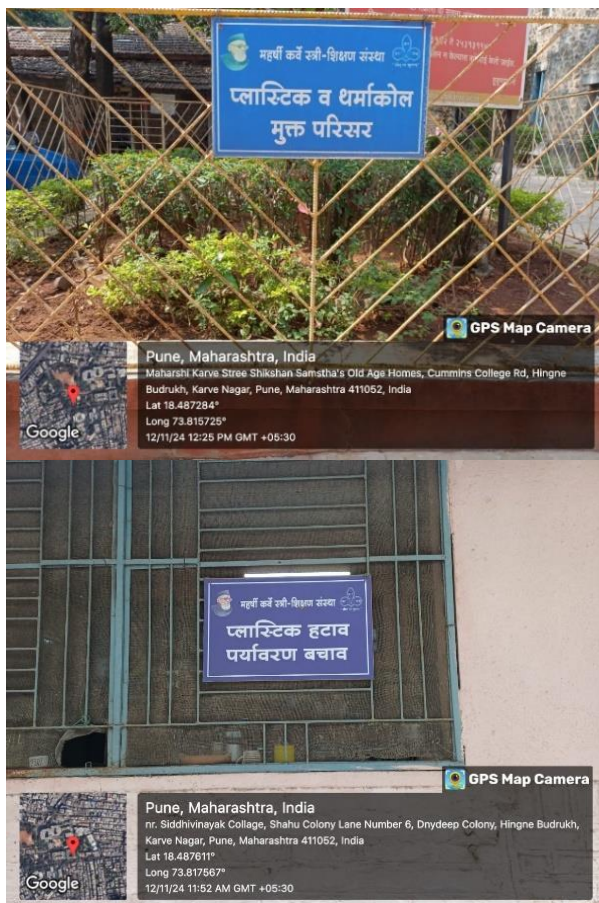


### 7.1.3.: Green Campus Initiatives

BNCA commits to sustainability and the efforts are reflected in various activities and programs aimed at reducing waste, conserving energy, and enhancing green spaces. From tree plantation drives to waste management programs, these efforts improve the campus environment and help instill a sense of responsibility among students, staff, and the community. Through these activities, the college aims to serve as a model for sustainable practices, inspiring stakeholders to adopt eco-conscious habits in their daily lives. BNCA's Environmental Department and Landscape Department regularly organize many activities and events on the campus to ensure the maintenance of a clean and green campus. Tree-plantation drives are undertaken each year to increase the green coverage on the campus. A QR code was implemented on campus to promote awareness of the importance of trees in urban ecology and biodiversity in an educational campus. BNCA organizes various awareness drives about energy and water conservation, plastic pollution, climate change, global warming, climate resilience, and carbon footprint. A 'Sustainable Development Goal' hub was established in BNCA to give our contribution to the 17 Sustainable Development Goals (SDGs) set by the UN. This Hub enables and provides the students, who are passionate about making a change, a platform to fulfill their part towards the betterment of society.

- **Ban on single-use plastic** – BNCA strictly implements the ban on disposable plastic and thermocol usage on the campus. Steel plates, Paper plates, and cups are used in the canteen.



*Plastic ban signages throughout the campus*

- **Restricted Vehicular traffic** - Vehicle traffic on campus is limited to the main entry road and parking lots. The campus is pedestrian-friendly, with well-defined walkways throughout. The campus provides a secure and beautiful setting for walking and participating in outdoor educational activities.

