

Shri. Dadapatil Rajale Shikshan Sanstha's

Dadapatil Rajale Arts, Science and Commerce College
Adinathnagar, Tal. Pathardi, Dist. Ahmednagar

Green Audit Report (2019-20)



Prepared by

Green Audit Committee

Message



Hon'ble MLA Monikatai Rajiv Rajale

Dadapatil Rajale Arts, Science and Commerce College, has undertaken the green audit of its campus for the academic year 2019-20. Environment is the important issue in the current era which needs to be maintained properly at every institute which provide higher education. Higher Education Institutes play key role to enhance environmental awareness among the students. Such institutes must encourage and guide students regarding environment. The role of institutes does not end after proper awareness campaign but it should go further by implementing measures to maintain environment in the campus.

Green audit report of the college clearly demonstrates the effects made by the college administration to maintain the greenery in the campus. Their efforts include the tree plantation at the campus in every academic year, preservation of plants and implementation of solar system for the electricity.

Hon'ble MLA Monikatai Rajiv Rajale

Our inspiration



Sahakar Maharshi Late Shri DadapatilRajale (Bhau)
Founder of DadapatilRajaleShikshanSansthas, Adinathnagar.

Sr No	Content	Page No	
1	Introduction	5	
2	Environmental Policy of the college.		
3	Green audit committee	6	
4	A- Physical Facilities		
	B- Electrical Bill	7	
	C- Electrical appliances	7	
	D- Environmental Subject Books, Library Book list.	8	
	E- Solid waste	8	
	F- Students and staff strength	8	
	G- Various types of awareness programme, celebrations of different days.	8-11	
*	H- Environment, Campus development, Tree plantation, cleaning committee.		
	I- Geographical description of the area.	12	
	J- Letters to Annasaheb Krushi vidyalaya.	12	
	K- Environment Policy	12	
	L- Drainage system College and Laboratories.	13	
	M- Air Quality Monitoring.	13	
	N- Water quality and quantity analysis.	13	
	O- Institutional Map	13-14	
5	Photographs of the campus	15	
6	Greenery of the campus	16	
7	Cleaning of the college	16	
8	List of audited plant species	17-18	
9	Methodology	19-23	
	a- Management of green campus	19	
	b- Waste disposal management	20	
	c- E- Waste	22-23	
	d-Energy conservation		

Introduction

The Green Audit is an assessment of business in terms of its impact on the environment. Environmental crisis occurs due to rapid Industrialization and Urbanization. To overcome this difficulty, Institute has adopted "The Green Campus" concept for sustainable development.

Shri Dadapatil Rajale Shikshan Sanstha's Dadapatil Rajale Arts Science and Commerce College is affiliated to Savitribai Phule Pune University and recognized by UGC under section 2(f) and 12(B). The College is run by Dadapatil Rajale Shikshan Sansatha, Adinathnagar. It was established by Hon. Late Dadapatil Rajale, founder of Shri Vriddheshar sugar Factory. The College is located in rural area. The College has gone through the Assessment from NAAC in 2016 and obtained 'B' Grade. The College has initiated 'The Green Campus program" for environmental protection and sustainability. The main aim of the "Green audit" is to follow the practice of the Institution for developing the Green campus and creating awareness of environment among students and society. It works on different factors including Tree plantation, Waste disposal management, Water conservation, Energy conservation etc.

Environment Policy of the College: -

Dadapatil Rajale Arts, Science and Commerce College, though situated in rural area, is aware about the Environment. The management, Staff and students participate in tree plantation activity every year.

It is our moral responsibility to preserve and enhance the natural beauty of our campus.

We have decided following environmental policy.

- 1) To promote an awareness of environmental issues within the college and to encourage the college staff, students regarding the environmental matter.
- 2) To minimize the pollution.
- 3) To increase the greenery.
- 4) To create awareness among students and staff about Water conservation.
- 5) To use Non-conventional energy.

- 6) Proper mechanism of waste disposal.
- 7) To promote an awareness of environmental issues within the college and to encourage the college staff, students regarding the environmental matter

Green Audit Committee

Members of the Green Audit Committee.

