

JANKI DEVI MEMORIAL COLLEGE UNIVERSITY OF DELHI



ENVIRONMENTAL SELF-ASSESSMENT REPORT 2020-2021



Prepared by:

Ms. Ifrah Rehman

Assistant Professor

Department of Environmental Studies

Member of AVANI – The ECO Club of JDMC



Ms. Pouriangthanliu

Assistant Professor

Department of Sociology

Member of AVANI – The ECO Club of JDMC



Ms Karishma Ahlawat

Assistant Professor

Department of Mathematics

Member of AVANI – The ECO Club of JDMC



Please note:

Due to the current circumstances and the recent surge of Covid cases in the country, the College has been functioning in online mode since March 2020. Therefore, the values and assessment found in this academic year does not reflect the original consumption of an institution running in physical mode.

The comparisons made in the various tables ahead can not depict the real values nor can be used to draw conclusions on JDMC's consumption and conservation patterns.

Green Audit Committee
2020-2021

Contents

Introduction

Section 1- Physical Profile

Section 2- Water Profile

Section 3- Energy Profile

Section 4- Solid Waste Profile

Section 5- Vegetation Profile

Section 6- Sustainable Activities

- Rain Water Harvesting Program
- Renewable Energy
- Butterfly Census
- Tree Census
- Green Activities-AVANI
- Garden Committee
- Environmental Education
- Conclusion



Introduction

Educational institutions have a vital role to play in societal and environmental reform. In the current deteriorating environmental scenario, it is crucial that these institutions lead by example and pave the way for future generations by harbouring and implementing environmental friendly initiatives and technologies within their campus. Janki Devi Memorial College (JDMC), University of Delhi, a premier institution for higher education in the capital, founded in 1959 by the famous Gandhian, Shri Brij Kishan Chandiwala, in memory of his mother, Smt. Janki Devi, has been diligently fulfilling this responsibility for six decades. The concept of environmental consciousness permeates the core functions of this institution, and the Environmental Self-Assessment Report is an honest attempt to analyse the college's environmental policies.

The Environmental Self-Assessment Report or the 'Green Audit' collates the environmentally friendly activities and initiatives being carried out in JDMC. The Department of Environmental Studies collaborated with AVANI - The Environmental Club of the College for the Green Audit. We are indebted to the administration staff (Dr Kaushal and Mr. Avinash), Avani & Garden Committee members for providing us the relevant data and information respectively. The Green Audit report is divided into seven sections, each covering a different aspect of the college.



Physical Profile

The physical layout of the institution is a good indicator of the ideology of the organisation. For an academic institution, the structure and design of the college campus can encourage positive thinking within the students and the faculty. Green spaces develop an environment, which nurtures a connection with nature, and is often the only connection to greenery for students coming from densely populated parts of the city.

Surrounded by fragments of the Central Ridge parts of the Aravalli Hills and the bustling market of Karol Bagh and Rajendra Nagar, JDMC is on the overlap between natural and man-made ecosystems. Providing a learning environment to over 3000 students and a spacious work environment for teaching and non-teaching staff requires a robust and well-planned infrastructure, which optimally utilises the physical space. Out of the total plot area of 43,108 sqm, the main college building is around 30 %. Approximately 42 % of the campus consists of green spaces. A new hostel is built to provide on-campus accommodation to outstation students.

The college is disabled-friendly and provides all possible support to remove any hindrances for students with disabilities. Ramps on all floors and an elevator allow free movement of wheelchairs. The students are also sensitised on issues relating to disabilities in their peers. The physical profile of the campus is given in table.



