

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Best practice II Proofs: Fostering Environmental Consciousness: Campus and Beyond

At Sri Venkateswara College we have a lot of green spaces, which has a lot of urban biodiversity as it's close to the Central Ridge Forest and it also generates a lot of green waste. The greenery of the campus is a boon for students as it helps them understand and participate in monitoring the biodiversity of the campus. The green waste generated is also utilized for vermicomposting and organic fertilizer generated is utilized for fertilizing lawns and gardens of the college campus. Various other eco friendly activities are also initiated in the campus such as waste segregation, use of solar energy, e-waste collection drives.

Sri Venkateswara College is also known for its off campus awareness initiatives with its flagship program the "Green School Initiative" where faculties and students of the college have been visiting various schools of Delhi- NCR for spreading environmental awareness among young school students. The college also organizes field visits for all the students enrolled in the college to practically understand and become aware about the environmental issues.

The Practice

On campus Environmental Initiatives:

(i) In-house Vermicomposting facility:

Vermicomposting Unit: In order to make college a green space and reduce the amount of waste produced an initiative was taken to establish vermicomposting in college by Eco-Club SVC. A well-established vermicompost pit is fully functional in college. The pit is maintained by staff and student volunteers of Eco-club. A hands-on training was given to 20 students for the same. A team of 30 volunteers presently are working efficiently by ensuring proper moisture content in the litter, managing the pit and taking care of the worms. Till now about 120kgs of compost has been prepared and we are hopeful of increasing it further.

2019-ongoing

http://svc.ac.in/SVC_MAIN/Societies/EcoClub/2018-19/SVC%202018-19%20ECOCLUB%20AC%201.pdf

- (ii) **Campus Bird Monitoring:** The college students/faculty have been actively involved in monitoring the avian diversity of the campus:

Booklet

http://svc.ac.in/SVC_MAIN/Societies/EcoClub/Birds/RS_Bird%20booklet%20Venky_2021_47%20species_v2019.pdf

Activity Sheet

http://svc.ac.in/SVC_MAIN/Societies/EcoClub/2020-21/SVC%202020%2021%20EVS%20RS%202.pdf

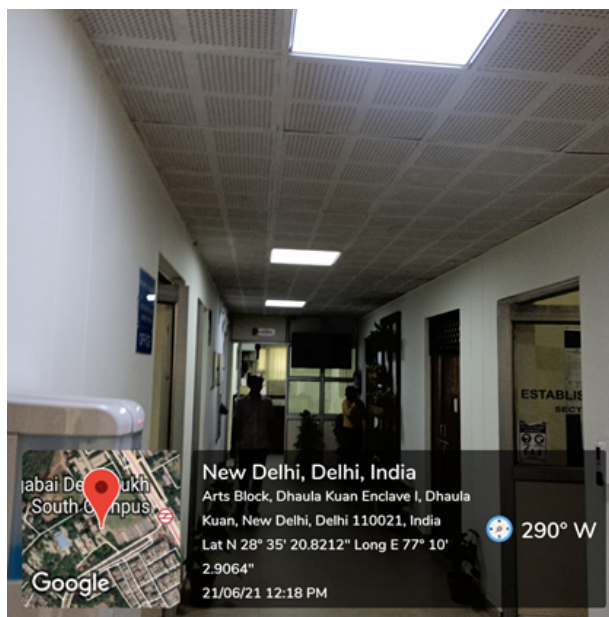
- (iii) **Survey and Conservation of Butterfly and Dragonfly of college campus:**

The survey is regularly conducted by Eco-Club in association with experts from Asola Bhatti Wildlife Sanctuary. Butterflies and Dragonflies are indicator species, and also provide several ecosystem services. In order to create awareness among students about the rich biodiversity in the campus, and to sensitize them towards the relevance of its conservation, campus survey was conducted to record the numerical strength and diversity of Butterfly and Dragonfly populations in the campus. Also, whenever needed the animals such as snakes are rescued in the campus.