- 1. Dr. S. R. Bharate, Chairperson
- 2. Prof. G. B. Lawande, Member
- 3. Dr. R. P. Ghule Member
- 4. Prof. Gaikawd D. B., Member
- 5. Dr. A. R. Chourpagar, Member
- 6. Prof. C. N. Pansare Member

Sr. No	Particulars	Quantity
A	Physical Facilities	
1	Total campus area	9.68 hectars
2	Build up area	58,855.80 Sq. foot
3	Total No. of Class room	16
	Laboratories	12
	Seminar Hall	01
	Seminar Hall with ICT	01
-	Classrooms with LCD facilities	10
	Classroom with Wi-Fi/ LAN	10
	Auditorium	01
4	Total Toilets, Latriens Urinals	Total Toilets-37(Indian -28,
	Toilet types- Western/ Indian	Western- 09)
		Latrines- 35, Urinals- 46
5	Sweeper No.	01
6	Frequency Cleaning (College)	Class rooms are cleaning daily.
		Campus is cleaning fortnight
7	Campus cleaning and garden	The campus cleaning and garden (Late Dadapatil Rajale

	maintenance.	(Bhau)Smarak) maintenance was done by NSS volunteers and students of Earn and learn scheme whenever needed
8	Total water coolers with capacity	01
9	Storage water tank tap water	01
10	Overhead tank drinkable water- with cleaning frequency	Cleaning of the Drinking tank was done one time in a week
В	Electrical Bill yearly	36420.00
C	Electrical appliances	
	Fan	138
	Exhaust Fan	03
	Tube	152
	CFL	54
	Generator	01
	Bore weal	03
	Refrigerator	04
	Ac	04
	TV	02
	Desert cooler	00
	Compressor (outside ground floor lab)	00
	Water filter	03
	Water Cooler	00
	Open electrometer (Water pumps)	03
	Xerox	03
	Printers	22
		01
	Servers	
	All computers	38 +02 Laptop
	All instruments- Annual maintenance contract	Rs. 98000/-

D	Environmental subject books,	Environme	ental subject	books:- 162	
	Library book list	Total Book	cs:- 22294		
	Total + Environment)				
E	Solid waste	shop m	enerated fro erchant o var Sahakari	ike wood and om tree is sold to r given to sakar karakana	
	Paper			ch are stored in hop merchant.	
	Exam papers		t are sold to	rom the exam paper merchant	
	Plastics	_	ces are sold	and stored in the to merchant for	
*	Liquid	Liquid wa	Liquid waste is dumped in the soak pit.		
	Solid (Iorn material)	The solid merchant.	The solid iron material is sold to scrap merchant.		
	Solid/ Liquid chemicals (Expired)	properly	Solid / Liquid Chemicals (Expired) are properly Dumped in the soak pits.		
	E. Waste	Physics d	E- waste produced by Computer and Physics department are stored in a particular place.		
	Bio medical waste		The Bio medical waste is not produced in the campus.		
	Canteen waste	Canteen Vermicom	waste is	s used for	
F	Students and staff strength	Teaching	Non- teaching	Students	
1	Male students	33	24	730	
	Female students	19	01	451	
	Total students	52	25	1181	
G	Various types of awareness progran	nmes, celebrat	tion of differ	ent days	

Yoga Day



Tree plantation programme





 June 2019 the college staff performed the National Yoga days.

30 june to 7 July 2019:-'Van Mahostav' This programme celebrated in presence of Hon. Monitai Rajale MLA of pathardi shevgaon. She inaugurated the ceremony and guided the staff. She appealed all to plant and conserve many trees to avoid the .On drought pone situation occasion trustee of the college, Hon. Shri Subhash Tathe, Shri. Shrikant Misal, Shri. Carudatta wagh, Shri. Babasaheb kilbile along with Prin. Dr. R. J. Temkar and Prin. Yuraj Surwanshi of Annasaheb shinde Krushi vidyalya were present. Near about 150 plants were planted in the college campus

 5th September 2019:- The NSS unit of the college organized programme on "Teachers Day"

The Red ribbon club was established by NSS and Dadapatil Rajale College. For this programme The Dr. Sandip Kambale of sub district hospital was present as a chief guest. He guided the students regarding aims and









