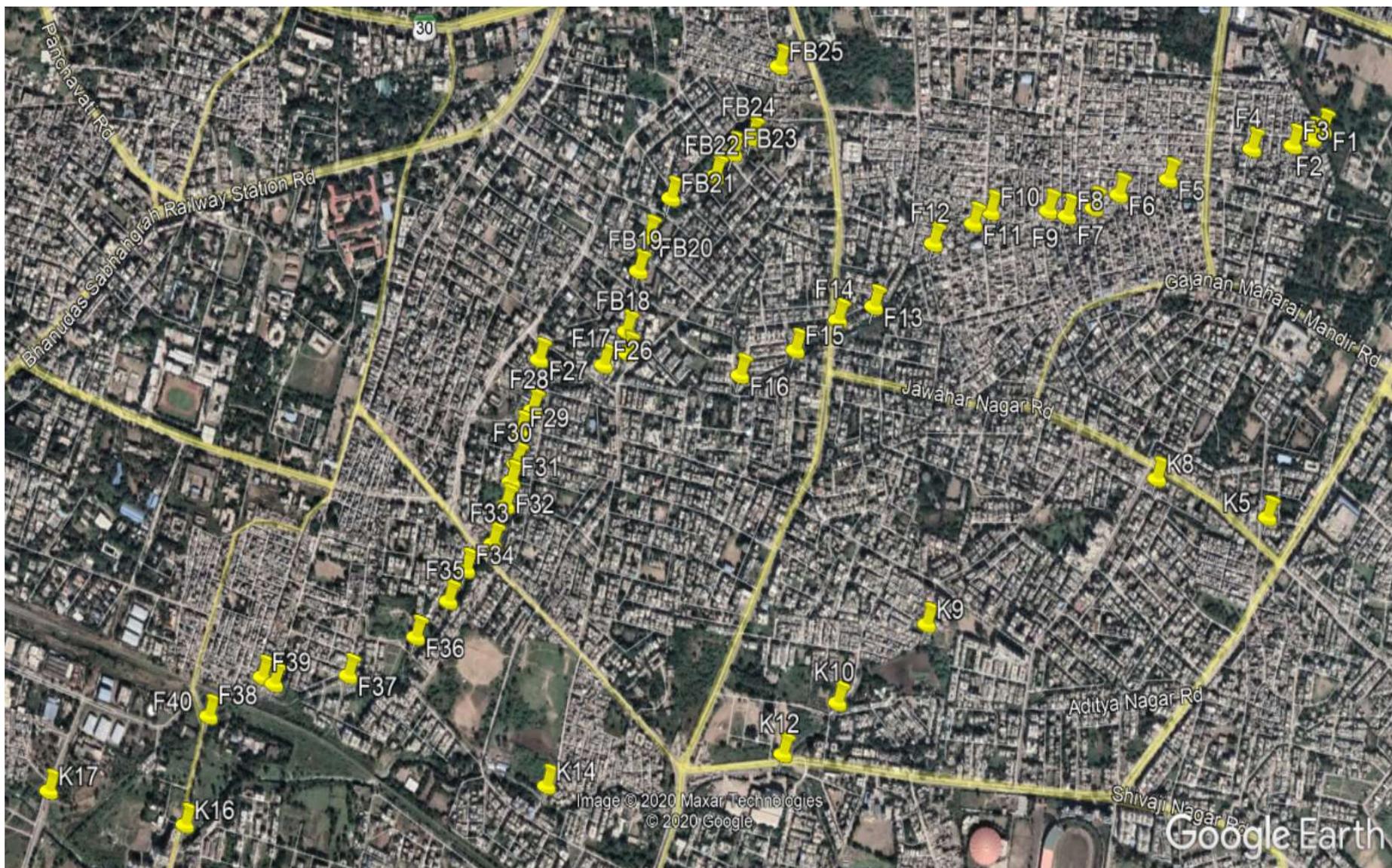
Sewer Locations – C Sewer



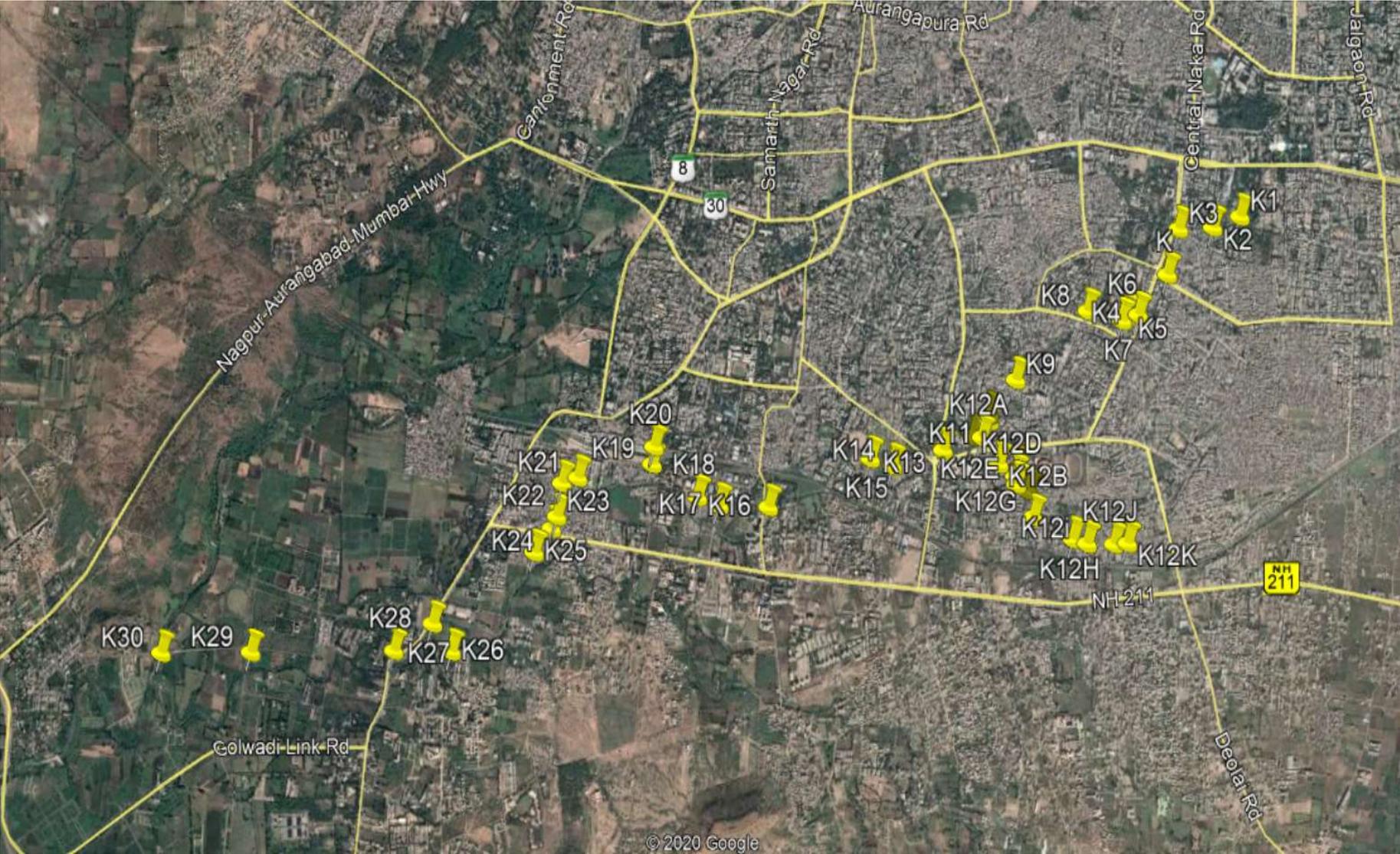
Sewer Locations – D Sewer



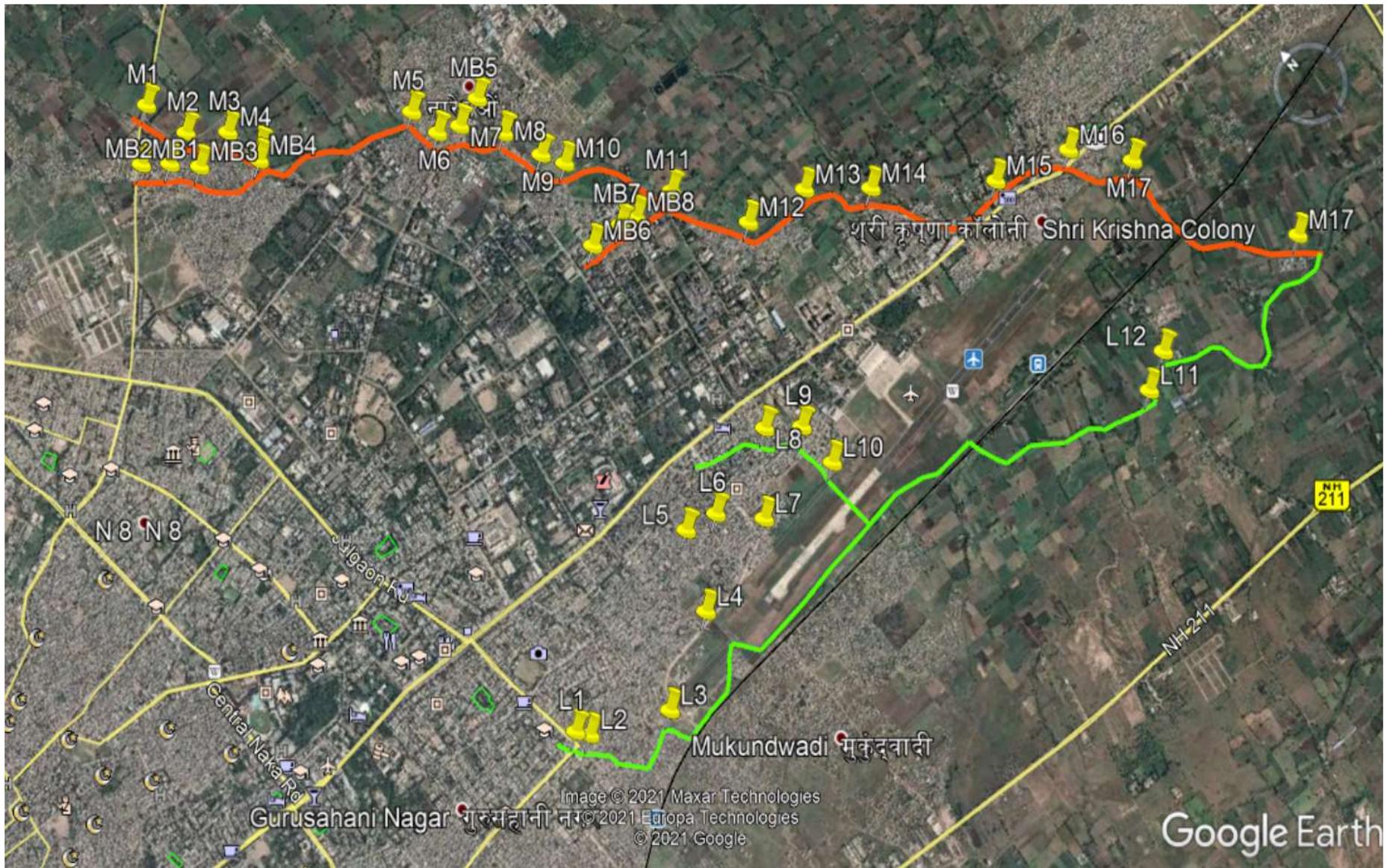
Sewer Locations – F Sewer



Sewer Locations – K Sewer



Sewer Locations – L & M Sewer



Recapitulation Sheet - Sewerage

RECAPITULATION SHEET						
Kham & Sukhna River Basin Nalla sewer Connection Cost						
Sr. No.	Sewer Name	Estimated Cost in Rs	12 % GST on Estimated Cost	Consultancy Charges 3 %	18 % GST on PMC Charges	Grand Total
1	A & Ward No.98 sewer Cost	8050196	966024	270487	48688	9335394
2	B & E sewer Cost	10196498	1223580	342602	61668	11824348
3	C Sewer Cost	7466138	895937	250862	45155	8658092
4	D sewer Cost	25268797	3032256	849032	152826	29302909
5	F sewer Cost	6780516	813662	227825	41009	7863012
6	K sewer Cost	7169115	860294	240882	43359	8313650
7	L & M Sewer Cost	8235706	988285	276720	49810	9550520
Total		73166965				84847925

Anticipated Benefits of the UGD Project

- Improvement in Environment, sanitation condition
- Better hygienic condition and healthy environment for Citizens
- Decrease in River / Nalla pollution
- Network will prevent pollution on road and near human settlements
- Improved environment will attract more investment in the city due to its competitiveness



सत्यमेव जयते



पर्यावरण व वातावरणीय
बदल विभाग,
महाराष्ट्र शासन



Draft Toolkit For Desktop Assessment 2021-22

(Suggestions are welcome
upto 22/09/2021)



A unique integrated first ever exercise by Environment and Climate Change Department, Government of Maharashtra for urban and rural areas:

- To encourage active participation in different climate change mitigation initiatives in a timely and innovative manner.**
- To identify dynamic and incremental/scalable measures towards sustainable environment through replication.**



Table of contents

S.I.	Content	Page number
1	Timeline	4
2	Data collection mechanism	6
3	Points to remember	8
4	Initial data collection	12
5	Thematic areas	13
6	Indicators	15
7	Upkeep of MVA1	126
8	Schemes/legislations for assistance	132



Timeline

Draft Toolkit for
Desktop Assessment



Timeline

	Activities	Dates
5 th June 2021 to 31 st March 2022	<input type="checkbox"/> Abhiyaan period	16 th April 2021 – 31 st March 2022
	<input type="checkbox"/> Work done status	
	Registration of local body	23 rd June to 9 th July 2021 (Completed)
	Interim work done status MIS submission	1 st January to 15 th January 2022
	Final cumulative work done status report submission	1 st April to 15 th of April 2022
1 st March 2022 to 31 st May 2022	Performance evaluation based on	
	Desktop assessment as per the toolkit	6 th to 30 th April 2022
	Direct Observation by Third Party Agency Citizen Feedback	1 st to 20 th May 2022
5 th June 2022	Award Distribution on World Environment Day	



Data Collection Mechanism

Direct Toolkit for
Desktop Assessment



Timeline

- MIS link will be shared on Majhi Vasundhara Website i.e. <https://majhivasundhara.in> – the ULB/PRI will have to submit their performance/activity details in the MIS as prescribed in the toolkit.
- The ULBs/PRI needs to keep all original copies of document. The department can ask for proof anytime.



Points to remember

DRAIN TOOLKIT FOR
DESKTOP ASSESSMENT



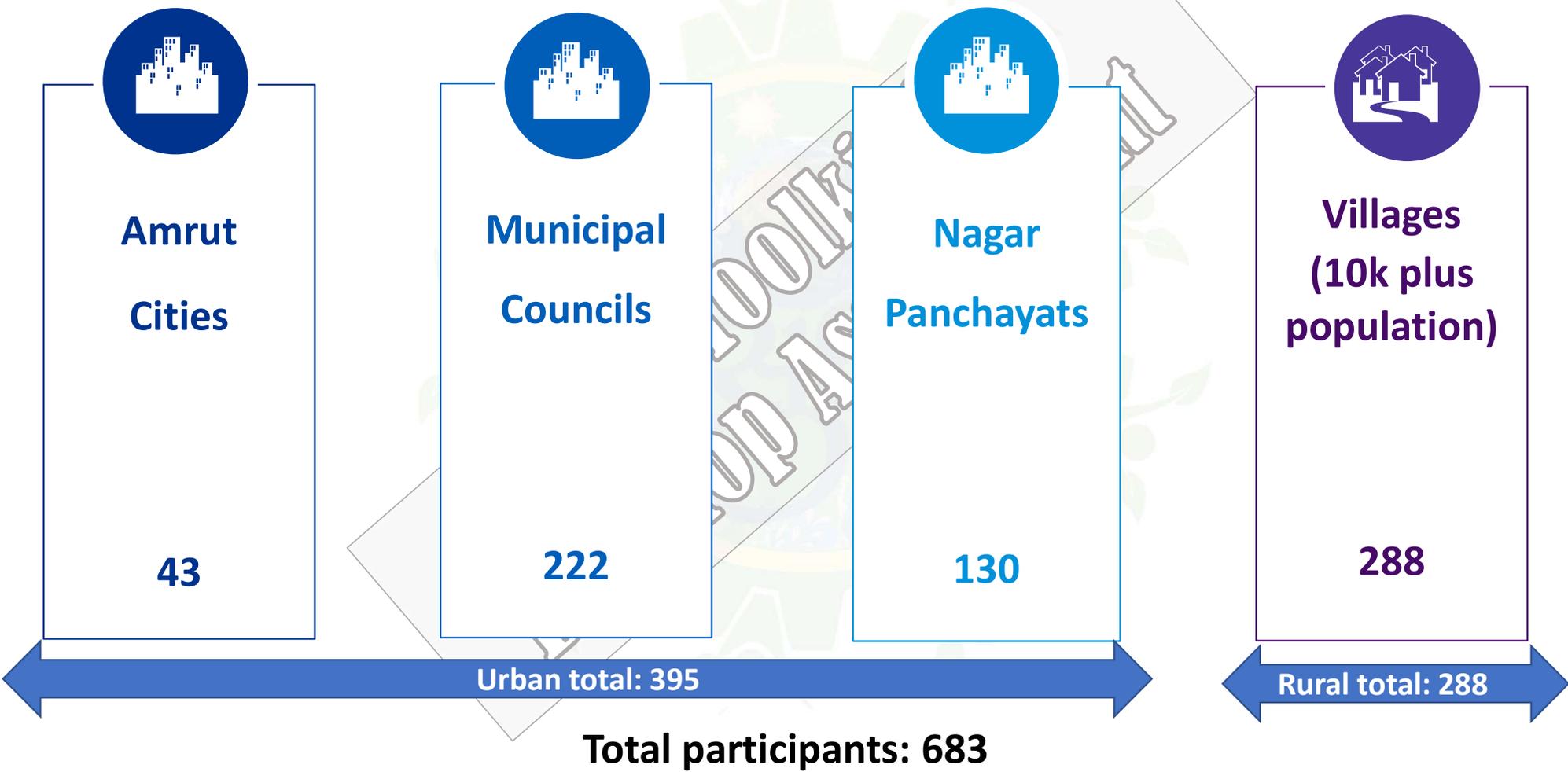
Points to remember



- Please share your feedbacks on Draft Toolkit for Desktop Assessment by 22nd September 2021 at director.mazivasundhara@gmail.com
- All measures taken up from **16th April 2021 to 31st March 2022** will be considered for the evaluation.
- Details must be provided in prescribed manner or in given format by the Mission Office. Formats will be available in MIS for downloading.
- All data collected through MIS will be used for desktop and field assessment.
- Methodology for third party actual evaluation will be announced subsequently by the department.

