



# INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN

(UNDER DELHI VIDE ACT 9 OF 2012, GOVT. OF NCT OF DELHI)

(ISO 9001 : 2015 CERTIFIED UNIVERSITY)

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# ANTARGAT

WE BEGIN WHERE IT ENDS

akashish  
art.com



# what are we ?

*“Antargat”* is a movement that incorporates efforts from within, your heart, mind and soul. It is believed that every mind has an edge of creativity embedded in it. This movement aims at providing a platform to enhance it. This society would help us to explore our talents and create products from *‘University Waste’* that maybe of used in some form or order to the present needs of the university. Every year the University discards loads of Waste.

The process of non-consumable items is a tedious and long process and requires lots of paper work and manpower to perform the condemnation process. More over the condemned material uses lots of storage space used as dump yard for the same. This society aims as doing away with all this material in a more productive and useful way.

This initiative incorporates the sustainability concept laid under millennium goals and ‘Swachh Bharat Abhiyan’ initiative of the government of India.

# what do we do?

Our *Aim* is to make Indira Gandhi Delhi Technical University for Women, a *Zero Waste University* in India. Many workshops, Awareness programs and on-ground Projects are proposed within the University for upcoming years. The initiative may incorporate collaboration with other societies with this aim as a joint venture.

A group of like-minded and budding architects looked at condemnation waste and came up with the idea that it's still breathing and some of it can still be revived. A society started on experimental basis in 2017 took official form in 2018. The main aim of the society was to:

## *Reduce*

condemnation waste in the University by promoting repair and remodeling of furniture etc.

## *Reuse*

of usable waste from University like furniture, civil waste items, event waste, canteen waste etc.

## *Recreate*

Initiating projects where waste items can be transformed to usable products and spaces.

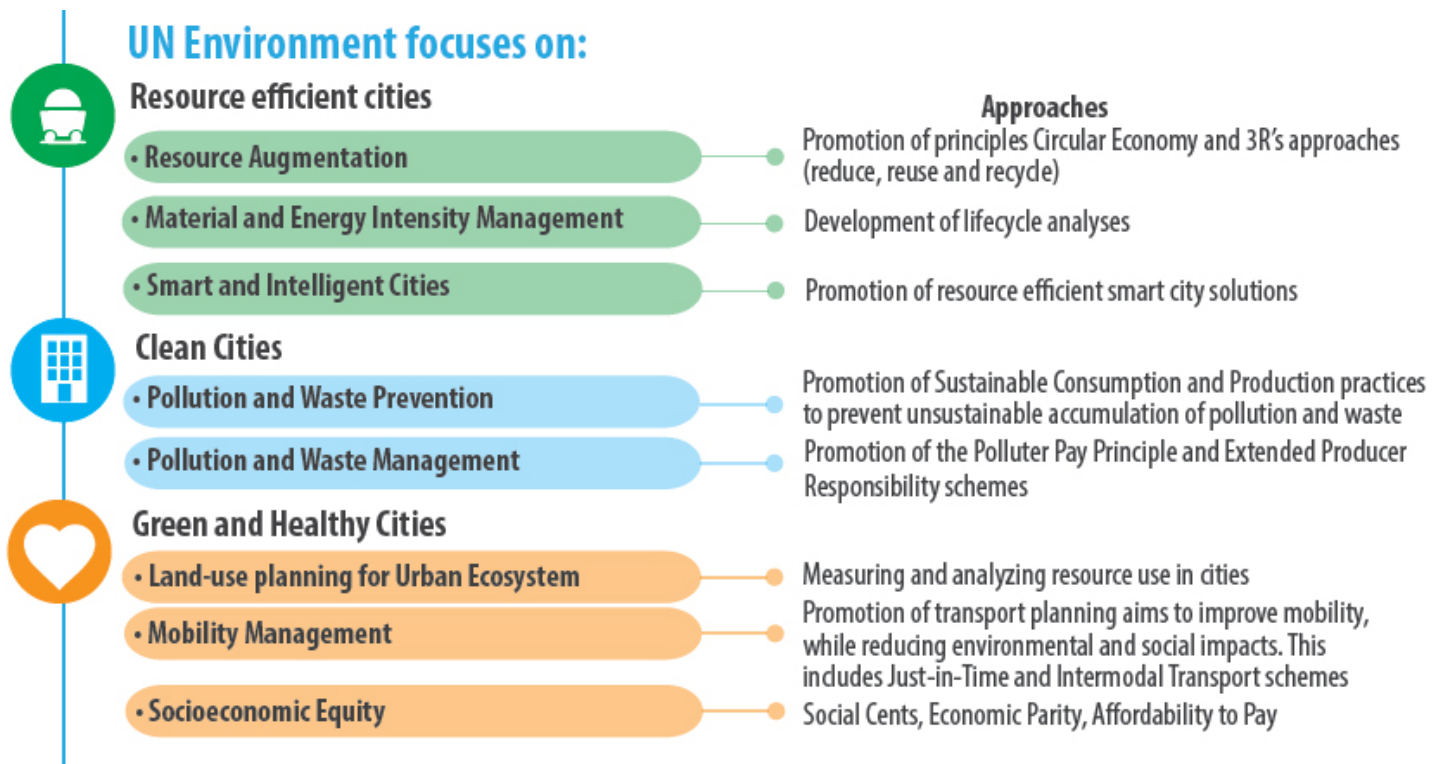


# City Sustainability

United Nations Environment Programme (UNEP) assists member states and stakeholders to achieve relevant SDGs on cities including SDG 11 (sustainable cities and human settlements) with specific focus on access to housing and basic services, sustainable transport system, sustainable urbanization, access to public spaces, sustainable buildings, per capita environmental impact of cities, and policies towards climate change, resource efficiency and disaster risk reduction

