#### SHRI SHIVAJI EDUCATION SOCIETY, AMRAVATI'S



## SHRI SHIVAJI SCIENCE COLLEGE, AMRAVATI



NAAC Accredited by Grade A with CGPA 3.13 (3rd Cycle) UGC awarded status of College with Potential for Excellence (2nd Phase) ISO 9000:2015 Certified College

Idenified by DST , Govt. Of India for FIST & Sant GadgeBaba Amravati University as Lead College



4<sup>™</sup> Cycle Assessment & Accreditation by NAAC

# Criterion-VII INSTITUTIONAL VALUES AND BEST PRACTICES

QnM - 7.1.4

Water conservation facilities available in the Institution:

### Contents

a. Rain water harvesting	Y
b. Borewell /Open well recharge	Y
c. Construction of tanks and bunds	Y
d. Waste water recycling	Y
e. Maintenance of water bodies and distribution	Y
system in the campus	

a) Rainwater Harvesting	4
1)Roof-top Rainwater Harvesting System	4
2) Roof-top Rainwater Harvesting System in the Payoshni Girls Hostel	5
b) Borewell /Open Well Recharge	6
c) Construction of Tanks and Bunds	7
1) Rain-water Supply to the Medico-Botanical Park in the College	7
2) Construction of Tanks For Rainwater Harvesting	8
3) Construction of Earthen Nala Bunds by NSS volunteers	11
Outdoor Activity by NSS	11
d) Waste water recycling	13
e) Maintenance of Water Bodies and Distribution System In the Campus	16
Awareness banner on importance of saving water at college campus	21



Ref. No.: SSSC/6471/IQAC/2021

Date: Nov. 22<sup>nd</sup>, 2021

#### Declaration

The information, reports, true copies of the supporting documents, numerical data, etc.

furnished in this file is verified by IQAC and found correct.

Hence this certificate.

5 Lunge

IQAC Coordinator Shri Shivaji Science College Amravati



G. V. Korpe Chairman IQAC and Principal Shri Shivaji Science College, Amravati

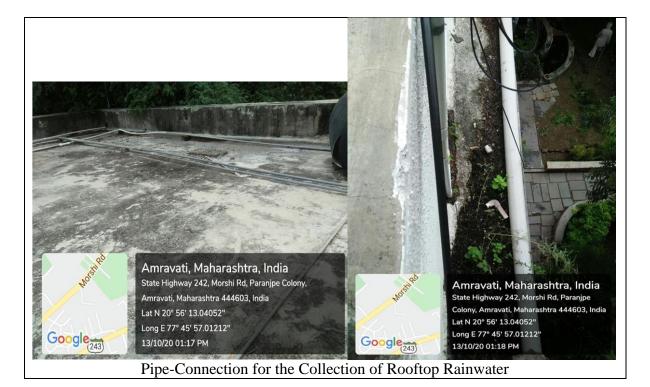
## a) Rainwater Harvesting

### 1) Roof-top Rainwater Harvesting System

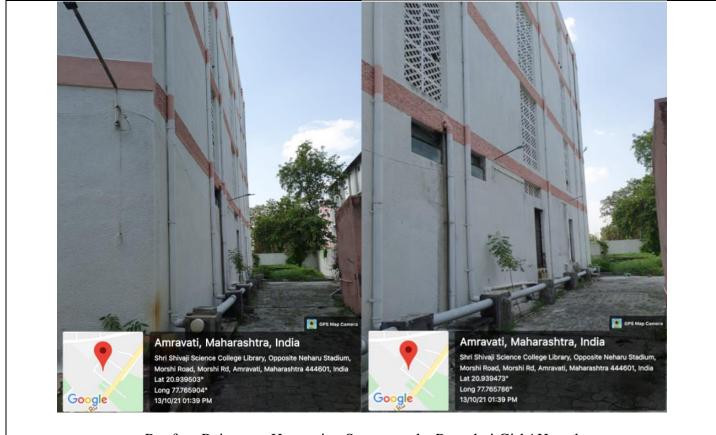
The college ensures rain-water conservation through rainwater harvesting. The rain water from the roof top outlets is carried through the well-connected pipelines to the wells or is collected in the large water harvesting tanks and the overflowing rain-water from these tanks is discharged in the soak-pits for ground water recharge.