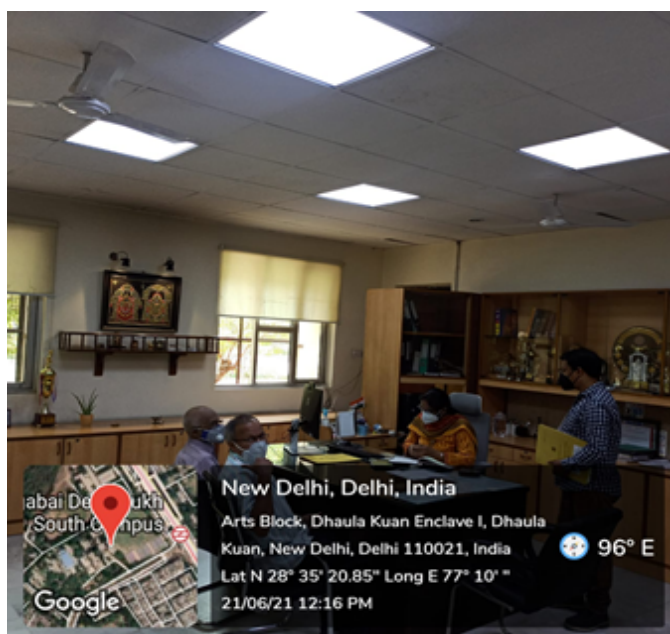
2020

http://svc.ac.in/SVC_MAIN/Societies/EcoClub/2019-20/SVC%202019-20%20ECOCLUB%20AC%205.pdf

- (iv) **Power conservation:** The college has been actively replacing the existing lights with new LED lamps.



LED Lights installed in Administrative block



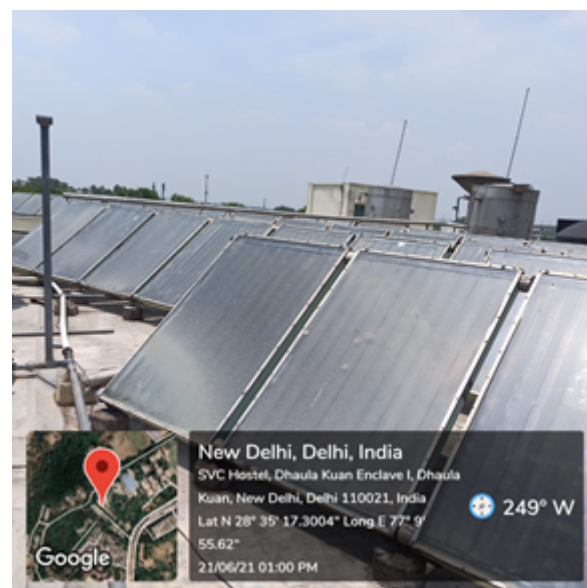
Principal's office equipped with LED lights

- (v) **Alternative sources of energy:** The streetlights in the campus and geysers in the hostel are solar powered

The Institution has facilities for alternate sources of energy and energy conservation measures. MOU Link

https://drive.google.com/file/d/1SBl65gVVH7qFf6FvUEeNk_kNntZ-xNZv/view?usp=sharing

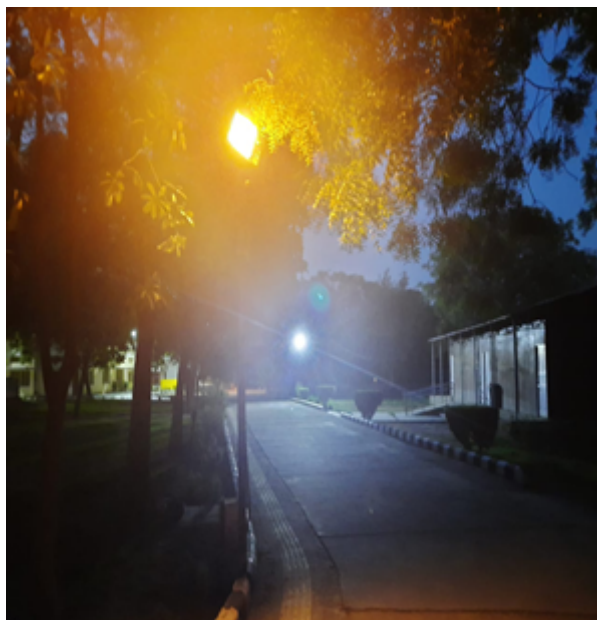
[g](#)





(SCIENCE BLOCK-street lights/path lights)





Pathways illuminated by solar powered lights

- (vi) **Record and digitization of flora and fauna:** The herbaceous flora and avian fauna of the campus has been well documents and digitized.

Digital flora of herbaceous species of the campus:

[http://www.svc.ac.in/SVC_MAIN/Societies/EcoClub/Herbaceous flora of SVC campus/E%20flora-SVC_Final_2021.pdf](http://www.svc.ac.in/SVC_MAIN/Societies/EcoClub/Herbaceous_flora_of_SVC_campus/E%20flora-SVC_Final_2021.pdf)

QR coding of tree species in the campus:

- (vii) **QR Coding of Trees:**



- (viii) **Waste segregation:** College promotes and practices waste segregation, and separate colour coded waste bins are used to collect and segregate waste.