S.No	Description	Area(m2)
1	Plot Area	43,109
2	Playground Area	10,442
3	Surface Parking Area	3,775
4	Road Area	4,407
5	College building built-up area	8,014
6	Staff Residence Area	1,717
7	Girls Hostel Building	2,066
8	Administration Office Area	450
9	Area under green and landscaping	18,203
10	Existing covered area on ground	4,639
	A) College Block	1,455
	B) Library Block	1,011
	C) Canteen Block	565
	D) Covered Seating	475
	E) Stage	255
	F) Music Room	120
	G) Home Science Lab.	264
	H) Vocational Training Centre	493

S.No.	Description	Area (m2)
11	Existing covered area on first floor	2,737
12	Existing covered area on second floor	638
13	Net covered area on all floors	8,015



Water Profile

In terms of bio-geographical location, Delhi falls under the ‘Semi-Arid’ zone of India, which means availability of fresh water is always a matter of concern. According to the official 2011 census, the population of Delhi stood at 16.8 million, which has expanded further in the last ten years. As per the Delhi Jal Board data, the daily water consumption has risen to 1.1 trillion litres by 2005, a tenfold increase from 1976. One can safely say that it is probably higher as of now. Hence, the water profile of an institute is a vital cog in its environment friendly design. Water bills were analysed in order to understand the consumption pattern (in kl) of the college. The data is presented in the table below and shows a monthly/bi-monthly unit consumption of water. The water consumption is split between the academic block and the teaching staff quarters. The bills for Academic Block are generated approximately every 60 days, while the Teaching Staff Quarters bills are generated monthly. The primary use of water in campus is for drinking and sanitation. Janki Devi Memorial College has taken significant steps toward utilising harvested rainwater on campus. The water consumption from Academic block meter has been shown in the table. The major decline in water consumption from average of 136 kl to 176 kl is attributed to online teaching-learning during the whole year. Further, the second meter (i.e. teaching staff quarters) has not been working, so the bill was generated on the basis of random meter readings and hence the data is approximate and cannot be compared.

(* Break in the readings due to Covid-19)

Month	Academic Block	Month	Academic Block
Jun-Jul-19	217	Jun-Jul-20	
Aug-Sep-19	371	Aug-Sep-20	366
Oct-19		Oct-20	96
Nov-Dec 19	276	Nov-Dec 20	266
Jan-Feb 20	521	Jan-21	
Mar-20		Feb-21	46
Apr-20	238		
May-20	240		
Total(kL)	2101	Total(kL)	774*
Average(kL)	176	Average(kL)	86

Energy Profile

Several environmental problems can be traced back to non-renewable energy resources. Air pollution due to burning of fossil fuels, water and soil pollution due to coal mining and oil drilling, displacement of tribal communities, loss of forest land due to dams etc. are some of the impacts of extracting and utilising non-renewable sources of energy. It is imperative that judicious consumption and conservation of energy should be at the heart of every institution's design and functioning. Electricity bills of the college were assessed and the monthly unit consumption was compiled as below. The table indicates that the average monthly electricity consumption was 24,759 kWh for 2016-17 and 29,466 kWh for 2017-2018, 31,281 kWh for 2018-19, 28,704 kWh for 2019-20 and for 2020-2021 it is 15,215 kWh. The decline in the consumption is attributed to online teaching-learning for the whole year. The College will be taking steps to reduce its electricity consumption and shift towards renewable sources of energy

* break in the readings due to COVID19 pandemic.

Month 2019 - 2020	Electricity Consumption (kWh)	Month 2020-2021	Electricity Consumption (kWh)
July	29798	July 2020	14141
August	42294	August	16880
September	47033	September	15661
October	55280	October	16550
November	27728	November	13776
December	22800	December	13260
January	25456	January	15392
February	28240	February	16272
March	20816	March	15680
April	8224	April	14544
May	8078	May	**
Average	28704	Average	15215

Solid Waste Generation Profile

Municipal solid waste consists of the non-hazardous waste material produced in the city limits. Commonly identified as 'garbage', it is the end point for most natural resources in the urban environment. Sanitary Landfills and Incineration are the two common methods employed by the government to dispose the waste material, both of which contribute to various forms of pollution. Thus, it is imperative to understand how much waste material JDMC produces and how is it disposed off. The primary sources on campus include the canteen, hostel mess and the garbage cans around campus. Garbage from the campus is collected on a daily basis in a handcart. Though it is difficult to weigh the garbage and estimate the mass, the volume of the garbage can be approximated with some degree of accuracy. The dimensions of the empty cart were measured to be 122 cm (Length), 82 cm (Breadth) and 79 cm (Depth). Upon loading the cart, the height of the garbage was approximately 89 cm. The volume of the fully loaded cart was calculated to be 0.89 m³. The frequency of the collection was monitored and is shown in the table.. Leftover food material and plastic was the main component of this waste. In addition to this waste, recyclable waste is sold to recycler but due to the online semesters, not enough waste was generated in the college to be sold to recyclers. The college has taken steps to develop its compost through newly installed compost machine. JDMC has also incorporated 'segregation of waste at the source' by installing the blue and green dustbins at multiple places in the college for easy handling of the waste.