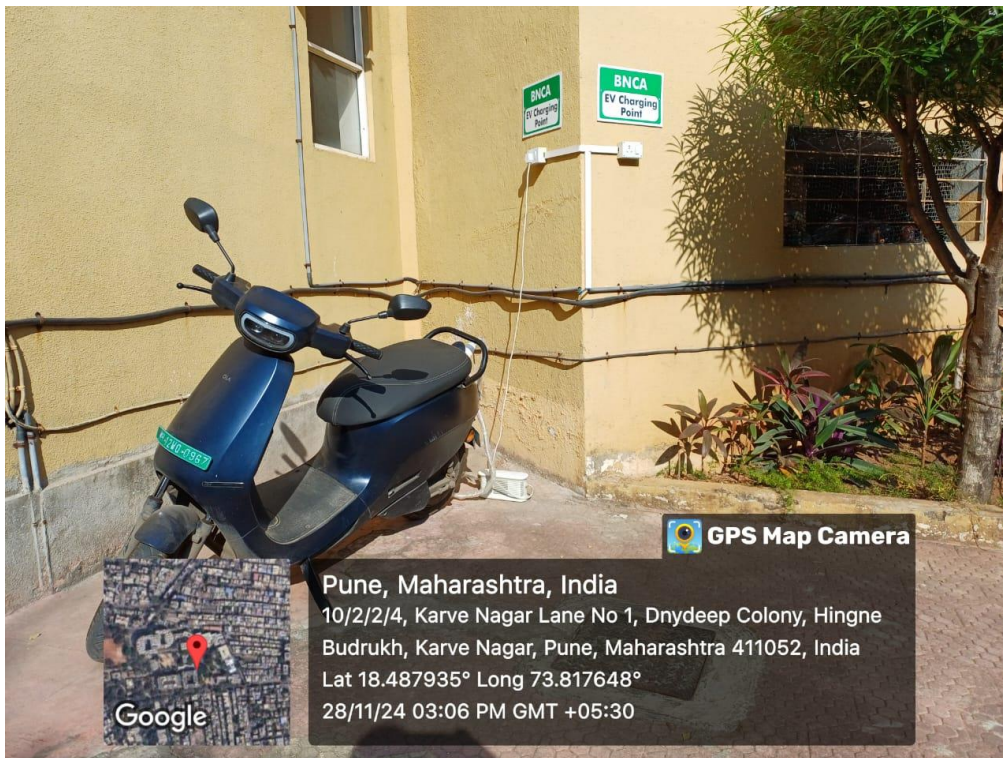
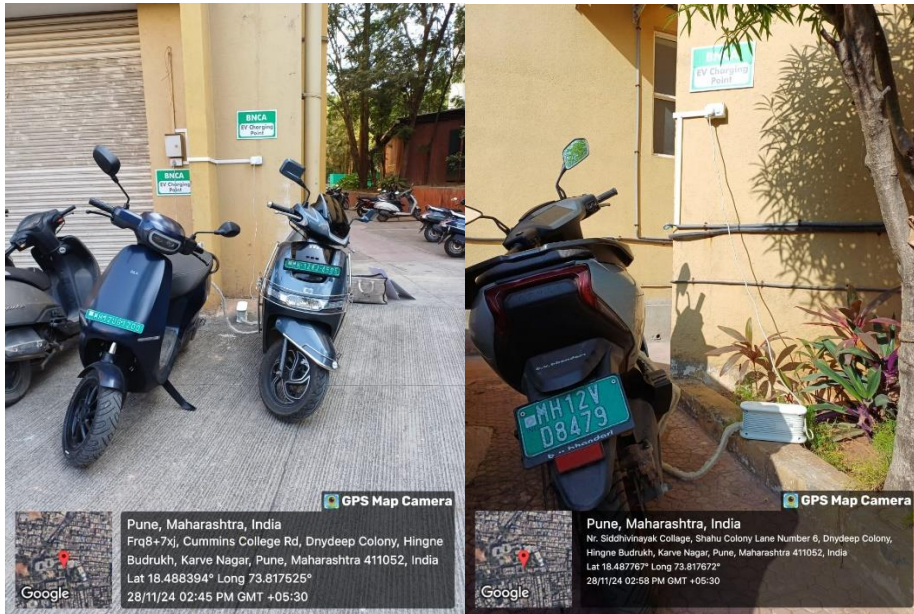


Vehicle free safe pedestrian pathways.

