



ACA's **INTERNATIONAL  
DESIGN COMPETITION**  
COMPILATION | 2015 - 2023

SHREE AMEYA PUBLIC CHARITABLE TRUST'S

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# ACA's **INTERNATIONAL DESIGN COMPETITION**

**COMPILATION | 2015 - 2023**

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## MESSAGE FROM THE FOUNDER TRUSTEE

**“Hope is the pillar that holds the world.”**

Shree Ameya Public Charitable Trust has been formed with a mission to provide service for nation building. What better source could there be for achievement of this vision than thinking about and investing in education. Archimedes said, “Give me a place to stand and I will move the earth.” Aditya Institute of Architecture believes in growth of individuals and community, with reason and passion. We believe in imparting architectural education not for years but for life. There are only two ways to live. One is as though “nothing is a miracle”. The other is “as if everything is”.

ACA stands as a pillar of quality education. The incredible infrastructure, a focused faculty group with curious student fraternity make ACA a force to reckon with. Explore this new and upcoming hub of holistic learning. I am proud of the students of ACA for having put forth such exemplary work through sheer dedication and commitment. “Our talents bring to your organisation a fresh set of ideating minds working in tandem to pursue a single-minded goal—of achieving excellence.”

It gives me immense pleasure to see how Aditya College of Architecture has flourished with its abundant academic knowledge, immense industry exposure, and innovative strategies in the field of education and research. I heartily congratulate Aditya College of Architecture for organizing the 4th International Design Research Conference 2024 (IDRC) on the theme “Architecture by the Edge. This year, IDRC aims to bring attention to the crucial matter of water as a limited resource and emphasize the importance of reinstating the reverence linked to its utilization in architectural practices. We hope that IDRC 2024 will educate and nourish everyone with valuable message and insight.

I wish all the prosperity and fortune to the institution and to the students who will take the baton ahead, to illuminate the world with their spark. On behalf of Aditya College of Architecture, I wish International Design Research Conference 2024 a grand success. May our team succeed in transferring knowledge.



**Dr. Harishchandra Mishra Ji**  
Founder Trustee & Chairman  
Aditya College of Architecture

## MESSAGE FROM THE PRINCIPAL

**Greetings from Aditya College of Architecture, Mumbai, India!**

As per the Vision and Mission of the Institute to have a global outreach ACA has been organizing the International Design Competition annually for a decade now since its inception in the year 2013. It provides for an international platform to showcase the works of young designers and to establish connections amongst the global architectural student's community as well as academia. On the other hand the Institute itself has gained much exposure to the various schools of thought and design that reflect through the numerous entries for its faculty and students to learn and reflect from.

The Institute also through the last decade have organised Juries through Eminent Architects from across the globe that have addressed the themes with their own understanding as well as the lessons learnt from the entries in the Prize Distribution Event by way of Keynote Addresses. Not to forget the Trustees wholeheartedly since a decade have awarded the prize winners handsomely thereby encouraging the Architectural student fraternity.

It further gives me pleasure to present this compilation of 10 years of prize-winning entries for the Architectural awareness of one and all and I should thank my Trustees once again for whole heartily agreeing to get this compilation printed in limited copies. We look forward to many more such issues in the coming years to enlighten the Architectural community!



**Ar. Prof. Jamshid Bhiwandiwalla**  
Principal  
Aditya College of Architecture

## ABOUT IDC ( INTERNATIONAL DESIGN COMPETITION)

Aditya College of Architecture has been constantly striving to academic excellence in architectural education since its inception, through rigor in learning processes and exposure to global practices. In alignment with the vision to create globally recognized leadership in architectural education, the college took the initiative of creating a global platform for under-graduate and post-graduate students as well as young architects to put forth innovative design ideas and push the boundaries of architectural thought. The International Design Competition (IDC), was the first step in this direction.

Each year the college hosts the IDC with a different theme that encapsulates some of the most immediate and urgent concerns that the world faces today, and that we as architects and designers are uniquely positioned to address. From the very 1st IDC that encourages participants to explore the profound questions that pertain to the nature of the sacred in the spaces we inhabit, to the recently concluded IDC that urged participants to interpret the intrinsic relationships that human culture forms with the natural waterbodies that define our existence as a civilization, the journey has been one of constant learning through exploration and discovery.

As we arrive at this significant milestone of 10 years, we look towards the future, steadfast and self assured that the IDC will continue to nurture the minds of young architects and enrich the discourse on our myriad relationships to the spaces that we inhabit.

## PILLARS OF ACA ( ADITYA COLLEGE OF ARCHITECTURE)



**Shri Ashish Mishra Ji**  
Trustee - ACA



**Shri Aditya Mishra Ji**  
Trustee - ACA



**Prof. Ar. Gurunath Dalvi**  
Mentor and Advisor,  
Ex President IIA



**Prof. Ar. Rita Nayak**  
Director - ACA



**Prof. Ar. Rasika Chodankar**  
IDRC Head, H.O.D- B.Voc.

## IDRC & IDC TEAM

Ar. Varsha Swar

Ar. Jwalant Dave

Ar. Ankita Dhir

Ar. Shruti Pandit

Ar. Urvashi Purohit

Ar. Bhumika Mhaddalkar

Ar. Neha Tambe

Ar. Amruta Talawadekar

Ar. Arun Nadar

Compiled by : Ar. Amruta Talawadekar, Ar. Meet Shah, Ar. Urvashi Purohit, Ar. Jwalant Dave

2015



# ACA's **INTERNATIONAL** **DESIGN COMPETITION**

**2015** | SACRED SPACES

# INTERNATIONAL DESIGN COMPETITION

## STAGES

**STAGE 1:** Online Registration of entries starts on the 21st of August, 2015. For more details visit us at [www.aditya-arch.edu.in/events/idc](http://www.aditya-arch.edu.in/events/idc)

**STAGE 2:** Online Submission of entries begins on 15th of September, 2015. Last Date for receiving entries is the 14th of October, 2015. All Submissions shall be made in PDF or JPEG format only. Submissions shall be made only through the Unique USER ID generated after registering on our website.

**STAGE 3:** Results shall be declared on the 31st of October, 2015.

**STAGE 4:** Post Declaration of results the winning participants would be invited to attend our Annual Festival "UDAAN". They will be invited to present their work during the festival and shall thereafter be felicitated with the prize amount.

## AWARDS

Winning entries at the IDC 2015-16 shall receive Certificates and a Prize amount as follows:

**1st Place - RS. 70,000/-**  
**2nd Place - RS. 50,000/-**  
**3rd Place - RS. 30,000/-**

**Citations - Certificates shall be awarded to 5 Exemplary Entries.**  
**Honourable Mentions to Mentors - Certificates shall be awarded to mentoring faculty of winning entries.**

## ELIGIBILITY

The Competition is open to all Bonafide Students from All Years of their Undergraduate Architecture course recognized by their respective State/ Country Board of Education or by their Country's respective Architecture Schools Associations.

## SACRED SPACES

"Where's your church?"  
 "We're standing in it."  
 "But this is a bookstore and it's a Friday."  
 "Yes, but you might also choose to see it as a cathedral of the human spirit—a storehouse consecrated to the full spectrum of human experience. Just about every idea we've ever had is in here somewhere. A place containing great thinking is a sacred space."

*Excerpt from A Chosen Faith: An Introduction to Unitarian Universalism by Forrest Church*

Man has always had an inherent relationship with things "Sacred" to him. The notion of what this non-manifest, sacred world is to an individual, stems from his intuition combined with his external influences. A person through his religious perspective would perceive a place of worship sacred, he who indulges in reading would find solitude in a library, while he who has pledged his devotion to dance would consecrate the stage. The experience of "Sacred" may stem from a Space, a Deity, a Belief, a Memory, a Ritual, an Object, a Ceremony, a Geographical terrain, an Event or even just an everyday Activity.

The human civilization has witnessed a plethora of cultures. Each of them has always had an anchor of sanctity grounding them. For some cultures it may be the act of holding weekly prayers, for some it may be bathing in a river - the water of which is considered pure enough to wash away their sins - once in their entire life span, while for some it might be the act of drinking tea with their dear ones. And that what is sacred, was and will always be formalized into Architecture.

Charles Correa in his essay, 'The Public, The Private and The Sacred', very aptly points out, "The principle vehicles through which we explore and communicate our notions of the non-manifest world are religion, philosophy and the arts. Like these, Architecture too is generated by mythic beliefs, expressing the presence of a reality more profound than the manifest world in which it exists."

What then is the experience and expression of the Sacred Space? Does the experience manifest itself through built architecture or landscape interventions? What is the nature, scale, form and character of this design intervention?

The INTERNATIONAL DESIGN COMPETITION this year, invites all young designers to express through design interventions, their idea of "SACRED SPACES".

## DESIGN

**1. SITE:** Participants shall intervene on a site in the urban/rural and geographical context of their choice. The area of the site shall NOT admeasure more than 10000 Sq. Meter.

**2. DESIGN INTERVENTION:** The intervention admeasuring a minimum of 2000 Sq. Meters will be proposed on the chosen site. No restriction on height is specified as long as the proposal responds to the context. The participants may choose to build upon an empty land or rebuild an existing old structure or even resort to an adaptive reuse of existing spaces and elements. Design Interventions and spaces could be BUILT ARCHITECTURE or LANDSCAPE INTERVENTIONS.

## SUBMISSION

**1. WRITE-UP:** A 500 word write-up covering the following-

- Description of your understanding of 'Sacred Spaces'.
- Justification of Choice of Site for Intervention.
- The process & method followed in Process of Designing.

**2. REPRESENTATION OF IDEAS:**

- Participants can choose the adequate drawing scale to communicate their design scheme effectively.
- They can provide Architectural drawings sufficient to describe the scheme.
- Pictures of Scaled Models, Computer generated 3D Views, Renders, etc.
- Diagrams, hand-made sketches and other Representational material.

## FORMAT

- Submit (Upload) your entries using a maximum of 2 A2 sized sheets NOT exceeding a combined file size of 15 MB in PDF or JPEG format only, with the above submission specifications duly complied.
- A4 sized PDF consisting of the write-up NOT exceeding a file size of 2 MB.
- A Bonafide Certificate from your College/ University/ Institute certifying your admission NOT exceeding a file size of 1 MB.
- All participant teams shall be given a Unique IDC code that you shall have to put in all your deliverables.

## TEAMS

Participating Teams shall comprise of a maximum of 5 students and a minimum of 3 students.

**VERY IMPORTANT NOTE:** Participants should NOT reveal their Identity or College name by any means in their Presentations. Participants will be identified by their UNIQUE IDC Code)

## CONTACT US

In case of any queries feel free to write to us at [fdc.aditya@aditya-arch.edu.in](mailto:fdc.aditya@aditya-arch.edu.in) or visit us at [www.aditya-arch.edu.in/events/idc](http://www.aditya-arch.edu.in/events/idc)

## JURY






PROF. NEELKANTH CHHAYA    AR. MANOJ PARMAR    AR. PINKISH SHAH    AR. SAMEEP PADORA

## JUDGING CRITERIA

The jury will analyse entries on a number of factors including originality, innovation, form, sustainability and also on how your design has-

- Addressed the key elements of the brief.
- Evolved in your community.
- Integrated itself within its context.



## 2015 | SACRED SPACES POSTER & BRIEF

## THE JURY



**Ar. Neelkanth Chhaya**  
 Neelkanth Chhaya Architects  
 Ex-Dean, Faculty of  
 Architecture at CEPT (2013)  
 Ahmedabad, INDIA



**Ar. Manoj Parmar**  
 Director at KRIVIA  
 Mumbai, INDIA



**Ar. Pinkish Shah**  
 S+PS Architects  
 Mumbai, INDIA



**Ar. Sameep Padora**  
 sP+a  
 Mumbai, INDIA

## BRIEF

Architecture of the Sacred...

"Where's your church?"

"We're standing in it."

"But this is a bookstore and it's a Friday."

"Yes, but you might also choose to see it as a cathedral of the human spirit—a storehouse consecrated to the full spectrum of human experience. Just about every idea we've ever had is in here somewhere. A place containing great thinking is a sacred space."