Rainwater Harvesting System in the College



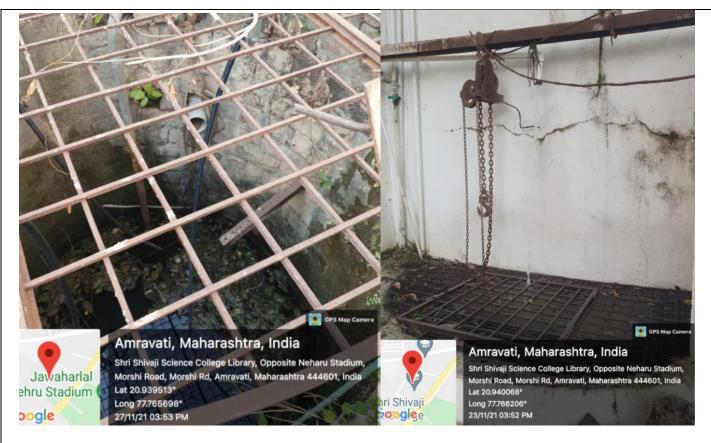
#### 2) Roof-top Rainwater Harvesting System in the Payoshni Girls Hostel



Rooftop Rainwater Harvesting System at the Payoshni Girls' Hostel

### b) Borewell /Open Well Recharge

Both the wells in the college and in the Girl's' Hostel are connected to rooftop rainwater harvesting system and the collected rain-water is discharged to the wells.



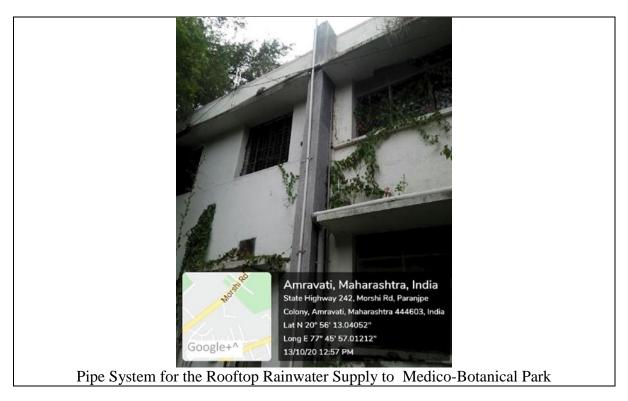
Both the wells in the college and in the Girl's' Hostel are connected to rooftop rainwater harvesting system and the collected rain-water is discharged to the wells.

### c) Construction of Tanks and Bunds

1) Rain-water Supply to the Medico-Botanical Park in the College

Rain water collected in the tank is supplied to the plants in the Medico- Botanical Garden of the college.





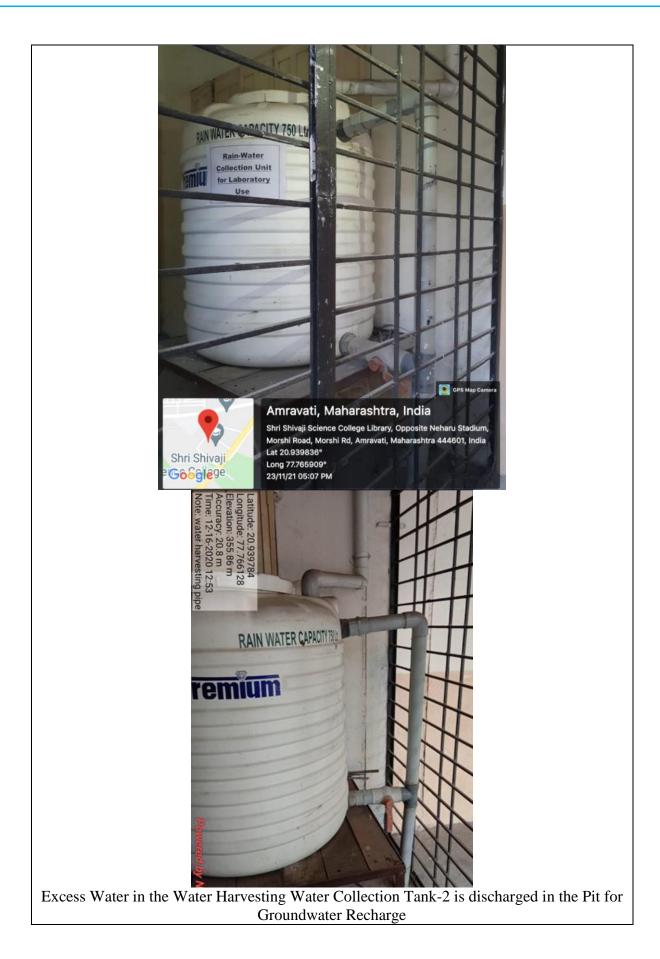
#### 2) Construction of Tanks For Rainwater Harvesting

The college has established two tanks near the Department of Chemistry for the collection of rain-water which is used for the laboratory use. In addition to this, the overflowing rain water from these tanks is carried to the soak pit for ground water recharge.