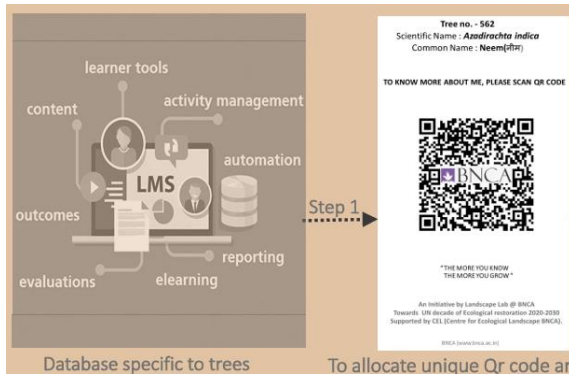
- An Electric cart is used regularly for campus transportation.



- BNCA has provided 4 charging points for electric vehicle charging for staff and students to encourage using EV for commuting to college.



- QR coding of campus trees-** Separate unique QR codes and URLs are developed for individual trees giving information about that tree at a single click. The project aims to promote awareness of the importance of trees in urban ecology and biodiversity in an educational campus and to spread information about trees in society with the use of easy and effective technological mediums.



**PLANT AND DESIGN : HERBARIUM SHEET**

Botanical name: *Mangifera indica*  
Common name: Mango

PK M.L.A 23-23 BNCA,PUNE

type of tree:

Flowering months:

Information:  
Kingdom: Plantae  
Division: Magnoliopsida  
Class: Magnoliopsida  
Order: Sapindales  
Family: Anacardiaceae  
Genus: *Mangifera*  
Species: *M. indica*  
Scientific Name: *indica*

Other names: Popularly known as *Amba*, in Hindi it is called *Am*, *Mzo* etc.

Description: It is a matter of astonishment to many that the delicious mango, one of the most celebrated of Indian fruits, is a member of the family Anacardiaceae-notorious for embracing a number of highly poisonous plants. The mango tree is erect, 30 to 100 ft high, with a broad, rounded canopy which may, with age, attain 100 to 125 ft in width, or a more upright, oval, relatively slender crown. In deep soil, the taproot descends to a depth of 20 ft, the profuse, wide-spreading, feeder root system also sends down many anchor roots which penetrate for several feet. The tree is long-lived, some specimens being known to be 300 years old and still fruiting. Nearly evergreen, alternate leaves are borne mainly in rosettes at the tips of the branches and numerous twigs from which they droop like ribbons on slender petioles 1 to 4 in long. Hundreds and even as many as 3,000 to 4,000 small, yellowish or reddish flowers, 25% to 98% male, the rest hermaphroditic, are borne in profuse, showy, erect, pyramidal, branched clusters 2 1/2 to 15 1/2 in high. There is great variation in the form, size, color and quality of the fruits. They may be nearly round, oval, ovoid-oblong, or somewhat kidney-shaped, often with a break at the apex, and are usually more or less lop-sided.

Uses: It is evergreen Shade giving tree, many times used in boundary plantation, used as Specimen tree, in sitting places to create natural shade It cultivates for its sweet fleshy fruit so, plays important role in economy for farmers.

Medicinal Uses: Mango plants produce fleshy stone fruits rich in phytochemicals with an undisputed nutritional value for its high content of polyphenolics and vitamins. This review provides an overview of the antioxidant, anti-inflammatory, and anticancer properties of mango, a fruit that should be included in everyone's diet for its multifaceted biochemical actions and health-enhancing properties.

Cultural Value/Importance:

Form and scale: *erect and irregular*

Special features: \_\_\_\_\_

Landscape use: *Can be used as a shade giving tree, and for boundary plantation in fields.*

Propagation: *seeds and cutting*

Growth: *slow to fast*

Maintenance:

Soil Condition:

Sun Condition:

Water requirement:

Fauna attracting:

Fragrant:

Edible:

Shade giving:

Physical characteristics: *oval and branching with a thick trunk and broad, rounded canopy*

Leaves: *various, irregular*

Height: *up to 20m* Spread: *6m to 8m*

Custom made predesigned easily understandable format



- **Tree Plantation Drive**

- The NSS team of BNCA organized a tree plantation activity on 15<sup>th</sup> Aug 2023. Enthusiastic participation from the students and the staff not only added greenery to the campus but also instilled a sense of unity and responsibility towards the environment among the participants.