Excerpt from *A Chosen Faith : An introduction to Unitarian Universalism* by Forrest Church

Man has always had an inherent relationship with things 'Sacred' to him. The notion of what this non-manifest, sacred world is to an individual, stems from his intuition as well as external influences combined. A person through his religious perspective would perceive a place of worship sacred, he who indulges in reading would find solitude in a library, while he who has pledged his devotion to dance would consecrate the stage. The experience of 'Sacred' may stem from a Space, a Deity, a Belief, a Memory, a Ritual, an Object, a Ceremony, a Geographical terrain, an Event or even just an everyday Activity.

The human civilization has witnessed a plethora of cultures. Each of them has always had an anchor of sanctity grounding them. For some cultures it may be the act of holding weekly prayers, for some it may be bathing in a river – the water of which is considered pure enough to wash away their sins – once in their entire life span, while for some it might be the act of drinking tea with their dear ones. And that what is sacred, was and will always be formalized into Architecture.

Charles Correa in his essay, 'The Public, The Private and The Sacred', very aptly points out, "The principle vehicles through which we explore and communicate our notions of the non-manifest world are religion, philosophy and the arts. Like these, Architecture too is generated by mythic beliefs, expressing the presence of a reality more profound than the manifest world in which it exists."

What then is this Architecture of the Sacred? What is its nature, scale, form and character?

The INTERNATIONAL DESIGN COMPETITION this year, invites all young designers to express through architecture, their idea of a "SACRED SPACE".

### Design Specifications:

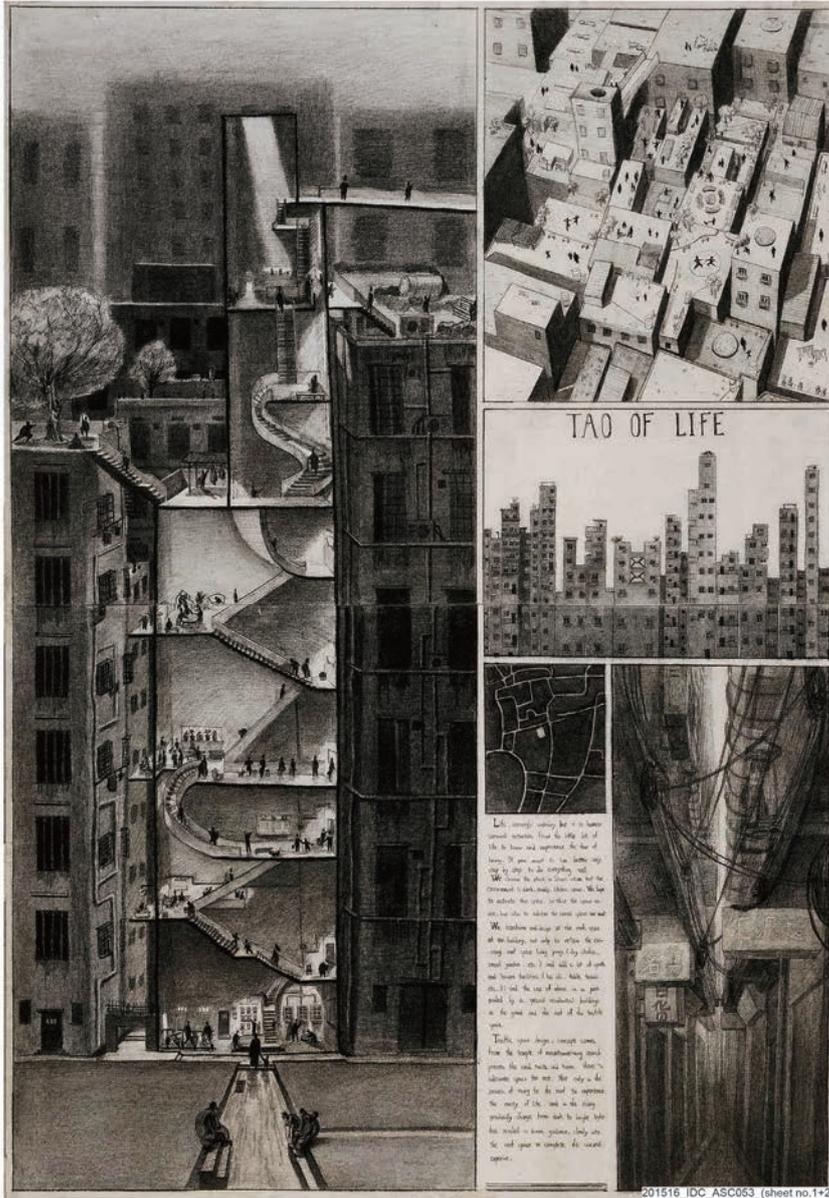
Participants can choose the

1. SITE: Participants need to choose the site in the urban/rural and geographical context representing the region they are belonging to. The area of the site shall NOT admeasure more than 10000 Sq. Meter.

2. BUILDING: Single or multiple built-forms admeasuring a minimum of 2000 Sq. Meter and a maximum of 3000 Sq. Meter will be proposed on the chosen site. No restriction on height is specified as long as the proposal does not exceed the specified built up area. The participants may choose to build upon an empty land or rebuild an existing old structure or even sort to its adaptive reuse.

# WINNING ENTRIES

# 2015



**1<sup>st</sup> WINNING ENTRY**  
 Aixingero Bill, YehJu Yin, Cho ShaoChen  
 Guangzhou Academy of Fine Arts, China

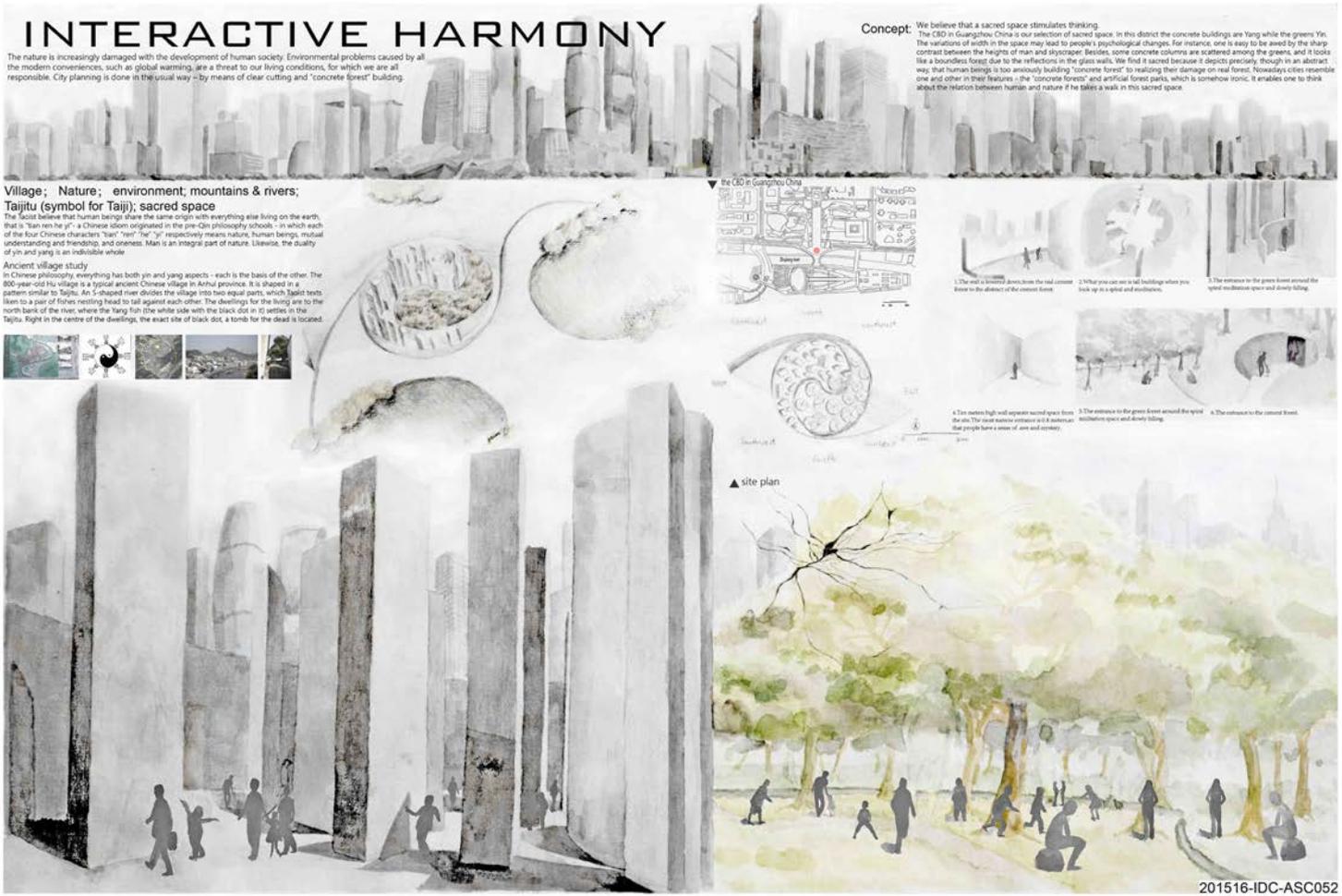
**WRITE UP FOR : ‘Architecture of the Sacred’**

“Tao”

What is sacred? Is a god? A missionary ? Is the idol? There are many religions, religion as well as branches in the world. 2014 India produced “My God” as reflected in India has many sects, people are believe their sect, days and nights of worship. Some missionaries in India take to defraud people of money, priority reception rich, claiming he is the incarnation of God, dialogue with God; and China is no exception, the monk is a career, secular, wore designer clothes, sports car ,ate meat and fish. Daily chanting monks are not practicing, they care about visitors rich or not , they care about money and position.

Divine is it really? In ancient China, people believed that the world people unity, the presence of things in the world have to comply “Tao” (ie the existence of the law) in order to own too good, the most important thing is respect for nature, respect the laws of all things. Divine is not far away, the sacred on the side, which is what we think of the divine.

Design is located in Guangzhou, China Shipai village, Pai incompatible with the surrounding environment, the village is surrounded by the most modern commercial center of Guangzhou. In a large number of buildings constructed in the village so that the non-planned destruction of the skyline, blocking air circulation, year-round gloomy dark. This space make people uneasy, depression, despair psychology. People do not want to stay in this space, so the site has lost its value. So to take advantage of the above-mentioned “sacred” good to let people experience the life of Pai, look for self-direction, move on. In the design process, proofing design techniques are consistent with the design content. For the base of the study intervention, and constantly discover what the villagers need a space, whether this space and what we think of “sacred space” match. We hope that this sacred space is not just an idea, but also to ease the practical problems of the villagers.



## 2nd WINNING ENTRY

Bi Shu Xin, Su Ming Ling, Liu Pei Ye  
Guangzhou Academy of Fine Arts, China

### WRITE UP FOR : 'Architecture of the Sacred'

Man is an integral part of nature. The duality of yin and yang is an indivisible whole. In Chinese philosophy, everything has both yin and yang aspects- each is the basis of the other.

The nature is increasingly damaged with the development of human society. Environmental problems caused by all the modern conveniences, such as global warming, are a threat to our living conditions, for which we are all responsible. City planning is done in the usual way - by means of clear cutting and "concrete forest" building.

We believe that a sacred space stimulates thinking.

The CBD in Guangzhou China is our selection of sacred space. In this district the concrete buildings are Yang while the greens Yin. The variations of width in the space may lead to people's psychological changes. For instance, one is easy to be awed by the sharp contrast between the heights of man and skyscraper. Besides, some concrete columns are scattered among the greens, and it looks like a boundless forest due to the reflections in the glass walls. We find it sacred because it depicts precisely, though in an abstract way, that human beings are too anxiously building "concrete forest" to realizing their damage on real forest. Nowadays cities resemble one and other in their features - the "concrete forests" and artificial forest parks, which is somehow ironic. It enables one to think about the relation between human and nature if he takes a walk in this sacred space.



View from outside the sanctuary

"As one enters the temple, it is as though a hand had caused to be. The details, with all this effort, recede in the light of the glorious overall conception. It is only after the wonder of spaces in their music of light becomes real and settled that the marvellous carving of the details takes over. It is all truly a marvel of architecture and spiritual expression."