The main areas for the current work on sustainable cities are:

- Sustainable consumption and production roadmap for cities covering all the sectors
- Upstream interventions through policy, technology and financing to reduce and manage pollution and waste



# Campus Sustainability

“Sustainable Campus” means a “university that contributes to building of a sustainable society through education, research, collaborating with the society and campus development.”

Sustainable Campus is not something that merely means a “campus with low environmental impact.” It aims to practically and multilaterally support the well being of a society by “expanding education and research that are rooted in social challenges as policies of the entire university” and “implementing campus development that harmonizes with surrounding areas.

# Where do we Stand?

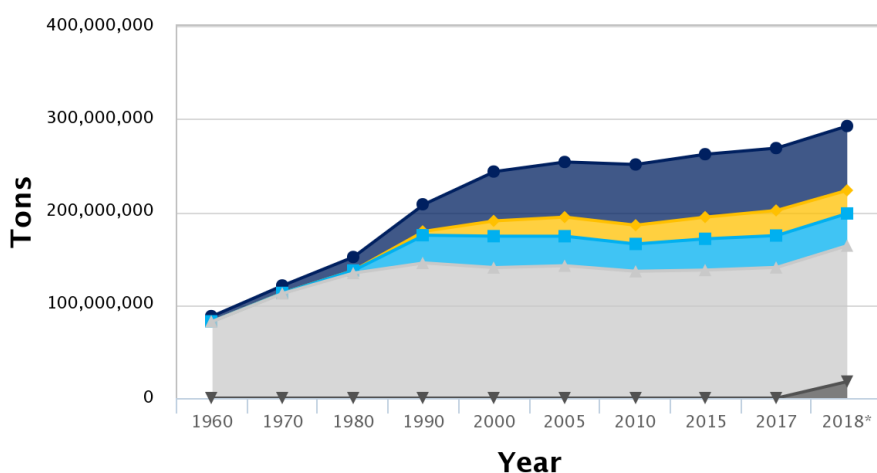
Over the last few decades, the generation and management of MSW has changed substantially. Generation of MSW increased (except in recession years) from 88.1 million tons in 1960 to 292.4 million tons in 2018.

Generation decreased 1 percent between 2005 and 2010, followed by a rise in generation of 7 percent from 2010 to 2017. Generation rose from 268.7 million tons to 292.4 million tons in 2018, mainly as a result of EPA's inclusion of additional food management pathways.

Over time, recycling and composting rates have increased from just over 6 percent of MSW generated in 1960 to about 10 percent in 1980, to 16 percent in 1990, to about 29 percent in 2000, and to about 35 percent in 2017.

It decreased to 32.1 percent in 2018.

**Municipal Solid Waste Management: 1960–2018**

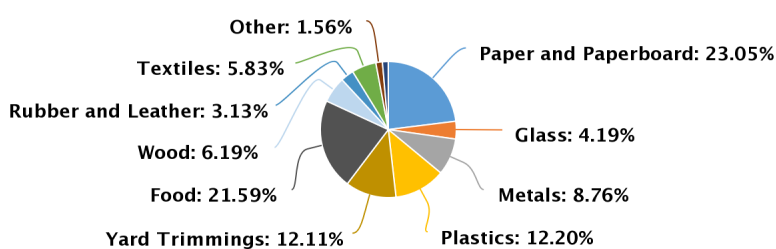


Click on legend items below to customize items displayed in the chart

- Recycling
- Composting
- Combustion with Energy Recovery
- Landfill
- Other Food Management

**Total MSW Generated by Material, 2018**

292.4 million tons



The amount of MSW combusted with energy recovery increased from zero in 1960 to 14 percent in 1990. In 2018, it was about 12 percent.

Landfilling of waste has decreased from 94 percent of the amount generated in 1960 to 50 percent of the amount generated in 2018.