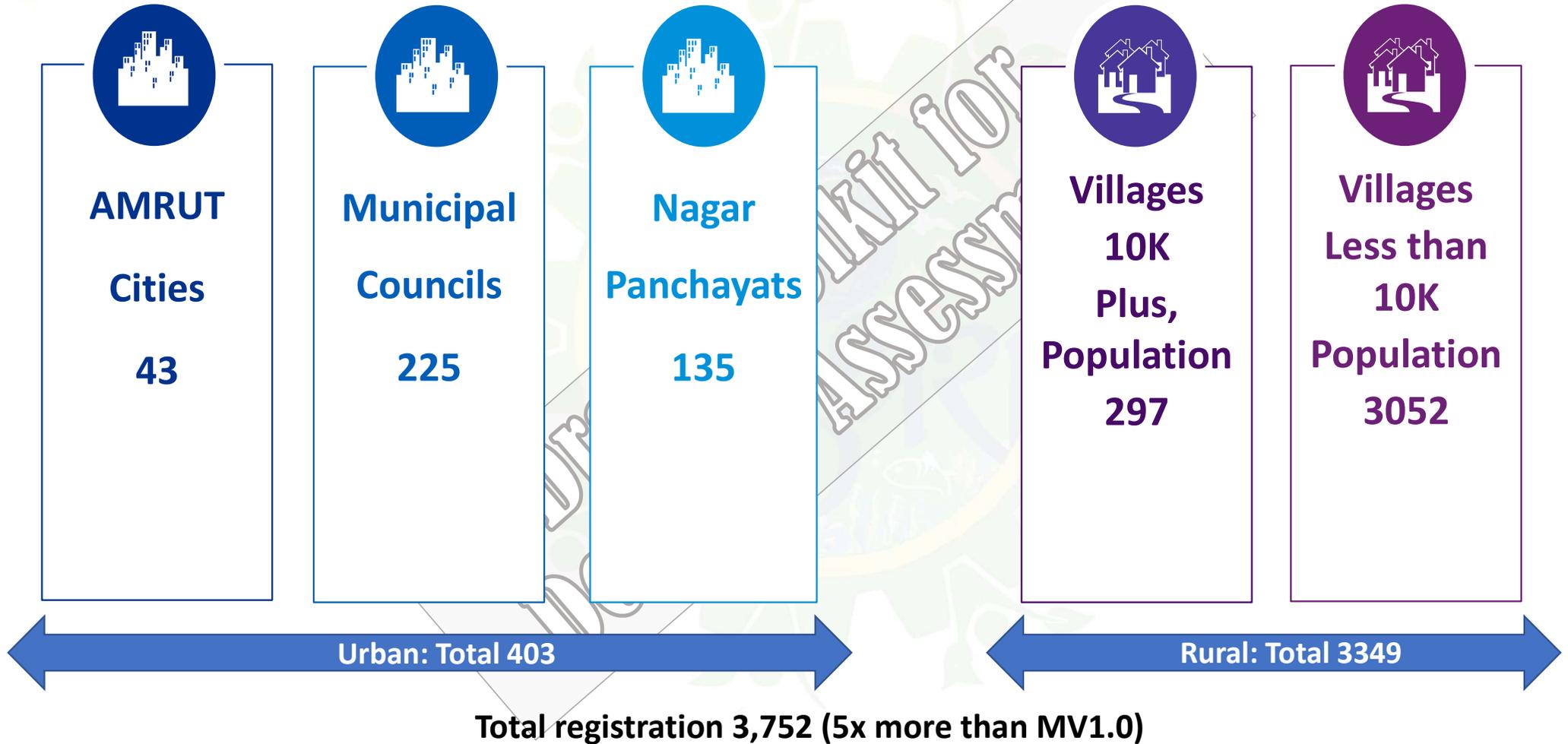


Verticals MV 1.0



Verticals MV 2.0

The ULBs and PRIs will compete in their own vertical





Initial Data Collection

ULB / PRI Profile

Urban Local Body/ Panchayati Raj Institution Name

Population

Number of household in the ULB/PRI

Area of the local body

Details of administrative head

Details of Nodal officer/Single point of contact for the abhiyan



Thematic areas





Bhumi
Earth



Vayu
Air



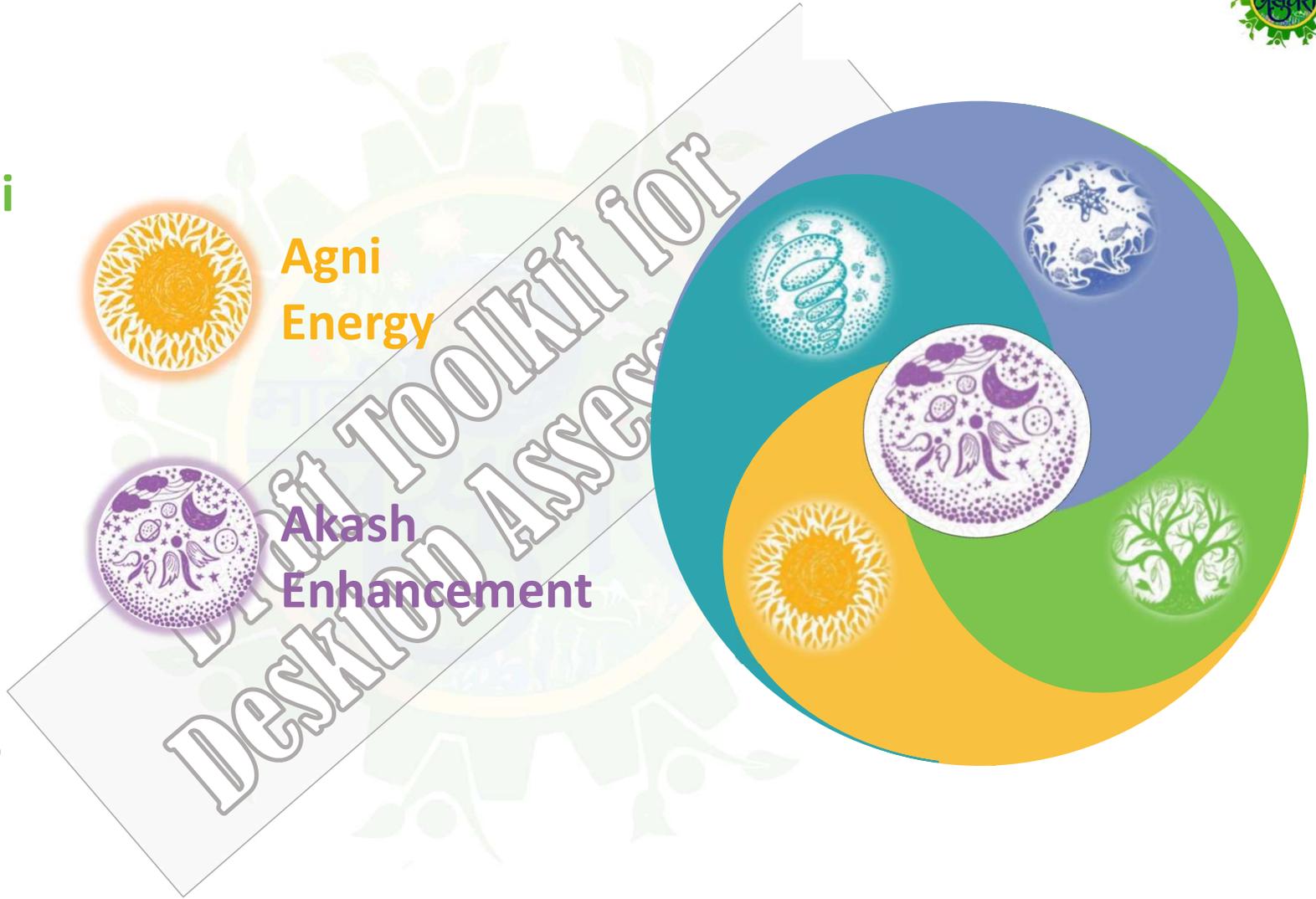
Jala
Water



Agni
Energy



Akash
Enhancement





Indicators

Draft Toolkit for
Desktop Assessment



1. Bhumi -1100



1.1 Green cover and biodiversity

700



1.2 Solid waste management

400

Draft
Desktop ASK



1.1 Green cover and biodiversity



S.I.	2021-22 Action points proposed		Marks
	Urban	Rural	
1.1.1	No. of trees planted and survived		100
1.1.2	Native/indigenous species tree planted and survived		50
1.1.3	Heritage tree – Census preparation & it's publications (50) Geo-tagging (50)		100
1.1.4	Tree Census - Census preparation & it's publications (50) Geo-tagging (50)		100
1.1.5	Creation of Nursery (to ensure all trees planted are minimum 6 to 8 feet high)		50
1.1.6	No. of newly created green areas (Amrut Van, Bio-diversity Park, Butterfly Park, Honeybee Park, Bird Parks etc.)		100
1.1.7	Bio-diversity register preparation and documentation		50
1.1.8	Initiatives towards conservation & maintenance of old & new green spaces		100
1.1.9	Tree Plan : A plan for achieving 33% green land use <ul style="list-style-type: none"> ○ Identification present green land use and proposed planning for achieving for 33% 		50
		Total	700



1.1.1 No. of trees planted & Survived

Marks
100

Tree plantation is the very basic step towards conserving the earth. This indicator examines whether plantation drives were taken up by the participant and how many trees they have planted as well as taken care of.

Details required for supporting progress:

- Self certification
- Total area of the green areas developed in sqm
- Number of tree planted and survived
- Location Details: Full address, Location of the project on google map
- Stage wise geo-tagged photographs (size 1 to 2 MB) of the plantation drives (Quarterly)

Evaluation mechanism	Marks
No. of trees planted & Survived	100
<i>Relative Marking</i>	

Note: 1. The trees planted during the abhiyan period (year 2021-2022) need to be submitted here
2. Trees planted last year will be considered in upkeep of Majhi Vasundhara 2020-21 part



The images are for illustrative purpose only



1.1.2 Native/indigenous species tree planted & survived

Marks
50

Native/indigenous species of trees are very important to keep the ecological balance of one region: This indicator examines whether the participants had given importance native/indigenous species while selecting trees for plantation drive, how many native/indigenous species trees have been planted during the abhiyan period.

Preference will be given to native/indigenous species

Details required for supporting progress:

- Self certification
- Total area where native and indigenous trees planted & Survived in sqm
- Number of native and indigenous trees planted & Survived
- Location Details: Full address, Location of the project on google map.
- Stage wise geo-tagged photographs (size 1 to 2 MB) of the plantation drives. (Quarterly – same angle)

Evaluation mechanism	Marks
No. of native and indigenous trees planted & Survived	50
<i>Relative Marking</i>	

Note: 1. The trees planted during the abhiyan period (year 2021-2022) need to be submitted here
2. Trees planted last year will be considered in upkeep of Majhi Vasundhara 2020-21 part



Indicative list of indigenous trees



Southern Tropical Semi-Evergreen trees	Southern Tropical Moist Deciduous tress	Southern Tropical Thorn trees
1. Terminalia paniculata (Kinjal)	1. Tectona grandis (Teak)	1. Acacia arabica (Babul)
2. Memocylon umbellatum (Anjani)	2. Terminalia tomentosa (Ain),	2. Acacia leucophleca (Hiwar)
3. Terminalia chebula (Hirda)	3. Delbergia latifolia (Shisham)	3. Zizyphus jujuba (Bor)
4. Syzigium cumini (Jambul)	4. Adina cardifolia (haldu)	4. Butea monosperna (Palas)
5. Olea diocea (Parjamun)	5. Madhuca indica (Moha)	5. Belanites rexburghii
6. Mangifera indica (mango)	6. Pterocarpusmarsupium (Bija)	(Hinganbet)
7. Actinodaphne hookeri (Pisa)	7. Mitragyna parviflora (kalam)	
	8. Salmalia malabaricum (Semal)	

Note: This is for reference only. More names are available in <https://mahaforest.gov.in>



1.1.3 Heritage tree census preparation along with geo-tagging and it's publications

**Marks
100**

As introduced by Govt. of Maharashtra in Maharashtra (Urban Areas) Protection & Preservation Of Trees Act 1975 amended in July 2021, a heritage tree is defined as “A tree with an estimated age of 50 years or more”. For the betterment of the environment, it is expected that the rural areas also identify their heritage trees and protect them. This indicator examines whether the participants had given importance to special protection of heritage trees or not.

Details required for supporting progress:

- Self certification
- Location of the heritage trees on google map.
- Species name, age, diameter and tree characteristics as per Local Tree Authority
- Photographs (size 1 to 2 MB) of the heritage trees

Please see “Maharashtra (Urban Areas) Protection & Preservation Of Trees (Amendment) Act 2021” for assistance.

Evaluation mechanism	Marks
Census preparation	25
Census publications	25
Geo-tagging	50



Latur



Bhiwandi



Latur



Baramati



Baramati

The images are for illustrative purpose only



1.1.4. Tree Census preparation along with geo-tagging and it's publications

Marks
100

According to Maharashtra (Urban Areas) Protection & Preservation Of Trees Act 1975 amended in July 2021-chapter four section 7 (b) once before December 1996 and thereafter once in every five years, carrying out a census of the existing trees in the land covered within its jurisdiction is mandatory. For the betterment of the environment, it is expected that the Rural bodies also prepare a tree census. This indicator examines whether the participants had given importance to encourage community awareness for tree conservation.

Details required for supporting progress:

- Self certification
- Location of the trees on google map. Geo-tagged maps can be provided if available
- Verified/certified latest document from Local Tree Authority

If the document is submitted for approval/certification, the local body needs to clarify that during submission. Final report submitted for approval to local tree authority will also be accepted.

Evaluation mechanism	Marks
Census preparation & it's publications	50
Geo-tagging	50



1.1.5. Creation of Nursery (to ensure all trees planted are minimum 6 feet high)

Marks
50

A tree nursery is a managed site, designed to produce tree seedlings grown under favorable conditions until they are ready for plantation. This indicator examines whether the participants had given importance to support reforestation and community tree plantation programs

Details required for supporting progress:

- Self certification
- Location and area of the nursery on google map.
- Number of nurseries created
- Capacity of each nursery created
- Photographs (size 1 to 2 MB) of nursery

Evaluation mechanism	Marks
Average capacity of the nursery (Total number of plants available in the nurseries/ Total number of nurseries)	50
<i>Relative Marking</i>	

Guidelines of Nursery as per – Indian Council of Agricultural Research



Time of sowing/initiation of propagules production depend on how long the seedlings will take to have an optimum size of a seedling (with good rooting and about 20 cm tall) and coincidence of its ready availability at the time of initiation of monsoon (July for Southwest monsoon and October for Northeast monsoon areas).

The number of plants required to be produced from a nursery can be calculated as below.