- 'Environment Week' was celebrated from 3<sup>rd</sup> – 7<sup>th</sup> June 2024 by organizing a tree plantation drive on the MKSSS campus ahead of World Environment Day. The students planted indigenous plant varieties on the campus as their contribution to safeguarding the environment.



- **Cleanliness Drive – 03-10-2023**

The NSS team of BNCA organized a cleanliness drive on the 3rd of October 2023. The event not only promoted a sense of responsibility and ownership among the students but also fostered a collective spirit of cleanliness within the college premises



- Swachhata Abhiyaan - 01-10-2024

The BNCA NSS team organized 'Swachhata Abhiyan to mark Mahatma Gandhi Jayanti 2 Oct 2024. The Objective of this Event was to emphasize the importance of Cleanliness amongst students and staff. 30 students along with the MKSSS-BNCA Swachhata Karmachari, cleaned the premises and also collected Plastic waste.



- 'Wood waste workshop'

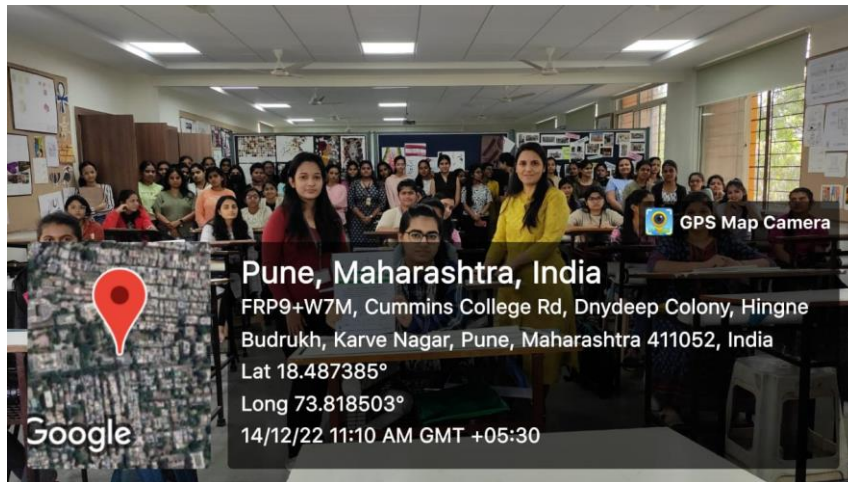
The wood waste workshop was organized at BNCA to instill awareness of sustainable material use in design and to demonstrate the potential of upcycling waste materials in architecture and interior design. Students gained hands-on experience in woodworking and material reuse. The workshop successfully demonstrated how waste materials could be transformed into valuable products.





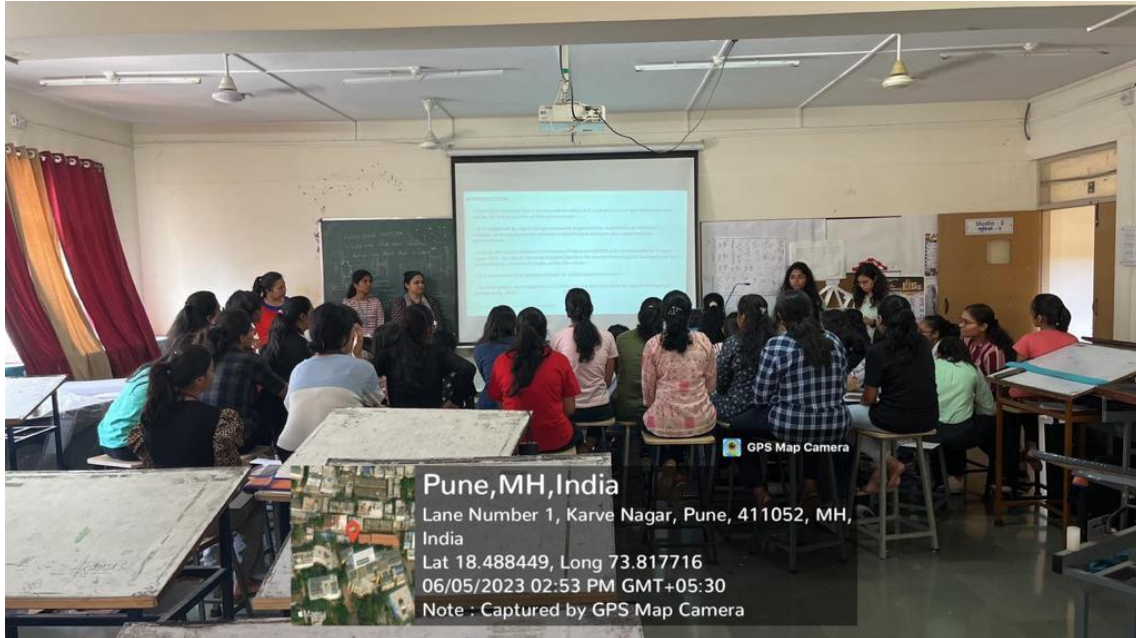
- **Workshop - 'Know your Carbon Footprint'**