Swachhata Status Report , NSSO

	1960	1970	1980	1990	2000	2005	2010	2015	2017	2018
<b>Paper and Paperboard</b>	17%	15%	21%	28%	43%	50%	63%	67%	66%	68%
<b>Glass</b>	2%	1%	5%	20%	23%	21%	27%	28%	25%	25%
<b>Plastics</b>	Neg.	Neg.	<1%	2%	6%	6%	8%	9%	9%	9%
<b>Yard Trimmings</b>	Neg.	Neg.	Neg.	12%	52%	62%	58%	61%	69%	63%
<b>Lead-acid Batteries</b>	Neg.	76%	70%	97%	93%	96%	99%	99%	99%	99%

Recycling and composting as a percentage of generation

# Can the Environment Afford Us?

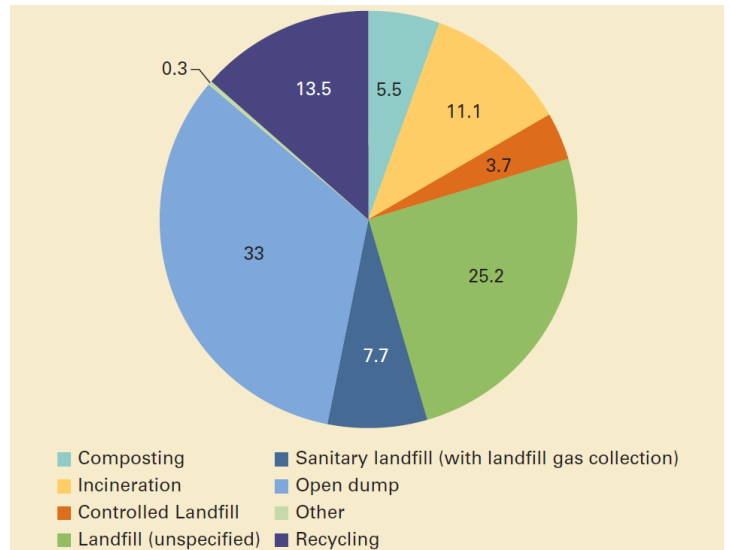


World Bank: Global waste generation could increase 70% by 2050.

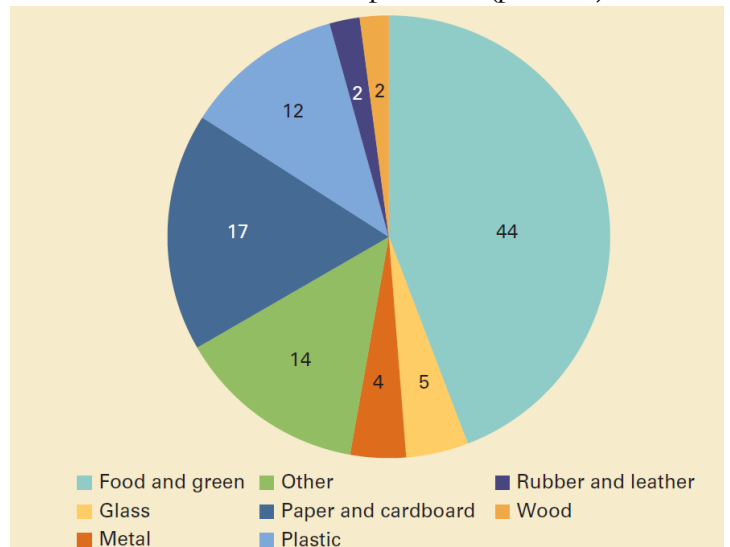
Currently, about 2.01 billion metric tons of municipal solid waste (MSW) are produced annually worldwide.

We generate more waste than we can handle, recycle, incinerate or dispose. We are responsible for converting our beautiful planet into a wasteful dump.

Global treatment and disposal of waste (percent)



Global waste composition (percent)



# What are the Sustainable Development Goals we fall under?

**8** DECENT WORK AND ECONOMIC GROWTH



## **SDG 8:**

### **Decent Work and Economic Growth**

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



## **SDG 9:**

### **Industry, Innovation and Infrastructure**

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

**11** SUSTAINABLE CITIES AND COMMUNITIES



## **SDG 11:**

### **Sustainable Cities and Communities**

Make cities and human settlements inclusive, safe, resilient and sustainable

**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



## **SDG 12:**

### **Responsible Consumption and Production**

Ensure sustainable consumption and production patterns

**13** CLIMATE ACTION



## **SDG 13:**

### **Climate Action**

Take urgent action to combat climate change and its impacts

Antargat society in collaboration with UBA cell and Enactus society have worked with housewives and freelance craftsman for product design and empaneled for such works. The five villages adopted are Jagatpura, Burari, Jhadoda Majra, Salempur Majra, Kamalpur Majra and craftsman employed for tailoring, carpentry, welding, local hand-craft works. The products made are sold during IGD'TUW's cultural fest and technical fests and profits are shared with the employed workforce. This enables skilled workers to work at home.

## Vision:

# IGDTUW as a Zero Waste Campus by 2025

The concept of sustainability can only be successful if we start at the beginning of waste generation. It is important to understand the physical and chemical qualities of waste material and utilize it to its maximum potential. *'Antargat'* believes *'Treat waste as the raw material'*

### Furniture Waste

- Repair, Recreate, Refurbish
- Furniture, dustbins, plant holders, roofing shed structures

### Green

- Collect in compost pits, dry use
- Manure for plantation, animal feed

### Civil Waste

- Reuse, Recreate
- Benches, plant holders, metal sculptures, murals

### Paper Waste

- Recycled, shredded
- Handmade paper, envelopes, gift bags, handicraft paper Mache products

### Glass/Plastic Waste

- Segregate glass, plastic, wrappers etc.
- murals, litter bins, partition walls etc.