- Number of plants required for the season = W
- Mortality in nursery = X
- Transportation/culling loss = Y
- Seedling required of buffer loss = Z
- **Total seedlings required to be produced from the nursery = W + X + Y + Z**

In case of vegetative propagules, the success percentage also needs to be considered. Generally, it is assumed that

- **The area of nursery should be 0.25% to 2.5% of the area to be planted**
- or
- **The area of nursery should be about 1 acre for every 30,000 seedlings.**
- **It also required daily supply of water @ 200 l per 1000 seedlings.**

* - Water Quality Criteria: [CPCB | Central Pollution Control Board](http://www.cpcb.gov.in/)



Physical resources required for Nursery



Physical Resources	Requirements
Land	Porous, and light to medium textured well drained soil, pH range - 6.5 – 7.5, location - should be close to railway station or bus station
Irrigation facility	Sufficient and assured supply of irrigation, Water quality should be within prescribed level by CPCB* - pH between 6.0 to 8.5 Electrical Conductivity at 25° C micro mhos/cm Max.2250 Sodium absorption Ratio Max. 26 Boron Max. 2mg/l
Labour	Manpower for grafting, budding, weeding, irrigation, spraying, dusting, training, pruning, etc., technically sound gardeners
Electricity	Regular supply of electricity for water pumps, spraying, dusting and many other operations
Road and Transport	Good roads and transport facilities



Basic Criteria for Nursery



Physical Resources	Requirements
Mother plants	Pests and diseases are controlled regularly, plants should be selected from Government nurseries or from Agricultural Universities
Hedges and compound	Thorny plants like Chilar (thorny creeper), golden duranta (thorny shrub), and agave cab be used as hedges in nurseries.
Space for Hardening of Nursery Plants	Small shade net houses are required
Propagation structures	Propagation structures are essential for production of grafts or seedlings
Store and office	Garden tools, implements, raw materials, insecticides, fungicides, manures, fertilizers, boards, polythene bags etc are stored in store house



Basic Criteria for Nursery



Physical Resources	Requirements
Land	Porous, and light to medium textured well drained soil, pH range - 6.5 – 7.5, location - should be close to railway station or bus station
Irrigation facility	Sufficient and assured supply of irrigation, Water quality should be within prescribed level by CPCB* -
Labour	Manpower for grafting, budding, weeding, irrigation, spraying, dusting, training, pruning, etc., technically sound gardeners
Electricity	Regular supply of electricity for water pumps, spraying, dusting and many other operations
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Space for Hardening of Nursery Plants	Small shade net houses are required
Propagation structures	Propagation structures are essential for production of grafts or seedlings
Store and office	Garden tools, implements, raw materials, insecticides, fungicides, manures, fertilizers, boards, polythene bags etc are stored in store house



The images are for illustrative purpose only



1.1.6 No. of newly created green areas

**Marks
100**

Green areas are very important for any society's mental and physical well being. This indicator examines whether the participants had given importance to creation of new green areas such as Amrut Van, Bio-diversity Park, Butterfly Park, Honeybee Park, Bird Parks etc.

Details required for supporting progress:

- Self certification
- Location of the project on google map.
- Implemented park/green area details in terms of
 - Area
 - Usage
- Stagewise geo-tagged photographs (size 1 to 2 MB)
- Google map's image of before creation of green area

Evaluation mechanism	Marks
No. of green areas created	100
<p><i><u>The evaluation will be done based on the number of green areas created. Each green area will have 10 marks.</u></i></p>	



Nashik

Before



After



Kolhapur

Before



After



The images are for illustrative purpose only Source google.com



1.1.7 Bio-diversity register preparation and documentation

Marks
50

People's Bio-diversity Register (PBR) shall contain comprehensive information on availability and knowledge of local biological resources, their medicinal use or any other traditional knowledge associated with it. This indicator examines whether the participants had given importance to promote conservation, documentation of biological diversity.

Details required for supporting progress:

- Self certification
- Valid document submission as a proof (the PBR is prepared and published – approved by **Biodiversity Management Committee/the Technical Support Group (TSG)/Maharashtra State Biodiversity Board (MSBB)**)

Evaluation mechanism	Marks
Valid PBR	
Yes	50
No	0



Process in PBR Preparation

Step 1: Formation of Biodiversity Management Committee (BMC)

Step 2: Sensitization of the public about the study, survey and possible management

Step 3: Training of members in identification and collection of data on biological resources and traditional knowledge

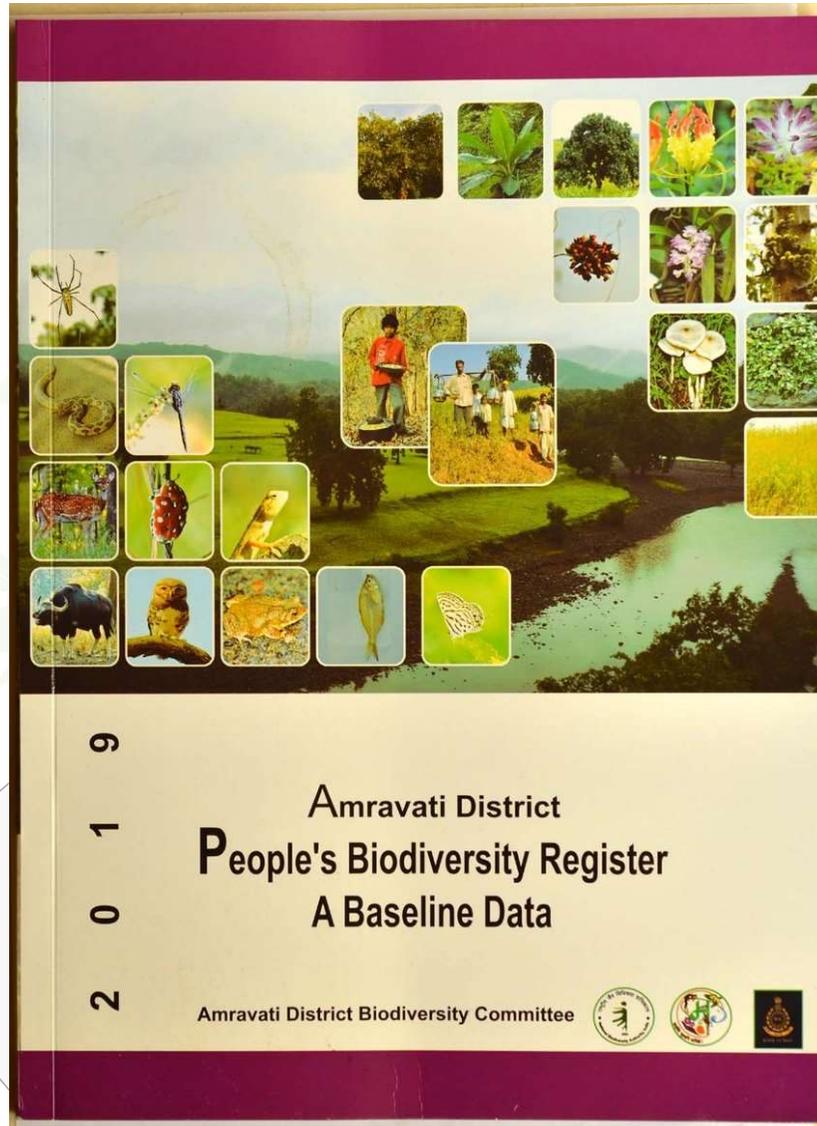
Step 4: Collection of data. Data collections includes review of literature on the natural resources of the area

Step 5: Analysis and validation of data in consultation with technical support group and Biodiversity Management Committee (BMC)

Step 6: Preparation of People's Biodiversity Register (PBR)

Step 7: Computerization of information and resources

Note: People's Biodiversity Register– <http://nbaindia.org/uploaded/pdf/PBR%20Format%202013.pdf>



The images are for illustrative purpose only Source google.com



1.1.8 Initiatives towards conservation & maintenance of old & new green areas

Marks
100

Green area creation is not enough until and unless they are maintained properly. This indicator examines whether the participants had given importance to maintenance of all old and new green areas.

Details required for supporting progress:

- Self certification
- Location of the project on google map.
- Implemented park/green area details in terms of area, usage (before and after)
- Stagewise geo-tagged photographs (size 1 to 2 MB) (During Majhi Vasundhara 1 and Majhi Vasundhara 2 in every quarter)
- Documents on mechanism of maintenance (in house maintenance or outsourced)

Evaluation mechanism	Marks
The evaluation will be done based on the number of green areas maintained	100
<u>Relative Marking</u>	



1.1.9 Tree Plan : A plan for achieving 33% green land use

**Marks
50**

As introduced by Govt. of Maharashtra in Maharashtra (Urban Areas) Protection & Preservation Of Trees Act 1975 amended in July 2021, every urban area should have 33% of green land use. Following the same, the department of Environment and Climate Change has introduced the concept of tree plan under Majhi Vasundhara Abhiyan which is applicable to both, urban and rural bodies, and targets to achieve 33% of green land use/green cover within the local body for the betterment of the environment. Under this indicator, the mission examines whether the local bodies are aware of their green land use and what initiatives they are taking to achieve 33% green land-use.

Details required for supporting progress:

- Self certification
- Valid master plan of the local body showing green land use – plan should be authorized by local planning authority
- Tree Plan for achieving 33% green land use

Evaluation mechanism	Marks
1.Valid land use map showing existing green land use (25)	
Yes	25
No	0
2. Status of Tree Plan (25)	
Activity Initiated	5
Work is going on	15
DPR ready	25



1.2 Solid Waste Management



S.I.	2021-22 Action points proposed				Marks
	ULB		PRI		
1.2.1	Percentage of solid waste collected, segregated (at source)				50
1.2.2	Wet waste processing				50
1.2.3	Recycling/Treatment/final disposal of Dry Waste				50
1.2.4	Plastic waste Management				
1.2.4.1	Initiative to reduce plastic waste considering the three "R" principles				50
1.2.4.2	Single use plastic ban				25
1.2.5	Bio-medical waste management				25
1.2.6	E-waste management				25
1.2.7	Scientific treatment of legacy solid waste and reuse of legacy waste dump site				75
1.2.8	ODF status				50
	ODF	20	ODF	30	
	ODF+	30	ODF+	50	
	ODF++	50			
Total					400



1.2.1 Percentage of solid waste collected, segregated (at source)

**Marks
50**

Proper solid waste management is very important for the environment. Solid waste, if not treated properly, ends up in landfill polluting soil, water tables, etc. This indicator examines whether the participants had given importance to scientific treatment of solid waste. Steps taken for scientific treatment are collection and segregation.

Details required for supporting progress:

- Self certification
- Solid waste generated
- Self assessment report on percentage of solid waste collected (door to door) and segregated at source.
- For ULB's:
 - Extracted data from Swachh Bharat Mission Urban MIS
- For PRI's :
 - Solid waste collection, segregation and scientific treatment in percentage
- Logbook submission for the mission period

Evaluation mechanism	Marks
Percentage of solid waste collected and segregated (at source). Breakup of marks is given below (50)	
• Collection (25)	
100%	25
80% - 99.99%	15
Less than 80%	0
• Segregation at source (25)	
95%-100%	25
80%-94.99%	15
Less than 80%	0



The images are for illustrative purpose only



1.2.2 Wet waste processing

Marks
50

The process of composting is hugely beneficial to the environment, not only because it reduces the amount of food and garden waste thrown away which in turn reduces the amount of methane greenhouse gas, but it's also a crucial part of the nitrogen cycle. This indicator examines whether the participants had given importance to treatment of wet waste by the process of composting or bio-gas plants to produce chemical free fertilizers and cooking gas.

Details required for supporting progress:

- Self certification
- Logbook entry amount of wet waste generated and processed
- Location on google map. Geo-tagged maps can be provided if available for compost plant/biogas plant
- Details about the compost produced :
 - If they are branded : Such as Harit certified (for urban)
 - Compost quality report complying with the FCO norms from authorized labs (for rural)
 - Usage/sell of the compost
- Geo-tagged photographs (size 1 to 2 MB) of the compost plants, products, and shops selling locally generated compost

Evaluation mechanism	Marks	
	Urban	Rural
Wet waste processing (50)		
% of wet waste converted to compost or used in biogas plant		
80% and above	40	40
50% to less than 80%	30	30
40% to less than 50%	0	10
Less than 40%	0	0
Harit branded	10	NA
Compost quality report	NA	10





 (See Clause 3(2))

Fertilizer Control Laboratory, Anusavi

 Tagore Road, Camp

 (E-mail: fclan@gnl.co.in)

 (Tel: 071-2662754 Fax: 2662794)

ANALYSER REPORT OF FERTILISER SAMPLE

 (SERVICE SAMPLE)



 (Incl. No. 1182-2015)

 MHL ACCOUNT NO. 1-1148

Sample Type Service : 24-05-2018 Report No. -NGFCLA/728, Date

To,

 CHIEF OFFICER,

 NAGAR PARISHAD, ANJANGAON SURKI DIST. AMRAVATI,

 Taluka -ANJANGAON, District-AMRAVATI,

 State- MAHARASHTRA

Ref. - Your Memorandum No.-1233 Dated-03-05-2018 ✓

 The analysis report of SERV sample forwarded vide your reference is as per details given below

1.Name of Fertilizer & Grade | Service ✓

 2.Date of Sampling | Omitted

 3.Omitted | Omitted

 4.Code No of Sample | IF

 5.Date of receipt of Sample in the Laboratory | 09-05-2018 ✓

 6.Laboratory Sample No. | 100-20182018 ✓

 7.Date of Analysis of Sample | 23-05-2018

 8.Chemical Analysis of Fertilizer | (on fresh weight basis except in the case of Urea on dry weight basis)

Srno	Specification as Per FCO	Composition as per Analysis (in %)
1	moisture	16.96 ✓
2	Total Nitrogen	2.85 ✓
3	Total phosphorus P ₂ O ₅	0.44 ✓
4	Water soluble potash (as K ₂ O)	5.35 ✓
5	Zinc (as Zn)	0.337 ✓
6	Copper (as Cu)	0.195 ✓
7	pH	7.81 ✓
8	Odour	ABSENT ✓
9	Bulk density (g/cm ³)	4.9 ✓
10	Total Organic Carbon	12.79 ✓
11	C:N RATIO	4.47:1 ✓
12	Conductivity (in dsm-1)	13.11 ✓
13	Color	BLACKISH GREY ✓
14	Particle size - 4.00 mm	100 ✓

Note: Results relate only to the sample as received.





 Authorised Officer

 Fertilizer Control Laboratory

 AMRAVATI

Scanned by CamScanner

The images are for illustrative purpose only



1.2.3 Recycling/treatment/final disposal of Dry Waste

**Marks
50**

The process of recycling/treatment and disposal of dry waste is very important. As dry solid waste is mostly mixed with waste containing recoverable resources such as plastic, glass, paper, metal, This should follow the route of recycling to reduce pressure on the dumping site and natural resources. This indicator examines how efficiently the local bodies are practicing recycling/treatment/final disposal of dry Waste.

Details required for supporting progress:

- Self certification
- Logbook entry amount of dry waste generated and processed
- Location on google map. Geo-tagged maps can be provided if available for recycling site.
- Geo-tagged photographs (size 1 to 2 MB) of the recycling units, products, and shops selling locally generated upcycled products.

Evaluation mechanism	Marks
Dry waste processing (50)	
% of dry waste recycled/treated/scientifically disposed	
80% and above	50
50% to less than 80%	30
Less than 50%	0



The images are for illustrative purpose only



1.2.4.1 Initiative to reduce plastic waste considering the three “R” principles

**Marks
50**

Plastic waste management is a critical issue. Over 300 million metric tons of plastic is produced in the world annually and about fifty percent of this volume is discarded within a year of it's purchase. This indicator identifies how the ULBs/PRI are managing their plastic waste.

Details required for supporting progress:

- Self certification
- Details about the initiatives taken up by the ULB/PRI for management of plastic waste such as
 - Number of drives conducted on plastic pollution and alternatives of single use plastic (SUP)
 - Upcycling of plastic waste
- Geo-tagged photographs (size 1 to 2 MB) of the drives/events

Evaluation mechanism	Marks
Assessment will be done on: Single use plastic confiscated Breakup of marks given below	
Drives conducted on alternatives of SUP	40
Drive to promote Recycled/ Upcycle product	10
<u>Relative Marking</u>	



1.2.4.2 Single use plastic ban

Marks
25

Plastic waste management is a critical issue. A major step taken up by CPCB/MPCB is single use plastic ban. This indicator identifies how the ULBs/PRIs are enforcing the ban in their area.

Details required for supporting progress:

- Self certification
- Logbook entry on penalty collection on usage of single use plastic (SUP)
- Receipt of fine collection as result of SUP ban

Evaluation mechanism	Marks
Mechanism of fine collection strictly followed upon usage of SUP	25



The images are for illustrative purpose only Source google.com



1.2.5 Bio-medical waste management

Marks
25

Biomedical waste or hospital waste is any kind of waste containing infectious (or potentially infectious) materials. It may also include waste associated with the generation of biomedical waste that visually appears to be of medical or laboratory origin (e.g., packaging, unused bandages, infusion kits etc.), as well as research laboratory waste containing biomolecules or organisms that are mainly restricted from environmental release. This indicator examines how efficiently local bodies are disposing bio-medical waste.

Details required for supporting progress:

- Self certification
- Details of mechanism for segregation of biomedical-waste at segregation site of local body sites- Location on google map.
- Agreement with MPCB authorized Bio-medical waste management vendors for collection, transportation and disposal
- Incase in-house management – Declaration from MPCB on the process of collection, transportation and disposal
- Photographs (size 1 to 2 MB)

Evaluation mechanism	Marks
Assessment criteria-based management done by local body for collection, transportation and disposal <ul style="list-style-type: none"> • Agreement with MPCB authorized vendor/Declaration from MPCB 	
▪ Yes	25
▪ No	0



1.2.6 E-waste management

**Marks
25**

Informal processing of e-waste in developing countries can lead to adverse human health effects and environmental pollution. It is the duty of the local body to ensure that e-waste if found to be mixed with Municipal Solid Waste is properly segregated, collected and is channelized to authorized dismantler or recycler. This indicator looks after the initiatives taken up by the local body for scientific disposal.