- objectives of red ribbon and made awareness regarding AIDS.
- 1Dec. to 7 Dec. 2019:- During this period in a college, Programme regarding 'Janjagruti sapthaha' was celebrated. Dr. Sadhana Mhaske Delivered lecture on awareness of AIDS. The Yuva spandhan group of college created questioner on AIDS.
- 20th Dec. 2019 N.S.S. Volunteers cleaned up the smahasan bhumi at Madhi.
- 21st December 2019:- Dr. Sandip Kambale of sub district hospital of Pathardi delivered lecture on Aids and Diet. On this occasion Dr. Bhoite had done the HIV Test of NSS Volunteers.
- 22nd December 2019 N.S.S. volunteers prepared Vanrai Bandhara at Madhi.





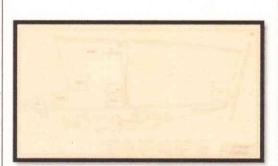


- 12/01/2020:- The National Youth Festival was celebrated in the college. On this occasion online Session regarding AIDS was conducted for students
- 17th January 2020:- On the occasion of Makarsnkaranti Festival Tilgul programme was celeberated in presence of Hon. Pandurang Khedkar, Director of VSSK Adinathnagar. This program was chaired by Hon. Shivajirao Rajale.(Chairman, CDC)
- The NSS Day was celebrated in the college. The programme officer Prof. A.H. Desai guided the students regarding aims and objectives of NSS.
 The IQAC Co- Ordinator Prof R. T. Gholap delivered lecture on *Today's youth and NSS*.
- 19February 2019 Shivjainti was celeberated.
- Insurance for the safety of students:- The students insurance policy scheme of savitribai Phule pune university is available for students. Under this scheme Rs. 50,000/- was given as accident benefit by oriental insurance LTD Thane, Divisional office Thane

H	Environment, Campus	Dr. S.R. Bharate: Chairman
	development, Tree plantation,	Prof. A.H.Desai.
	cleaning committee	Prof. D. B. Gaikawd.
Ÿ		Prof. V. B. Bansode
		Prof. A. G. Agase
		Mr. N. B. Aher.
I	Geographical description of the	Pathardi Tahasil is located to the east of
	area	Amednagar district in Maharashtra. It covers
		the total area is 133725 hectars As per 2011
		census population of pathardi tahsil is
		258109. Population density is 193 persons per
		Sq. km. This region is covered under drought
		prone area according to Government of India.
		The region is surrounded by hills. The people
		of this region are mainly depend on
		Agriculture, Poultry, Dairy.
	Other land	The soil types of the Pathardi tehasil are
		broadly divided in to four categories namely
		Shallow soil, medium soil, medium black soil
		deep black soil reddish soil.
	Rain fall	The average rain fall is 579mm.
	Geographical location	It is extended up to 18 ^o 54 N to 19 ^o 13 N
		latitudes. And 74° 54 E to 72°24 E longitude.
J	Letter to Annasaheb krushi	Letters regarding waste disposal are given to
		Annasaheb shinde krushi Vidyalya.
K	Environment policy	8) To promote an awareness of
		environmental issues within the college
		and to encourage the college staff,
		students regarding the environmental
		matter.
		O) T
		9) To minimize the pollution.