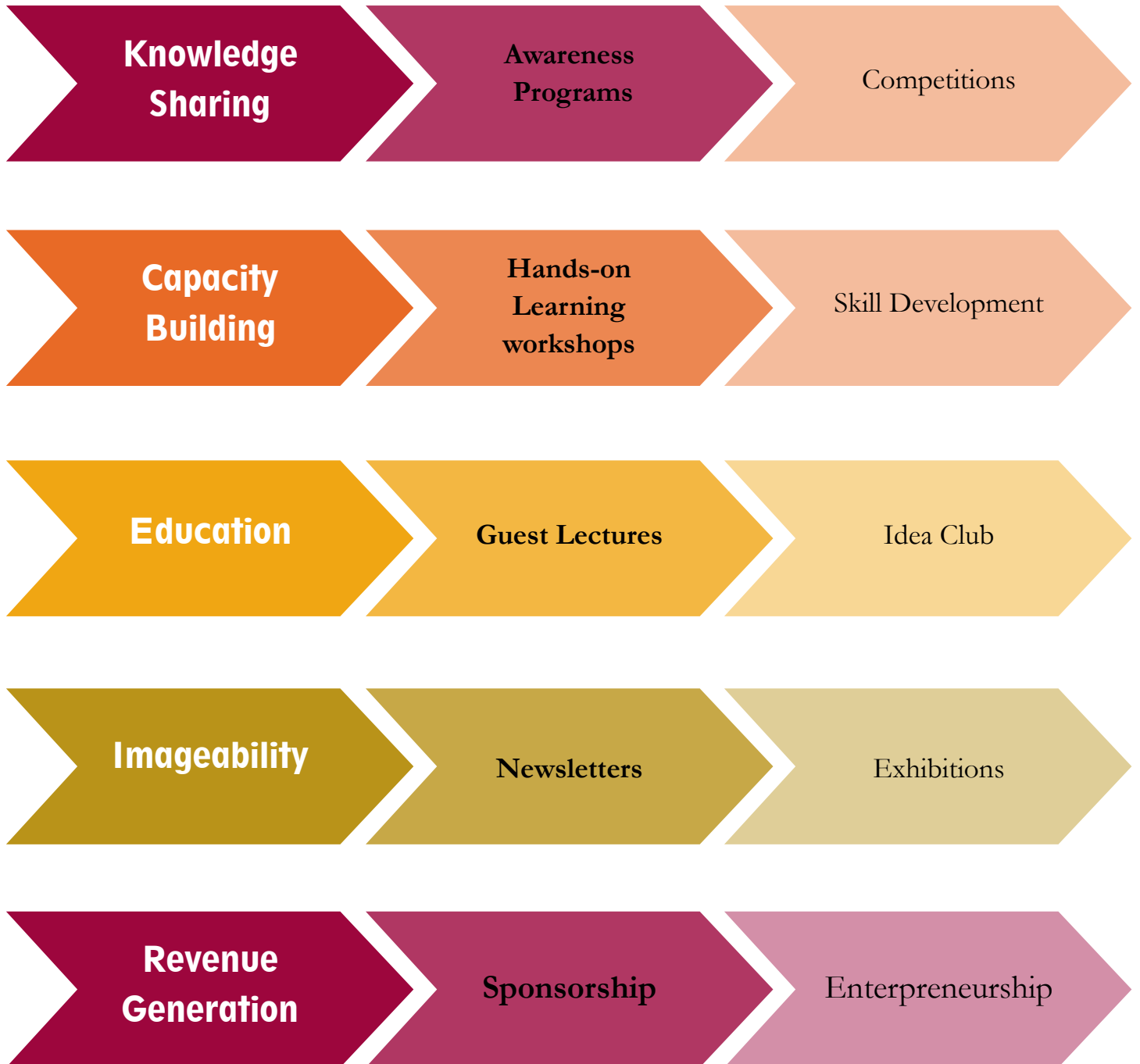
### Flex/Polythene Waste

- Reuse, Recreate
- Baskets, fans, bags roofing material



# Antargat as a Work Culture

‘Antargat’ is a movement that needs nurturing with time to become part of our everyday lives. The efforts of the team is to create ‘Antargat’ as a culture that people follow everyday subconsciously like breathing and eating. This movement intends to change the perspective of looking at the environment as a separate entity. We need to identify that the environment is part of us and our existence depends on co-existence. So it is imperative that we need to care for it as much as we do for ourselves.



# Plantation Drive

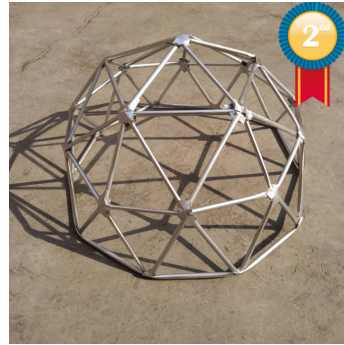
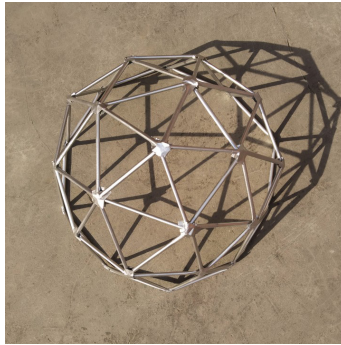
A Plantation Drive was organised by An-targat Team aiming to make campus green.