Details required for supporting progress:

- Self certification
- Details of awareness activities on proper segregation of E –waste (For rural minimum 2 and for Urban minimum 10)
- Details of mechanism for segregation of E-waste at segregation site of local body sites within local body- Location on google map.
- Agreement with MPCB authorized dismantler or recycler
- Stagewise photographs (size 1 to 2 MB)

Evaluation mechanism	Marks
Assessment criteria based on	
▪ Awareness activities on proper segregation of E –waste	10
▪ Segregation of E-waste (10)	
Yes	10
No	0
▪ Agreement with authorized dismantler or recycler (5)	
Yes	5
No	0



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1.2.7 Scientific treatment of legacy solid waste and reuse of legacy waste dump site

**Marks
75**

Legacy wastes not only occupy large space, but also become a breeding ground for pathogens, flies, and generation of leachate, which may lead to water contamination. Scientific treatment is very important for managing the legacy waste. This indicator examines whether the participants had given importance to scientific treatment of legacy waste.

Details required for supporting progress:

- Self certification
- Details of remediation sites within local body– Location on google map.
- Status of remediation
- Stagewise geo-tagged photographs (size 1 to 2 MB)
- If land is reclaimed, before and after photographs

Evaluation mechanism	Marks
Assessment criteria based on stage of remediation (75)	
▪ Tenders have been called	10
▪ Work going on	25
▪ Work is complete/ no legacy waste	60
▪ Land reclaimed and reused	75



1.2.8 ODF Status

Marks
50

Open-defecation is a major issue in India. GoI had given utmost importance to make a behavioral change in the citizens/villagers and make India open-defecation free. Open-defecation causes major pollution in soil and water. This indicator examines whether the participants had given importance to make their area Open-defecation free.

Details required for supporting progress:

- Self certification
- For Urban: Recent valid ODF, ODF+ or ODF++ certification from third party agency appointed by GoI
- For Rural: Recent valid ODF, ODF+ certification from competent authority
- Assessment will be done on the basis of ODF, ODF+ and ODF++ status.

Evaluation mechanism	Marks	Evaluation mechanism	Marks
Urban		Rural	
ODF	20	ODF	30
ODF+	30	ODF+	50
ODF++	50		

Note: SBM(Grameen) Phase II Guidelines:

<https://swachhbharatmission.gov.in/SBMCMS/writereaddata/portal/images/pdf/sbm-ph-II-Guidelines.pdf>



माझी वसुंधरा
अभियान



Air - Vayu

Air quality

900



2. Air - 900



2.1 Air quality monitoring

100



2.2 Reduction of Air Pollution

200



2.3 Promotion of good habits in citizen

100



2.4 Effective implementation of EV Policy

500



2. Air



S.I.	2021-22 Action points proposed			Marks	
	Urban	Rural			
2.1	Air quality monitoring – Once a month air quality monitoring report: MoEFCC recognized labs & NABL Accredited Labs/ MPCB air quality monitoring report			100	
2.2	Reduction of Air Pollution				
2.2.1	Initiatives towards banning firecrackers			100	
2.2.2	C&D waste management	100	2.2.2.1 Agricultural waste management (stubble/open burning of the farm waste)	50	100
			2.2.2.2 UJJAVALA coverage and gas connection	50	
Total				300	



2. Air



S.I.	2021-22 Action points proposed		Marks
	Urban	Rural	
2.3	Promotion of good habits in citizen - Creation of cycling track		100
2.4	Effective implementation of EV Policy		500
	Total		600

Draft TO
Desktop Assessment



2.1 Air quality monitoring – MoEFCC recognized labs and NABL

Accredited Labs

Marks

100

Clean air is a birth right of every citizen on earth. But due to many reasons the earth is suffering from severe air pollution. This indicator focuses on monitoring the average air quality of the cities/villages.

Details required for supporting progress:

- Self certification
- Air quality monitoring report from MoEFCC/NABL accredited laboratories – photographs (size 1 to 2 MB) and location details of the same
 - 24 hours continuous monitoring
 - One report should be within a week after festival
 - Monitoring should be taken at the most congested residential area
- Photograph (size 1 to 2 MB) of continuous Ambient Air Quality Monitoring Stations, and location details of the same.

Evaluation mechanism	Marks
Air quality monitoring report from - MoEFCC recognized/NABL accredited labs	
Urban (100)	
▪ 7-9 or more	100
▪ 5-6	50
▪ Less than 5	0
Rural (100)	
▪ 5-7 or more	100
▪ 3-4	50
▪ Less than 3	0



The images are for illustrative purpose only



List of Operating Agencies / Institutes working with MPCB for ambient Air Quality Monitoring

Sr.No	Name of City having AAQM stations	No. of NAMP stations	Regional Office	Operation Agencies / Institutes
1	Amravati	3	Amravati	Govt. College of Engineering, Amravati
2	Akola	3	Amravati	College of Engineering and Technology, Akola
3	NaviMumbai	5	Navimumbai	Karmaveer Bhaurao Patil College, Vashi , Navi Mumbai
4	Panvel	1	Navimumbai	
5	Kolhapur	3	Kolhapur	Walchand Institute of Technology, Sangli.
6	Tarapur	3	Thane	Smt. CHM College, Ulhasnagar
7	Solapur	2	Pune	Walchand Institute Of Technology, Sangli
8	Nashik	4	Nashik	KTHM College, Nashik
9	Ambernath	1	Kalyan	
10	Dombivali	1	Kalyan	Smt. CHM College
11	Aurangabad	4	Aurangabad	SBES College, Aurangabad
12	Chandrapur	6	Chandrapur	Rajiv Gandhi College of Engineering Research and Technology, Chandrapur
13	Nagpur	4	Nagpur	Visvevaraya National Institute of Technology, Nagpur
14	Pune	4	Pune	Savitribai Phule Pune University
15	Thane	3	Thane	Thane Municipal Corporation
16	Mumbai	1	Mumbai	MPCB
17	Jalna	2	Aurangabad	Badrinath Barwale Mahavidyalaya , Jalna
18	Ulhasnagar	2	Kalyan	Smt. CHM College
19	Badlapur	1	Kalyan	BIWA House , Badlapur
20	Latur	3	Aurangabad	Dayanand Education Society, Latur



List of Operating Agencies / Institutes working with MPCB for ambient Air Quality Monitoring

Sr.No	Name of City having AAQM stations	No. of NAMP stations	Regional Office	Operation Agencies / Institutes
21	Mahad	3	Raigad	Dr.Babasaheb Ambedkar Technological University (INACTIVE)
22	Roha	2	Raigad	Smt. Geeta Tatkare Polytechnic, Roha.
23	Lote - Chiplun	2	Ratnagiri	D B J College, Chiplun
24	Sangli-Miraj	3	Kolhapur	Walchand College Of Engineering, Sangli
25	Jalgaon	3	Nashik	Kaviyatri Bahinabai Chaudhari North Maharashtra University, Jalgaon
26	Nanded	3	Aurangabad	Indira Gandhi Sr.College, Nanded
27	Kalyan	1	Kalyan	Bhiwandi Nijampur Municipal Corporation
28	Bhiwandi	2	Kalyan	
29	Wani (Yavatmal)	3	Chandrapur	Rajiv Gandhi College of Engineering Research and Technology, Chandrapur (INACTIVE) Sub-Centre , Mumbai University, Ratnagiri
30	Ratnagiri	2	Kolhapur	
31	Solapur	2	Pune	
32	Pandharpur	1	Pune	N .K. Orchid College of Engineering, Research & Technology, Solapur
33	Barshi	3	Pune	
34	Osmanabad	3	Pune	
35	Gondia	3	Nagpur	Manoharbai Patel Institute of Engineering and Technology, Gondia
36	Wardha	3	Nagpur	Datta Meghe Institue of Engineering & Reseach, Wardha
37	Parbhani	3	Aurangabad	Shri Shivaji College of Arts, Science and Commerce
38	Udgir	3	Aurangabad	Maharashtra Udayagiri Mahavidyalaya, Udgir.
39	Kamptee	1	Nagpur	VNIT, Nagpur
40	Wadi	1	Nagpur	



List Of NABL Accredited Testing Laboratories For Ambient Air Quality Monitoring

List Of NABL Labs Accredited Testing Laboratories For Ambient Air Quality Monitoring can be found from NABL Website (<https://www.nabl-india.org/nabl/index.php?c=search&m=index&Itemid=177>)





2.2.1 Initiative towards banning of firecrackers

Marks
100

People burn firecrackers to celebrate different occasions / festivals. Firecrackers have carbon and sulphur which produce a range of toxic gases. These gases are harmful to plants and animals both. This indicator examines whether participants have given importance to the ban of firecrackers.

Details required for supporting progress:

- Self certification
- Copy of notification for banning sale and use of firecracker by local authorities
- Photographs (size 1 to 2 MB) related to banning activity and promotion of green festival

(Continuous air quality monitoring report within a week of festival from indicator 2.1 will be considered to check if firecracker ban was successfully implemented or not during evaluation)

Evaluation mechanism	Marks
Copy of notification (25)	
Yes	25
No	0
Initiative towards promoting green festival	
Number of awareness event/initiative taken up by local body (Relative Marking)	75



2.2.2 Urban: C&D waste management

Marks
100

30 percent of air pollution is caused due to dust which emanates from construction sites. Scientific management of Construction and Demolition (C&D) waste plays a key role in reducing air pollution. As per the Construction and Demolition Waste Management Rules, 2016 local authorities are liable to ensure the C&D waste is collected and disposed properly. This indicator will check if these rules are followed on the ground.

Details required for supporting progress:

- Self certification
- Details of identified land/area for C&D waste storage and dedicated vehicles for collection of waste
- Details of the boundary which will stop the fugitive dust from the identified land
- Classification of segregated C&D waste
- Total C&D waste collected and reused in tones (with logbook)
- Stagewise photographs (size 1 to 2 MB) of waste management process

Evaluation mechanism	Marks
Identification of land/area for C&D waste storage	20
Dedicated vehicles for collection	20
Segregation of C&D waste	20
Percentage of C&D waste reused	40



2.2.2.1 Rural: Agricultural waste management (stubble/open burning of the farm waste)

Marks
50

A large portion of crop residue is burnt 'on-farm' primarily to clean the field for sowing the next crop. Crop residue burning releases carbon dioxide (CO₂), carbon monoxide (CO), oxides of sulphur (SO_x), particulate matter and black carbon. This indicator is to examine whether participants have taken efforts for agricultural waste management.

Details required for supporting progress:

- Self certification
- Initiative taken for agricultural waste management following
 - Banning of crop residue burning – local (banning document)
 - Photographs (size 1 to 2 MB) for promotion of collection of crop residue for other works such as feeding to cattle, brick making, etc.
- Copy of notification for banning of crop residue burning by local authority

Evaluation mechanism	Marks
Evaluation based on actions taken up by local body for Crop Residue management	
Banning on Crop residue burning (25)	
Yes	25
No	0
Number of Initiatives taken for waste management.	25
<i>Relative Marking</i>	



2.2.2.2 Rural: UJJAVALA coverage and gas connection

Marks
50

Using woods/cow dung cakes for cooking is a major cause of household air pollution in rural areas. Household air pollution causes non-communicable diseases including stroke, ischemic heart disease, chronic obstructive pulmonary disease (COPD) and lung cancer. Pradhan Mantri Ujjwala Yojana provides access to cleaner fuel for the BPL households. This indicator identifies how the local body is focusing on promotion of Ujjwala Yojana which will also help in reducing air pollution.

Details required for supporting progress:

- Self certification
- Number and list of household connected under Pradhan Mantri Ujjwala Yojana- Data extracted from PMUY portal needs to be submitted
- Geo-tagged photographs (size 1 to 2 MB)
- Percentage of HH having access to Gas

Evaluation mechanism	Marks
% of HH in the PRI with gas connection	
90% and more	50
70% to 90%	25
Less than 70%	0



पेट्रोलियम और प्राकृतिक गैस मंत्रालय
भारत सरकार

**महिलाओं को
मिला सम्मान**

**स्वच्छ ईंधन.
बेहतर जीवन.**

प्रधानमंत्री
उज्ज्वला
योजना

स्वच्छ ईंधन, बेहतर जीवन!

The images are for illustrative purpose only Source google.com



2.3 Promotion of good habits in citizen - Creation of cycling track

Marks
100

Non-motorized transport can reduce air pollution to a high level. Cycle is one of the most affordable non-motorized transport used by Indians since ages. Due to lack of infrastructure i.e. accessible road for cycling demotivates the citizen to use cycle in their day-to-day affairs. This indicator checks how much efforts given by the local authority to ensure creation of cycling track along the main roads to promote cycling.

Details required for supporting progress:

- Self certification
- Location Details: Full address, Location of the project on google map with Length of Cycling Track Created (in KM)
- Photographs (size 1 to 2 MB) before and after creation of cycling track

Evaluation mechanism	Marks
<ul style="list-style-type: none"> • Length of Cycling Track Created (in KM) <p><i>Relative Marking</i></p>	100

Standards for Cycle Track



Segregated Cycle + NMT Paths	Cycle and NMT Path in cement concrete, physically separated from Motorized vehicle traffic by an open space or barrier within the existing Right-of-Way.
Bicycle Parking and Other Infrastructure	Secure Cycle Parking must be provided at all MRTS/ BRTS Stations.
	Designated cycle-rickshaw parking is to be provided near all local and mass transit stops.
	Cycle parking and cycle rickshaw parking should be accommodated within the Multi-Functional Zone; minimum width required is 1.5 M.
	The stands should allow at least the frame and ideally both wheels, to be secured to them.
Cycle Track - Capacity	Capacity in number of cycles per day
For One way Traffic	Two Lane - 2.5 to 5.0 M
	Three Lane - Over 5.0 M
	Four Lane - -----
For Two Way Traffic	Two Lane - 2.5 MINIMUM
	Three Lane - 2000 to 5000
	Four Lane - Over 5.0 M
Cycle Track - Types	Two types of cycle tracks:
1	Which run parallel to or along a main carriage way. A. Adjoining Cycle Tracks B. Raised Cycle Tracks C. Free Cycle Tracks
2	Which are constructed independent of any carriage way.

Source: Unified Traffic And Transportation Infrastructure (Planning & Engineering) Centre , Delhi Development Authority- <http://www.uttipee.nic.in>



The images are for illustrative purpose only



2.4 Effective implementation of EV Policy

Marks
500

E-transportation is one of the most promising technologies to alleviate fossil fuel dependency, reduce greenhouse gas emission, and improve energy efficiency. This indicator highlights the initiatives taken up by the local body for the promotion of electrification of public transport.

Details required for supporting progress:

- Self certification
- Detailed information from concerned RTO should include –
 - Numbers of registered EVs (Two-wheeler [2W], Three-wheeler [3W] and Four-wheeler [4W]) , Public transportation (Buses) in local body area
 - Number of EVs purchased by local body

Evaluation mechanism	Marks	
	Urban	Rural
EVs registered in local body area		
2W EV	100	150
3W EV	100	150
4W EV	100	100
Buses EV	100	50
EVs purchased by Local body	100	50
<i>Relative Marking</i>		



The images are for illustrative purpose only



Water - Jal

Water conservation

1000





3. Water - 1000



3.1 Water Conservation

100



3.2 Fresh water Consumption Monitoring & reduction

50



3.3 Rainwater harvesting & percolation

150



3.4 Water body rejuvenation/beautification

100



3. Water - 1000



3.5 Well Rejuvenation

100



3.6 Sewage treatment/Drip irrigation

150



3.7 Reuse of treated water for non-potable use/Initiative towards watershed development activities

50



3.8 Reduction of water pollution during festivals

100



3.9 Promotion of eco-friendly idols

200



3. Water



S.I.	2021-22 Action points proposed		Marks
	Urban	Rural	
3.1	Water conservation activities taken up		100
3.2	Fresh water consumption Monitoring & reduction		
	Water audit report of Government Buildings	Water audit and water budgeting for the Gram Panchayat	50
3.3	Rainwater harvesting & percolation		
3.3.1	Rainwater harvesting in public buildings For Gram panchayat and Nagar Panchayat Vertical (100%) For Amrut cities and Municipal Council (50%)		100
3.3.2	Initiative towards creation of rainwater percolation pits.		50
	Total		300



3. Water



S.I.	2021-22 Action points proposed		Marks
	Urban	Rural	
3.4	Water body rejuvenation and beautification plans taken up		100
3.5	Well rejuvenation plans taken up		100
3.6	3.6.1 Proportion of sewage treated in STP(for local bodies with existing STP) Or 3.6.2 Proposed / approved projects for implementation of STP (for local bodies without STP)	Percentage of farmland covered under drip irrigation/micro irrigation projects	150
3.7	Reuse of treated water for non-potable use	Initiative towards watershed development activities	50
3.8	Reduction of water pollution during festivals <ul style="list-style-type: none"> • Alternate way of deity immersion • Reduction of flower waste disposal in waterbodies/river etc. • Promotion of pollution-free celebrations / festivals 		100
Total			500



3. Water



S.I.	2021-22 Action points proposed		Marks
	Urban	Rural	
3.9	Promotion of eco-friendly idols during festivals		200
	Total		200

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3.1 Water conservation activities taken up

**Marks
100**

Conserving water helps to preserve our environment. Conserving the water minimizes the effects of water shortages and helps us to build a better defense against future drought years. This indicator measures how much water and the local water resources (lakes, dams, rivers) is being conserved by the local bodies.