Louis Hadzorek Kahn  
January 25th 1964,  
Philadelphia, USA.  
(from the visitor's book of the Banakpur Temple)

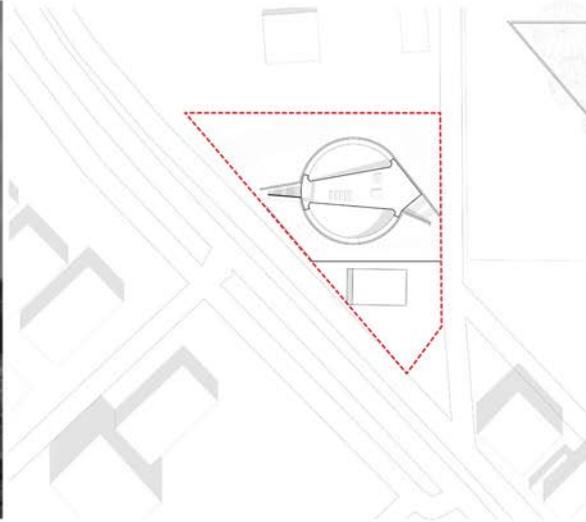
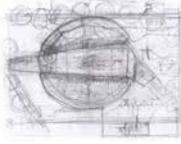
I am a wanderer. I wander looking for peace, for acceptance.

I see this mass, tucked in the soil, subtly.

I need a place to contemplate. My mind needs to be devoid of all things material.

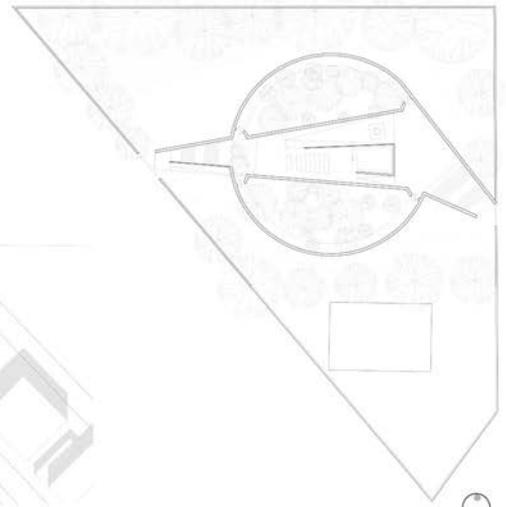
I enter this dungeon like structure. They call it 'The Sanctuary'. I'm curious. It takes me into a surreal space, one where light trickles in from the sides of the walls, just enough for me to discern the path. My eyes are wide open, senses alive, I walk into a skylight shimmering and refracting the light inside. I can hear my heart beat, with calculated steps I take it all in. I walk, as if being led by some force, I see light glistening at the other end and it beckons me, I give in blindly.

As I reach the source, I'm met by a tall iron door which creaks open into a pit which encircles the dungeon, this Chapel of subconscious. The pit circles the Chapel religiously, making me walk and wonder in awe. I am lost, in me.



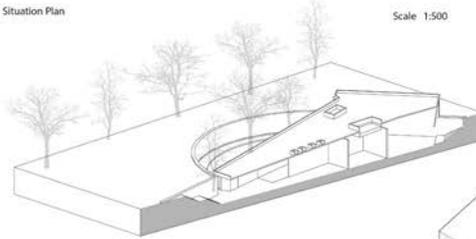
Situation Plan

Scale 1:500

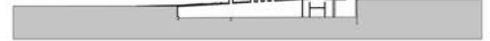


Floor Plan

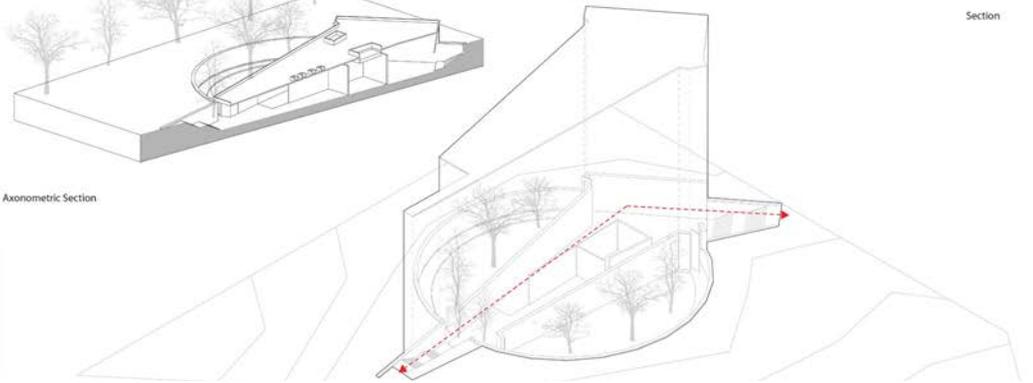
Scale 1:200



Axonometric Section



Section



### 3rd WINNING ENTRY

Reshma Esther Thomas, Srija Gantasala, Mir Nasrullah Khan  
Sri Venkateshwara College of Architecture, India

#### WRITE UP FOR : 'Architecture of the Sacred'

What makes Man? What sets him apart?  
Is it his constant quest for an answer?

In a world of bias and prejudice where the Soul is moulded and shaped by its environs, there is always a longing to explore without being told.

I am a Soul, pure and untouched. I flow, from one emotion to another, one realm to the other. To see me, you have to understand me. To understand me you must be true. To embrace me, you have to let me go. Where the Spaces dictate and shape lives, there is a need for an intervention, a space, sacred to a soul, unbiased and not authoritative. A space not confused between ideologies, between psychological factors. A space which appeals to the soul, which accepts a person as he is and gives him something to take back.

A believer in God, A freethinker, a troubled woman or an addled teen, a space flexible and inviting. Not judging a person or enrapturing him. A space so sublime that it doesn't ask to be embraced, but you do it anyway. And for a place to be sacred, it has to be pure, a purity which melts all forms of beliefs and emotions and binds them together.

A Sacred Space is a space which doesn't confirm to one single person, it doesn't try to. It is a space which addresses the most basic of human emotions and enhances them to give them a profound understanding and awareness of their inner self.

2016



# ACA's **INTERNATIONAL** **DESIGN COMPETITION**

**2016** | THE ARCHITECTURE  
OF BOUNDRIES

ACA's 4<sup>th</sup> INTERNATIONAL DESIGN COMPETITION



STAGES

**STAGE 1: WORLDWIDE LAUNCH** - Online Registration of entries starts on the 8th of August, 2016. For more details visit us at [www.adityacampus.org/idc](http://www.adityacampus.org/idc).  
**STAGE 2: SUBMISSION WINDOW** - In order to account for the variations in Academic Schedules globally, at this stage of the Competition a Submission Window shall open on the 12th of September, 2016 and close on the 8th of November, 2016. Online Submission of entries shall be accepted during this window only. Student teams shall be allowed to update their submissions till the 8th of November, 2016.  
**STAGE 3: RESULT ANNOUNCEMENT** - Results shall be declared on the 14th of November, 2016.  
**STAGE 4: AWARD CEREMONY** - Post Declaration of results the winning participants would be invited to attend our Annual Festival 'UDAAN' on the 16th of December, 2016. They will be invited to present their work during the festival and shall thereafter be felicitated with the prize amount.

AWARDS

Winning entries at the IDC 2016-17 shall receive Certificates and a Prize amount as follows:  
**Global Category**  
 1st Place - RS. 1,00,000/- | US \$1500  
 2nd Place - RS. 75,000/- | US \$1125  
 3rd Place - RS. 50,000/- | US \$750

**Citations** - Certificates shall be awarded to 5 Exemplary Entries.  
**National Category (Student Teams from India)**

1st Place - RS. 50,000/-  
 2nd Place - RS. 30,000/-

**Citations** - Certificates shall be awarded to 3 Exemplary Entries.  
 Honorable Mentions to Mentors -  
 Certificates shall be awarded to mentoring faculty of winning entries.

ELIGIBILITY AND TEAMS

The Competition is open to all Bonafide Students from All Years of their Undergraduate Architecture course belonging to the same School/College/Department in their University/Institute recognized/affiliated by their respective State/Country Board of Education or Architecture Schools Associations. No Inter-Collegiate Participation shall be allowed. Participant teams shall comprise of a minimum of 1 student and a maximum of 5 students.

**NOTE** - For REGISTRATION, SITE & DESIGN PARAMETERS and SUBMISSION DETAILS Visit us at [www.adityacampus.org/idc](http://www.adityacampus.org/idc).

JUDGING CRITERIA

The jury will analyze entries on a number of factors including originality, innovation, form, sustainability and also on how your design has:  
 1. Addressed the key elements of the brief.  
 2. Evolved in your idea of the ethos it belongs to.  
 3. Integrated itself within its context.

JURY



CONTACT US

In case of any queries feel free to write to us at [idc@aditya@gmail.com](mailto:idc@aditya@gmail.com).  
 Or visit us at [www.adityacampus.org/idc](http://www.adityacampus.org/idc).

**REGISTER NOW** [www.adityacampus.org/idc/register](http://www.adityacampus.org/idc/register)

118 COUNTRIES  
 MULTIPLE AWARDS  
 JURY OF EMINENT ARCHITECTS  
 GLOBAL EXCHANGE OF IDEAS



The ARCHITECTURE OF boundaries..

*"Imagine there's no countries  
 It isn't hard to do  
 Nothing to kill or die for  
 And no religion too  
 Imagine all the people  
 Living life in peace... You....  
 You may say I'm a Dreamer  
 But I am not the only one  
 I hope someday you would join us  
 And the world will live as one."*

- Excerpt from 'Imagine'  
 by John Lennon (1971)

The fascination of boundaries lies in their ambivalent role of dividing and connecting at the same time. They mark the transition between different modes of existence. They transmit and control exchange between territories. They are the playground for discovery and conquest."  
 -Richter and Peitgen, 1985.

Beyond the "Self", we are inherently a part of 'collectives' such as a family, a community, a city, a village, a country, a culture, an ethos, and the universe. In the natural course of life we become aware about the geographical edges and social boundaries such as language, culture, religion and economy that segregate Us from Them. And yet we feel connected to these various 'collectives' almost simultaneously.

To feel connected we learn about other cultures, art, languages, share ideas, do trade, or just come together and celebrate. The transitional events such as family rituals, work, education, festivals, recreation, public events, journeys, pilgrimages are the means through which we constantly traverse from one domain to the other. In today's world the digital media has made this transition through the boundaries a lot quicker.

The connectedness takes place when the 'edges' defining the territories allow for exchange. Prof. Richard Sennett, renowned Sociologist, teaching at the London School of Economics, has demonstrated through the natural phenomenon of "Edge Effect", how the boundary conditions between diverse habitats are conducive for exchange and hence generate a greater biodiversity. He therefore asks whether the "natural systems of edge effects" could be simulated as "man-made systems" for human habitat thereby proposing that the "public realms" to be pushed to the 'edge' where the human activity is heightened and rich.

Architecture has always facilitated this transition by providing spaces where the territorial or socio-cultural boundaries are negotiated - dissolved, consolidated or maintained. The Haskell Free Library that sits on the border between the United States and Canada speaks of a knowledge exchange between countries. The Hammam restoration project in Kabul, Afghanistan aims at reviving the traditional bathing house culture. It is an example that shows how Architecture can facilitate a boundary that breaks the barriers of social restriction. The Tabiat Pedestrian Bridge in Tehran, Iran is a beautiful example showing how architecture can transform the idea of bridging a physical boundary beyond its functional connotation. The Great Wall of China built in 14th century to divide the kingdoms and protect them from invasion has over time transformed into a world heritage site visited by millions every year exemplifying how architecture adapts and blurs boundaries in time.

Christopher Alexander, in his book A Pattern Language emphasizes the importance of having boundaries in order to ensure a thriving mosaic of subcultures. He further suggests let this boundary be natural - wilderness, farmland, water-or man-made-railroads, major roads, parks, schools, some housing. Along the seam between two subcultures, build meeting places, shared function, touching each other.