## “Best out of Waste”



*First Winning Entry*  
Water bottle into serving platter for birds  
- **Anishmeta Mitra**,  
M.Plan 2<sup>nd</sup> year



*Second Winning Entry*  
Geodesic Dome made out of waste straws  
- **Chanchal Soni**, B.Arch  
3<sup>rd</sup> year



Lamp made of waste cups



Mobile stand made of waste cardboard

Cardboard box converted into a bangle box



# Poster Making Competition

Theme: Go Green



First Winning Entry  
**Palak Verma**



Second Winning Entry  
**Sona Gusian**

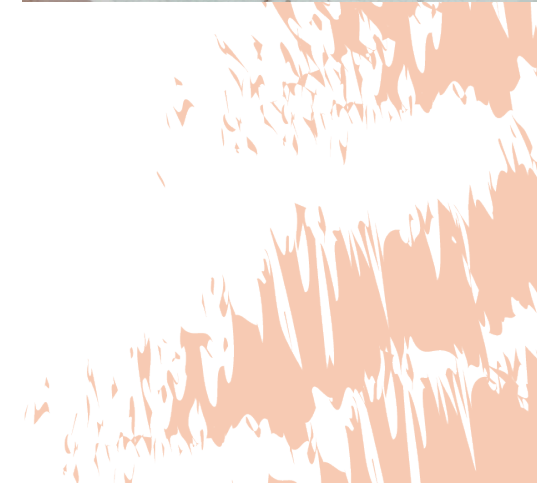
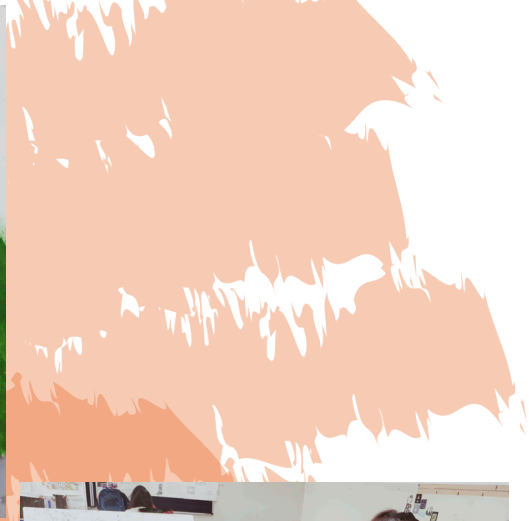
Antargat has hosted a painting competition under “*Swachhta Pakwada Drive*” with go green campaign. Some of the winning entries were:-

**11 SUSTAINABLE CITIES AND COMMUNITIES**



IGDTUW joined hands with Ministry of Education in the Swachh Bharat Mission and celebrated *Swachhta Pakwada Drive* from 1st Sept 2021- 15th Sept 2021.





# Essay / Poetry Writing Competition

An online “Essay/ Poetry Writing Competition” was organized by Antargat. The students were supposed to write an essay or a poem of not more than 500 words on the theme “Go Green Campaign” and one student could send a maximum of two entries. Some Entries:-



*First Winning Entry*  
**Kashish, B.Arch - 4<sup>th</sup> year**

Why world seems so cruel,  
We, the ones who build your homes, brick by brick, with love and hard work,  
Irrespective of harsh sun, stormy winds, chilled winter days.  
We work for your shelter but don't owe any.  
We, the masons of your home sweet home are lost.  
We are lost.  
We are humans just like you!  
~a helpless human.

The outbreak of COVID 19 has increased the urban liability as it widened the gap between rich and poorer sections of our society, resulted as poverty multiplier. According to reports of 2020, 501 million workers are India, are daily wagers and migrant workers. They were helpless, without adequate food supply, no shelter on their head, lack of transport facilities. This has reminded us the need of inclusive cities that can provide safety to all, irrespective of the status of people living in the country. It also made us realise that city should provide opportunities for all, it is essential. The concept of inclusive cities involves multiple spatial, social and economic factors which directly results into the development of the society.

As climate change is real and one of the reasons why the concept of sustainability came into rapid action, we need to understand the sensitivity of the topic. Enhancing the sustainability of urbanization processes is needed to protect the environment and mitigate disaster risk and climate change. Urbanisation is both, cause and solution for climate change. It's upon us what and how we choose to make it, thus the role of architects and planners becomes so important in shaping towns and cities. The recent events of climate change were result of overuse and indiscriminate use of the resources which lead to global warming, increased carbon footprint, depletion of ozone layer and list goes on. We can stop it. We should stop it. Realising the importance and value of resources and using them consciously can help because resource efficient spaces are more productive and creative with lower costs and reduced environmental impacts, while providing increased opportunities for public choice and sustainable living.