Month	Quantity(Number of solid waste carts per month)	Number of solid waste carts per day
Mar-Apr-20	25+18=43	0.7
May-Jun-20	20+21=41	0.67
Jul-Aug-20	26+28=54	0.88
Sep-Oct-20	30+37=67	1.1
Nov-Dec-20	42+47=89	1.46
Jan-Feb-21	50+48=98	1.66
Mar-Apr-21	52+49=99	1.62
	Average no. of solid waste carts per day	1.15

Vegetation Profile

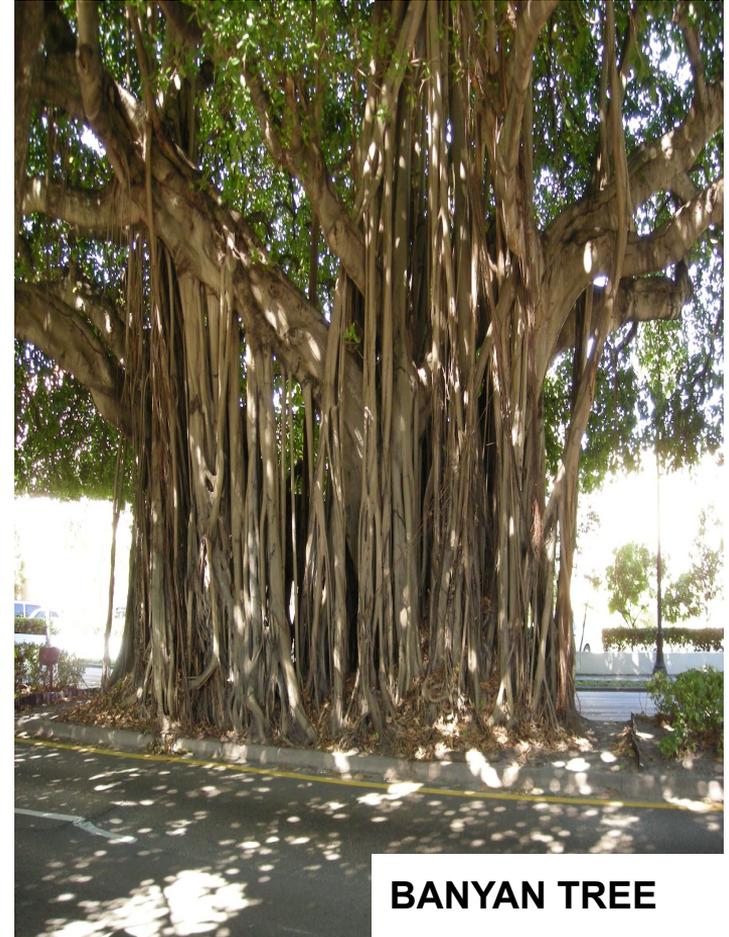
Green spaces are rare in a crowded city like Delhi, and for students and employees, a college campus can often be an oasis. The green cover also is a factor that attracts many students to this beautiful campus year after year. The department of Environmental Studies and AVANI – the Environment Club initiated the Tree Census in order to understand and quantify the floral diversity of the campus. The project also aimed to educate the students about the different tree species that they encounter in their daily lives. The tree census was done by Mr. Akash Verma and Dr. Rajwant Kaur (former faculty members) in the year 2016-2017 with the help of students. The students referred to *Trees of Delhi: A Field Guide* by Pradip Krishen for correct identification of trees. The tree census was revised by Ms. Ifrah Rehman and Ms. Pouriangthanliu in 2020. A total of 300 trees were found in the college campus, which included 45 unique species. Neem (*Azadirachta indica*) was the most prolific tree species, followed by Champa (*Plumeria rubra*) and Ashok (*Polyalthia longifolia*). The campus also had some well-established Banyan trees (*Ficus benghalensis*), which are a keystone species as their fruits (figs) provide nutrition to a large variety of animals, including several bird species. A related observation was the invasion of Vilayati Kikar (*Prosopis juliflora*) from the periphery of the college. We identified 14 individuals, which had established themselves in the area behind the new hostel construction.. Overall, the tree census yielded a wealth of knowledge about the floral diversity on the campus.