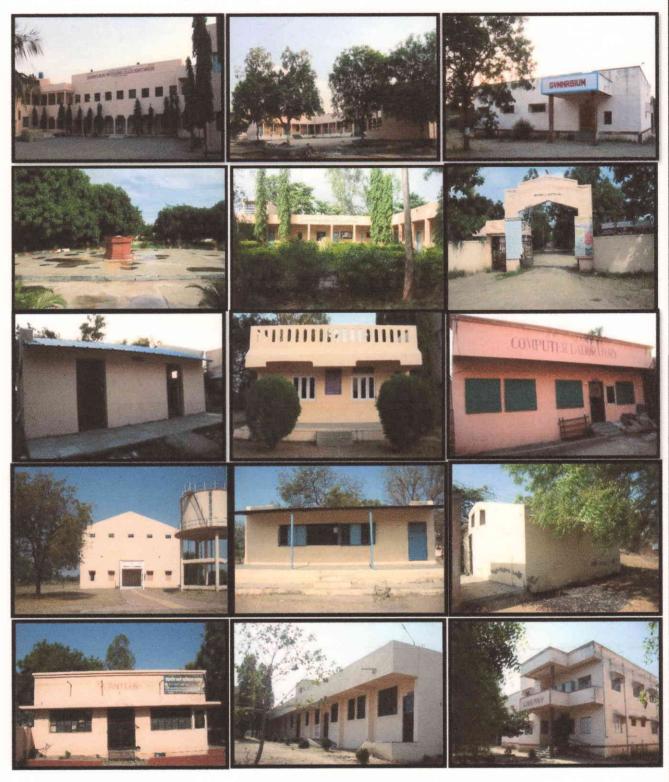
		10) To increase the greenery.
		11) Water conservation.
		12) Non-conventional energy.
		13) Proper mechanism of waste disposal
	Photographs of the campus	Separate sheet is attached
	Identification of plant species in the campus	Separate sheet is attached.
L	Drainage system college and lab	The liquid waste produced in the laboratories is dumped in soak pits.
M	Air quality monitoring	Our college is situated in rural area and the area is pollution free. So in our institution we don't purchase the Air quality monitoring device.
N	Water quality and quantity analysis	The pH of water is measured by chemistry Department.
		The college has 4000L. capacity drinking water tank.
		The college has 3300000 Liter capacity Farm tank.
0	Noise level monitoring	No vehicles are allowed in the campus, parking shed is located near college gate. Noise level is maintained as per permissible limit.
P	Institution map	Labour quarter
		2. Cattle shed
		3. Agri Polytechnic
		4. Cycle stand
		5. Gents toilet



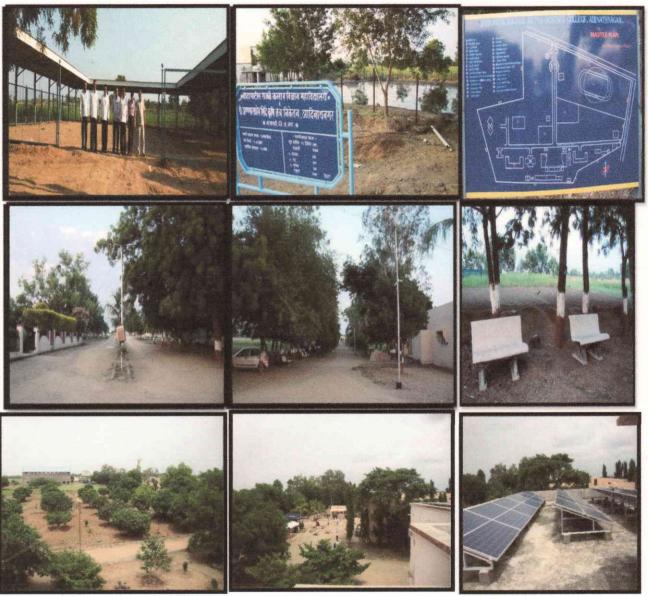


- 6. Drinking water tank
- 7. Management office & principal office
- 8. Building no. 1 & Administration office
- 9. Computer lab
- 10. Laboratory building
- 11. Store room
- 12. Girls toilet
- 13. Generator room
- 14. Library
- 15. Labour quarter
- 16. Cattle shed
- 17. Agri Polytechnic
- 18. Cycle stand
- 19. Gents toilet
- 20. Drinking water tank
- 21. Management office & principal office
- 22. Building no. 1 & Administration office
- 23. Computer lab
- 24. Laboratory building
- 25. Store room
- 26. Girls toilet
- 27. Generator room
- 28. Library

Photographs of the campus:



Greenery of the campus



Cleaning of the college campus:-



List of audited plant species:-

Sr.No	Vernacular Name	Botanical name	Family	Total
1	Ficus	Ficus benjamina L	Moraceae	55
2	Saptapami	Alstonia scholaris (L) R.Br.	Apocynaceae	60
3	Sawar	Bombax ceiba L	Bombaceae	45
4	Arjun satada	Terminalia arjuna L	Combretaceae	04
5	Shisham	Dalbergia sissoo L	Fabaceae	145
6	Mango	Mangifera indica L.	Anacardiaceae	66
7	Sapota	Achras sapota L	Sapotaceae	14
8	Neem	Azadirechta indica L	Meliaceae	200
9	Sitaphal	Annona sqamosa L	Annonaceae	85
10	Bambu	Bambusa arundinaceae L	Graminae	54
12	Nilgiri	Eucalyptus globulus.	Myrtaceae	47
13	Chandan	Santalum album L	Santalaceae	03
14	Naral	Coccus nucifera L	Palmae	04
15	Ashok	Saraca indica L	Annonaceae	35
16	Areca Palm	Dypsis lutescens L	Arecaceae	50
17	Sag	Tectona grandis L	Verbenaceae	70
18	Badam	Anacardiumoccidentale L	Anacardiaceae	04
19	Chinch	Tamarindusindica L	Fabaceae	15
20	Bor	Zizupusjujuba L	Rhannaceae	04
21	Umbar	Ficus glomerata L	Moraceae	02
22	Peru	Psidium guajava L	Myrtaceae	
23	Mosumbi	Citrus limetta L	Citraceae	
24	Limbu	Citrus limon (L.) Osbeck.	Citraceae	11
25	Dalimb	Punica granatum L	Lythraceae	07
26	Zamia	Zamia		01
27	Rain tree	Albizia saman L	Fabaceae	85
28	Gulmohar	Gmelina arborea L	Verbenaceae	35
29	Karanj	Pongamia glabra L	Fabaceae	28
30	Kasvad	Casia siamia L	Caesalpinaceae	33
31	Pimpal	Ficus glomerata L	Moraceae	20

32	Avla	Phylanthus emblica L	Phyllanthaceae	05
33	Parijatak	Nyctanthus arbor-tntis L	Olecaceae	15
34	Cheri	Prunus avium L	Rosaceae	07
35	Mahogani	Swietenia mahagoni	Meliaceae	08
36	Cycas	Cycas circinalis L.	Cycadaceae	08
37	Kanher	Neriun indicum L	Аросупасеае	06
38	Morpanki	Thuja orientalis L	Cupressaceae	67
39	Tagar	Tabermontanadivaricata L	Аросупасеае	06
40	vad	Ficus bengalensis L	Moraceae	02
41	Shivan	Gmelina arborea L	Lamiaceae	65
42	Shankasur	Caesalpinia pucherima L	Caesalpinaceae	15
43	Vavla	Hioptelea inegrifolia L	Ulmaceae	10
44	Raktachandan	Pterocarpus santalinus L	Fabaceae	02
45	Bhokar	Cordia dichotoma L	Boraginaceae	02
46	Jambul	Cyzygium cumini L	Myrtaceae	07
47	Shevga	Moringa oleifera L-	Moringaceae	09
48	Santra	Citrus reticulate Blanco	Rutaceae	09
49	Neeli gulmohar	Jacranda mimosifolia	Bignoniaceae	01
50	Christmas tree	Araucaria Christmas	Araucariaceae	02
51	African tulip tree	Spathodea companulata	Bignoniaceae	01
52	Australian Babul	Acacia auriculiformis Benth	Fabaceae	01
53	Babul	Acacia nilotica L	Mimosae	04
54	Shrish	Albizia lebbeck (L) . Benth	Fabaceae	03
55	Erand	Ricinus Communis L	Euphorbiaceae	02
56	Sonmohar	Peltophorum pterocarpum	Caesalpiniacea	04
		(DC.) Backer ex K. Heyne	e	
57	Kanchan	Hardwickia bipinnata	_	50+
		Total		1524

Methodology:-To conduct the green audit of the campus personal observations of the campus, data analysis, recommendations are needed. Followings are the areas for green audit.

- a. Management of Green campus.
- b. Waste disposal management.
- c. E-Waste management.
- d. Energy conservation.

a) Management of green campus.