Recharge



#### 3) Construction of Earthen Nala Bunds by NSS volunteers

#### **Outdoor Activity by NSS**

In NSS camp 2018-19 students with Dr. Tushar Wankhede NSS program In-charge built an Earthen Nala Bund (ENB) for ground water recharge in the adopted village - New Akola by the NSS unit of the college.



Construction of ENB for increasing groundwater recharge by the NSS students in the NSS Camp of Our college 2018-19



Construction of ENB for increasing groundwater recharge by the NSS students in the NSS Camp of Our college 2019-20



Construction of ENB for increasing groundwater recharge by the NSS students in the NSS Camp of Our college 2019-20

#### d) Waste water recycling

Shri Shivaji Science College, Amravati has agreement with SMS company to carry out hazardous chemicals from special tanks constructed outside Chemistry laboratory as a part of Waste management. The hazardous chemicals carried away by SMS company are taken to "Common Effluent Treatment Plant", MIDC, Amravati. After processing of hazardous chemicals at "Common Effluent Treatment Plant" college receives back treated water and is used in college for various purposes excluding drinking.

EME
Ref: SMS/CETP/AMT/20-21/292 Date: 19.10.2020
To,
The Principal Shri Shivaji Science College,
Morshi Road, Amravati.
Subject: Parminging to discourt 200
Subject: Permission to dispose Effluent at CETP, Nandgaon Peth Reference : Your letter dated 13/10/2020
Dear Sir, With reference to your letter dated 13/10/2020, we are ready to accept 1000 litter effluent
generated during every two month at your Chemical Testing Laboratory for final treatment and
disposal, as per following terms
<ol> <li>You will have to comply all statutory/ legal requirements if any.</li> <li>You will be responsible for safe Transportation of effluent.</li> </ol>
<ol> <li>Disposal Charges will be Rs. 126/- per 1000 litter plus GST.</li> </ol>
y appendix and be the two per too much pub (151.
Regards with best wishes
For SMS Ltd. (CETP Amravati)
E 1
W.
(C P Sarkar)
Ce : Executive Engineer MIDC, Amravati Division, Amravati
o Dateutre Engineer Miloe, Anravan Division, Amravan
Registered & Corporate Office: IT Park, 20, S.T.P.I., Gayatri Nagar, Parsodi, Nagpur – 440 022 (India) SMS LIMITED
Ph.: +91-712-6665000, 7125000, Fax: +91-712-6665100, E-mail: info@smsl.co.in, Web: www.smsl.co.in (Formerly SMS infratructive Limited)
Permission Letter for the disposal of Chemical Effluent from the College to the SMS Ltd., CEPT,
Nandagaon Peth

Accredited by NAAC with "A" grade with a CGPA of 3.13 College with Potential for Excellence Shri Shivaji Science College Shivaji Nagar, Morshi Road, Amravati. Office : 2660885 Founder Dr. Panjabrao Alis Bhausaheb Deshmukh Fax/Ph. : 2665485 President : Sh. Harshvardhan P. Deshmukh Resi. 2551400 Principal : Dr. V. G. Thakare \* E-mail : shivajiscamt.office@gmail.com Ref.No. SC/ 1 1 Date : 13.10.2020

> To The Executive Engineer, MIDC, Amravati

Subject: For disposal of chemical effluent generated in the Chemistry laboratories of B.Sc and M.Sc.

Dear Sir,

This is to request you for the disposal of our chemistry laboratory waste effluent in your COMMON EFFLUENT TREATEMENT PLANT, MIDC, NANDGAON PETH, AMRAVATI. Our laboratory waste liquid is collected nearly 1000 Lt. in two month. To avoid soil and water pollution we request you to collect and chemically dispose off this effluent. We will have to submit this laboratory waste three times a year. Please give us all details with charges and your permission letter for this process. We wish for your support to stop this pollution.

Thank you.

Yours faithfully,

Principalai Ihri Shivaji Science College, AMRAVATI.