CHAMROD

TREE CENSUS

S. No	Common name	Scientific name	Count
1	Amaltas	<i>Cassia fistula</i>	6
2	Arjun	<i>Terminalia Arjuna</i>	1
3	Ashok	<i>Pofyalthia longifolia</i>	18
4	Bakain	<i>Melia azedarach</i>	4
5	Banyan	<i>Ficus benghalensis</i>	5
6	Belpa	<i>Aegle marmelos</i>	3
7	Cabbage Palm	<i>Saba/ palmetto</i>	6
8	Champa	<i>Pfumeria rubra</i>	25
9	Chamrod	<i>Ehretia laevis</i>	3
10	Chir Pine	<i>Pinus roxburghii</i>	3



BANYAN TREE

S. No	Common name	Scientific name	Count
11	Christmas tree	<i>Araucaria cu/umnaris</i>	2
12	Cycas	<i>Cycas sp.</i>	17
13	Dhak	<i>Butea monosperma</i>	1
14	Fiddle leaf Fig	<i>Ficus lyrata</i>	1
15	Firangipani	<i>Plumeria obtusa</i>	4
16	Floss Silk Tree	<i>Ceiba speciosa</i>	2
17	Harsingar	<i>Nyctanthes arbor-tristis</i>	2
18	Imli	<i>Tamarindus indica</i>	4
19	Indian Rubber Tree	<i>Ficus elastica</i>	3
20	Jaggery Palm	<i>Caryota urens</i>	1



FIDDLE-LEAF FIG

S. No	Common name	Scientific name	Count
21	Jamun	<i>Syzygium cumini</i>	3
22	Jarul	<i>Lagerstroemia speciosa</i>	5
23	Kadi Patta	<i>Murraya koenigii</i>	1
24	Kassod	<i>Senna siamea</i>	6
25	Katthal	<i>Artocarpus heterophyllus</i>	1
26	Lasara	<i>Cordia dichotoma</i>	1
27	Mahua	<i>Madhuca longifolia</i>	1
28	Mango	<i>Mangifera indica</i>	12
29	Maulsari	<i>Mimusops elengi</i>	6
30	Neem	<i>Azadirachta indica</i>	82



JAMUN

S. No	Common name	Scientific name	Count
31	Oak	<i>Casuarina equisetifolia</i>	2
32	Orange species	<i>Trifoliate orange</i>	1
33	Peepal	<i>Ficus religiosa</i>	9
34	Royal Palm	<i>Roystonea regia</i>	8
35	Safeda	<i>Eucalyptis camaldu/ensis</i>	4
36	Saptaparni	<i>Alstonia scholaris</i>	3
37	Semal	<i>Bombax ceiba</i>	1
38	Shahtoot	<i>Morus alba</i>	6
39	Sheesham	<i>Dalbergia sissoo</i>	4
40	Silver Oak	<i>Grevillea robusta</i>	2



SEMAL

Sl. No	Common name	Scientific name	Count
41	Siris	<i>Albizia lebbek</i>	3
42	Sonjna	<i>Moringa oleifera</i>	2
43	Traveller's Palm	<i>Ravena/a madagascariensis</i>	2
44	Vilayati Kikar	<i>Prosopis juliflora</i>	14
45	Weeping Bottlebrush	<i>Callistemon viminalis</i>	8
46	unidentified		
47	Guava	<i>Psidium guajava</i>	
48	Chiku	Manilkara zapota	
49	Nimbu	<i>Citrus limon</i>	
50	Rudraksha	<i>Elaeocarpus ganitrus</i>	