The Department of Environmental Architecture in association with the 'Goethe Institute, organized a workshop on 'Know your Carbon Footprint' at BNCA on the 'World Energy Conservation Day' on 14<sup>th</sup> Dec 2022. The workshop helped the students understand how to calculate their personal carbon footprint and how they can reduce the same by making sustainable choices and modifications in their lifestyles.



- **Environment awareness drive**

**World Environment Day** – The Department of Environmental Architecture carried out an awareness drive to educate students about the serious problems due to plastic pollution. Students were encouraged to take a pledge to not use disposable plastic bottles and to carry cloth/paper bags.



- **Webinar Series (9, 16, 23 April 2021)**

## Towards low-carbon climate resilience: how architects can deliver change

The Department of Environmental Architecture and Planning, BNCA in collaboration with the Indian Network on Ethics and Climate Change (INECC) and LAYA recently kicked off its Online Webinar Series on How Architects Can Deliver Change under its Towards Low-Carbon Climate Resilience initiative. The three-part online series is conducted to increase awareness about sustainable architecture, its impact on the environment, and climate change.

**TOWARDS LOW-CARBON CLIMATE RESILIENCE**

**HOW ARCHITECTS CAN DELIVER CHANGE**

**ONLINE WEBINAR SERIES**



**6 PM ON FRIDAYS**

**9 APR**  
CLIMATE CHANGE AND ARCHITECTURAL PRACTICE

**16 APR**  
TECHNOLOGIES FOR RESILIENCE BUILDING

**23 APR**  
THE WAY FORWARD AS A PROFESSION WITHIN A CLIMATE CHANGING WORLD

\*CERTIFICATE WILL BE AWARDED TO PARTICIPANTS WHO ATTEND ALL 3 SESSIONS  
\*OPPORTUNITY TO BE MENTORED BY EXPERTS ON SUSTAINABLE ARCHITECTURE

\*HOSTED ON ZOOM

INECC  
People's Voices in Policy Choices

Laya

125<sup>th</sup> ANNIVERSARY 1946-2021

BNCA  
MAHARISHI KARVE SHREE SHIKHAN SAMITHI'S  
DR. BILANUBEN NANAVATI  
COLLEGE OF ARCHITECTURE  
FOR WOMEN

TO REGISTER  
POURNIMA@SAMUCHIT.COM

**TOWARDS LOW-CARBON CLIMATE RESILIENCE**

**HOW ARCHITECTS CAN DELIVER CHANGE**



**Vivek Gilani**  
Ashoka Fellow  
Managing Director, cBalance



**Mili Majumdar**  
Managing Director, GBCI  
Senior VP, USGBC

**6 PM ON FRIDAYS**

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**TOWARDS LOW-CARBON CLIMATE RESILIENCE**

**HOW ARCHITECTS CAN DELIVER CHANGE**



**Prof. Prasad Vaidya**  
Director,  
Solar Decathlon India  
Senior Advisor, IITB



**Prof. Rob Fleming**  
Director,  
MS in Sustainable Design,  
Thomas Jefferson University



**Dr. Satish Kumar**  
President and Executive Director  
Alliance for an Energy Efficient  
Economy (AEEE)

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- Clean Air for blue skies webinar (4<sup>th</sup> Sept. 2021)