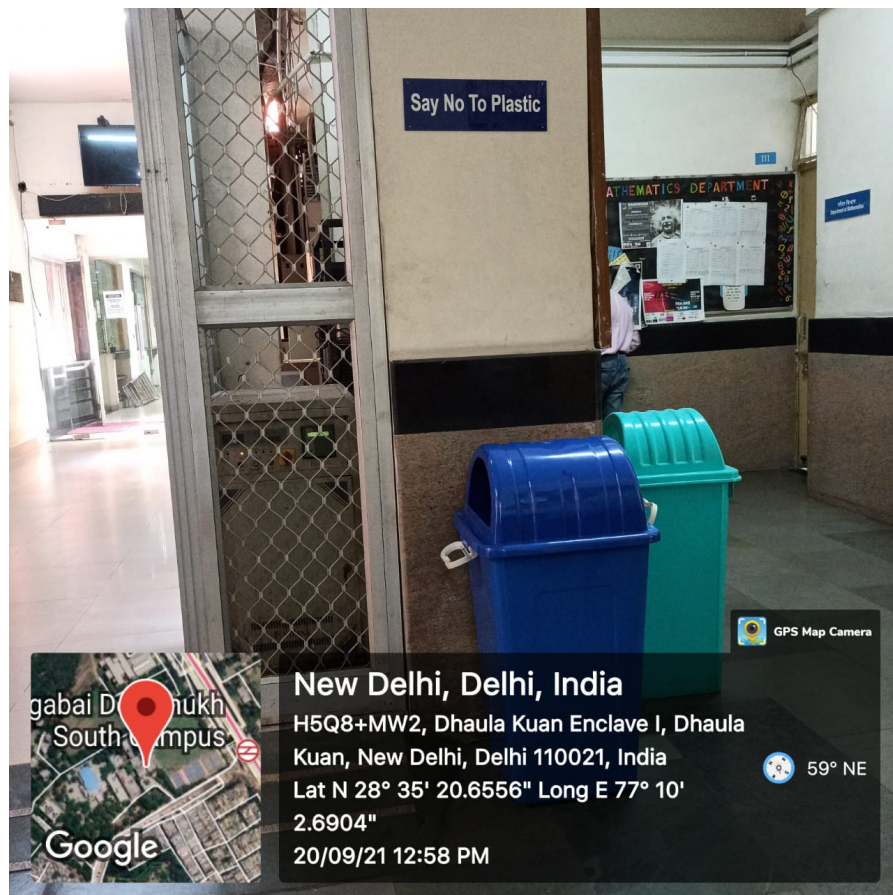
Vermicomposting training for students: (2019-ongoing)

(http://www.svc.ac.in/SVC_MAIN/Societies/EcoClub/2018-19/SVC2018-19-ECOCLUB-1.pdf)

Leaf composter in the campus:



Ban on single use plastics





- (ix) **Rain Water Harvesting:** The college is the process of installing the rain water harvesting system.

DELHI JAL BOARD: GOVT. OF NCT OF DELHI
OFFICE OF THE EXECUTIVE ENGINEER (RWH/GWC)-I
ROOM NO. 208, VARUNALAYA PHASE-I
KAROL BAGH, NEW DELHI - 110005
23558264

No./DJB/EE (RWH/GWC)-I/2021/ 1209

DATED: 04/8/2021

To,
Principal,
Prof. C. Sheela Reddy,
Sri Venkateswara College,
Benito Juarez Road,
Dhaura Kuan, New Delhi-110021

Subject: Design of rain water harvesting structure at Sri Venkateswara College, Benito Juarez Road, Dhaura Kuan, New Delhi-110021.

Sir,

Please refer to your application on the above subject. A drawing of rain water harvesting structure for the premises including conditions and layout drawing showing location of RWH structure are enclosed. It is to mention that design of rain water harvesting structure is based on the inputs provided by yourself/your representative.

The enclosed design is in form of technical assistance only. Proposed Eight Nos. RWH structure **without bore** of sizes mentioned in the sheet of RWH structure drawing attached herewith. Rain water conveyance system (storm water drain) should be provided and connected with RWH Structure in the above premises.

This is subject to the condition that in case of any restrictions on construction activities in the said premises by any other government authorities and court orders, then this design/approval deemed to stand cancelled. The storm water conveyance system shall be provided in place and made fully operational for efficiency of proposed RWH Structure.