VILAYATI KIKAR

Creatures that fly: Bugs, butterflies and moths in the JDMC gardens

S.No.	Common Name	Scientific Name
1.	Small branded swift	<i>Pelopidas mathias</i>
2.	lesser cream wave	<i>Scopula immutata</i>
3.	Indian owlet moth	<i>Spirama retorta</i>
4.	Malayan eggfly	<i>Hypolimnas anomala</i>
5.	Small cupid	<i>Chilades parrhasius</i>
6.	White orange tip	<i>Ixias marianne</i>
7.	Pioneer white	<i>Belenois aurota</i>
8.	Small salmon arab	<i>Colotis amata</i>
9.	Pale grass blue	<i>Pseudozizeeria maha</i>
10.	Rice swift	<i>Borbo cinnara</i>
11.	Common jay	<i>Graphium doson</i>

12.	Cassius blue	<i>Leptotes cassius</i>
13.	Mottled emigrant	<i>Catopsilia pyranthe</i>
14.	Eastern honeybee	<i>Apis cerana</i>
15.	Giant honeybee	<i>Apis dorsata</i>
16.	Blue long legged fly	<i>Dolichopus spp</i>
17.	Seven spotted ladybird	<i>Coccinella septempunctata</i>
18.	Danaid eggfly	<i>Hypolimnas misippus</i>
19.	Lime swallowtail	<i>Papilio demoleus</i>
20.	Indian cabbage white	<i>Pieris canidia</i>
21.	Common red flash	<i>Rapala iarbus</i>
22.	Common swallowtails	<i>Papilionidae spp</i>
23.	Plains cupid	<i>Luthrodes pandava</i>

S.No.	Common Name	Scientific Name
24.	Common tiger	<i>Danaus genutia</i>
25.	Yellow pansy	<i>Junonia hierta</i>
26.	Common mormon	<i>Papilio polytes</i>



COMMON SWALLOWTAILS



LIME SWALLOWTAIL



YELLOW PANSY



DANAID EGGFLY

Sustainable Activities

Janki Devi Memorial College prides itself on the numerous environmental initiatives, which have won the college many accolades. We believe that sustainable development must go beyond the classroom and the books, and permeate into the core functions of the institution. With this in mind, the College has initiated several programmes over the last two decades, which reflect the environmentally friendly ideology of the institution.

Rain Water Harvesting Programme

The Rain Water Harvesting Programme in JDMC came as part of an initiative taken by Ms. Aruna Ludra, a faculty member of the English department of the college. She donated Rs. 30,000/- to the college on her retirement and the project was implemented with the help of the Centre for Science and Environment (CSE) in June 2001. CSE continued to monitor groundwater level up till 2008. The cost of the entire Rain Water Harvesting system was Rs. 70,000/-. It won the college the Chief Minister's Institutional Rain Water Harvesting Award in 2007.

Rainwater Harvesting System

1. Rooftop Water Harvesting

The runoff from the terrace of the college building is channelled into three recharge wells located at three different locations, each measuring 1m x 1m x 2m. All the rooftop rainwater outlets, except that from the Tutorial Block, discharge into storm-water drains and then to the recharge structures. In the Tutorial Block, a network of pipes linked through chambers take the rainwater to the recharge wells. To facilitate groundwater recharge, all structures are provided with 15m deep borewells of 150mm diameter. Layer of bricks filled inside the recharge ensure proper filtration of the harvested water.

2. Surface Runoff Water Harvesting

The runoff from the unpaved area is intercepted at the main gate by a collection trench. From here, the runoff eventually drains into an abandoned open well, which facilitates ground water recharge.

The total rooftop and surface area for collection stands at 32,170m². With the average annual rainfall in Delhi being 611mm, the campus has the potential to harvest over 19,000 m³ or 19,000,000 litres of water annually. Current volume of rainwater harvested 6880(m³) or 68, 80,000 litres. This represents about 35% of the total rainwater harvesting potential of the campus. JDMC utilises the ground water through three borewells inside the campus to cater to the water requirements of the college.