Details required for supporting progress:

- Self certification
- Number of initiatives taken up
- Location of projects on google map
- Estimation of water conservation potential for each of the activities taken
- Physical and financial progress brief
- Stage wise photographs (size 1 to 2 MB)

Evaluation mechanism	Marks
Assessment will be done based on the activities taken up by the local body for the conservation of water.	50
Water conservation potential created (m ³)	50

Relative Marking



3.2.1 Urban: Water audit report of Government Buildings

**Marks
50**

Water auditing is a method of quantifying water flows and quality in simple or complex systems, with a view to reducing water usage and often saving money on otherwise unnecessary water use. It was proven with water audit, minimum 15%-20% water savings is possible. This indicator is introduced to encourage monitoring of potable water usage and reduction of wastage of fresh water.

Details required for supporting progress:

- Self certification
- List of government buildings
- Location of the govt. buildings on google map where water audit was done. Geo-tagged maps can be provided if available
- Water audit report from an authorized institute/organizations
- Photographs (size 1 to 2 MB) of ongoing water audit activity

Evaluation mechanism	Marks
% of govt. buildings with water audit report (50)	
80% or More	50
60% - less than 80%	40
40% - less than 60%	25
25% - less than 40%	15
Less than 25%	0



3.2.1 Rural: Water audit and water budgeting for the Gram Panchayat

**Marks
50**

Water audit and water budgeting is a method of quantifying water flows and quality in simple or complex systems, with a view to reducing water usage and often saving money on otherwise unnecessary water use. It was proven with water audit, minimum 15%-20% water savings is possible. This indicator is introduced to encourage monitoring of potable water usage and reduction of wastage of fresh water.

Details required for supporting progress:

- Self certification
- Water audit & budgeting report from an authorized institute/organizations (Inhouse reports will also be accepted if it is approved by the officials of water and sanitation department, Govt. of Maharashtra).
- Photographs (size 1 to 2 MB) of Water budget displayed outside the gram panchayat office.

Evaluation mechanism	Marks
Based on the submission of report (50)	
Report submitted	
Yes	50
No	0



3.3.1 Rain water harvesting in public buildings

**Marks
100**

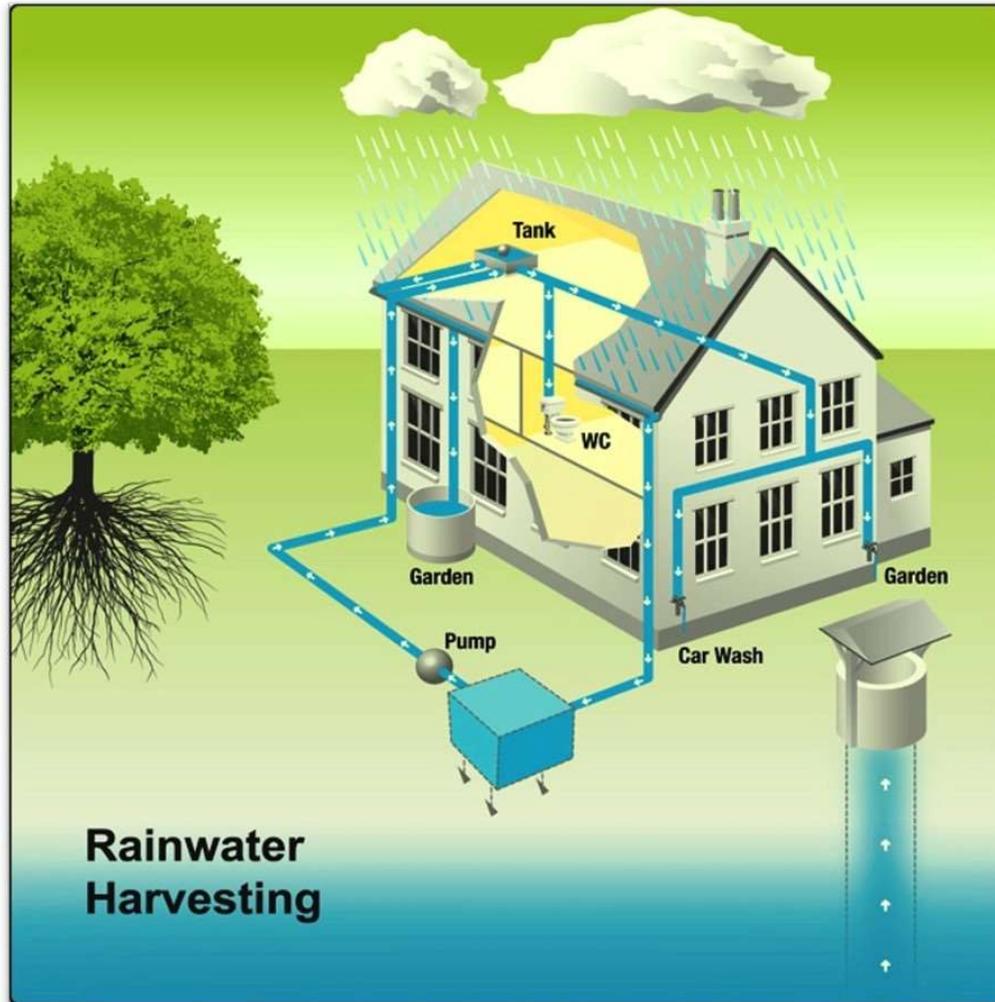
Rainwater harvesting is the simple process or technology used to conserve rainwater by collecting, storing, conveying and purifying of Rainwater that runs off from rooftops, parks, roads, open grounds, etc. for later use. This indicator measures the amount of rainwater harvested by the local body for future usage.

Details required for supporting progress:

- Self certification
- Number of public building available within the periphery
- List of public buildings with rooftop rainwater harvesting project
- Location of the govt. buildings on google map where water audit was done. Geo-tagged maps can be provided if available
- Stage wise photographs (size 1 to 2 MB)

Evaluation mechanism		Marks
Assessment will be done based on the number of public buildings with RWH system		
Amrut cities and Municipal Council	Gram panchayat and Nagar Panchayat Vertical	
50% or more	100%	100
25% to 49.99%	50% -99.99%	50
Less than 25%	Less than 50%	0

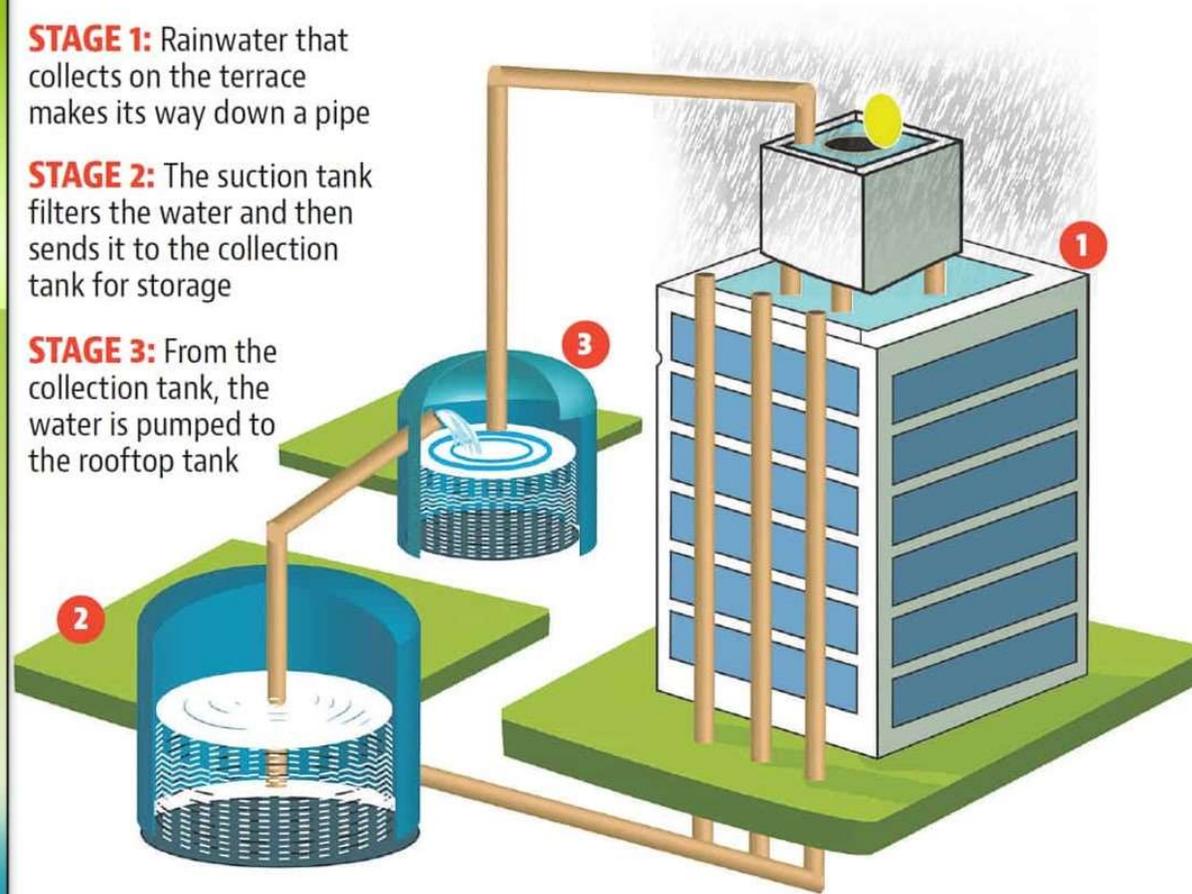
Note: The RWH systems taken up during the abhiyan period need to be submitted here. RWH systems taken up last year will be considered in upkeep of Majhi Vasundhara 2020-21 part.



STAGE 1: Rainwater that collects on the terrace makes its way down a pipe

STAGE 2: The suction tank filters the water and then sends it to the collection tank for storage

STAGE 3: From the collection tank, the water is pumped to the rooftop tank



The images are for illustrative purpose only Source google.com



3.3.2 Initiative towards creation of rainwater percolation pits

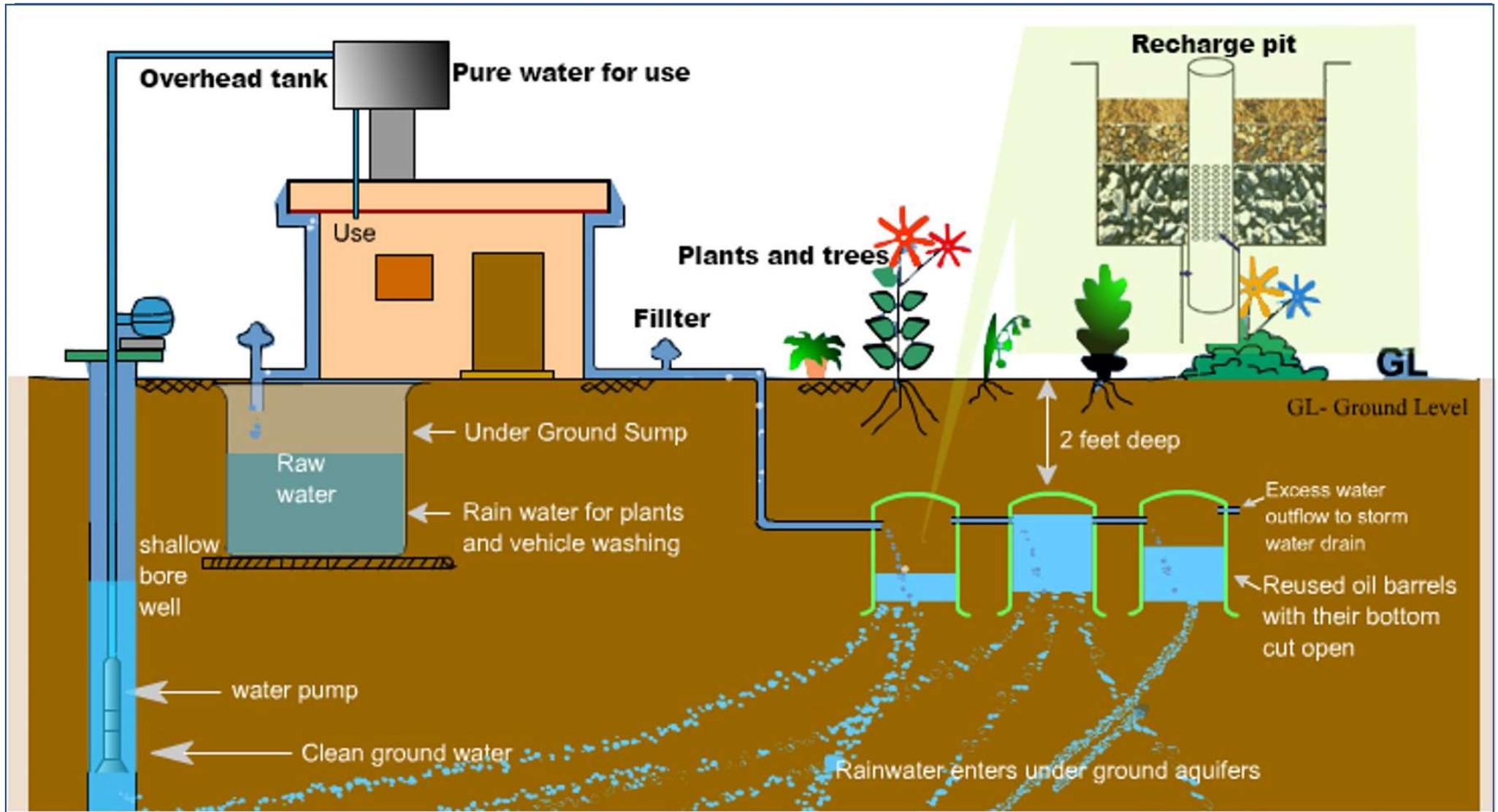
Marks
50

Rainwater percolation is the simple process or technology used to ensure rainwater gets absorbed in the ground to maintain the groundwater table. This indicator highlights the initiatives taken up by the local body to ensure groundwater recharge through rainwater percolation.

Details required for supporting progress:

- Self certification
- Location of the percolation points on google map.
- Capacity of the project, project brief with stage wise photographs (size 1 to 2 MB)
- Physical and financial progress brief
- Stage wise photographs (size 1 to 2 MB)

Evaluation mechanism	Marks
Initiatives taken up by the local body to ensure rainwater percolation	20
Number of percolation point created	30
<i>Relative Marking</i>	



The images are for illustrative purpose only Source google.com



3.4 Water body rejuvenation and beautification plans taken up

**Marks
100**

Water body rejuvenation is very important for conserving the water. Sometimes the water bodies/streams/nallahs/statutory lakes are used for solid waste disposal, untreated effluent disposal which cause serious harm to the environment. Due to disposal of solid waste, the capacity of water bodies reduces over time and sometimes it gets filled. To maintain the balance of natural water cycle in them, the water bodies/streams need to be cleaned/rejuvenated periodically. This indicator focuses on the initiatives taken up by the local body for cleaning of the waterbodies and streams.

Details required for supporting progress:

- Self certification
- Number of projects taken up for rejuvenation and beautification
- Surface area of water bodies/streams/nallahs/statutory lakes were rejuvenated and beautified (m²)
- Capacity addition / Desilting carried out (m³) at each waterbody
- Location of the project site on google map
- Physical and financial progress brief
- Stage wise photographs (size 1 to 2 MB)

Evaluation mechanism	Marks
Surface area of water bodies/streams/nallahs/statutory lakes were rejuvenated and beautified (m ²)	70
Capacity addition / Desilting carried out (m ³)	30
<i>Relative Marking</i>	

Note: 1. The water body rejuvenation and beautification plan taken up during the abhiyan period need to be submitted here.

2. Water body rejuvenation and beautification plan taken up last year will be considered in upkeep of Majhi Vasundhara 2020-21 part.



rejuvenation and beautification the water bodies suggested measures:

1. Periodical dredging of waterbody/river/nallah/lake
2. Periodical cleaning drives via community participation
3. Identifying point sources of pollution and capturing of the same such as arresting untreated wastewater disposal.
4. Arresting solid waste disposal
5. Installation of dustbins
6. Polluter pays principle should be adopted
7. Periodic removal of water hyacinths
8. Removal of encroachments near the water bodies and beautification of the same.
9. Special attention during the religious festivals :
 - i. Restriction on deity submersion
 - ii. Restriction on flower and other organic waste disposal



3.5 Well rejuvenation plans taken up

**Marks
100**

Wells are very important source of ground water since ages. The wells played a critical role as a source of drinking water as well as for sustaining the Indian agriculture. In urban areas also played an important role as a source of drinking water, absorption of flood water and a conduit for ground water recharge. Due to technology upgradation and urbanization, this traditional system was neglected, and many wells dried up. This indicator encourages the local bodies to revive their traditional wells and examines how efficiently the local bodies are doing it.