EE (RWH/GWC)-I
EE (RWH/GWC)
DELHI JAL BOARD
VARUNALAYA BHAWAN
JHANDEWALAN, N.D.-5

**Conditions for Construction at Sri Venkateswara College, Benito Juarez
Road, Dhaula Kuan, New Delhi-110021.**

| | | |
|----|---|---|
| 1 | Total area of the Plot | 60700.50 sqm. |
| 2. | Total Roof Top area considered for RWH Systems | 8631.09 sqm. |
| 3 | off available -Average Yearly Rain Water Run for recharge | 650 mm |
| 4 | Maximum average hourly rainfall intensity considered for designing rain water harvesting structures | 25 mm |
| 5 | Proposed Recharge Structures (drawing enclosed) | Eight nos. recharge pit without recharge bore well. |

1. This office should be intimated immediately after completion of the recharge system for inspection by officials of RWH cell of DJB.
2. Structural design for chamber walls & top slab is to be got done from a qualified structural engineer. No claims shall be tenable on account of this.
3. Depth of the recharge trenches/chambers is below the Invert Levels of inlet pipes and up to the first layer of filter media. Sizes in respect of lengths and breadths given in design are the inner dimensions of recharge trenches/ chambers. Foot rests in filtration chamber are to be provided to facilitate entry of maintenance person in this chamber. In case of any doubt, the office of EE (RWH) Cell, DJB may be contacted.
4. Waste water/contaminated water shall not be allowed to enter into the storm water drains (rain water conveyance system) and recharge structures to avoid contamination of ground water. Proper care & precaution shall be taken for maintaining the rain water harvesting system on regular basis.
 - a. Check and clean catchments on weekly basis.
 - b. Check and clean rain water conveyance system on monthly basis.
 - c. Check and clean filtration chamber prior to and after monsoon every year. Take out filter media, wash it and reuse with additional quantities for the deficient portions.


These are to be checked on fortnightly basis during monsoon and are to be cleaned.

5. It is advised to provide a mesh on the mouth of the inlet (in the last chamber of the rain water conveyance system prior to recharge structures) to prevent entry of debris and floating material into the recharge trenches. Sluice valves/ Shutters may be provided to ensure that no water other than rain water is diverted to the recharge structures and to divert first rain water run-off into municipal drain. Rain water recharge structures are to be in operation during the monsoon season only so as to avoid any contamination.

**EE (RWH) GWC)
DELHI JAL BOARD
VARUNALAYA BHAWAN
JHANDEWALAN, N.D.-5**

[Signature]