This year's ACA's International Design Competition-2016 has set out to discover, the layers of

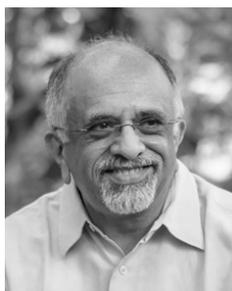
the architecture of boundaries. The Competition eagerly awaits your unique narrative of these 'Spaces on Edge' that represent a core transformational condition, theme or an event set in your part of the world. For this you may need to take a deep dive into the inheritance of the ethos you belong to and simultaneously take a leap out of it to embrace the world beyond it.

The English musician John Lennon immortalized an imagination of a world free of boundaries, barriers and borders at a time when it seemed like control over them were the only things that could prove supremacy.



2016 | SACRED SPAC- POSTER & BRIEF

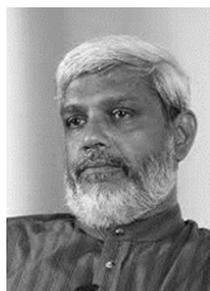
THE JURY



Ar. Prem Chandavarkar  
 CnT Architects  
 Bengaluru, India



Ar. Ratan J. Batliboi  
 RJB-CPL  
 Mumbai, INDIA



Ar. Jayantha Perera  
 CAA  
 Colombo, Shri Lanka



Ar. Rajesh Patel  
 Rajesh Patel Architects  
 Mumbai, INDIA



Ar. Arjun Malik  
 Malik Architects  
 Mumbai, INDIA



Prof. Jayashree Deshpande  
 NIASA Pune, India



Mr. Pratap Jadhav  
 Pratap Jadhav Associates  
 Pune, INDIA



Ar. Vijay Garg  
 Vice-president  
 COA

## BRIEF

“The fascination of boundaries lies in their ambivalent role of dividing and connecting at the same time. They mark the transition between different modes of existence. They transmit and control exchange between territories. They are the playground for discovery and conquest”

- Richter and Peltgen, 1985.

Beyond the ‘Self’, we are inherently a part of ‘collectives’ such as a family, a community, a city, a village, a country, a culture, an ethos, and the universe. In the natural course of life, we become aware about the geographical edges and social boundaries such as language, culture, religion and economy that segregate Us from Them. And yet we feel connected to these various ‘collectives’ almost simultaneously.

To feel connected we learn about other cultures, art, languages, share ideas, do trade, or just come together and celebrate. The transitory events such as family rituals, work, education, festivals, recreation, public events, journeys, pilgrimages are the means through which we constantly traverse from one domain to the other. In today’s world the digital media has made this transition through the boundaries a lot quicker.

The connectedness takes place when the ‘edges’ defining the territories allow for exchange. Prof. Richard Sennett, renowned Sociologist, teaching at the London School of Economics, has demonstrated through the natural phenomenon of “Edge Effect”, how the boundary conditions between diverse habitats are conducive for exchange and hence generate a greater biodiversity. He therefore asks whether the ‘natural systems’ of ‘edge effects’ could be simulated as ‘man-made systems’ for human habitat there by proposing that the ‘public realms’ to be pushed to the ‘edge’ where the human activity is heightened and rich.

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Christopher Alexander, in his book ‘A Pattern Language’ emphasizes the importance of having boundaries in order to ensure a thriving mosaic of subcultures. He further suggests ‘Let this boundary be natural - wilderness, farmland, water- or man-made rail roads, major roads, parks, schools, some housing. Along the seam between two subcultures, build meeting places, shared function, touching each other.’

ACA’s 4th International Design Competition 2016 has set out to discover, the layers of the Architecture of Boundaries. The Competition eagerly awaits your unique narrative of these ‘spaces on edge’ that represent a core transformational condition, theme or an event set in your part of the world. For this you may need to take a deep dive into the inheritance of the ethos you belong to and simultaneously take a leap out of it to embrace the world beyond it.

The English musician John Lennon immortalized an imagination of a world free of boundaries, barriers and borders at a time when it seemed like control over them were the only things that could prove supremacy. He said,

“Imagine there’s no countries  
It isn’t hard to do  
Nothing to kill or die for  
And no religion, too  
Imagine all the people  
Living life in peace... You...

You may say I’m a dreamer  
But I’m not the only one  
I hope someday you’ll join us  
And the world will be as one”

— Excerpt from “Imagine” by John Lennon, 1971

# WINNING ENTRIES

# 2016



# 1st WINNING ENTRY

Atiya Nusrat Urmi, Sharmin Sultana, Mehri Farnaz, Tasneem Wahed  
 Department of Architecture, BUET, Bangladesh

Architectural boundary may form the exact transition space for cultural exchange, exchange of old and new and socio-cultural values. Our idea of space at edge revolves around creating a cultural and communal hub inside the boundaries of the historical walls of Dhaka Central Jail in the opportunity of its permanent relocation.

Being located in the heart of Old Dhaka, The Central Jail of Dhaka is bearing the footmarks of all the cultural, social, political changes that took place for more than 200 years. It exists as an integral part of the morphology and infrastructure of old Dhaka and yet detached from its surroundings, with its boundaries.

While reintegrating the core jail area with the surrounding context, our intention is to facilitate the area conserving and preserving the "Cultural Heritage" of Old Dhaka, ensuring new developments not coming in conflict with the heritage site with all preserved buildings for adaptive reuses, trees and intimate open spaces.

In Old Dhaka open spaces are scattered here & there which may not be used to their full potential and not sufficient for that area. We designed this site not merely as an urban space but also conserved the historical essence of the previous central jail. We zoned the site into two public spaces along with Najimuddin Road and Urdu Road on both side of the historical zone providing public facilities (restaurant, parking, open field for celebrating any kind of festivals). These public spaces are connected with a foot-over over bridge.



buildings occupied by sculptors. may be musicians or, dancers will occupy them next...

## 'Aleppo', TO MAKE A DIFFERENCE ON CONFLICTS

### CONCEPT :

Above all, 'humanity' reaches to an edge when a war breaks out. But what if the parties involved, could have seen the upcoming disaster of a war and also the promising future if they avoid a war through mutual understandings?

### CONTEXT :

'SYRIAN' CITY 'ALEPPO' IS ONE OF THE OLDEST CONTINUOUSLY INHABITED CITIES OF THE WORLD. SINCE ANCIENT TIMES IT WAS RENOWNED FOR ITS CULTURE & HERITAGE. SPECIALLY BECAUSE, BEFORE 'SUZ CANAL' WAS INAGURATED, PEOPLE TRAVELLING IN BETWEEN ASIA-AFRICA & EUROPE USED TO TRAVEL THROUGH THIS CITY, AS ITS LOCATION IS AT ONE END OF THE HISTORIC 'SILK ROAD'. EVEN IN MODERN DAYS IT WAS CALLED 'ISLAMIC CAPITAL OF CULTURE' BY ARAB PEOPLE. BUT DUE TO ONGOING CONFLICT, WITH MOST OF THE DWELLERS BEING DEAD OR HAS BECOME REFUGEES, 'ALEPPO' HAS BECOME COMPLETELY LIFELESS. A BUILDING WHICH WAS ONCE A RESIDENCE OR OFFICE, MIGHT HAVE BEEN USED AS A MILITARY COMMAND CENTER, AN ARMS DEPOT, A REFUGEE SHELTER, A POSITION OF SNIPERS OR MAY BE ACCOMODATING ONLY RATS & VULTURES. DUE TO MASS DESTRUCTION, BROKEN WALLS & SLABS, IT HAS BECOME DIFFICULT TO IDENTIFY WHAT A BUILDING PREVIOUSLY WAS!

### PROCESS:

A PART OF THE CITY WILL BE PRESERVED WITH ITS CURRENT WAR-TORN CONDITIONS, LIKE - BULLET AND SHELL HITTED SPOTS, BROKEN & DESTROYED BUILDINGS.

PEOPLE RELATED TO ARTS & CULTURE i.e., ARTISTS, SINGERS, DANCERS, SCULPTORS, MAGICIANS ETC WILL COME FROM AROUND THE WORLD AND USE THE ABANDONED BUILDINGS AS THEIR STUDIOS /WORKSHOPS AND PUBLIC EXPOSITION FOR CERTAIN PERIODS. ALSO TEACHERS, PHILOSOPHERS, STUDENTS & INTELLECTUALS WILL COME, OCCUPY THE BUILDINGS AND SHARE THEIR IDEAS WITH EVERYONE. ALL THE BUILDINGS WILL BE COLORFUL AND WHEN A GROUP LEAVES, THE COLOR OF THE BUILDING WILL BE CHANGED FOLLOWING A COLOR SCHEME. THUS THE CITY WILL ALWAYS TAKE A DYNAMIC COLOR FLOW & FUNCTIONS. BROKEN PARTS OF THE WALLS WILL BE COVERED (IF NECESSARY) THROUGH TEMPORARY INSTALLATIONS BY ARTISTS AND ARCHITECTS, WHILE THE SIGNS OF DESTRUCTION SHOULD BE KEPT CLEARLY VISIBLE. THE INSTALLATIONS WILL ALSO CHANGE ACCORDING TO THE FUNCTIONS. SUCH FUNCTIONS WILL ATTRACT TOURISTS AND THE REMAINING FULL FUNCTIONAL BUILDINGS WILL SERVE THE GUESTS TO STAY WITH THE NATIVE DWELLERS, CAN BE TURNED INTO HOTELS. ON THE PLACES OF TOTALLY DESTROYED BUILDINGS, CUBE SHAPED FRAMES WILL BE BUILT, THEIR COLOR WILL REMAIN WHITE - WORKING AS A CONSTANT FOR PEOPLE TO ENJOY THE DYNAMIC NATURE OF COLORS AND ACTIVITIES AROUND. SUCH A PROGRAMME WILL CERTAINLY INSPIRE PEOPLE TO RAISE A STRONG VOICE AGAINST WAR.

AT THE CENTER, A WHITE RECTANGULAR FRAMED SPACE WILL BE BUILT TO BE USED BY UNITED NATIONS, TO HOLD MEETINGS ON WAR AND CONFLICTS. IT WILL BE OPEN FOR DISCUSSIONS BETWEEN ANY PARTIES IN CONFLICT. THE PARTIES WILL HAVE TO WALK AROUND THE CITY, FULL OF LIFE AND ALSO THE SIGNS OF DESTRUCTION, TO REACH THE SPOT. THUS, ALEPPO WILL SHOW THEM, THE PERILOUS EFFECTS OF WAR AND ALSO THE BLESSINGS OF PEACE & FRIENDSHIP, BEFORE TAKING ANY DECISION.



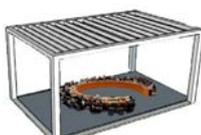
this tunnel can serve fashion designers, can hold trade fairs and so on...



a playground can also arrange a concert, neighbouring buildings can accommodate student jumborees, indoor games etc...



cube frames



space for discussion



temporary installations will be made using light materials like - paper, bamboo, teflon etc.



a building with painters, may become a gallery next time...



Aleppo city (red marked, is the proposed area)



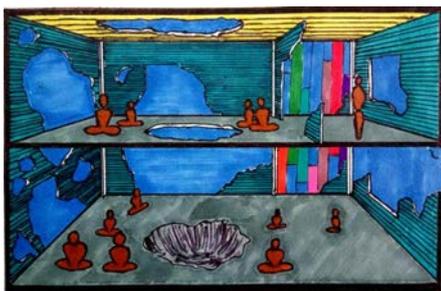
The proposed area is beside a heritage site 'Aleppo Citadel' which dates back to 3<sup>rd</sup> millennium BC. But it was severely damaged in the current war. such a programme will certainly grow more concern on the security & conservation of heritage structures.



proposed site; the blue spot marks the position of the space for discussion



space for discussion on conflicts



space for meditation. can also be used by poets, philosophers.....