Details required for supporting progress:

- Self certification
- Number of old wells within the periphery of the local body
- Number of projects taken up for rejuvenation
- Location of the project site on google map.
- Physical and financial progress brief
- Stage wise photographs (size 1 to 2 MB)

Evaluation mechanism	Marks
% of old wells were rejuvenated	100
<i>Relative Marking</i>	



The images are for illustrative purpose only



3.6.1 Urban: Proportion of wastewater treated in STP (for Urban Local Bodies with existing STP)

Marks
150

Untreated sewage is a major cause for water pollution. It needs to be properly treated before it can be disposed of to any natural water source. Sewage treatment is the most important part of the environmental planning. This indicator focuses on how the ULBs/PRIs are treating their sewage.

Details required for supporting progress:

- Self certification
- Location details along with capacity of existing STP and total water received in the STP
- Physical and financial progress brief
- Geo-tagged photographs (size 1 to 2 MB) of the STP in working condition (size 1 to 2 MB)

It is mandatory that the treated water from STP should match with the CPCB/MPCB latest standards.

Evaluation mechanism	Marks
Assessment will be done based on :	
Is the STP functional	
Yes	75
No	0
Capacity usage of STP	
100% capacity	75
Below 100%	0



3.6.2 Urban: Proposed approved projects for implementation of STP (for local bodies without STP)

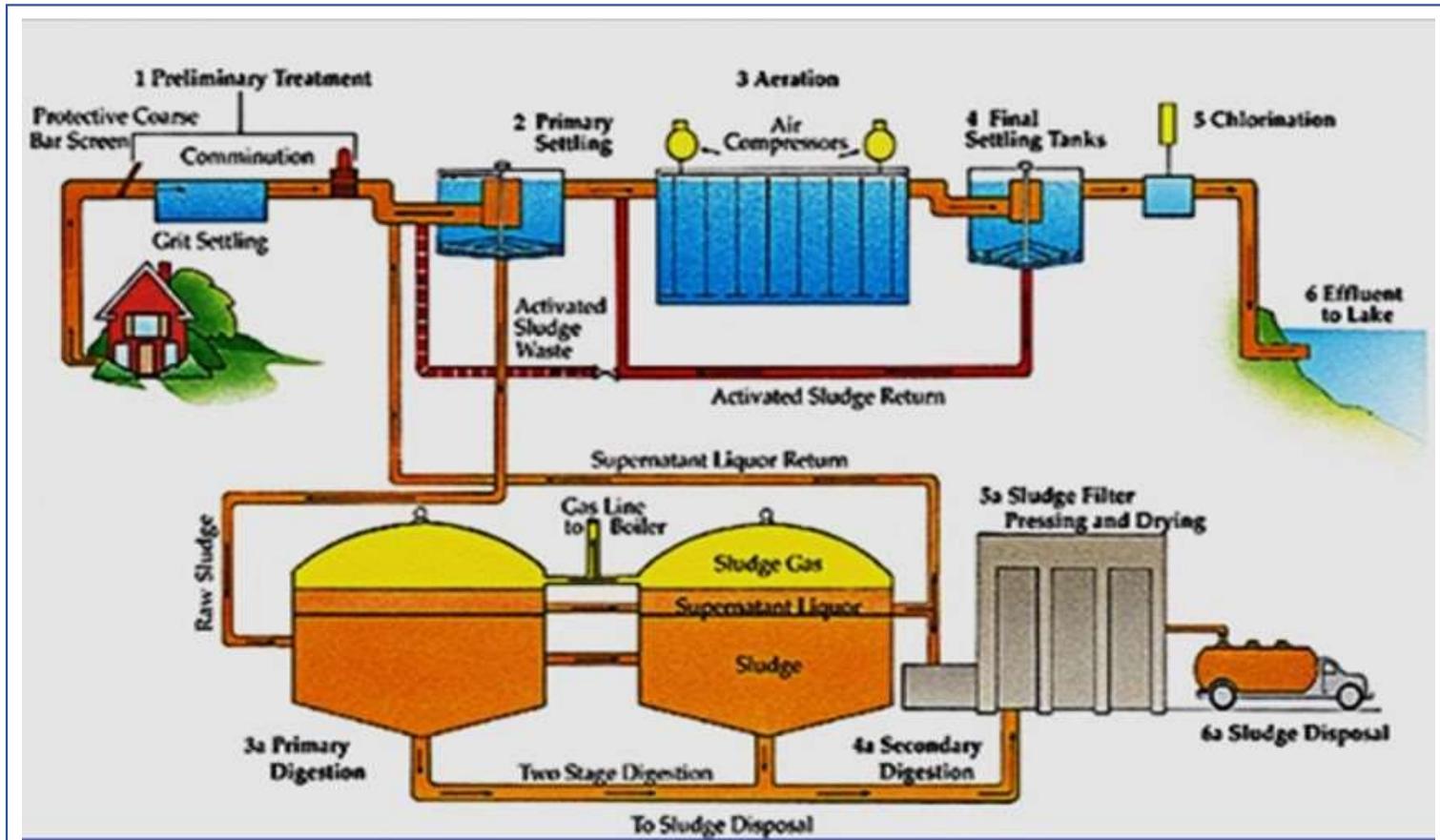
**Marks
150**

Many ULBs/PRIs don't have their own STP. But construction of STP is now being accorded importance in cities/villages as aids in pollution prevention and environmental conservation. Considering the above fact this indicator will identify the ULBs who don't have STP but they already have proposed new STP in their area.

Details required for supporting progress:

- Self certification
- Location details along with capacity of STP
- Physical and financial progress brief
- Status of the STP
- Stage wise photographs (size 1 to 2 MB) of the project

Evaluation mechanism	Marks
Assessment will be done based on the status of the project	
▪ Tender awarded	30
▪ Construction in progress	50
▪ Construction complete	150



The images are for illustrative purpose only Source google.com



3.6 Rural: Percentage of farmland covered under drip irrigation/micro irrigation projects

**Marks
150**

Micro irrigation techniques not only help in water saving, but also in reducing fertilizer usage, labour expenses, other inputs and input costs, besides sustaining soil health. Micro-irrigation systems deliver water savings up to 40% over conventional flood irrigation methods, along with appreciable crop productivity and income enhancement. Through this indicator the department wants to understand how much farmland from rural Maharashtra is using micro-irrigation.

Details required for supporting progress:

- Self certification
- Details of beneficiary taken advantage of **Pradhan Mantri Krishi Sinchayee Yojana (Valid Aadhar details)**
- Total farmland under rural local body
- Total farmland covered under drip irrigation/micro irrigation projects (Acre/hector) with location map.
- Physical and financial project brief

Evaluation mechanism	Marks
Percentage of farmland covered under drip irrigation/micro irrigation projects	75
Number of beneficiary under Pradhan Mantri Krishi Sinchayee Yojana (Valid Aadhar details)	75
<u>Relative Marking</u>	



3.7 Urban: Reuse of treated water for non-potable use

Marks
50

Reuse of wastewater after its treatment may be a good alternative for regions, which suffer from lack of pure water or have limited access to water resources. Reuse techniques may be applied for municipal and industrial wastewater. This should only consider water that is directly conveyed for recycling or reuse, such as use in gardens and parks, use for irrigation, etc. This indicator examines how efficiently the local bodies are using the sewage management practices.

Details required for supporting progress:

- Self certification
- Treated water in MLD
- Percentage of treated water directly used or recycled for a variety of applications such as Farm Forestry, Horticulture, Toilet flushing, Industrial use as in non-human contact cooling towers, Fish culture, gardens and parks etc.
- Photographs (size 1 to 2 MB) and locations of the application activity

Evaluation mechanism	Marks
Percentage of treated water directly used for purposes mentioned	
> 95 %	50
80 to < 95 %	40
50 to < 80 %	30
20 to < 50 %	15
< 20 %	0

Note: Handbook On Service Level Benchmarking by MoUD - <http://cpheeo.gov.in/upload/uploadfiles/files/Handbook.pdf>



3.7 Rural: Initiative towards watershed development activities

**Marks
50**

Watershed is a geo-hydrological unit draining to a common point by a system of drains. Watershed development refers to the conservation; regeneration and the judicious use of all the natural resources particularly land, water, vegetation and animals and human development within the watershed. Rural Maharashtra had adopted watershed development and management to reduce drought. This indicator examines how efficiently the local bodies are using the watershed development activities.

Details required for supporting progress:

- Self certification
- Work order/ Administrative approval
- Location details along with capacity of watershed
- Physical and financial progress brief
- Stage wise photographs (size 1 to 2 MB) of the project

Evaluation mechanism	Marks
Evaluation will be done based on the status of the watershed development project	
▪ Project was conceptualized and approved by district authority	20
▪ Work is going on	30
▪ Project is completed	50



3.8 Reduction of water pollution during festivals

Marks
100

Immersion of idols in water bodies like rivers, lakes, ponds, estuaries, open coastal beaches, wells etc., cause concerns in terms of water pollution. It is therefore important that we celebrate the festival keeping in view the need for environment protection, prevention and control of pollution. This indicator will give idea about the activities of local body to reduce water pollution due to idol immersion.

Details required for supporting progress:

- Self certification
- Photographs (size 1 to 2 MB) of eco-friendly immersion promotional activities: street plays, promotion in social media, guideline communicated in different housing societies and festival clubs, ban of idol immersion in traditional immersion water bodies
- Total number and locations of artificial immersion spot
- Detailed report on collection, segregation, transport and processing of worship material before and after the immersion

Evaluation mechanism	Marks
Promotion of eco-friendly immersion	20
No. of artificial immersion spots created	50
Collection, segregation transport and processing of worship material pre and post immersion	30

Relative Marking

Guidelines for idol immersion: https://www.mpcb.gov.in/sites/default/files/focus-area-reports-documents/CPCB_Guidelines_for_Idol_Immersion.pdf



3.9 Promotion of eco-friendly idols during festivals

Marks
200

Traditionally, clay is used to make idols with natural colors. Now a days Plaster of paris, toxic dyes, plastic and thermocol are used which are non-biodegradable and toxic in nature. So eco-friendly idol and its promotion can reduce the water pollution during festivals. This indicator will evaluate the local body about their promotional activity regarding eco-friendly idol.

Details required for supporting progress:

- Self certification
- Total number of promotional activities
- Photographs (size 1 to 2 MB) of promotional activities
- Total number of idols (Community and individual) worshiped
- Total number of eco-friendly idols worshiped

Evaluation mechanism	Marks	
	Community	Individual
No. of promotional activity done	50	
Percentage of eco-friendly idols worshipped	75	75
<i>Relative Marking</i>		



Suggestions for promotional activities of eco-friendly idols

- Training or awareness programs for idol makers educating about eco-friendly idol making
- Publication of list of the idol makers who are licensed/permited to manufacture and sell eco-friendly idols
- Campaign/ awareness activity on toxic effects of artificial components like dyes, Plaster of Paris, Thermocols used in idol manufacturing

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Desktop Assessment



4. Energy - 800



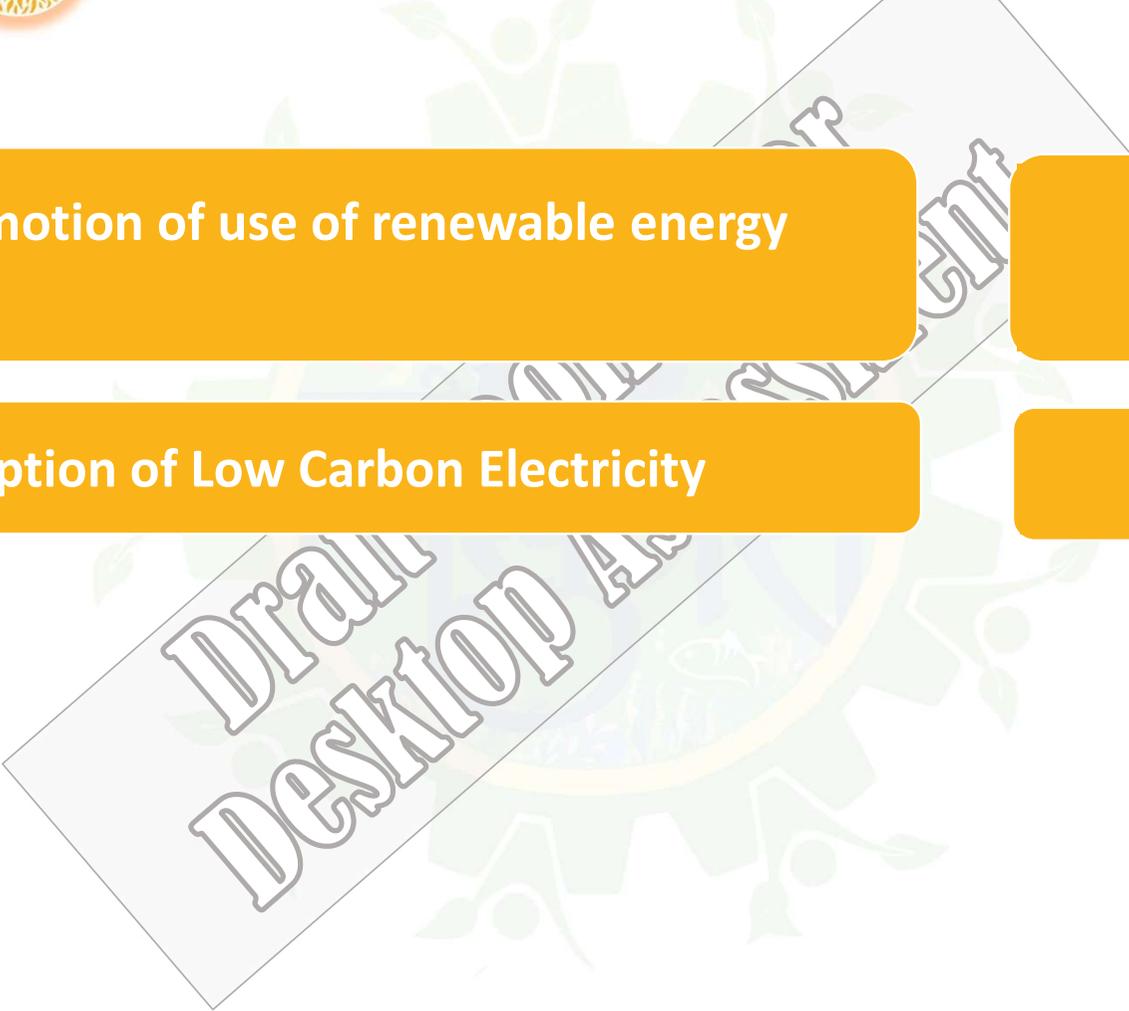
4.1 Promotion of use of renewable energy sources

200



4.2 Adoption of Low Carbon Electricity

600





4. Energy



S.I.	2021-22 Action points proposed		Marks
	Urban	Rural	
4.1	Promotional and awareness generation activities to encourage use of renewable energy sources		200
4.2	Adoption of Low Carbon Electricity		
4.2.1	Total no. of solar and/or LED lights installed in the mission period		100
4.2.2	Solar installation on rooftops/in complexes of public buildings		300
4.2.3	Number of green buildings	Bio-gas plants as a source of renewable energy	100
4.2.4	Energy audit of public buildings and energy saving efforts (% of buildings covered through energy audit) and energy saving efforts by using recycled paper, censor-based lights)	Total number of agricultural solar pumps	100
	Total		800



4.1 Promotional and awareness generation activities to encourage use of renewable energy sources

Marks
200

Considering the depletion in the conventional natural resources it is very important to move to renewable energy such as solar power, hydraulic power./wind power This indicator identifies how the ULBs/PRIs are promoting usage of renewable energy.

Details required for supporting progress:

- Self certification
- Copy of documents regarding public awareness activities taken up
- Photographs (size 1 to 2 MB) of events
- Citizen participation details in those events

Evaluation mechanism	Marks
No. of awareness events organized to promote Renewable energy	200
<i>Relative Marking</i>	



4.2.1 Total no. of solar/ LED lights in the mission period

Marks
100

Usage of Solar/LED lights is the very basic step towards energy conservation. This indicator identifies how the ULBs/PRIs are promoting usage of solar/LED lights.

Details required for supporting progress:

- Self certification
- Number of solar/LED lights installed
- Energy saving report due to the change in the lights. Such as before and after electricity bills.
- Physical and financial progress brief
- Before & after photographs (size 1 to 2 MB)

Evaluation mechanism	Marks
Total no. of solar/LED lights	
For solar lights	50
For LED lights	50
Relative Marking	

Note: 1. The solar/led lights installed during the abhiyan period need to be submitted here.
2. Solar/led lights installed last year will be considered in upkeep of Majhi Vasundhara 2020-21 part.



The images are for illustrative purpose only Source google.com



4.2.2 Solar installation on rooftops or in complexes of public buildings

Marks
300

Usage of Solar rooftop is the very basic step towards reduction of conventional energy usage and promotion of renewable energy. This indicator identifies how the ULBs/PRI's are setting an example for citizens and promoting renewable energy by installing solar rooftops on the public buildings.