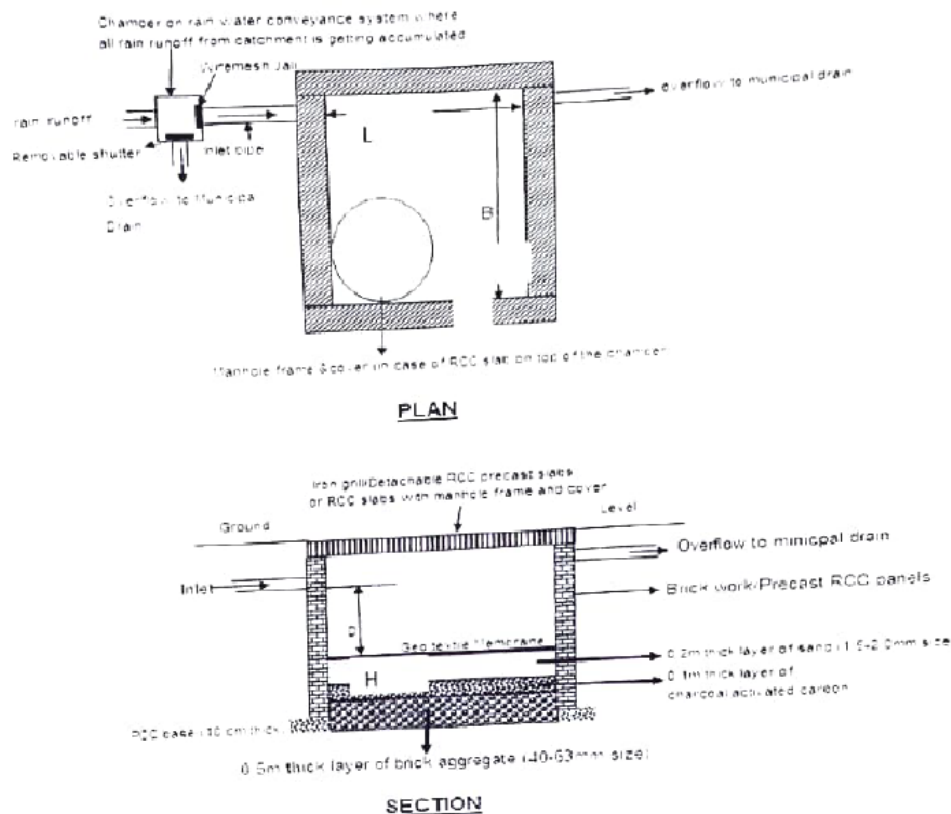
6. The work may be undertaken by the specialized agencies so that the objective of rain water harvesting is implemented in true spirits and due benefits are accrued.
7. It is to be noted that success and effectiveness of rain water harvesting system depend on proper execution and its proper maintenance.
8. Following measures as stipulated by Hon'ble Supreme Court must also be ensured to prevent any accident:
 - a. Erection of signboard & caution board at the time of construction and on the above installations.
 - b. Erection of barbed wire fencing or suitable barriers around the above sites.
 - c. The display Board (in Hindi) with Dos & Don'ts must be erected on each crucial installation.
9. Capacities for recharge structures are based on rain water runoff from roof areas. However citizens are encouraged to make recharge structures of additional capacities that take runoff from other non polluting catchments.
10. Minimum and maximum depths of recharge structures may not be less than 1.0m and may not be more than 4.0m respectively.
11. Recharge structures shall be cleaned before onset of monsoon season every year including removal, washing and relaying with topping of filter media layers, if provided.
12. It is advisable to clean the recharge structures after every 2 rainfalls during the rainy season or more frequently. Recharge structures shall be checked and cleaned at least 7 days interval or more frequently during rainy season.
13. Post monsoon cleaning and maintenance of recharge chambers shall be carried out. It is again to emphasize that proper & timely maintenance is the key factor for the success of Artificial Recharge structures. Citizens are required not just to make the RWH structures but also to maintain them such that they are efficiently able to function during the monsoons. Following annual maintenance activities shall also need to be done in this regard.
 - a. Cleaning of filter media by thoroughly washing it with water/topping/replacement of filter media.
 - b. Repair for structural damages & system efficiency.
 - c. Repair / design modifications / diversions to ensure that no contaminated water enters the structures and not to allow any changes in catchment that may prevent Rain Water runoff from reaching the recharge chambers.


 EE(RWH/GWC)-1
 EE (RWH/GWC)
 DELHI JAL BOARD
 VARUNALAYA BHAWAN
 JHANDEWALAN N D-5


 AE(RWH)-1

RWH Structure at Sri Venkateswara College, Benito Juarez Road, Dhaula Kuan, New Delhi-110021.

Fig. 1 Rectangular Recharge Chamber for RWH



- Size of RWH Structure:-**
- (1) $L = 12.0 \times B = 3.50 \times D = 1.25 \text{ m}$ (Only one No. RWH structure)
 - (2) $L = 14.0 \times B = 4.0 \times D = 1.25 \text{ m}$ (Only one No. RWH structure)
 - (3) $L = 3.0 \times B = 3.0 \times D = 1.25 \text{ m}$ (Only one No. RWH structure)
 - (4) $L = 4.0 \times B = 3.0 \times D = 1.25 \text{ m}$ (Only two Nos. RWH structures)
 - (5) $L = 2.0 \times B = 2.0 \times D = 1.25 \text{ m}$ (Only three Nos. RWH structure)

Note: For working out the storage/retention capacities, depths are to be considered below the invert level of the lowest inlets to the recharge chambers/trenches. Alternative to suggested filter media may be multiple layers of jute mats in recharge chambers / modular filters in rain water pipes from rooftops with the objective to arrest the silt in the rain runoff generated from the catchments before its percolation into the natural soil strata. No waste water is allowed to be entered into Recharge Structures. For more details, please contact to the office of EE (RWH/GWC), Delhi Jal Board, Room No. 11, Varunalaya Phase-I, Karol Bagh, New Delhi-110005, Tel No. 011-23558264.



Prof. C. Sheela Reddy
Principal

శ్రీ వేంకటేశ్వర కళాశాల
Sri Venkateswara College

(University of Delhi)

NAAC 'A' Accredited, DBT Star Status

Benito Juarez Road, Dhaula Kuan, New Delhi-110021
Ph.: 011-24112196, 24118590, Telefax : 011-24118535
principal@svc.ac.in

To

7th June 2021

Mr. Rana Chatterjee
Head of Office,
CGWB SUO
R K Puram
New Delhi – 110022

Subject: Request for technical expertise for Rain Water Harvesting for groundwater recharge

Dear Sir,


As you are aware, Sri Venkateswara College, University of Delhi, is known not just for its academics, sports and cultural vibrancy, but also for being environmentally conscious.