Impact

The Janki Devi Memorial College is located in Delhi's Ridge area. The water level in the college premises was 35.8 m below ground level (bgl) in May 2002. After implementing the RWH system on the campus, water levels rose remarkably. The water level in September 2002 was 22.1 m (bgl) while in May 2003 it was 25.0 m (bgl), a rise of 10.8 m even during the peak summer month. The water level in July 2003 was recorded at 35.9 m (bgl). The data was collected and analysed by the project team from Centre for Science and Environment.

Renewable Energy

Solar energy is the most abundant, easy, and cost-effective renewable energy to harvest. It is also the most important of the non-conventional sources of energy because it does not generate any carbon dioxide and contributes to the efforts against global warming and climate change.

On 13th May 2016, JDMC signed a Power Purchase Agreement (PPA) with Azure Solar Solutions Pvt. Limited for 25 years under the Renewable Energy Service Company (RESCO) Model of the Ministry of Renewable Energy. Azure Solar Solutions Pvt. Limited is engaged in the business of building and operating solar power plants, including grid-connected rooftop power projects. Under the PPA, Azure Power installed the solar plant at JDMC, free of cost.

How does it work?

The College currently purchases electricity from two sources. The primary source is BSES which provides electricity through the main grid at a rate of Rs. 8.00 per unit of electricity consumed. The solar system generates electricity from the incident solar radiation falling on the PV modules and supplies it to the college at a rate of Rs. 3.20 per unit of electricity consumed.

A Net Energy Meter is used to keep track of the power generated from installed solar panel system. Any solar energy that is not used simultaneously with its production goes back into the electrical grid through the meter. At night or on cloudy days when the system is not producing power to meet the building requirements, the college draws electricity directly from the grid. The Electricity Utility generates a bill for the 'net' consumption for any given billing period and provides a credit for any excess produced during a given period.

The solar plant installed operates on a solar photovoltaic system of 58.90 KW capacities. The plant is installed on the rooftop measuring approximately 14,402 square feet and has a shade free area of approximately 12,292 square feet. The setup includes 84 panels, two inverters that modulate the voltage, a portable weather monitoring station, and a data logger and transmitter. The data logger collects the necessary data from the system and wirelessly transmits it to the Azure Power Monitoring team.

	Parameter	Value
1	System size	58.9 kW
2	Expected annual energy generation	As per schedule IV
3	Module Type	Polycrystalline Modules
4	Inverter Type and Rating	String Inverters
5	Electrical Parameter for Interconnection	Interconnection existing in LT panels at 3 phases, 415V, 50 Hz
6	Mounting Type	Fixed Structure
7	Surface Azimuth Angle	0 Degree
8	Tilt Angle	10 Degree
9	Wind Resistance	150 Km/Hr



Contribution to the College

The solar power plant came into operation in the month of December 2016. During 2019-2020, 15% of the energy demand of college was met by solar energy generation. Since the installation of solar panel, JDMC could see the difference in reduction of electricity bills as the electricity bought from the solar plant is priced at a much lower rate. We look forward to having the solar power plant generating at full capacity as summer approaches. The solar plant, coupled with power saving installations, will aim to fulfil the complete energy demand for the college in the coming years.



Month	Solar Electricity Generation	Solar Export Units	Month	Solar Electricity Generation	Solar Export Units
June	4427	16	June	-	
July	5762	96	July	29686.2	0
August	5021	32	August	5621	0
September	4843	0	September	6247.6	0
October	3814	32	October	3939	0
November	3156	0	November	3847.8	0
December	3178	16	December	4169	0
January	4267	16	January	3898.2	0
February	3841	96	February	5,908.6	0
March			March	6,052	0
Monthly Average	5080	35		7707	

Composting

In 2019, college took an initiative in waste management. A composting machine model 24-25 and capacity 25-30 kg. per batch (fully automatic with inbuilt shredder) was installed on 26-02-2019 to decompose the organic waste of the campus. The details of the compost generated are tabulated below in Table 9:

Month	Waste Input(in kg)	Compost Output(in kg)
Jan 2020	35	14
Feb 2020	25	7.5
Mar 2020	20	4
Apr 2020 - Aug 2020	500	100
Sep 2020 - Mar 2021	600	110
Apr 2021 - May 2021	150	45
Total	1330	280.5

Green Activities - AVANI

The Environment Club AVANI, at the JDMC was set up in 2004. The club began with simple ideas like on-the-spot painting competitions and slogan and poster making in an effort to encourage students' interest in the environment. The “green treasure hunt”, which involved locating tree species on campus, continues to be a much-awaited annual event.