Details required for supporting progress:

- Self certification
- Total number of public buildings
- Number of public buildings with solar rooftop or in complexes with solar installation
- Total capacity of solar installations (in kW) during Abhiyan period
- Energy saving report due to installation of solar rooftop. Such as before and after electricity bills.
- Physical and financial progress brief
- Before & after photographs (size 1 to 2 MB)

Evaluation mechanism	Marks
Total capacity of solar installations (in kW) during Abhiyan period	300
<i>Relative Marking</i>	

Note: State Renewable Energy Policy 2020 dated 31st Dec 2020 - <https://www.mahaurja.com/meda/data/other/Policy2020GridAndOffGrid.pdf>



The image is for illustrative purpose only



4.2.3 Urban: Number of green buildings

Marks
100

A green building is one which uses less water, optimizes energy efficiency, conserves natural resources, generates less waste and provides healthier spaces for occupants, as compared to a conventional building. Green building helps to reduce carbon footprint of the local body. This parameter indicates how many green buildings are existing or proposed within the periphery of the local body.

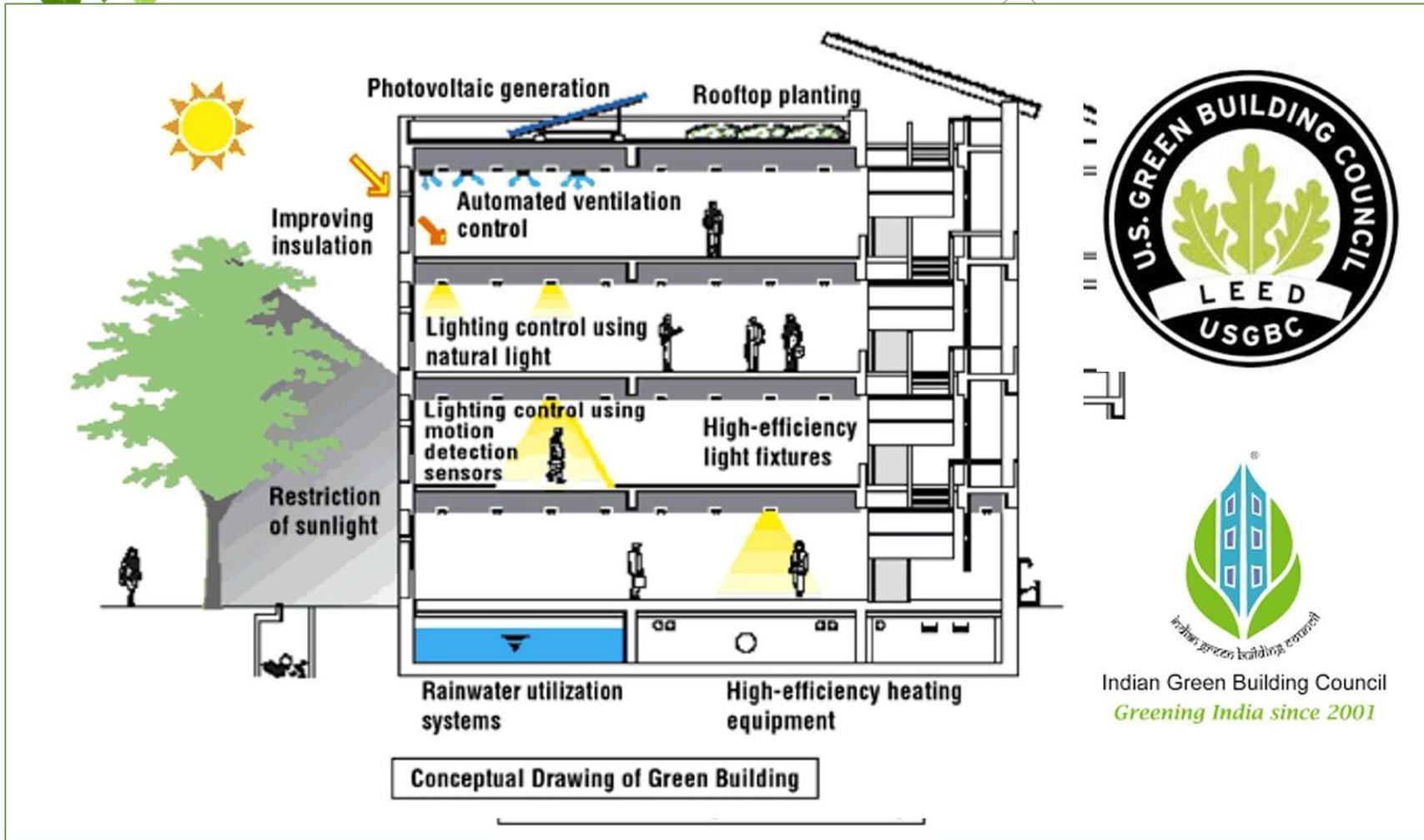
Details required for supporting progress:

- Self certification
- Number of buildings with LEED/IGBC certification
- Location of the buildings on Google map. Geo tagged maps can be submitted if available.
- OC received from the ULB for the green buildings
- Valid certification from LEED/IGBC or equivalent

Note: Validity period for IGBC rated projects would be 3 yrs (for buildings) and 5 yrs (for large developments like cities, campuses, etc).

Evaluation mechanism	Marks
Number of green building	100

Relative Marking



The image is for illustrative purpose only



4.2.3 Rural: Bio-gas plants as a source of renewable energy

Marks
100

Biogas can be produced from raw materials such as agricultural waste, manure, municipal waste, plant material, sewage, green waste or food waste. Biogas is very good source of renewable energy in rural areas. This indicator highlights how the ULBs/PRIs are using Bio-gas to reduce usage of conventional energy sources.

Details required for supporting progress:

- Self certification
- Number of biogas plant installed and in working condition during Abhiyan period
- Location on google maps. Geo-tagged maps can be submitted if available.
- physical and financial progress brief
- Geo-tagged photographs (size 1 to 2 MB) of biogas plants

Evaluation mechanism

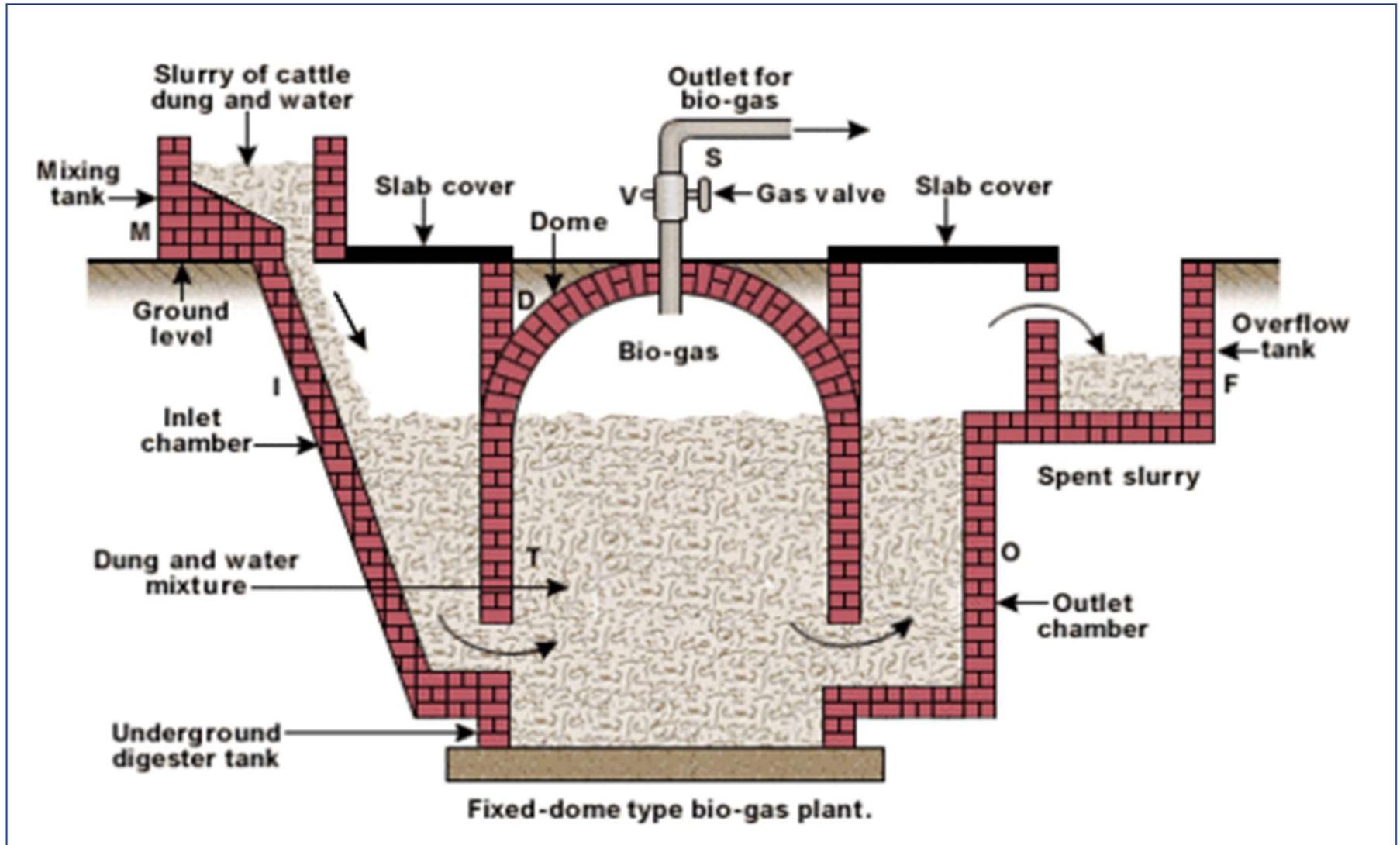
Marks

The marks will be given on the number of biogas plants installed and in working condition during Abhiyan period

100

Relative Marking

Note: the biogas plants installed during the abhiyan period need to be submitted here. Biogas plants installed last year will be considered in upkeep of Majhi Vasundhara 2020-21 part.



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4.2.4 Urban: Energy audit of public buildings and energy saving efforts

Marks
100

An energy audit is an inspection survey and an analysis of energy flows for energy conservation in a building. It may include a process or system to reduce the amount of energy input (by using sensor-based light, recycled paper, paperless official work [online], eco-friendly material etc.) into the system without negatively affecting the output. It was proven with energy audit minimum 15%-20% energy savings is possible which not only save electricity but also reduce the electricity bills. This indicator is introduced to encourage monitoring of electricity usage and reduction of energy wastage.

Details required for supporting progress:

- Self certification
- Total numbers of public buildings
- Number of buildings with energy audit report
- Physical and financial progress brief
- Details on implementation of the recommendations made in the energy audit report
- Geo-tagged photographs (size 1 to 2 MB) of solar pumps in working condition.

Evaluation mechanism	Marks
% of public buildings with energy audit report	
75% or More	80
50%-74.99%	50
25%-49.99%	20
Implementing the recommendations of energy audit report	20



ENERGY IS LIFE

B E E

C O N S E R V E I T



4.2.4 Rural: Total number of agricultural solar pumps

Marks
100

The main advantage of a solar water pump is, it uses sunlight with no cost at all. As solar water pump minimizes the dependence on electricity or diesel, once installed, there is no recurring cost of electricity or fuel. GoI encourages the use of water pump in rural areas through KUSUM scheme/Mukhyamantri Saur Krushi Pump Yojana. This indicator identifies how the villages are using solar pumps in their day-to-day life.

Details required for supporting progress:

- Self certification
- Details about number of solar pump installed
- Physical and financial progress brief
- Photographs (size 1 to 2 MB) of solar pumps in working condition.

Evaluation mechanism	Marks
Total number of solar pumps installed in individual or community areas (Installed and in working condition)	100
<i>Relative Marking</i>	

Note: 1. The solar pumps installed during the abhiyan period need to be submitted here.

2. Solar pumps installed last year will be considered in upkeep of Majhi Vasundhara 2020-21 part.



सत्यमेव जयते
Government of India

KUSUM SCHEME
Kisan Urja Suraksha
Utthaan Maha Abhiyaan

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5. Akash - 1200



5.1 #Epledge taken

150



5.2 Upkeep of #Epledge

200



5.3 Awareness on environment improvement/protection in line with #Epledge and #Majhivasundhara though Social Media

100



5. Akash - 1200



5.4 Promotion of Majhi Vasundhara to engage citizens

100



5.5 Organizing local Competition/Spardha to promote Majhi Vasundhara

100



5.6 Creation of success story- Individual/group (Minimum 10 success stories)

50



5.7 Promulgating Majhi Vasundhara principles in public areas

500



5. Akash



S.I.	2021-22 Action points proposed	Marks
5.1	#Epledge taken	150
5.2	Upkeep of #Epledge	200
5.3	Activities involving awareness generation on environmental conservation and their posts with #Epledgeupdate and #Majhivasundhara on Social Media.	100
5.4	Promotion of Majhi Vasundhara to engage citizens <ul style="list-style-type: none"> • Events for conducting group pledge ceremony and follow up activities under #Epledge • Celebration of green festivals (as suggested by the mission office time to time) 	100
5.5	Organizing local Spardha to promote Majhi Vasundhara <ul style="list-style-type: none"> ○ Identification of Paryawaran Doot as an outcome of one of the Spardha 	100
	Total	650



5. Akash



S.I.	2021-22 Action points proposed	Marks
5.6	<p>Creation of success story on adoption of Epledge - Individual/group (Minimum 10)</p> <p><u>Note: Only the stories which were recognized by Majhi Vasundhara Mission office will be considered.</u></p>	50
5.7	<p>Promulgating Majhi Vasundhara principles in public areas in the form of:</p> <ul style="list-style-type: none"> • MV Pathways with solar lights, road-side plantation • MV Fountain to indicate water reuse • MV Greens consisting of native trees, drip irrigation system, land and water reuse 	500
	Total	550



5.1. #Epledge taken: Individual/ Group pledges

Marks
150

Majhi Vasundhara #Epledge is an initiative by the Department of Environment and Climate Change, Govt. Of Maharashtra to connect with every citizen at a personal level. This indicator identifies how many citizens/groups have taken #Epledge .

Details required for supporting progress:

- Self certification
- Number of #Epledges taken by **individuals and groups** in the respective local body.
- Cumulative number will be considered.

Evaluation mechanism	Marks
Number of #Epledges taken by individuals in the respective local body	100
Number of #Epledges taken by groups in the respective local body	50
<u>Relative Marking</u>	



5.2. Upkeep of #Epledge: individual/Group pledges

Marks
200

This indicator identifies how many citizen/Groups have implemented #Epledge taken by them. This indicator will motivate the citizens/Groups to upkeep their #Epledge.

Details required for supporting progress:

- Self certification
- Total number of #Epledges taken by individuals and groups in the respective local body
- Total Number of individuals and groups who have upheld on their #Epledge

Evaluation mechanism	Marks
% of individual who have upheld their #Epledge in comparison with the total number of individual taken #Epledge in respective local body	150
% of groups that have upheld their #Epledge in comparison with the total number of groups taken #Epledge in respective local body	50

Relative Marking



5.3 Activities involving awareness generation on environmental conservation, climate change and their posts with #Epledge and #Majhivasundhara on Social Media.

Marks
100

The mission wants to encourage active citizen participation in different climate change mitigation initiatives in a timely and innovative manner. And considering the present scenario, social media is the best platform to connect with citizen. The mission wants to identify how the local bodies are reaching out to citizen to make them aware of the mission through social media.

Details required for supporting progress:

- Self certification
- Number of posts from local bodies on their social media pages with #majhivasundhara and #Epledge will be counted.
 - Facebook
 - Twitter
 - Instagram
- Number of events conducted
- Number of participants in each event

Evaluation mechanism	Marks
Number of posts from local bodies social media page with #majhivasundhara and #Epledge	50
Average number of participants per event <i>(Total number of participants engaged/Number of events)</i>	50

Relative Marking



5.4 Promotion of Majhi Vasundhara to engage citizens

Marks
100

Active participation in different climate change mitigation initiatives in a timely and innovative manner is one of the objective of Majhi Vasundhara Abhiyan. This indicator will evaluate about promotional activity regarding Majhi Vasundhara Abhiyan by local bodies.

Details required for supporting progress:

- Self certification
- Number of events/activities conducted by the local body
- Number of events/activities conducted by the private companies/NGO's/Corporates
- Events/activities organized by the educational institutions (percentage of educational institution in comparison with total number of educational institutions. (recognized schools/colleges)
- Number of events/activities organized by the societies/residence welfare associations/citizen groups/citizen clubs

Evaluation mechanism	Marks
Assessment will be done based on number of events/activities conducted by -(100)	
The local body	40
Private companies/NGO's/Corporates	20
The educational institutions	20
The societies/residence welfare associations/citizen groups/citizen clubs	20
Relative Marking	



5.5 Organizing local Competition/Spardha to promote Majhi Vasundhara

Marks
100

The mission wants local bodies to be creative and organise their own Competition/Spardha to encourage active citizen participation in different climate change mitigation initiatives in a timely manner. This department wants to identify how the local bodies organized the Competition/Spardha

Details required for supporting progress:

- Self certification
- Details of the Competitions/Spardha conducted.
- Number of the participants
- Outcome of the Competition/Spardha
- Identification of Paryawaran Doot as an outcome of one of the Competition/Spardha
- Number of events conducted by Paryawaran doot

Evaluation mechanism	Marks
Number of Competitions/Spardha conducted by the local body	50
Number of people connected/participated	20
Number of Paryawaran doot identified	10
Number of events conducted by Paryawaran doot	20
<i>Relative Marking</i>	



Criteria for “Paryawaran doot”

The person should be -

- A citizen of the respective local body
- An active citizen who participates and willing to participate in different climate change mitigation initiatives
- A participant of local Majhi Vasundhara Abhiyan competition

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5.6 Creation of success story on adoption of #Epledge - Individual/group

Marks
50

As an outcome of the Majhi Vasundhara Abhiyan 2021-22, every local body should have their own success story. This indicator will identify how many #Epledge success stories respective ULBs and PRIs have.