Green auditing is also known as "Environmental Auditing". There is a provision of auditing campus in the college. Under the guidance of IQAC the Waste disposal management and Light and Energy committee has been formed for developing and auditing the green campus. For the Committee each member is selected from Dept. of Botany, Geography, Zoology, Chemistry and Computer Science,. There are about 1524plants in the college campus.

To create awareness about environment college performed following activities

Dadapatil Rajale Arts, Science and Commerce college organizes this activity every year in the month of July. As we know that the world is facing the problems of Global warming due to the increase in pollution. To recover such problems and create awareness about Environment, the Campus Development Committee performed tree plantation activity during academic year 2019-20 between 30 June 2019 and 7th July 2019. This activity was performed by the students under Earn and Learn scheme and NSS volunteers.

The event was begun by warm welcome of guest, Hon. MLA Monikatai Rajale (Shegaon –Pathardi), Shri. Subhash Tathe, Shri. Shrikant Misal, Shri. Charudatta Wagh and Babasaheb Kilbile, trustee of the College, Hon. Secreatory J. R. Pawar., Hon Principal Dr. Surwanshi Yuraj and Prin. Dr. R. J. Temkar. Shri R. Y. Mhaske. All the staff and students were present for this function. At the function Hon. MLA Monikatai Rajale, Prin. Dr. R. J. Temkar, Shri Ramdas Mhaske, and Hon. Shri. J. R. Pawar delivered their valuable speech in front of Earn and Learn and NSS volunteers.

After that all the guests along with the principal moved towards tree plantation activity. The very first tree plantation activity was done by Hon. MLA Monikatai Rajale. Total 15 plants were planted by the Guest. Then remaining 135 plantation was done by the students.

Tree plantation 2019-20 Photo and News:



b) Waste disposal management:-

From various sources following type of waste is created.

- Solid waste
- Biodegradable waste.
- Chemical waste
- Plastic waste.

Observations:- The solid waste produced from tree is sold to shop merchant. The Department of Botany and Zoology produce biodegradable waste during practical work which is used for raw material for vermicomposting. The chemical waste produced by Chemistry Department is disposed by releasing it in the soak peat in a protected zone. Fuming chambers are installed in the laboratories to exhaust the harmful gases. To avoid the misuse of apparatus and chemicals instructions are displayed in Laboratories. Liquid waste is dumped in a soil pits near laboratories. The paper waste produced from Office is sending for paper pulping. One side waste paper is utilized for rough work. Newspaper after reading are collected properly stored in Library and then sold to shop merchant. In campus plastic wastes are produced in small amount are sold to shop merchant along with scrap.



Recommendations:-

- 1. Whenever required empty bottles in a Laboratory should be reused.
- 2. Office staffs are suggested to minimize the paper waste as the papers are produced from plant product. This activity is useful to save the forest.
- 3. Do not throw the important papers in a dust bins, which are send for paper pulping.
- 4. Place separate Dust bins for Biodegradable waste and non-biodegradable waste separately in a campus. After filling dustbins are empty on proper place.

c)E-Waste:-

E- Waste is hazardous and very dangerous waste to Environment and human health. This waste is produced by computer Department.

Observations: -

As comparison to other waste E-Waste is generated in small amount. In our college these wastes is properly stored scrap room. After decision of management it is sold to E-Waste merchant for recycling

Recommendation.

- 1) Maintain the record of E-Waste.
- 2) Store the E- Waste in separate room and give the name as E- Waste room.
- 3) E- Waste are sold to Scrap merchant.

d)Energy Conservation: - Roof top solar system has been activated in the college campus. The electric need of the college is being fulfilled by the system. College is not depending on MSEB.



Roof top solar system

Recommendation.

- 1) Prepare monthly report for Energy conservation by electricity committee.
- 2) Whenever required replace tubes and bulbs by LED bulb and tubes.

We are sincerely thankful to college authority to allow this project and to enter the new era of Green Audit in the College Campus. Further we extend our sincere thanks to the college staff for providing us necessary facilities and co-operation during the audit. This helped us in making the audit, a grand success.

Dr. S.R Bharate

Jonan

Chairperson, Green audit Committee,
Dadapatil Rajale Arts, Science & commerce College,

Bada Patil Rajale College Adinathnagar, Tal.Pathardi

Adinathnagar