2016\_IDC0113

## 2<sup>nd</sup> WINNING ENTRY

Shovon Shahriar

Department of Architecture, Shahjalal University of Science & Technology, Bangladesh

Every brick creates something, every opening brings a new dimension. An art form, Architecture has got the ability to define peoples subconscious mind. A worker may think of a wall as a barrier. but we may think a wall as a termination of hopes! So it's our responsibility to find ways to defend, to protect chances and inspirations through forms & programs, may be with an absence of physical forms or with the presence of most unexpected objects & so on.

Whenever we open a newspaper or, TV news, we hear the news of people suffering due to war. When a war breaks out, its not only the people who suffers but also their accommodations are destroyed, cities become dead.

We often discuss about the failure of United Nations to prevent wars. Also with anger we say the sufferings of people never touches the mighty political leaders. So the initial idea was about the possibility of arranging the future meetings on conflicts on any previous war torn area. Then, it was felt important to connect common people to such an environment where the perilous effects of destruction are present & also through such a process which will inspire common people to have more strength to stand against war. The buildings have completely lost their identity in Aleppo city. But still a lot of them are structurally functional & they are carrying stories, sounds & smiles of the previous dwellers. So how about we use them for different programs which can pronounce the beauty of life, the affinity between people & architecture. 'Culture' is not only a word, it's a platform, a ground which connects people. It celebrates changes, accepts diversity, revels our inner greatness & inspires to become more humane. In presentation of the idea it was felt important to dream the most destroyed places as most diverse ones. So recent photographs of Aleppo were edited with architectural considerations to preservation and also cube shaped & one rectangular box shaped frame were three dimensionally created to visualize on the place of totally destroyed buildings.



### 3rd WINNING ENTRY

Antrara Talukdar, Rajib Kumar Saha, Qazy Md, Atikul Islam, Zahidul Islam, Protiti Iqbal  
 Department of Architecture, University of Asia Pacific

In our everyday seeing, some unseen, in- tangible boundaries also exist. Soul or Marrow is a pure thing. It has no barrier of anything. Barrier within the souls create confliction between people. Most of the iconic places which is globally accepted by the peoples, denies people’s accessibility of various religion and culture.

That physical barrier ends up in a psychological barrier that finally results into some unwanted consequences. The places that witnessed these consequences and also bear historical values are the sites chosen for our design. The concept of this design motivates us to create a module that stands on those places where these boundaries get scopes to be generated by people. It is a flexible module that dissolve the barriers depending on the context. To show that flexibility we placed it in a congestive urban area of Dhaka city where it dissolves the social and cultural barrier of this place. By naming this module ‘Marrow’ we tried to seek attention of the people towards the humanity which is the soul of a peaceful world.

Let the people experience the space we are calling Marrow with an entry of a 10 feet height opening at the beginning, which gradually in- crease to a height of 17 feet. Water rolling down on both side walls of the ramp leading to that one fire flame burning in the centre, surrounded by shallow water symbolizes the Purity of Hu mankind. From the centre we see a ramp going upward, taking people towards the Ocular to let them explore the spirituality of light; some Oculi bringing down the water reflected light and a slit light coming from a corner of a room might be in use for exhibition, reading or even as a meditation space.

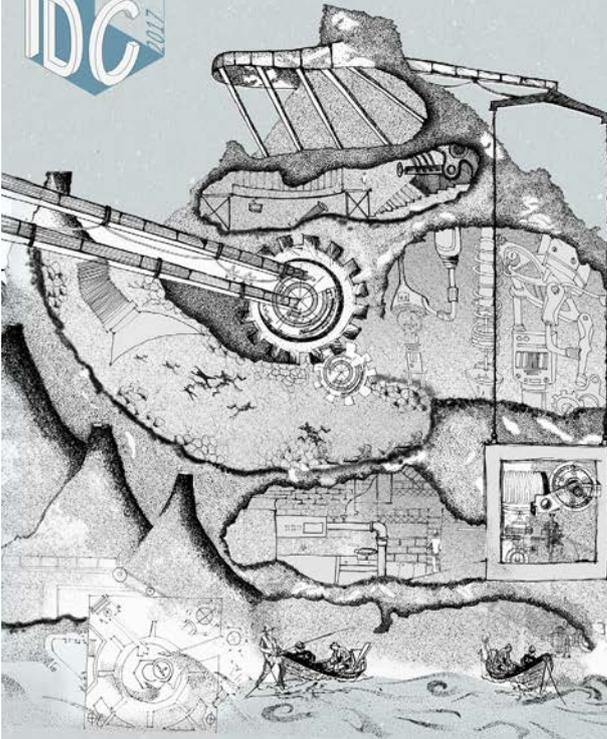


2017



# ACA's **INTERNATIONAL DESIGN COMPETITION**

**2017** | INHABITING NATURE

# INHABITING NATURE

## BRIEF

Historically we are able to trace human settlements that either integrated or co-existed peacefully with nature. The architecture of the river valley civilizations was a direct result of the yearly flooding cycle and how it was negotiated for sustenance and livelihood by its inhabitants. Likewise, Old Indian cities like Ilatohan in Shiro, coastal towns of Kilwa in Tanzania and Teotihuacan in Mexico, all explored the city-nature relationship. At the level of buildings, we have effectively negotiated the climate and terrain to innovate systems that have had minimal impact on environment by leveraging natural phenomena. Around the world, elements such as thick walls, jalis, wind towers and Courtyards have been using temperature difference and wind-directions to optimize the air flow and provide passive cooling for the inhabitants.

From the late 18th century, growth of industry led to the birth of the modern city. For the first time, rapid development and urbanisation were witnessed around the world as a large number of migrants moved from rural communities to the new cities in search of opportunity. Natural resources such as coal, petroleum and other fossil fuels were employed to accelerate this process. Till date 60% of the world's energy needs are met by burning fossil fuels. This prevalent use of fossil fuels in recent years, has raised widespread concerns about pollution and long-term impact on the environment.

It is only in the 20th Century that various experiments and attempts began to emerge in a few parts of the world to address concerns over deteriorating environmental conditions and renew the relationship of man with nature. Letchworth (1903), laid out by Raymond Unwin was a direct manifestation of Sir Ebenezer Howard's concept of the Garden City. The Town of Aesont, designed by Paolo Soleri explored the concept of arcology, which combines architecture and ecology. Elon Musk's Hyperloop, is an example where technology is being used to reimagine high speed transportation, thereby minimizing dependence on fossil fuels.

Sustan Wangbu's Ice Shulpas are a fine example where science and innovation are used to imitate natural systems and negotiate with climatic conditions to create artificial glaciers during the winters, which melt to provide water to carry out farming and other daily activities during summer in the mountain town of Ladakh, India. The mountain community has now come together to develop an institution that allows a space for conceptualizing such ideas. One can also look at the example of the restoration of Timba quarry in Coimbatore, India, where an ecosystem has been slowly revitalized to create a self-sustaining natural park by introducing flora and fauna into a barren region.

Each of these examples, are specific cases in which natural systems and mechanisms have been employed as 'engine for development'. However, to have far reaching effect on the global human settlement a paradigm shift is required.

Kayleh Samels in his essay, 'Architecture and Urban Ecosystems: From Segregation to Integration' argues that 'cities should be an extension of our natural environment. The health of biodiversity affects you. And what you do affects biodiversity. Everything we do either uses natural resources or returns them as waste.' The question this poses to us as architects and designers is if we can base our innovations and visions of 'healthy human communities' on a co-existent relationship between natural entities and development; And can these visions, then be actions and models that are more scalable, panaromic and trans-disciplinary in nature?

ACA's 5th International Design Competition therefore wishes to investigate various forms in which this co-existence manifests itself. Must we strive towards creating a symbiotic relationship with our environment? Should we mimic the systems available in nature to generate adaptable outcomes? Or is there a possibility to invent a completely new approach altogether to inhabit nature?

**1. CHALLENGE:** The Competition invites the architectural literacy of students and academics to Design an 'Everyday Institution' - ranging from landscape, urban renewal and systems - that responds to the city, town or country it belongs to, where communities led by citizens, rebels, wanderers and mad scientists within us, come together to rethink, innovate and implement new ways of creating spaces, objects and models that sensitize their impact on the environment and demonstrate a ground for experimentation for the future of communities that inhabit nature harmoniously.

**2. SITE:** Participants shall intervene on a site in the urban/rural and geographical context of their choice. They may even choose to put forth designs that are site less or imaginary.

## JURORS



Ar. Ken Yeang  
T. R. Hamzah & Yeang Sdn. Bhd.  
MALAYSIA  
Theme Supported by Ar. Ken Yeang



Ar. Andy Chong  
T. R. Hamzah & Yeang Sdn. Bhd.  
MALAYSIA



Ar. K.R. Jaisim  
Jaisim - Fountainhead  
Bengaluru, INDIA



Ar. PK Das  
PK Das and associates  
Mumbai, INDIA



Ar. Vikas Dilawari  
Vikas Dilawari Architects  
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**ADITYA COLLEGE OF ARCHITECTURE**  
MUMBAI - INDIA

**ACA'S 5th INTERNATIONAL DESIGN COMPETITION**

START DATE FOR SUBMISSIONS: 13 AUG 17 | LAST DATE FOR SUBMISSIONS: 01 OCT 17

## 2017 | INHABITING NATURE POSTER & BRIEF

### THE JURY



**Ar. Ken Yeang**  
T. R. Hamzah & Yeang  
Sdn. Bhd.  
MALAYSIA



**Ar. K. R. Jaisim**  
Jaisim -  
Fountainhead Bengaluru,  
INDIA



**Ar. Jamshed Banaji**  
Banaji and Associates  
Mumbai, INDIA



**Ar. Andy Chong**  
T. R. Hamzah & Yeang Sdn.  
Bhd.  
MALAYSIA



**Ar. PK Das**  
PK Das and associates  
Mumbai, INDIA



**Ar. Vikas Dilawari**  
Vikas Dilawari Architects  
Mumbai, INDIA

## BRIEF

“The idea of using development as an engine to protect open space, strengthen communities, reduce auto-mobile use and even restore damaged ecosystems is an exciting one. It will require a paradigm shift to move society ‘from thinking the best it can do is to minimize negative impact, toward a view in which development is seen as both contributing to the growth of healthy human communities while simultaneously restoring (not merely sustaining) the natural environment.’”

- Alex Wilson, Green Development, 1998

Historically we are able to trace human settlements that either integrated or coexisted peacefully with nature. The architecture of the river valley civilizations was a direct result of the yearly flooding cycle and how it was negotiated for sustenance and livelihood by its inhabitants. Likewise, Old Iranian cities like Isfahan & Shiraz, coastal towns of Kilwa in Tanzania and Teotenago in Mexico, all explored the city-nature relationship. At the level of buildings, we have effectively negotiated the climate and terrain to innovate systems that have had minimal impact on environment by leveraging natural phenomena. Around the world, the elements such as thick walls, Jalis, wind towers and Courtyards have been using temperature difference and wind-directions to optimize the air flow and provide passive cooling for the inhabitants.

From the late 18th century, growth of industry led to the birth of the modern city. For the first time, rapid development and urbanisation were witnessed around the world; as a large number of migrants moved from rural communities to the new cities in search of opportunity. Natural resources such as coal, petroleum and other fossil fuels were employed to accelerate this process; till date 80% of the world's energy needs are met by burning fossil fuels. This prevalent use of fossil fuels in recent years, has raised widespread concerns about pollution and long-term impact on the environment.

It is only in the 20th Century that various experiments and attempts began to emerge in a few parts of the world to address concerns over deteriorating environmental conditions and renew the relationship of man with nature. Letchworth (1903), laid out by Raymond Unwin was a direct manifestation of Sir Ebenezer Howard's concept of the Garden City. The town of Arcosanti, designed by Paolo Soleri explored the concept of arcology, which combines architecture and ecology. Elon Musk's Hyperloop, is an example where technology is being used to re-imagine high speed transportation, thereby minimizing dependence on fossil fuels. Sonam Wangchuk's Ice Stupas are a fine example where science and innovation are used to imitate natural systems and negotiate with climatic conditions to create artificial glaciers during the winters, which melt to provide water to carry out farming and other daily activities during summers in the mountain town of Ladakh, India.