## International Day of Clean Air for blue skies

**Clean Air**

International Day of Clean Air for blue skies

UN environment programme

**Inside Out**

#WorldCleanAirDay  
#CleanAirForAll

Outdoor Air Pollution is a growing concern for Indian cities with 26 cities being in the top 50 polluted cities in the world ranking in 2019. Along with this, Indoor Air Quality (IAQ) also needs urgent address, since 90% of our time is spent indoors. IAQ has a significant and direct impact on the health and well-being in buildings for its occupants. Green Buildings can be a key intervention strategy to ensure healthy indoor spaces for occupants and mitigate the adverse effects of indoor air pollution. Outdoor air pollution on the other hand needs policy and advocacy level interventions along with an aggressive implementation action plan.

The Clean Air-Inside Out webinar will discuss and deliberate on how various actions and steps could be taken by stakeholders to combat air pollution in cities as well as in the built environment.

**Speakers-**

**Dr. Prasad Modak**  
Executive President, EMC  
Founder President  
Society for Indoor Environment

**Pararathna Borah**  
India Director  
Clean Air Asia

**Dr. Victor Shinde**  
Sector Coordinator  
Water & Environment  
NIUA

**Date: FRIDAY 4TH SEPTEMBER 2020**  
**Time: 4:30 PM to 6:00 PM**  
**Venue: Zoom**

Organising Team: Namrata Dhamankar (Faculty, DEAP), Dr. Sujata Karve (HOD, DEAP), Prajakta Kulkarni (Faculty, DEAP)

Supported by: Dr. Anurag Kashyap (Principal, BNCA)

Organised by: BNCA (Bhanuben Nanavati College of Architecture for Women), DEAP (Department of Environmental Architecture & Planning), IGBC

- World Water Day 22 March 2021

22 March 10:42

**World Water Day**  
I care for each drop

Check your toilet for leaks.

*Put a few drops of food coloring in your toilet tank. If, without flushing, the coloring begins to appear in the bowl, you have a leak that may be wasting more than 100 gallons of water a day.*

#worldwaterday #savewater  
#sustainability #savingwatertips  
#lovenature #savetheworld

@bnca\_environment

**I PLEDGE TO**  
**SAVE WATER**  
**SAVE WATER IN EVERY WAY**

- International Ozone Day – 16 to 23 September 2020 Awareness Drive

International  
Day for the  
Preservation  
of the **Ozone**  
Layer 2020

#OZONEFORLIFE



Initiated by:-



#Take the ozone preservation pledge  
today! 16th - 23rd September 2020

- World Environment Day 5 June 2019 – E-waste Collection Drive

## Give US your e-WASTE & Plastic Waste

From 5<sup>th</sup> June to 15<sup>th</sup> June 2019

With the increase in consumption of electronic and plastic goods, the generation of this waste is also increasing

*Here is a list of some of the most used electronics that are frequently replaced:*

- Cellphones**  
Replaced every 22 months
- Desktop computer**  
Replaced every 2 years
- Television**  
Replaced every 10+ years
- Portable music player**  
Replaced every 2 to 3 years
- DVD player**  
Replaced every 4 to 5 years
- Printer**  
Replaced every 5+ years

### What to give Us?

All waste caused due to discarding electronics, plastic bags, bottles, packaging used by you and me

We will sort out the waste disposed off by you and

**DONATE . RECYCLE . REUSE**

Collection Centre

E-waste collection bin is placed near Canteen, Ground floor, BNCA

Organised by

**BNCA**  
Dept. of Environmental Architecture

- **National Symposium on Sustainable Development**

On 4<sup>th</sup> October 2022, a national symposium was held in BNCA on the topic of Sustainable Development. It consisted of two-panel discussions on the topics of Youth Action & SDGs and Current Challenges and SDGs.