According to the report by your CGWB, groundwater level is declining by 0.5 to 2 metres annually in most parts of Delhi. Therefore, Sri Venkateswara College has been aiming to install Rainwater Harvesting (RWH) in our college for groundwater recharge.

I would highly appreciate it if you could kindly provide us with your technical expertise and guide us through various steps for installing RWH structures in our college. This will help us to fulfil our responsibility to recharge groundwater and contribute to increasing the water table in the area.

Please feel free to contact me (principal@svc.ac.in) or Dr. Vartika Mathur (vmathur@svc.ac.in; +91 9810386575), who is taking care of this initiative, for any queries or communication.

Looking forward to your favourable reply.


Prof. C. Sheela Reddy
Principal



Dr. P. Hemalatha Reddy
Principal

శ్రీ వేంకటేశ్వర కళాశాల
Sri Venkateswara College

(University of Delhi)

NAAC 'A' Accredited, DBT Star Status

Benito Juarez Road, Dhaula Kuan, New Delhi-110021

Ph.: 011-24112196, 24118590, Telefax : 011-24118535

principal@svc.ac.in

Ref.No.SVC/Police/2019/141-28

28.09.2019

The Dy. Commissioner of Police
South West District
Basant Lok, Vasant Vihar
New Delhi - 110 070

Sub: Sri Venkateswara College, New Delhi - Water Harvesting Structures in the campus - permission - reg.

Dear Sir,

I am pleased to inform you that the college has accorded necessary approvals from the management for a provision of water harvesting structures (3 nos.) in the college.

The work of "Construction of Rain Water Harvesting Structures in S.V. College: has been awarded to M/s Chaudhary Builders, Khasra No.299, Village Gokul Pur, Wazirabad Road, Shahdara, Delhi - 110 094 and the work will be supervised by the Tirumala Tirupati Devasthanams' Engineering Department stationed in the college campus.

I have been requested by the contractor and T.T.D. Engineering Department to obtain necessary approvals from your department for construction of Rain Water Harvesting Structures and other related works.

In the light of the above, I request you to kindly accord your approval for the Construction of Rain Water Harvesting Structures in S.V. College as the construction of Rain Water Harvesting Structures is a mandatory requirement as per NGT Guidelines for educational institutions.

Thanking you,

Yours sincerely


(P. HEMALATHA REDDY)

41-29 Copy to:

The S.H.O. South Campus, R.K. Puram, New Delhi, for information and necessary action


41-30

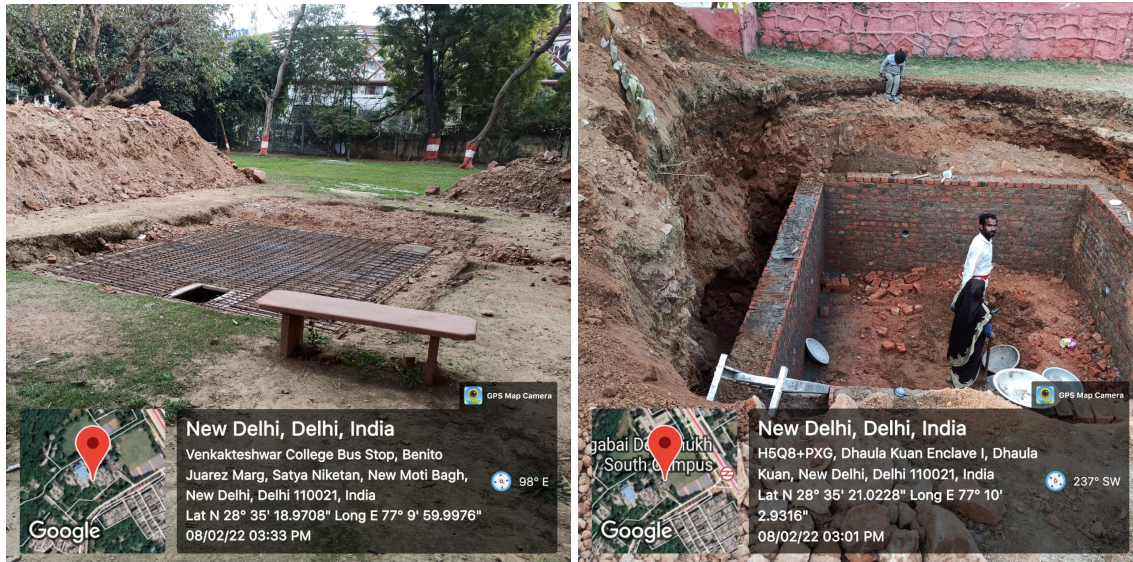
The Chowki-in-Charge, Nanakpura, New Delhi, for information and necessary action.