Avani, the Environment Club of Janki Devi Memorial College, consists of students from different departments who form its green brigade, which is engaged in promoting eco-friendly options for a healthier and greener environment.

Convenors: Ms. Vandana Madan Co-convenors: Dr. Abha Jain, Ms. Bhawna Pal, Ms. Anuradha Goel, Dr. Kanika Kakar, Ms. Pouriangthanliu, Ms. Ifrah Rehman, Ms. Karishma Ahlawat and Dr. Deepak Rawat.

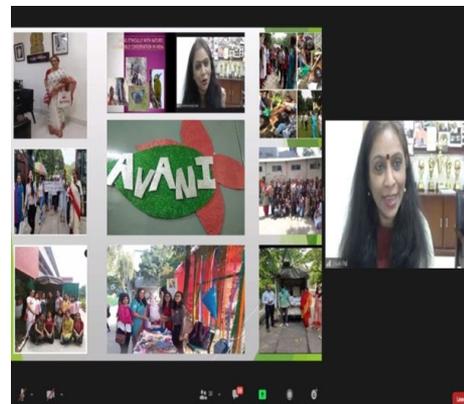
Avani organised a plethora of activities during 2020-2021 reflecting its commitment towards clean, healthy and green environment.



The Environment Club AVANI

Avani organised multiple activities during 2020-21 through online mode via the Zoom platform and Google meet.

- On May 22,2021,International Biodiversity Day, Avani organised a workshop on gardening with the organisation Lazy Gardener ,in keeping with the theme of the day “Give back to nature”
- On April 22, 2021,Earth Day, Avani, the Environment Club along with Centre for Universal Values and Ethics, JDMC, University of Delhi under its,initiative **LENS** (Living Ethically with Nature Series) organised an international webinar on “Community Forest Management in the Himalayas”.The lecture was delivered by Mr.Akash Verma ,a PhD scholar at the National Singapore University.
- On 10th March, 2021 Avani organised the fifth inter-college debate competition, Green Matters on the topic ‘The only way to prevent environmental disasters and reverse climate change is to return to traditional knowledge systems and be individually responsible’.
- Create from Waste was celebrated on 13th February, 2021 as a part the annual college festival, Symphony 2021. The theme of the competition was ‘The recent Himalayan Disaster’.
- Avani hosted an Intra-college visual -video competition ‘Walking with Nature’ from 20th November to 5th December, 2020.
- On 6th November, 2020, Avani, the Environment Club along with Centre for Universal Values and Ethics, JDMC, University of Delhi under its,initiative **LENS** (Living Ethically with Nature Series) organised an international webinar on”Sustainable Development” The speaker for the webinar was Dr. Ghazala Shahabuddin who is a member of Asia Board, Society for Conservation Biology.
- On 5th October, 2020 to observe World Habitat Day, Avani conducted an inter-college ‘Poster making competition’ with the theme ‘Sustaining All Life on Earth’



The Environment Club AVANI

- An Intra-college Create from Waste competition with the topic 'Less is More - The Gandhian Way in Times of Crisis' was held on 21st September, 2020
- On 18th September, 2020 Avani conducted a workshop on the topic 'Handmade Paper at Home – DIY'. The special guest for the webinar was Ms. Shakshi Kataria, an ex-student of JDMC and former member of Avani.
- Despite the pandemic and the lockdown, on 22nd August, 2020 Avani delivered 30 cartons of clothing and 500 kilos of ration to Goonj, reflecting its commitment to social well-being and concern for humanity.