- Projects and activities carried out by BNCA SDG hub

Event 03 | 19 Nov. 2021

# Climate change and COP 26

By Prachi Shevgaonkar

BNCA had invited a speaker named Prachi Shevgaonkar, who is a communicator, climate entrepreneur, and the founder of an award-winning startup 'Cool The Globe' - an app that enables common people to reduce their greenhouse gas emissions. It has over 10,000 users with a presence in 55 countries across the world and is burgeoning into a citizen-led movement for climate action.

Prachi spent months covering stories of youth, farmers, waste picker communities, and citizen groups to understand the impact of climate change on the day-to-day lives of people. She firmly believes that when ordinary citizens come together, miracles can happen. The ethos behind the app is to make climate action achievable, simple, and quantifiable, and to empower individuals to take small but consistent measures to contribute to surmounting climate change.

**"We don't have to engage in grand, heroic actions to participate in change. Small acts, when multiplied by millions of people, can transform the world."**

- Howard Zinn



## SUSTAINABILITY FACTS/ NEWS

03

According to a report by the International Energy Agency, solar power is set to be the number one power source by 2050

04

In the last 170 years, we added 2.4 trillion tons of Carbon Dioxide into our atmosphere. Half of this was added in the last 35 to 50 years.



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COLLEGE OF ARCHITECTURE  
FOR WOMEN  
KARVE NAGAR PUNE 411002



SDG Student Hub  
Dr. Bhanuben Nanavati college of  
Architecture for Women



| 04

Event 05 | 04 Dec. 2021

# Project Agroscape

By Millennium Fellows and SDG Student Hub

Millennium fellows worked on project Agroscape. This project was taken ahead by the SDG student hub. The pandemic has shown the rise in concern over food security and interest in healthier diets. Thus, it has become crucial to develop ecologically sensitive urban landscapes which integrate food than just aesthetics.

To put this concept into practice, urban farming in the form of edible landscapes can be done at the home, institute, and corporate levels. To start with, urban farms were developed within campus encouraging participation among various students, faculty, and parents.

**“Sustainability is no longer about doing less harm. It's about doing more good.”**

- Jochen Zeitz



Images from site visit



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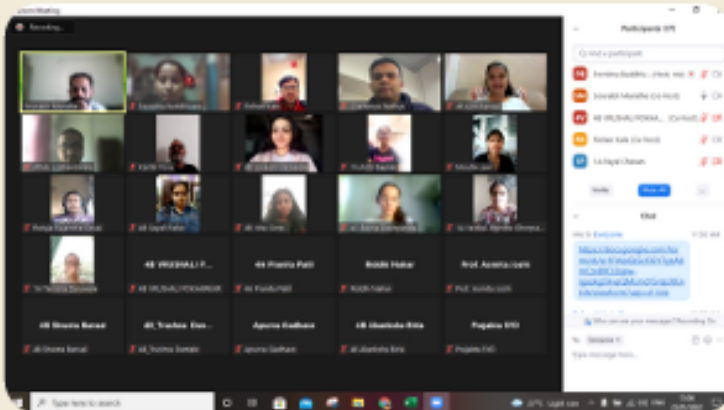
Event 07 | 22 Jan. 2022

# Stepwell Campaign S-Talk

By Rohan Kale

The state of Maharashtra has thousands of step-wells, if revived, they could become an excellent source of water for drinking and domestic use for people in rural areas. And the first step to doing this is to map and document all. With this goal in mind, Rohan Kale and his team have set out on a journey to explore the historic step-wells in Maharashtra and have mapped 1600+ step-wells so far.

To have a piece of explicit knowledge about this campaign, Rahul Kale was invited as the speaker to put light on the conservation of step-wells through people's participation in Maharashtra Stepwell Campaign.



## SUSTAINABILITY FACTS/ NEWS

09

Scientists Show That at Least 44 Percent of Earth's Land Requires Conservation to Safeguard Biodiversity and Ecosystem Services.

10

Many plastics that are labelled as biodegradable are only compostable under industrial conditions, but scientists at the University of Bath have now found a way to make plastics break down using only UV light.



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08