The mountain community has now come together to develop an institution that allows a space for conceptualising such ideas. One can also look at the example of the restoration of Timba quarry in Gujarat, India, where an eco-system has been slowly revitalised to create a self-sustaining natural park by introducing flora and fauna into a barren region.

Each of these examples, are specific cases in which natural systems and mechanisms have been employed as 'engines for development'. However, to have far reaching effect on the global human settlement a paradigm shift is required.

Kavieh Samiei in his essay,

“Architecture and Urban Ecosystems: From Segregation to Integration” argues that “cities should be an extension of our natural environment. The health of biodiversity affects you. And what you do affects biodiversity. Everything we do either uses natural resources or returns them as waste.”

The question this poses to us, as architects and designers is if we can base our innovations and visions of 'healthy human communities' on a co-existent relationship between natural entities and development?; And can these visions, then be actions and models that are more scalable, panoramic and trans-disciplinary in nature? ACA's 5th International Design Competition therefore wishes to investigate various forms in which this co-existence manifests itself. Must we strive towards creating a symbiotic relationship with our environment?

# WINNING ENTRIES 2017



**1st WINNING ENTRY**

Nipun Hettiarachi  
University of Moratuwa, Sri Lanka

A Moving Story, the project is based in the alagalla mountain range, pothapithiya, sri lanka. In line with current discourse about ecological heritage and conservation, the project introduces a holistic concept of protection, education and sustainable development in correlation with all other aspects of the areas natural and cultural heritage.

**INTRODUCTION**

National Geo-Monument Park is specifically dedicated to the conservation and protection of geological importance as a geo-heritage, managed with a holistic approach of protection, education and sustainable development in combination with all other aspects of the natural and cultural heritage of the area.

**DEVELOPMENT VISION**

The project uses areas geological heritage, in connection with all other aspects of the area's natural and cultural heritage, to enhance awareness and understanding of key issues facing society, such as using Earth's resources sustainable, mitigating the effects of climate change and reducing the impact of natural

**CONCEPT**

Earth has been moving from the beginning of its birth. The evaluation time frame made the earth more heterogeneous. The processes of earth have modified the surface while making ultimate landscapes. Mountains, Valleys, Plains, faults, with more surprisingly Geomorphology. The movement of the earth also effects on the definitions made by people, though earth is moving and the definitions moving too. A moving story concept emerged with the ideology of introducing exploratory Geo forms to the users to make unique definitions and to be updated with moving earth while taking a form with feature into form with features and functions.



## 2nd WINNING ENTRY

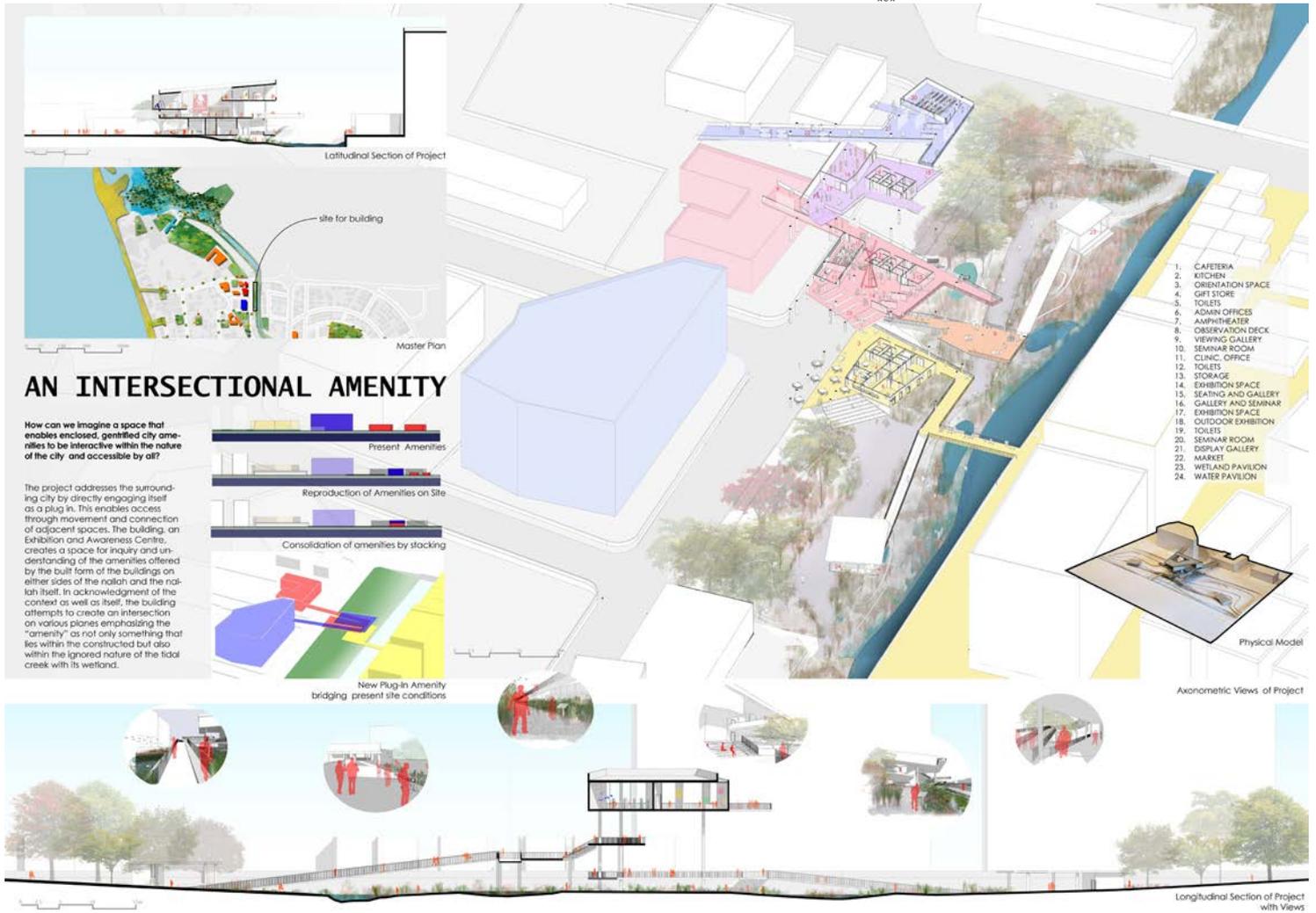
Sneha Khulge  
Kamala Raheja College of Architecture, Mumbai, India

Meandering Landscapes, a learning and community centre, set beside the Irla nullah in Mumbai. The project proposes using the phenomenon of flooding of the nullah to enable the landscape to become performative, receptive and reactive to its ecological condition and its public interface.

The Irla Vile Parle precinct is a cluster of dense urban planned development connected within the looped pedestrian and vehicular routes of movement, shared by various neighborhoods and user groups, such as the Indira Nagar and Nehru Nagar slums, the JVPD Scheme, the educational institutions of SVKM and so on.

The future projections allow for development of the buildings up to eight to nine stories, within the precinct. The proposed metro running next to the educational institutions would further add to the congestion. The learning and community centre, along the nullah, set amidst this precinct, flows seamlessly with the intervening landscape, while rejuvenating the vast backyard of the defunct factory. It opens up three access points that get intertwined with each other, creating a journey as one traverses along the nullah. The journey creates moments of sharing and chance encounters, allowing for various user-groups to interact with each other.

The programs developed within the learning and community centre pull in the residential communities as well as the floating population, essentially the students and the shoppers, into these meandering landscapes. The organisation of programs is addressed, considering the accesses and locations of these communities and the needs of each of it. These functions overlap or create common spaces to nurture interactions within these communities. The landscapes culminate at two points, the amphitheater and the discussion space, before bifurcating into the various access points.



### 3rd WINNING ENTRY

Akanksha Kala  
 Kamala Raheja College of Architecture, Mumbai, India

An intersectional amenity, imagines a space that enables enclosed, gentrified city amenities to be interactive within the nature of the city and accessible by all. The project is a plug in that bridges across the nullah and consolidates existing public programs on site.

While we already inhabit nature, we do it in the most unnatural way. The city of Mumbai has evolved to ignore its inherited natural landscapes to impose rigid inharmonious spaces which have led to the direct destruction of the environment, be it as the depleting mangroves or the polluted Mithi River. Inhabiting nature today must be where it is not just protected and separate but as part of the city. The project aims to occupy land and its inherent nature by not segregating the built project with the natural landscape but seamlessly stitch one with another.

The location of the project is adjacent to the Irla Nallah, a natural estuary treated like a waste channel which opens up to the Arabian Sea. The neighbourhood of Juhu presents itself with multiple existing public buildings. The with critically looking at the amenities present around the site. The amenities are then replicated on the plot of land and consolidated to form a multi-level building.

Bridges allow these to be connected to the project, allowing access by all, a locus of activity and common- place for both sides of the Nallah. The program of the building is an Exhibition and Awareness Centre that comes together in a way to allows everyone passing by to easily access the different floors, each floor a different programme corroborating to the building it is bridged to. By reclaiming the land to its original state of marshy wetlands and sloping the ground to- wards the estuary, the observer experiences the drama of the rising and falling water at their feet, taking in the life of the wetlands as well as that of the neighbourhood.

2019



# ACA's **INTERNATIONAL** **DESIGN COMPETITION**

**2019** | THE ARCHITECTURE  
OF INHERITANCE

# ACA'S 6TH INTERNATIONAL DESIGN COMPETITION 2019 PRESENTS, ARCHITECTURE OF INHERITANCE



ENDORSED BY



## THE DESIGN BRIEF

"Architecture is a discipline that requires a deep cultural, sociological, economical, political and ethical understanding of the world. This is what students need to learn because, when we are in a state of crisis like we are today, we have to rethink the world."  
- ODILE DECQ

The first purpose of architecture is to create habitat that fulfil the needs of society or individuals for places to work and live. It is a manifestation and expression of cultural values of the society with which it interacts. Over the years Architectural Design and perception have changed dramatically, transcending through the passage of time, absorbing and reflecting the changing trends in human behaviour brought about by technological advances and modernization. The entire spectrum from space to urban planning needs to follow a direction that amalgamates tradition and technology capturing the psyche of the society.

Mainstream Urban architecture has inherently remained universal or generic enough to be easily replicated anywhere else in the world thereby losing its connect with the local context.

How do we continue to evolve as a society without neglecting our past? What are the ways by which architecture can take on the present-day challenges posing as a global driver of change and simultaneously engaging with the local culture? Perhaps if one discovers as of "why" inheritance matters while looking forward in time, the "what" and "how" of responsive design will reveal itself.

## THE DESIGN CHALLENGE

ACA's 6th International Design Competition wishes to investigate the various possible outcomes through which inheritance can perform as a catalyst while creating a design that respects both past and present. Moreover, the competition puts forth the question on how to identify our inheritance and where do we start looking for it in the ocean of tangible and intangible heritage which is futuristic yet sustainable. When it comes to engaging with contemporary architecture, how can we adopt contextual parameters of culture, socio economic values, political and ethical understanding of Inheritance.

The competition invites students of the architectural fraternity to evolve a design that successfully bridges these gaps in an urban precinct that integrates the community and encourages sustainable expression through built form. After all as Frank Lloyd Wright, once put it,

"Architecture is life, or at least it is life itself taking form and therefore it is the truest record of life as it was lived in the world yesterday, as it is lived today or ever will be lived."

## IMPORTANT DATES

REGISTRATIONS OPEN 14TH AUG 2019  
**LAST DATE OF RECEIVING REGISTRATIONS - 30TH NOV 2019**  
**LAST DATE OF RECEIVING ENTRIES - 10TH DEC 2019**  
 JURY - DEC 13TH & 14TH 2019  
 DECLARATION OF RESULTS - DEC 21ST, 2019

## CONTACT

In case of any queries feel free to write to us at  
[adityacampus@adityacollegeofarchitecture.edu.in](mailto:adityacampus@adityacollegeofarchitecture.edu.in)  
<http://adityacampus.org/idc/>  
 PHONE  
 +91-9833-300-496 & +91-22-611-06135

## ADDRESS

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 6th floor, Aditya Educational Campus,  
 E. M. Bhatlari Road, Ram Nagar,  
 Borivali (West), Mumbai 400 092  
 SOCIAL MEDIA  
 Facebook: ACA's International Design Competition  
 Instagram Handle: adityacampusidc

### PARTICIPANTS UNDERGRADUATE B.ARCH. STUDENTS

#### ELIGIBILITY

The proposed design intervention could be ranging from built form & landscape to urban renewal & systems. If the chosen intervention fits the scope of the brief, the participants are encouraged to think on multiple scales.