"Going green with technology is aim of sustainable living".

The era of technology and artificial intelligence made our path smoother and faster towards going green. Spaces needs to be built smartly. The cell phone update is important for better performance likewise our conventional method needs to be updated. Strategic planning is one of the important aspects to be considered and taken care of which includes creating career and business opportunities, green public spaces, urban planning. It should take care of the global challenges, including poverty, inequality, climate change, environmental degradation, peace and justice.

**Shubhangi Gupta, B.Arch - 4<sup>th</sup> year**

## GO GREEN CAMPAIGN

(Essay)

Several essays and articles have been written, several speeches have been delivered on "Go Green", "Save the Planet", and many more topics like this. But have we acted enough upon the issue? What we have done enough is giving speeches and organizing summits. It's time we act upon our issues of climate change, environmental pollution and degradation, start applying the 3 R's and start using environment friendly products for real! The need of the hour is to wake up, take some seeds and plant them instead of debating and wasting the little amount of time we are left with. To bring the change we have to start with ourselves, as an household and as an individual. It's important for us to understand that it is drop by drop for the ocean to be mighty and it is acting individual by individual for the waves of change to come.

You say, "Don't waste even a single bit of paper, "Don't use plastic", "Don't pollute the planet", but today, i ask you my dear reader, "Have you followed any of the above?" It's "Go Green" not just "Think Green". Going green does not necessarily means that we have to plant trees, i mean of course we have to plant trees but its more than that. The word "green" is usually referred to as "being environment friendly" Going green means using products that are environment friendly, that help contribute to the environment's health instead of degrading it.

You don't need much things or require specific skills to go green, all you need is a mindset and the desire to do that. We can always start small, there are a few things that i have tried and my mother has always suggested to do to "generate less waste"

- 1) When we are doing rough work in our notebooks we can also write above and below the margins ? Why are we wasting the paper above and below the margins in our rough works ?
- 2) 'The newspaper' that we get delivered in our homes and is of no use once we have read it, can we not paint on it and make a masterpiece, can we not make paper envelopes of different sizes from it ?
- 3) 'Old cloth (bedsheets/apparels)', can we not use it to make cloth bags and folders instead of buying plastic bags and folders?
- 4) 'Plastic bottles and tiffins', though they come in very beautiful designs to attract customers, but is using them really wise? Can we use steel or clay products instead? By using clay products we will also be supporting our clay makers!

And yet again, i have written another essay upon the same issue. Let's change the way we have been in past and start taking necessary steps towards "Go Green". For there is only one Earth and it is rightly said, "We have not inherited the Earth from our ancestors, we have borrowed it from our children".

*Second Winning Entry*



Oh dear human  
Where do you think you are he  
Towards a future with a planet shredding?  
Look upon this reckless behaviour  
Leading to a planet failure  
People dying of extreme heat  
In a jungle of concrete  
It's hard to breathe  
We are in a dire need of a tree  
Oh dear human  
Are you blind?  
Can you not see the planet dying?  
Act before it's too late  
To save her before the eighth  
For this Earth is great  
And you will not be able to carry the weight  
Oh dear human  
Go green and save  
Bring the change in waves  
Make up for your mistakes  
The Earth awaits.

**Gurpriya, B.Arch - 2<sup>nd</sup> year**

## GO GREEN

*I am the Nature  
And the life is me  
CO2 is from you  
and the O2 is from me  
What I am creating  
is what I need to create  
as  
I am one of a kind  
Another is hard to find*

*My lush green leaves are falling  
and My lively green skirts are tearing  
My lovely flowers are dying  
and My birds have no space for flying  
my feet's are broken  
But my ache stays unspoken  
still  
I am one of a kind  
Another is hard to find*

*You have given me an excessive amount of air to breathe  
however there aren't sufficient of me to present you the equal to breathe  
I am angry with you my friend  
So I floods my wrath on you to defend  
I love you  
so I can simply warn you  
that  
I am one of a kind  
Another is hard to find*

*Global Warming isn't tough to explain  
It leaves me crying with excruciating pain.  
I am indeed there for your need  
but could not provide for your greed  
No extra plastic and no extra waste  
Because I am fading at a quick pace  
I need love and I need care  
Because you are polluting my air  
I am one of a kind  
Another is hard to find*

*I can shield you only if I am alive to shield you  
Lets embrace each other  
And Keep a little space for me in your homes with other  
By being eco-friendly, you can save me  
Grow me  
Respect me, Refuse, Reduce, Reuse and Recycle me  
Follow the 5 Rs and I will follow you for life  
GO GREEN ! AND LIVE YOUR DREAM !  
as  
I am one of a kind  
Another is hard to find*

**Raghvi, M.plan - 2<sup>nd</sup> year**

# Exhibition held at Education Mentoring Programme

by Team Antargat

On the launch day (20th March 2021) of the Education Mentoring Programme (a unique initiative of IGDTUW in collaboration with Govt. of NCT of Delhi under the Youth for Education), the various departments of IGDTUW have put up exhibitions to highlight the works of their department. The Education Mentoring Programme was an initiative to supply adequate guidance to a girl child who wants good mentoring towards their career and help them in making the right decisions for their career. **Sir Manish Sisodia, Deputy Chief Minister of Delhi** and our honorable Vice Chancellor Ma'am, Mrs. Amita Dev, both addressed the crowd for the same.