TTD Engineering Department/Police file/Water Harvesting file/master file

d/c

1/4


(P. HEMALATHA REDDY)



(Rain water harvesting: Work in progress)

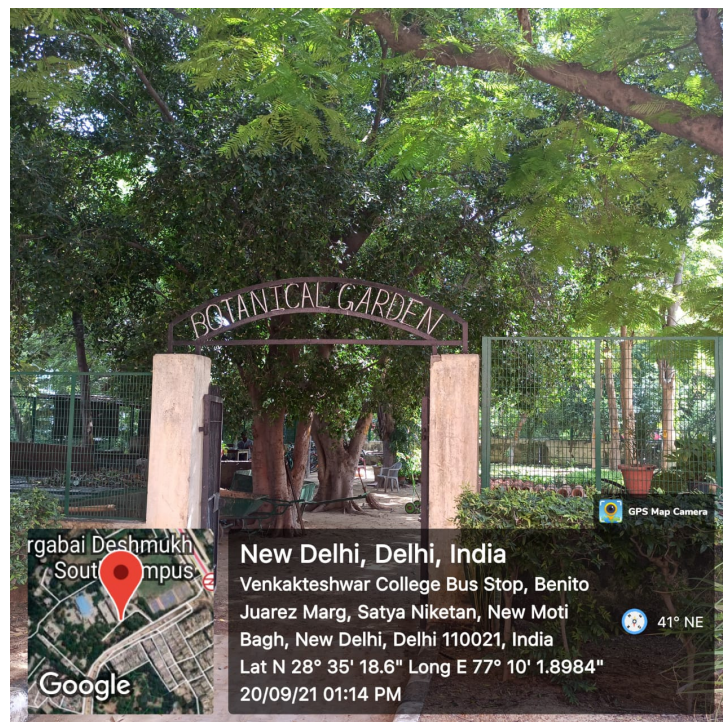
(x) Campaign against single use of plastic



(xi) SVC WildSpace and Botanical garden:



Designated wild space of the campus





Academic endeavours:

(xii) Add-on Course on 'Climate Change: Issues, Concerns and Strategies':

2019 – Present

Add-on course on Climate change has been conducted for the last three years to disseminate environmental education to students of campus and other colleges. The course has experts from the field of climate change who discuss various issues related to it. The course is big success and has been attended by students, professionals, researchers in the field of climate change from all over the country. The add-on course helps students to gain knowledge to work on climate change which is one of the major environmental issues that the world is facing

2019

http://svc.ac.in/SVC_MAIN/AddonCourses/2018-19/Add%20on%202018-2019%20Climate%20change.pdf

2020

http://svc.ac.in/SVC_MAIN/AddonCourses/2019-20/Add%20on%202019-2020%20Climate%20change.pdf

2021

http://svc.ac.in/SVC_MAIN/AddonCourses/2020-21/Add%20on%202020-2021%20Climate%20change.pdf

2019-20

http://svc.ac.in/SVC_MAIN/Societies/EcoClub/2019-20/SVC%202019-20%20ECOCLUB%20AC%201.pdf

Mindspar 3.0 (2021)

<http://www.svc.ac.in/Mindspar/mindspar.asp>

- (xiii) **Celebration of Environmental days:** The college celebrates world Environment Day, Earth Day, Ozone Day, Wetland Day and other such days to commemorate them. Examples

2020-21

http://svc.ac.in/SVC_MAIN/Societies/EcoClub/2020-21/SVC%202020%2021%20EVS%20RS%201.pdf

- (xiv) **TROPICSU (Trans-disciplinary Research Oriented Pedagogy for Improving Climate Studies and Understanding):** Faculty members of the college are actively engaged in promoting climate education by creating e-lesson plans. Examples

<https://tropicsu.org/lesson-plan-species-extinction/>

<https://tropicsu.org/lesson-plan-strawberry-fruited/>

<https://tropicsu.org/lesson-plan-plan-diseases/>

<https://tropicsu.org/lesson-plan-the-impact-of-climate-change-on-sex-determination-in-sea-turtles/>

- (xv) **Research in Environment:**

Research projects: The college has been granted a two year major research project from the Ministry of Environment Forests and Climate Change to conduct research in the field of climate change.