### GRADUATE M.ARCH. STUDENTS & RECENT B.ARCH. GRADUATES

The Competition is open to all Bonafide Students from All Years of their Graduate Architecture (M.Arch / M.S Arch) course recognized by their respective State/Country Board of Education or by their Country's respective Architecture Schools Associations. Young architects, who have finished their undergraduate course in 2019 are also eligible to participate.

#### ACCOLADE

Certificates and a Prize amount as follows  
 • 1st Place: Rs. 1,00,000/- (\$ 1550)  
 • 2nd Place: Rs. 50,000/- (\$ 716)  
 • 3rd Place: Rs. 30,000/- (\$ 430)  
 Winning entries will be published in ACA's COA approved publication for 2019-20. Citations: Certificates shall be awarded to 4 Exemplary entries.

Winning entries will be published in ACA's COA approved publication for 2019-20. Citations: Certificates shall be awarded to 5 Exemplary entries.

**NOTE: REGISTRATIONS ARE FREE**



AR. LAXMAN THITE  
LAXMAN THITE ARCHITECT  
PUNE



AR. YATIN PANDYA  
FOOTPRINTS E.A.R.T.H.  
AHMEDABAD



AR. SHASHI PRABHU  
SASHI PRABHU & ASSOCIATES  
MUMBAI



AR. KAMAL MALIK  
MALIK ARCH.  
MUMBAI



AR. PALINDA KANNANGARA  
PALINDA KANNANGARA ARCHITECTS.  
SRI LANKA



## ACA'S 6TH INTERNATIONAL DESIGN COMPETITION

START DATE FOR SUBMISSIONS: 14TH AUGUST 2019 |  
 LAST DATE FOR SUBMISSIONS: 10TH DECEMBER 2019

# 2019 | THE ARCHITECTURE OF INHERITANCE POSTER & BRIEF

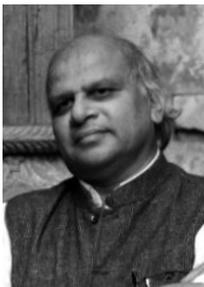
## THE JURY



Ar. Kamal S Malik  
Malik Architecture  
Mumbai, INDIA



Ar. Palinda  
Kannangara  
Palinda Kannangara  
Architects, SRI LANKA



Ar. Yatin Pandya  
FOOTPRINTS E.A.R.T.H.  
Ahmedabad, INDIA



Ar. Sashi Prabhu  
Sashi Prabhu & Associates  
Mumbai, INDIA



Ar. Laxman Thite  
Laxman Thite Architects  
Pune, INDIA

## BRIEF

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The first purpose of architecture is to create habitat that fulfil the needs of society or individuals for places to work and live. It is a manifestation and expression of cultural values of the society with which it interacts. Over the years Architectural Design and perception have changed dramatically, transcending through the passage of time, absorbing and reflecting the changing trends in human behaviour brought about by technological advances and modernization. The entire spectrum from space to urban planning needs to follow a direction that amalgamates tradition and technology capturing the psyche of the society.

Mainstream Urban architecture has inherently remained universal or generic enough to be easily replicated anywhere else in the world thereby losing its connect with the local context. Whereas, the 2018's Pritzker Prize winner B. V. Doshi's Aranya Township Project (1983) in Indore, Central India which was a low-income incentivised site and services vernacular housing project. It is an ideal example for understanding the concept of designing for community inclusiveness and proposing vernacular architecture as a medium while dealing with modern day complexities of high-density urbanisation.

The round building housing complex designed by Urbanus architects in Guangzhou is inspired by ancient 'Tulou' that has encouraged community living in China over centuries. The traditional Tulou dwelling is a rural Chinese housing typology originating in the 12th Century, particularly to the Hakka mountains. Following the Chinese dwelling tradition of 'closed outside, open inside', the self-contained structures formed a small walled city, each housing up to 800 people. The Fortified walls built contained the individual dwellings, enclosing a generous inner-courtyard and communal facilities. The homes themselves were small and modest but shared amenity spaces including ceremonial halls, water-wells, bathrooms and washrooms.

This Aga Khan winning project involved the design of a 220-apartment housing complex for low income families. The urban Tulou consists of an outer circular block with a rectangular box within that is connected to the outer ring by bridges and a courtyard. Both the circular and rectangular blocks contain small apartment units; the spaces in between are for circulation and community use. The lower floors contain shops and other community facilities.

How do we continue to evolve as a society without neglecting our past? What are the ways by which architecture can take on the present-day challenges posing as a global driver of change and simultaneously engaging with the local culture? Perhaps if one discovers as of 'why' inheritance matters while looking forward in time, the 'what' and 'how' of responsive design will reveal itself.

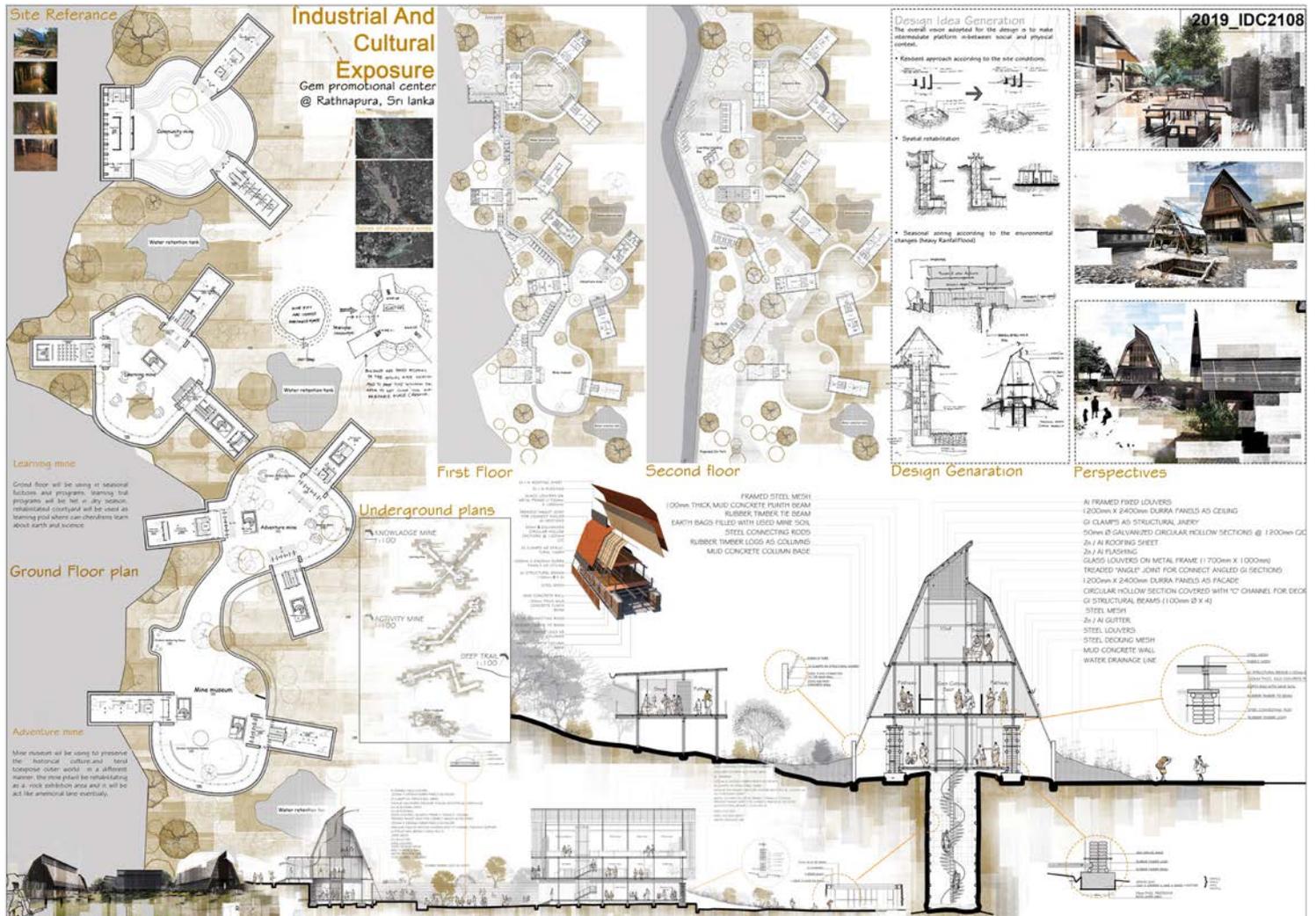
## THE DESIGN CHALLENGE

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The competition invites students of the architectural fraternity to evolve a design that successfully bridges these gaps in an urban precinct that integrates the community and encourages sustainable expression through built form. After all, as Frank Lloyd Wright, once put it, “Architecture is life, or at least it is life itself taking form and therefore it is the truest record of life as it was lived in the world yesterday, as it is lived today or ever will be lived.

# WINNING ENTRIES

# 2019



**1st WINNING ENTRY**

M B M C B Gawarammana  
University of Moratuwa, SRI LANKA

Additive architectural components can lead to reflect any cultural statements while fulfilling the fictional aspects which relates.

**INTRODUCTION**

The main idea behind this particular design thesis is to Reveal the real treasure in gem industry which majority haven't catches in to their eyes. Furthermore, this particular academic exercise leads to reveal particular segments which are laid beneath the society through an architectural intervention. Supportively, Selected Problems were resolved due to the aims and objectives which have created by analyzing the related sector. Proposed project is more over a Gem promotional center to promote all the related criteria in the process. The main idea behind this design thesis is to come up with a methodology to promote the gem industry in a particular manner while developing its background and other related cultural aspects. The design also focuses on adding value to the community and the real owners of these treasures.

**CONCEPT**

Proposed Architectural intervention is more over an Industrial and Cultural exposing tool. Which will cater for selected Propagandas which have been selected to promote in particular manner which will discussed further. This system allows to Promote their own cultural and Industrial Value while facilitating within their own premises (Gem mines). The Project will lead to act as a supportive tool for the Transitional development in near future. In fact, the selected Area will be transforming in to Gem Conservation city by the government Proposals which are already Started. So the Proposed Promotional Center will act as a Pre advertisement to the Future Development goals and to Fulfill the Aims and objective that government has Proposed.

## RESEARCH AND ECO AWARENESS LANDSCAPE @ GALGAMA, BANDARAGAMA

Construction of Expressways are the most emerging development tendency in Sri Lanka. With these development activities, there are a lot of environmental and social issues started. As a third world country, general society appreciate the urbanization by ignoring the environmental imbalance. Project formulate to build an awareness among the people about the sustainable land use practice and environmental impact/ Mitigation measures due to the rapid urbanization within Sri Lanka. It also work as a prototypical landscape for restore the existing degraded land forms caused by urbanization. Project work as a research and recreational landscape that improve the resilience factor of rapid development within Sri Lanka.

Project mainly formulate under two stages. Within the first stage of the project general public involve to recover the damage by restoring the disturbed land. After the first stage is finished, A part of land convert in to experiential and recreational landscape that demonstrate how the restored landscape looks like and give the awareness and the knowledge about importance of proper land use with care.

**Concept of the design** express the idea the planet earth comes long way within 4.5 Billion years, by converting into different formations and different formations of organisms. In the present Human are the main key-stone specie within planet, we responsible for the land use changes, and its effects. And more importantly responsible for make the changes more sustainable and environment friendly way. Finally Design give awareness and practice about the "Human- natural harmonious co-existence". That will greatly benefit to the country sustainability.