Separate booths were put up by different branches of the University, presenting their fine works and innovations. The first booth was presented by the students of the Architecture and Planning Department with a marvelous welcoming banner, the students gave a heartwarming welcome to all. They had put up their sheets and models.

There was a presentation of the society “Antargat” showing the innovative works done by the students through reusing university waste and turning them into marvelous and useful creations like making eco-friendly bags from old banners and flex sheets. The presentation explained the vision of the society which is to make IGDTUW, a *Zero-Waste University* in India in the coming years.

Society helps you challenge your mind and think out of the box to turn our everyday non-consumable waste into things that can be used. The aim is as simple as it could be: to reuse, reduce and recycle. Society has done amazing works with the same aim from reusing old computer chairs to upcycling tables and turning them not only into an art piece but also something that is useful.

Various hands-on learning workshops, awareness programs, guest lectures, competitions, etc. are organized throughout the year to help us remember that we co-exist with the environment. The youth have an overly sensitive approach towards the waste and the creative pieces that they have created. It was very astonishing to see their work. It was a proud moment for the girls of IGDTUW to be given a platform to highlight their brilliance.

Various colleges and schools paid a visit to this exhibition and looked upon the works done by the students of the university.





# Exhibition of Department of Architecture and Planning by Antargat

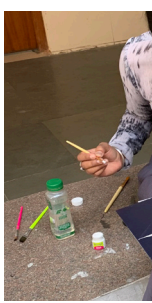
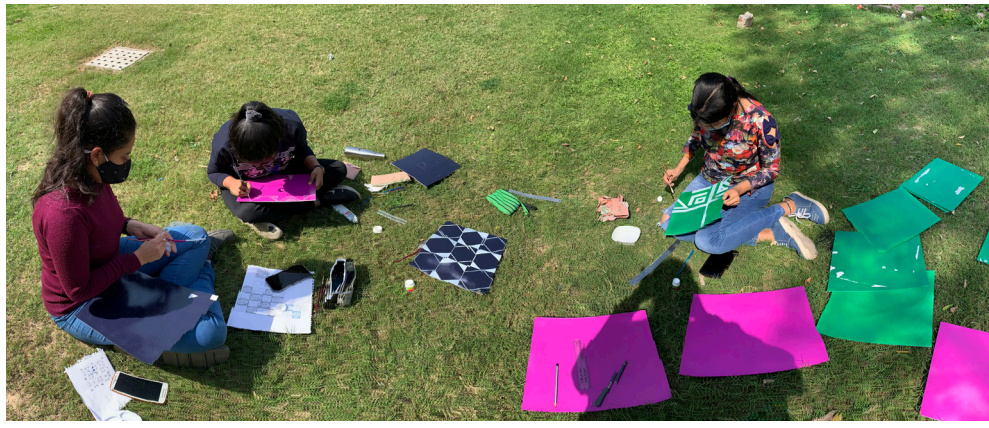


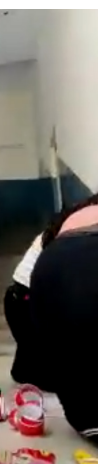
The Chief guests strolled around the booths, appreciating the works and the efforts students have displayed.



It was such an enriching and insightful experience to walk through lush green grounds under a bright sky where the future of the country was depicting their creativity, the knowledge they have gained, and using it for the advancement of society.







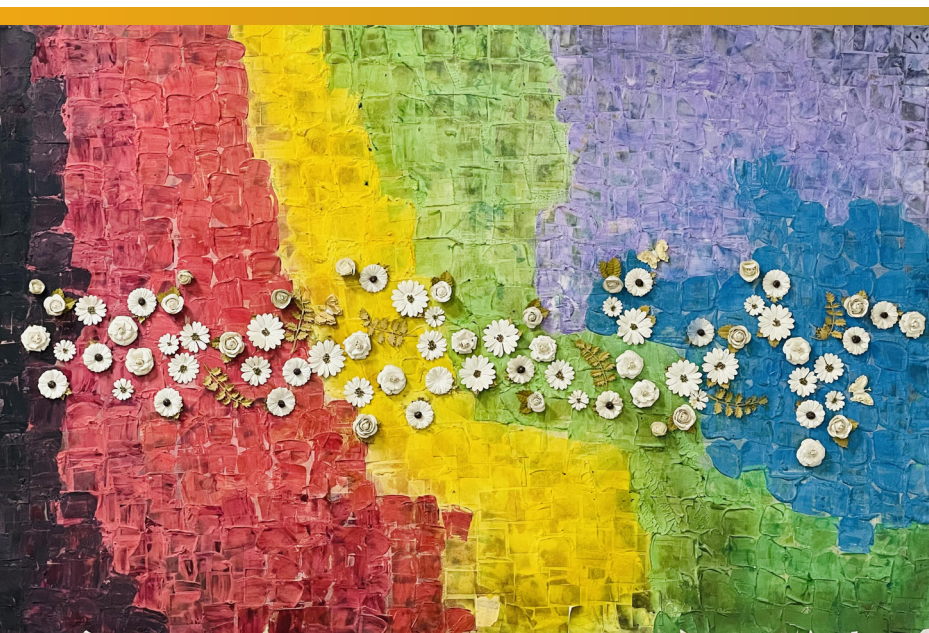
# Functional Transformation (Domestic & Construction Waste)