http://www.svc.ac.in/SVC_MAIN/Departments/Botany/Miscellaneous/Publications/Bot_Pooja_Sanction%20letter%20MoEF_CC_Pooja_Vartika%20Mathur.pdf

Carbon footprint calculation of students and staff of SVC campus:

Individual carbon footprint of students and staff of SVC campus was calculated to create awareness and sensitize students towards global climate change.

http://www.svc.ac.in/SVC_MAIN/Departments/Botany/Miscellaneous/Publications/Bot_Pooja_Book%20chapter_2021.pdf

Environmental initiative -Department of History

Investigator in the project titled ‘Sustainable Tourism and Revival/Preservation of Hill Cultures and Ecology in abandoned villages of Uttarakhand: A Pilot Project’ sponsored under National Mission of Himalayan Studies (NMHS), under the Ministry of Environment, Forest and Climate Change (MoEF&CC) granted on 28th March 2018 for a period of 3 years.

<https://lifestyle.livemint.com/smart-living/environment/can-salamanders-the-silent-amphibians-speak-111614654803857.html> (2021).

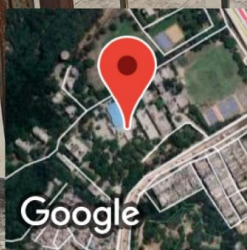
Environmental research facilities:

The college has state of art CO₂ and temperature enrichment facilities to conduct research in the field of climate change. Fully automated Open Top Chambers (OTC) have been established under the MoEFCC project to conduct simulation experiments of Soil-Plant-Microbe interactions.



**CO₂ AND TEMPERATURE
ENRICHMENT FACILITY
(Open Top Chambers)**
Funded by Ministry of
Environment, Forests and Climate
Change (MoEF&CC)
Project No. 3-6/2020-RE

GPS Map Camera



New Delhi, Delhi, India

Venkateshwar College Bus Stop, Benito
Juarez Marg, Satya Niketan, New Moti Bagh,
New Delhi, Delhi 110021, India
Lat N 28° 35' 18.996" Long E 77° 9' 59.1768"
24/09/21 12:49 PM

122° SE



Off- Campus activities

- (xvi) **Green School Initiative (2016 – present):** The institution collaborated with eminent health professionals of the Department of Pulmonary Medicine and Sleep Disorders, All India Institute of Medical Sciences (AIIMS). The Initiative was started in 2016 and till date more than 5,000 students of 19 government, government aided and private schools of Delhi-NCR have been sensitized towards Air Pollution and associated health hazards. In the year 2020-21 due to the pandemic the activity of GSI has been conducted through online platforms.

2020-21

http://svc.ac.in/SVC_MAIN/Societies/EcoClub/2020-21/SVC%202020-21%20ECO%20CLUB%20%20GSI.pdf

- (xvii) **Biodiversity Awareness Trips:** All students of Sri Venkateswara College go for field visits to gain knowledge about the local biodiversity of Delhi-NCR. Selected students also go on outstation awareness trips to rainforests of Western Ghats (Kerala and Karnataka) and also forests of Western Himalayas (Himachal Pradesh and Uttarakhand) to gain knowledge about the country's vast biodiversity.

Evidence of Success

1. Published in National Media

<https://www.thehindubusinessline.com/blink/know/a-documentary-on-frogs-by-two-delhi-university-students-won-the-first-prize-at-the-just-concluded-national-science-film-festival/article33371019.ece> (2020).

<https://lifestyle.livemint.com/smart-living/environment/can-salamanders-the-silent-amphibians-speak-111614654803857.html> (2021).

2. Functional composting units

http://svc.ac.in/SVC_MAIN/Societies/EcoClub/2018-19/SVC%202018-19%20ECOCLUB%20AC%201.pdf

3. **Memorandum of Understanding:** The college has collaborated with eminent institutions like AIIMS, New Delhi to conduct research and outreach programs on environment and its health impacts.

http://svc.ac.in/SVC_MAIN/Societies/EcoClub/2020-21/SVC%202020-21%20ECO%20CLUB%202%20GSI.pdf

<https://www.thehindubusinessline.com/blink/know/a-documentary-on-frogs-by-two-delhi-university-students-won-the-first-prize-at-the-just-concluded-national-science-film-festival/article33371019.ece> (2020).

MoU with Indraprastha Gas Limited (IGL) to conduct Environmental monitoring of their Afforestation project in Delhi.

http://www.svc.ac.in/SVC_MAIN/MOU/IGL%20Sample%20collection%20Activity%20report%20visit_MOU.pdf