Memorandum of Understanding with World Wide Fund for Nature

As a part of the ECHO programme for the university students, JDMC signed a **MoU with WWF India**, assigning Dr. Abha Jain from Avani as mentor (teacher coordinator) and nominated four students as college representatives. As a part of the understanding forged with WWF, JDMC is involved in implementing the project, '**World in our Palms**' since November, 2020 for a period of six months.



Garden Committee

The college gardens are campus treasures full of tall trees, colourful flower beds and a variety of plants that add to the beauty and peaceful ambience of the college. Our gardens include Main (front) garden, herb garden, rose garden with exclusive display of rockery and a green cliff at the entrance with the name of the college written on it.

During 2020-21, the garden was maintained and bloomed by our gardeners. However, new varieties of plants could not be added due to global pandemic. The college garden committee prepared well to participate in the Delhi University Flower Show 2021. The college garden environment, along with different plants were sent as participating entries in the 63 rd Annual Flower Show 2021. Our college secured many prizes in various categories such as 'Succulents and Cacti Pots', 'Bonsai Plants', 'Potted Plants: Tagetes (Marigold), Verbena', and 'Foliage Plants'

The overall impression of open green spaces surrounded by trees and shrubs in garden creates a clean and green college environment.

Convenors: Dr. Sandhya Garg; Teacher Members: Dr. Nisha Malik, Ms. Meghna Surana, Ms. Shivani Thakur and Mr. S Shravan Kumar



Environmental Education

Department of Environmental Studies at Janki Devi Memorial College makes extra effort to provide a wholesome educational experience for the students. The Ability Enhancing Compulsory Course (AECC) in Environmental Studies was initiated in 2014 and the Department of Environmental Studies teaches Environmental Science to approximately 500 students in each semester. Apart from classroom teaching, the students are taken out of the campus on environmental field trips

During 2020-2021, the Department of Environmental Studies, given the circumstances, organized an Add-on Course to raise awareness amongst the students on “Environment Sensitization for the post-Covid world: A wake-up call” for all second- and third-year students from September 01 to November 17th, 2020 led by Ms. Ifrah Rehman.



The Department of EVS also engages in various programmes alongside AVANI, like Create from Waste in which students recycle household waste materials and create something useful; Green Matters: The Annual Inter-College Debate Competition to raise awareness about the growing environmental issues.

Ms. Ifrah Rehman, Assistant Professor of the Department also performed in collaboration with AVANI- The Environment Club of JDMC, a Green Audit – the Environmental Self-Assessment Report of Janki Devi Memorial College in August 2020.

The Department is also engaged in a students' research project on “Awareness on Environmental and Health Hazards of Sanitary Napkins and Factors that Impact College Students' Choice of Menstrual Products” by Barkha Arora and Sonali Chauhan under the guidance of Ms. Ifrah Rehman.

The faculty members actively participate in various societies that they are a part of, like, the Canteen Committee, AVANI- the Eco-club, ETIHAD- the MUN society and ENACTUS-JDMC. The Department engaged in updating the tree census and butterfly census of the college.



Conclusion

The annual Environmental Self-Assessment of Janki Devi Memorial College is conducted by the Department of Environmental Studies in collaboration with AVANI-the Environment Society. In a constant effort to keep up with the changing times, it is important to understand where one stands in the present. In the environmental scenario, an institution has a duty not only towards itself, but also to the students and society to evolve with the shifting tides and to contribute towards a greener and cleaner future. Of the many tools available to assess the impact of one's activity on the environment, a Green Audit is indispensable.

Janki Devi Memorial College is an environmentally and ecologically responsible institution and is actively carrying out many activities to improve the environment such as rainwater harvesting, solar energy generation, waste management, recycling etc. The College has taken an initiative to improve its environmental performance further recently by establishing the compositing unit. Not only this, students and faculty members are actively working towards environmental awareness through various activities of the Environmental Club Avani.

This project would not have been possible without the encouragement and support of the Principal, Prof. Swati Pal, the administrative staff, faculty members and the students. It is their assistance and collaboration that has brought this Green Audit to fruition.