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



We at Antargat aim at making the Best of Waste, and we achieved this motto in our society by creating various useful products out of waste which included:

1. Paracord Keychains are made from waste shoelaces.
2. An old and dry tulsi plant spray painted kept in a vase, and used as a masterpiece.
3. Reuse of wooden clips for constructing a lamp.
4. An old denim jeans pocket framed and used as a pen holder.
5. Designed a bag out of waste cloth.
6. A lamp made up of the waste sheet is used to cover stones like marble at construction sites.
7. Epoxy table made out of left over wood, wooden pieces & colours
8. Books/Stationary organiser made from old cold drink wooden crate
9. Painting made from old bits and pieces of unused paper
10. Painting made out of old strings, boards, some clay and nails.



**Painting made from old bits and pieces of unused paper**

Bits and pieces of papers left after any art and craft work was preserved and used in making this painting reducing the waste of paper and creating a huge art piece for interior decor



**An old and dry tulsi plant spray painted kept in a vase, and used as a masterpiece**



## 8 DECENT WORK AND ECONOMIC GROWTH



Reuse of wooden clips for constructing a lamp



An old denim jeans pocket framed and used as a pen holder



## Carry Bag made out of old jeans and old t-shirt

These bags are good in aesthetics and could be used while picking up some groceries. The bags could be good alternative of pastic. It have various pockets to keep all kind of stuff.

## 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Paracord Keychains made from old shoelaces



**Lamp made up of the waste sheet used to cover stones like marble at construction sites**

**12 RESPONSIBLE CONSUMPTION AND PRODUCTION**



**13 CLIMATE ACTION**



**Epoxy table made out of left over wood, wooden pieces & colours**



**Books/Stationery organiser made from old cold drink crate**

**Painting made out of old strings, boards, some clay and nails**



# Founders



**Ar. Bhoomika Mehta**  
Batch 2015



**Ar. Jyoti Meena**  
Batch 2015,  
M.plan Batch 2020



**Nilfa Saha Karmakar**  
Batch 2016



**Ridhi Arora**  
Batch 2016



**Kashish**  
Batch 2018

I, Kashish, an artist and an architecture student currently studying at Indira Gandhi delhi technical university. The journey of connecting with antargat society has been such an amazing learning experience and a creative exploration altogether.

Antargat society aims to make IGDTUW campus sustainable by taking up discarded waste materials, turning them into useful pieces of art. Up till now we have taken up many projects and saved a huge amount of waste in and around the campus. The aim this year is to go the extra mile and take the ideology further beyond the campus.

When I got to know about Antargat, I was beyond thrilled. The idea of creative people getting together and creating something interesting from existing waste was intriguing. The best part of this society has been that it has a place for everyone's creative potential.

I have always been interested in creating art, in all its forms- be it fine art, graphic design, video editing and so on. Antargat has given me space to use my talents and encouraged me to get better.

Antargat aims to make IGDTUW campus sustainable by taking up discarded waste materials, turning them into useful pieces of art. We aim to get innovative and make IGDTUW waste free.



**Nandini Mishra**  
Batch 2018



**Muskan Sharma**  
Batch 2018

Antargat is where innovation meets sustainability.

It is the perfect platform for all the creative-responsible minds who believe that innovation is a response to a problem. Who understand the value of well being of the ecosystem in its entirety.

I, Muskan Sharma am a fellow Architecture Student, currently in my fourth year. I did not just learn but also unlearn the conventional way of looking at material, throughout my journey with ANTARGAT.

The culture of consumerism is one big battle that we were fighting. That is when we started recycling the University waste to produce Useful items of furniture and goods. I was able to challenge my design skills during this journey and what's architecture if not innovation.

# about us

## Patron



**Dr. (Mrs.) Amita Dev**  
Vice Chancellor, IGD TUW

## Team Antargat

### Faculty Advisor



**Ar. Preeti Chauhan**  
Associate Prof., DAP

### Co-Faculty Advisor



**Ar. Jahnabi Kalita**  
Assistant Prof., DAP

### Curator: Workshop Series



**Ar. Salil Dogra**  
Assistant Prof., (VF) DAP

### Curator: SDG Lecture Series



**Ar. Garima Singh**  
Assistant Prof., (VF) DAP

## Chief Editor



**Ar. Jyoti Meena**  
M.Plan Batch 2020,  
B.Arch 2015 Batch

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Batch 2019



**Shreya Suman**  
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**Nandita Chellaramani**  
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**Palak Verma**  
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**Avantika Chhetri**  
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**Apoorva Bhalotia**  
Batch 2020