Details required for supporting progress:

- Self certification
- 5 Facebook posts with highest engagement on remarkable/innovative work done by respective ULBs/PRIs.

Evaluation mechanism

Marks

Avg. of Facebook post engagement by respective ULBs/PRIs (like and share)

50

Relative Marking



5.7 Promulgating Majhi Vasundhara principles in public areas

**Marks
500**

Majhi Vasundhara Abhiyan focuses on identifying potential action points under the five elements of nature (Panchamahabhuta) for the betterment of the environment. Promulgation of these five principles (Bhoomi, Vayu, Jal, Agni and Akash) in public amenities will aware and encourage citizens to participate in this mission more actively.

Details required for supporting the progress:

- Self certification
- Number and details of each spot (minimum 5) created which promulgate MVA principles. For example
 - MV Pathways with solar lights, road-side plantation
 - MV Fountain to indicate water reuse
 - MV Greens consisting of native trees, drip irrigation system, water reuse, solar lights etc.
- Geo-tagged photographs (size 1 to 2 MB) of amenities created.

Evaluation mechanism	Marks
Number of spots developed with focus on Majhi Vasundhara Principles	500
100 marks will be allocated for each spot developed. Five or more number of spots developed will get full marks	



The images are for illustrative purpose only



Upkeep of MVA1

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6. Upkeep of MVA1

Marks
450

This section is created to make sure the local bodies are taking care of the activities done by them in MVA 1, 2020-21.

Details required for supporting progress:

- Self certification
- Data submission as per prescribed format by the department
- The data submitted during Majhi Vasundhara Abhiyan 2020-21 must be submitted again for comparison.
- Photographs (size 1 to 2 MB) from MVA 1 and current photographs (size 1 to 2 MB)



6. Upkeep of MVA 1

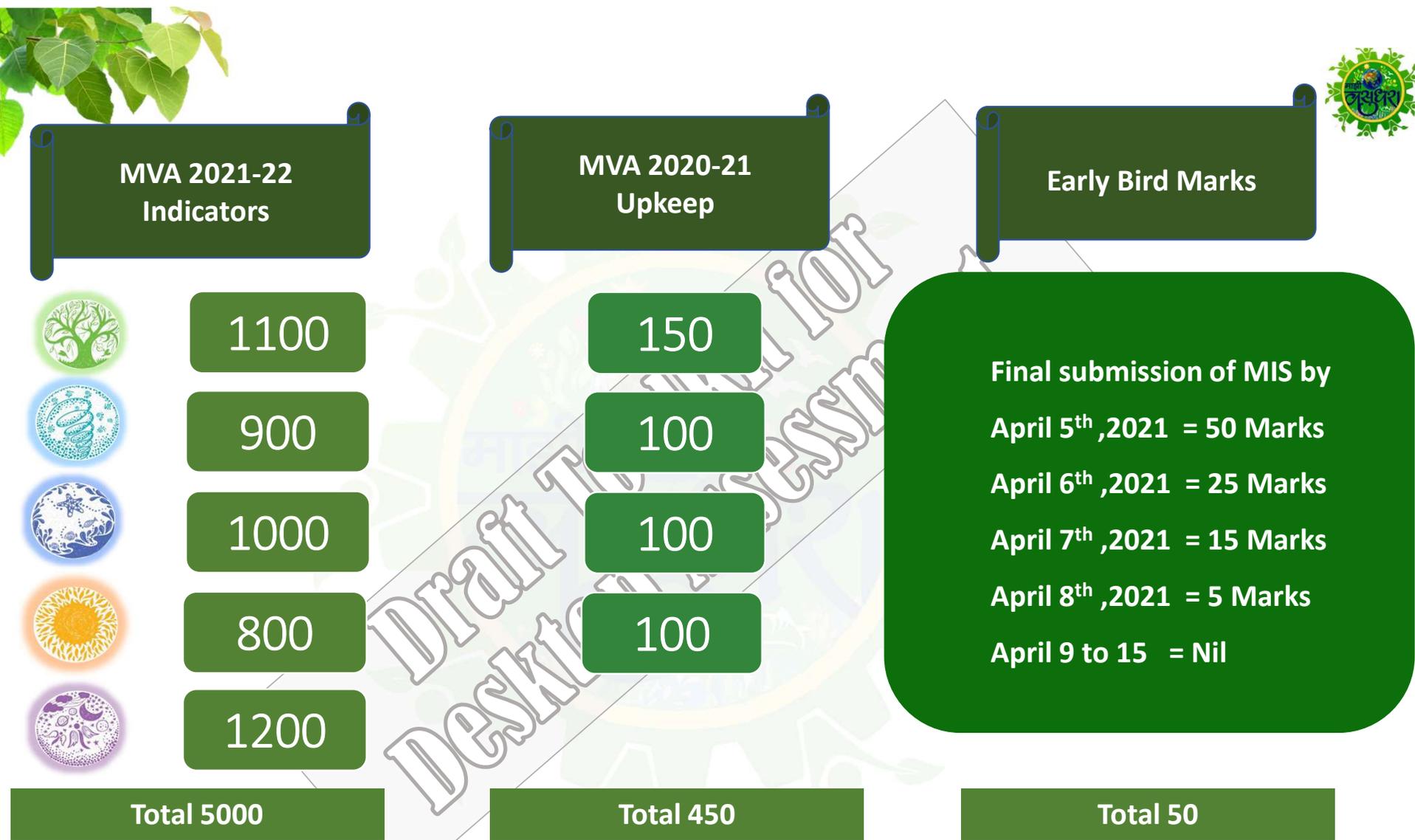


S.I.	2021-22 Action points proposed		Marks
	Comparison will be done based on last years data		
	Urban	Rural	
	Bhumi		
6.1	Number of trees survived from MVA 2020-21		100
6.2	Number of indigenous trees survived from MVA 2020-21		50
	Vayu		
6.3	Number of roadside trees survived from MVA 2020-21		100
	Jala		
6.4	Maintenance of the Rainwater harvesting systems in buildings taken up during MVA 2021		50
6.5	Maintenance of the rejuvenation and beautification plans taken up during MVA 2021		50
	Total		350

6. Upkeep of MVA 1



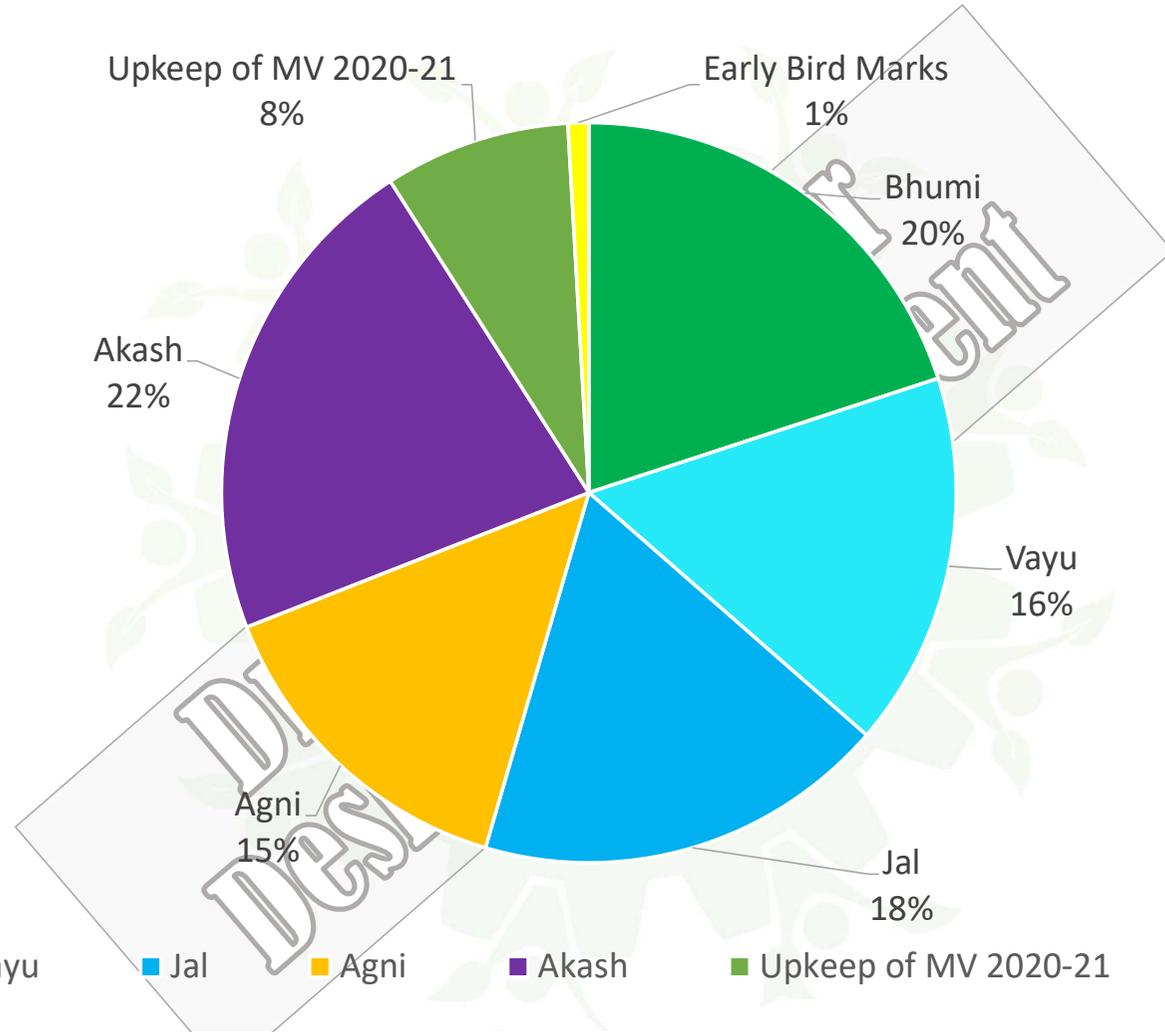
S.I.	2021-22 Action points proposed		Marks
	Comparison will be done based on last years data		
	Urban	Rural	
	Agni		
6.6	Total no. of solar are in working condition from MVA 2021		25
6.7	LED lights are in working condition from MVA 2021		25
6.8	Number of green buildings rating maintained	Bio-gas plants as a source of renewable energy are in working condition from MVA 2021	25
6.9	Number of charging points are in working condition from MVA 2021	Total number of solar pumps are in working condition from MVA 2021	25
	Total		100



Total potential to score: 5500



Marks Division



■ Bhumi ■ Vayu ■ Jal ■ Agni ■ Akash ■ Upkeep of MV 2020-21 ■ Early Bird Marks

Total : 5500



Schemes/legislations for assistance

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S.I.	Action points	Scheme/legislation name
1.1 Green cover and biodiversity		
1.1.1	No. of trees planted/sqm (Plantation Density)	Vanmahotsav - Mission Plantation by Maharashtra Forest Department, Govt. of Maharashtra Green India Mission – Ministry of Environment, Forest & Climate Change, Govt. of India
1.1.2	Native/indigenous species tree planted/sqm (Plantation Density)	
1.1.3	Heritage tree – Census preparation & it's publications (50) Geo-tagging (50)	Amendment to the Protection and Preservation of Trees Act (1975)
1.1.4	Tree Census - Census preparation & it's publications (50) Geo-tagging (50)	
1.1.6	No. of newly created green areas (Amrut Van, Bio-diversity Park, Butterfly Park, Bird Parks etc.)	Amrut Van under Atal Mission for Rejuvenation and Urban Transformation (AMRUT) scheme in Maharashtra – Ministry of Housing and Urban Affairs, Govt. of India Urban development Department , Govt. of Maharashtra
1.1.7	Bio-diversity register preparation and documentation	Biological Diversity Act, 2002



S.I.	Action points	Scheme/legislation name
1.2. Solid waste management		
1.2.1	Percentage of solid waste collected, segregated (at source)	
1.2.2	Wet waste processing	Swachh Bharat Mission (Urban) Ministry of Housing and Urban Affairs, Govt. of India
1.2.3	Recycling/Treatment/final disposal of Dry Waste	Urban development Department , Govt. of Maharashtra
1.2.4	Plastic waste Management	Swachh Bharat Mission (Rural) Department of drinking water and sanitation, Govt. of India
1.2.4.1	Initiative to reduce plastic waste considering the three "R" principles	
1.2.4.2	Single use plastic ban	Maharashtra Plastic and Thermocol Products (MUSTH&S) Notification, 2018
1.2.5	Bio-medical waste management	The biomedical waste management & handling rules (1998).
1.2.6	E-waste management	Amended E-Waste Management Rules (2018)
1.2.7	Scientific treatment of legacy solid waste	
1.2.8	ODF status	Swachh Bharat Mission



S.I.	Action points	Scheme/legislation name
Air quality		
2.1	Air quality monitoring - MoEFCC recognized labs & NABL Accredited Labs once in the month/ MPCB air quality monitoring report will also be accepted	Maharashtra Pollution Control Board – Clean air action plan for Maharashtra State (as of 2020). National Clean Air Programme (NCAP) - Ministry of Environment, Forest & Climate Change, Govt. of India
2.2.2	C&D waste management	The Construction and Demolition (C&D) Waste Management Rules, 2016 by the Ministry of Environment, Forest and Climate Change (MoEF&CC)
2.2.2.1	Agricultural waste management (stubble/open burning of the farm waste)	National Green Tribunal order
2.2.2.2	UJJAVALA coverage and gas connection	Pradhan Mantri Ujjwala Yojana (PMUY) , Ministry of Petroleum and Natural Gas



S.I.	Action points	
Air quality		
2.2.3	Agricultural waste management (stubble/open burning of the farm waste)	National Green Tribunal order
2.2.4	UJJAVALA coverage and gas connection	Pradhan Mantri Ujjwala Yojana (PMUY), Ministry of Petroleum and Natural Gas
2.4	Effective implementation of EV Policy	Maharashtra Electric Vehicle Policy



S.I.	Action points	Scheme/legislation name
Water		
3.1	Water conservation activities taken up	<p>National Water Mission, Ministry of Jal Shakti , Govt. of India</p> <p>Jal Shakti Abhiyan, Department of Drinking Water and Sanitation Ministry of Jal Shakti , Govt. of India</p> <p>Jalyukt Shivar Abhiyan, Department of Soil and Water Conservation, Govt. of Maharashtra</p>
3.2.1	Water audit report of Government Buildings	Central Water Commission – Draft general guidelines for water audit and water conservation (2017)
3.3.1	Rainwater harvesting in public buildings	
3.7	Initiative towards creation of rainwater percolation pits.	Water Supply & Sanitation Department of Government of Maharashtra G.R approving Rainwater Harvesting as a means of improving water supplies



S.I.	Action points	
Water		
3.4	Water body rejuvenation and beautification plans taken up	Atal Mission for Rejuvenation and Urban Transformation (AMRUT) scheme in Maharashtra Ministry of Housing and Urban Affairs, Govt. of India
3.6.1/3.6.2	Proportion of sewage treated in STP (for local bodies with existing STP) (ULB) Or Proposed approved projects for implementation of STP (for local bodies without STP) (ULB)	Urban development Department , Govt. of Maharashtra National Water Mission , Ministry of Jal Shakti , Govt. of India
3.6	Percentage of farmland covered under drip irrigation/micro irrigation projects	Pradhan Mantri Krishi Sinchayee Yojana – Central scheme on micro irrigation, National Mission on Micro Irrigation, Department of Agriculture, Govt. of India.
3.7	Initiative towards watershed development activities	Integrated watershed management program (IWMP) , Department of Land Resources, Ministry of Rural Development, Govt. of India.



S.I.	Action points	Scheme/ legislation name
Renewable energy		
4.2.1	Total no. of solar/ LED lights	Off-grid Solar PV Programme , Ministry of New and Renewable Energy (MNRE), Govt. of India Unnat Jyoti by Affordable LEDs for All (UJALA) scheme for rural areas, Ministry of Housing and Urban Affairs, Govt. of India
4.2.2	Solar rooftop on the public buildings	Grid connected Rooftop Solar Program , Ministry of New and Renewable Energy, Govt. of India.
4.2.3	Bio-gas plants as a source of renewable energy (Rural)	National Biogas and Fertilizer Management Program New National Biogas and Organic Manure Programme (NNBOMP) , Ministry of New and Renewable Energy (MNRE), Govt. of India
4.2.4	Energy Audit of public buildings.	National Energy Conservation Act , guidelines by the Bureau of Energy Efficiency.
4.2.4	Total number of solar pumps (Rural)	Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM) , Ministry of New and Renewable Energy, Govt. of India Mukhyamantri Saur KrushiPump Yojana , Industries, Energy and Labour Department, Govt. of Maharashtra



2021-22

Majhi

Vasundhara2

#majhivasundhara

Thank you