Letter to the Executive Engineer of MIDC, Amravati for the Disposal of Chemical Effluent generated in the Chemical laboratories of B.Sc. and M.Sc. of the college

		and the second second		
		• 100 100 100		SME
				21112
Ref	No SMS/CE	ETP/AMT/388	Date: - 03/12/20	21
		To Whomsoeve	er It May Concern	
Nar	adgaonpeth /	Amravati is working on	<b>Treatment Plant situat</b> ZLD basis, where treated water ty of treated water is maintained	er is returned to
	i) pH	: 7.0 to 8.5		
-	ii) BOD	:<5 ppm		
1	iii) COD	: < 30 ppm		
1	iv) TDS	: < 750 ppm		
The	treated water	is recommended to use for	or all purpose except drinking	
	Common Ef DC, Nandgao	fluent Treatment Plant		
WIII	DC, Nanogao	Jupetn	•	
	- Ya	E fr		
Mr.	C. P. Sarka	r (Unit Head)		
			agar, Parsodi, Nagpur – 440 022 (India)	
Ph.: +91-712-60	ob5000, 7125000	, Fax: +91-712-6665100, E-mail: in	nfo@smsl.co.in, Web: www.smsl.co.in CIN No.: U45201MH1997PLC107906	to manufactory music strategy (manufactory)

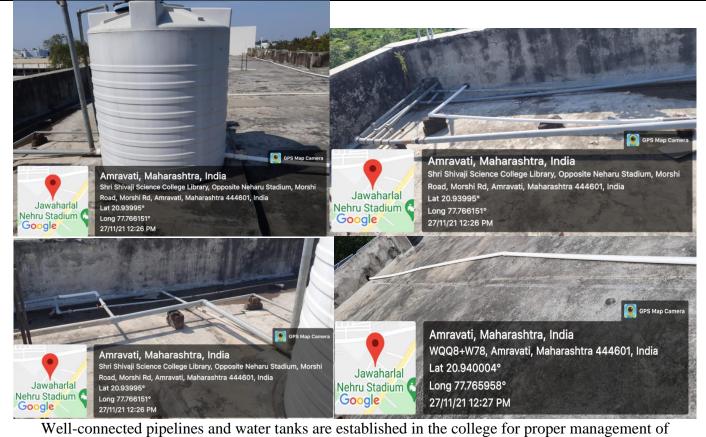
## e) Maintenance of Water Bodies and Distribution System In the Campus

For the drinking water, a separate pipeline from the Amravati Jeevan Pradhikaran is installed. In addition, R.O. water purification plants have been installed at the required places including the Girls' Hostel for healthy and pure drinking water for the staff and the students. Regular maintenance of the R.O plants is ensured by making servicing/repair whenever required.

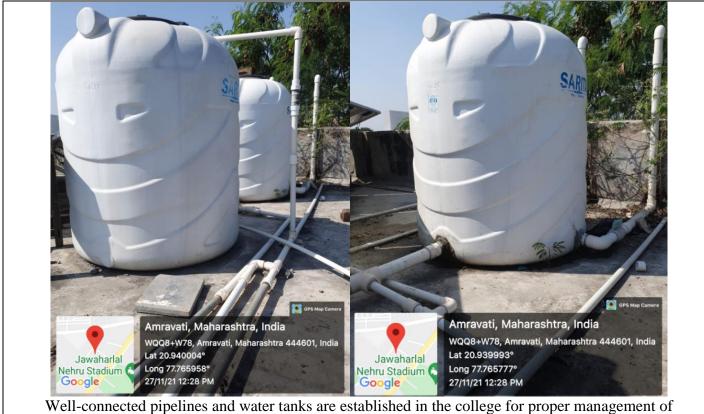
The water for all other purposes is supplied through another set of distribution pipes. The college has two wells with ample water. The ground water from the wells is pumped into the storage tanks / elevated service reservoirs located at different places in the campus. The water is distributed through well-laid pipe network.

Entire distribution system is well supervised by the college administration to ensure that there are no leakages and wastages of water through Leakages in the pipelines and the water-taps etc. Regular cleaning of the water tanks is regulated by the administrative staff of the college. All the stakeholders of the college are well-educated to use water economically and efficiently

Rainwater from the different college buildings is taken to the wells for ground-water recharge. A proper care is also taken to keep the Rooftops cleaned so that unnecessary garbage does not mix with the rainwater leading towards the well. The inlets of these tanks is controlled by the ball-valves to avoid water overflows.



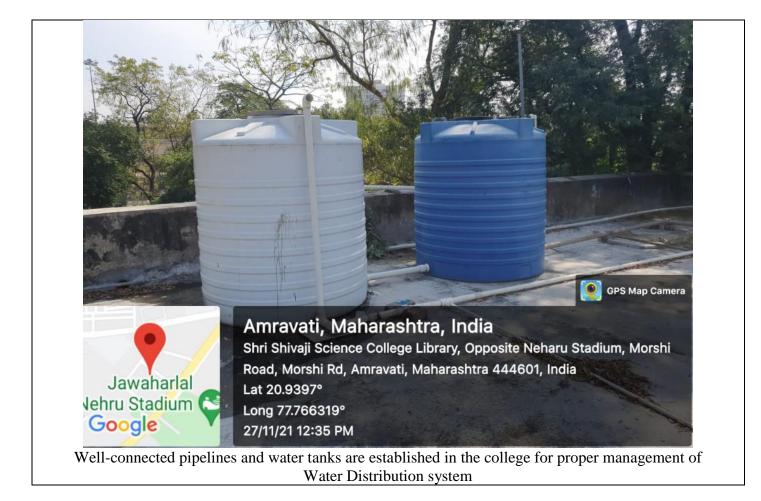
Water Distribution system



Water Distribution system

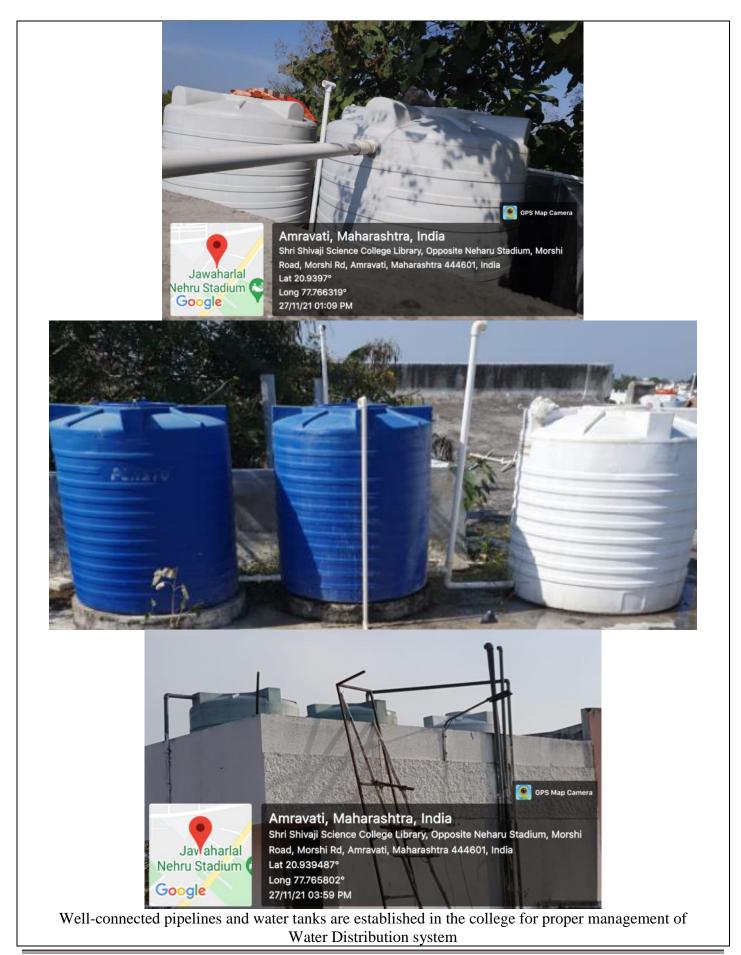


Water Distribution system

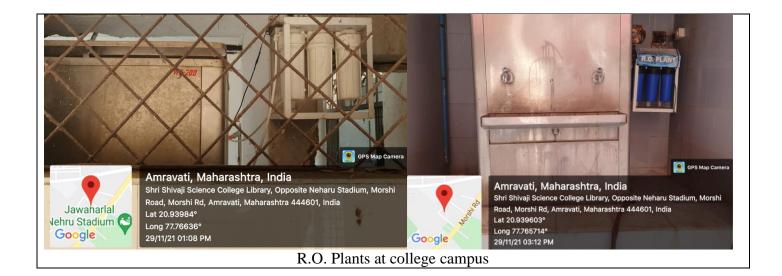




Water Distribution system







### Awareness banner on importance of saving water at college campus