**Major design considerations**

- Create the steps, ramps and decks with respect to the existing formations, maximum usages of existing ground formations.
- Solids and voids of rock excavation holes create the aesthetics with the observation flat forms. Experience the negative spaces.
- Observation flat form with the isometric view of expressway and surrounding landscape flat form also contain the earlier landscape character by the graphical presentation.
- The facility building create with giving priority to the environment, the structure with minimum disturbance to the existing geological formations.
- The vegetation proposal highly consider the water existence of the site, because of the disturbance to the rock the water retaining capacity reduced.
- The facility building create with giving priority to the environment, the structure with minimum disturbance to the existing geological formations.

# HEALING FRACTURED LANDSCAPE

LAND AND LAND COVER FORMER ARE SUPERIMPOSED WITH DESIGN HARMONIOUS CO-EXISTENCE THAT SUSTAINABLY IMPROVE ASPECTS OF GROUND SYSTEM FUNCTIONING. THAT SUSTAINABLY IMPROVE GROUND SYSTEM FUNCTIONING.

(ITALIA G.A. SOCIAL RESPONSIBILITY NUMBERED FOR THE YEAR 2008)

**Concept** 2019 IDC 2140

**HARMONIOUS CO-EXISTENCE**

CONCEPT OF THE DESIGN EXPRESS THE IDEA THE PLANET EARTH COMES LONG WAY WITHIN 4.5 BILLION YEARS, BY CONVERTING INTO DIFFERENT FORMATIONS AND DIFFERENT FORMATIONS OF ORGANISMS. IN THE PRESENT HUMAN ARE THE MAIN KEY-STONE SPECIE WITHIN PLANET. WE RESPONSIBLE FOR THE LAND USE CHANGES, AND ITS EFFECTS. AND MORE IMPORTANTLY RESPONSIBLE FOR MAKE THE CHANGES MORE SUSTAINABLE AND ENVIRONMENT FRIENDLY WAY.

**IDENTIFY THE REAL CHALLENGE**

DEGRADED LAND DUE TO QUARRY ACTIVITIES

**DESIGN DEVELOPMENT**

IDENTIFY EXISTING GEOLOGICAL FORMATIONS

**MASTER PROPOSAL**

**PROJECT FORMULATION**

SECTOR FORMULATE ACCORDING TO THE CONCEPT OF "HUMAN NATURE HARMONIOUS CO-EXISTENCE". FROM THE CONSTRUCTION PHASE OF THE PROJECT GENERAL PUBLIC INVOLVE TO RECOVER THE DAMAGE BY RESTORING THE DISTURBED LAND. AFTER THE FIRST STAGE IS FINISHED, A PART OF LAND CONVERT IN TO EXPERIENTIAL AND RECREATIONAL LANDSCAPE THAT DEMONSTRATE HOW THE RESTORED LANDSCAPE LOOKS LIKE AND GIVE THE AWARENESS AND THE KNOWLEDGE ABOUT IMPORTANCE OF PROPER LAND USE WITH CARE.

**STAGE ONE**

**STAGE TWO**

**DESIGN LAYOUT**

**1 BLOOMING THEATER**

**2 REFLECTION STRETCH**

**3 THIN STRIP OF SKY**

**4 SCATTERED PEAK**

**5 SCATTERED LADDER**

**6 PRECIOUS HUB**

**7 TESSELLATION TERRACE**

**8 WALK TO WILD**

**9 MOSAIC WATCH**

**10 COMMUNITY FOREST**

**BLOOMING THEATER**

**THIN STRIP OF SKY**

**TESSELLATION TERRACE**

**REFLECTION STRETCH**

**SCATTERED PEAK**

**MOSAIC WATCH**

**2nd WINNING ENTRY**  
 Ishika Aroshana  
 University of moratuwa, SRI LANKA

## Healing Fractured Landscape Research and Eco Awareness Landscape Bandaragarna, Sri Lanka (6°39'49.4"N 80°01:112.111E)

### INTRODUCTION

Construction of Expressways are the most emerging development tendency in Sri Lanka. With that, there are a lot of environmental and social issues started. As a third world country, general society only appreciate the urbanization by ignoring the environmental imbalance. They have no idea about the effects that comes with the improper development with destroying the natural ecological systems. With that issue, project formulate to build an awareness among the people about the sustainable land use practice and environmental impact Mitigation measures due to the expressway development within Sri Lanka. It also work as a prototypical landscape for restore the existing degraded land forms caused by the development projects. Project work as a research and recreational landscape based on resilience, which helps to blend with rapid development within Sri Lanka.

Project mainly formulate under two stages. Within the first stage of the project, general public, voluntary groups involve to recover the damage by restoring the disturbed land by land preparation, regenerate the forest cover and purifying the water bodies. Next stage of project focus to convert the part of disturbed land in to experiential and recreational landscape that demonstrate how the restored landscape looks like and technology behind to give the awareness and the knowledge about importance of proper land use with care. The design space consist of blooming podiums, Geological museum, Geo observation decks, Research facility center, Animal crossing, highway observation podium camping space and etc. to alter the user perception towards sustainable development strategies.

### CONCEPT

Concept of the design express the idea the planet earth comes long way by converting into different formations and different formations of organisms. In the present Human are the main key-stone specie and responsible for the land use changes, and its effects. And more importantly responsible for make the changes more sustainable and environment friendly way. Finally design give awareness and practice about the "Human- Natural Harmonious Co-Existence. That will be the key to safeguard the country, people and finally the mother earth.

### Main Key Words Phrases and Spaces Discussed Within Design

- Patch dynamics Comparison model of Change of the land use after construction of expressway.
- Illustration of the disturbance to the patches along the expressway due to construction,
- Human responsible for recover the disturbed landscape.
- How human and nature co- existing with each other,
- Rock formation observation area- existing formations framed and emphasize with care
- Camping area with rock pillars, experience the negative space surrounded by excavated rock walls.
- Transitional point to restored land- going through the narrow path with the rock excavated holes besides.
- Steps and the pathway create with response to the natural formation without disturbing, reminding importance of the co-existence

# MUTUALISTIC LIVING; WILD ELEPHANT CONSERVATION VILLAGE @ KALAPURAYA, SIGIRIYA



## BACKGROUND

Accession planners should convey their major attention to the wild animals that will inhabit a defined boundary, rather than being freely situated, irrespective of that environment in some areas. Therefore, there is a big necessity to create a built environment as stated by various people and go beyond the human centered common conventional and other sides of thinking. More than giving 'space' for human and programs, it is more effective if built environment could be arranged in a sensitive manner to mitigate the unnecessary needs towards the sensible attitude around the landscape where it lives to comprehend the more beneficial mutualistic relationship between architectural and biological systems.

### Theoretical Position Cultural position

**"ARCHITECTURE CAN BE A MEDIUM THROUGH WHICH HUMAN AND WILDLIFE DISCOVER MUTUALISM"**

#### Project position

Understanding "Mutualistic Architecture" to accommodate and enrich the relationships between the broader village community and wild elephants.



## Project Justification

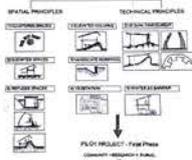
The endeavours are to be undertaken to utilize existing information from research on elephant behavior, their habitats, biology, social organizing and different fields of related research and thereby to combine it into usable information in the plan of structures strong and sensitive to be conveyed in the deployed of human and elephant living spaces.

This project will act as a pilot project to check on the feasibility of using architectural design principles to mitigate the issue. The project is going to address the "Mutualism" in two kind of way. Responding mutualism between community and elephants resulted in a mutualism with tourism by taking side benefits for the economic and lifestyle of the community. The negative connection between community and wild elephants can be resolved by identifying methods of economically benefiting from their unique situation.

-Mutualism between community and the wild elephants  
-Economic mutualism between community and tourists



### DESIGN PRINCIPLES

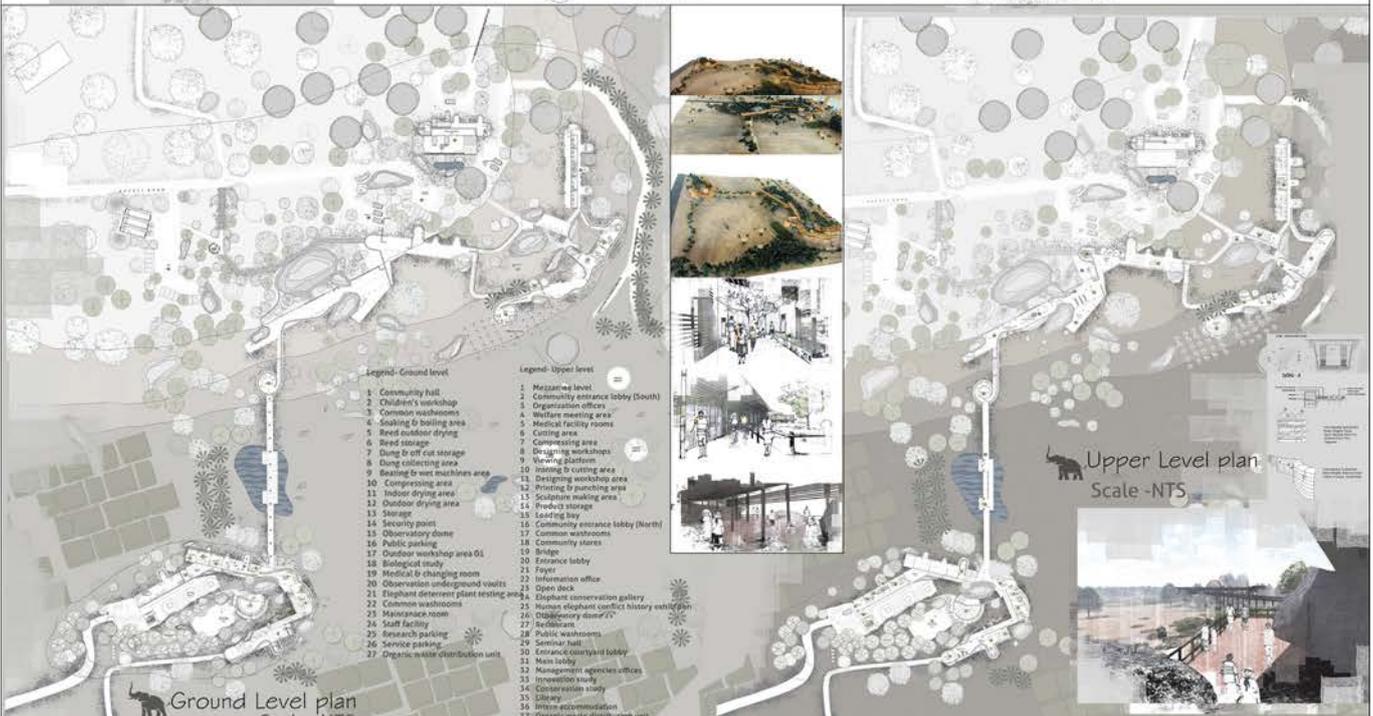


## Architectural objectives

Through the project, it provides necessary arrangements and design layouts to minimize the interaction between human and elephants. As these villages were mainly based on agriculture, the project will also address the alterations in the agricultural zones to minimize the impact of wild elephants (regain) the cultivation areas. The first phase of the project, attempt to act as the pilot project which is breaking new ground in the quest for sustainability in architecture in respect to the term "Mutualism". The pilot project has 3 distinct categories:

- community participation
- researcher's participation
- public participation

In addition the project will attempt to address the mutualism in two different ways. Creating the innovative architectural strategies to mitigate the conflict and symbiosis in the same area (regain) the "Mutualistic living" between the community and the elephants. Therefore using that phenomena as a benefit, this project will also facilitates the tourists which make as the "Economic mutualism" between community and tourists.



## 3rd WINNING ENTRY

BKSN Goonawardena  
University of moratuwa, SRI LANKA

## Mutualistic Living ; Wild Elephant Conservation Village at Kalapuraya, Sigiria, Sri Lanka

### INTRODUCTION

#### Cultural position

"Architecture can be a medium through which human and wildlife discover mutualism"

Project position

Understanding "Mutualistic Architecture" to accommodate and enrich the interrelationship between the broader village community and wild elephants

Human elephant conflict in Sri Lanka

It is estimated that Sri Lanka has the highest density of elephants in Asia but the population of Sri Lankan elephants has declined by at least 50% over the last three generations. Human-elephant conflict is increasing due to the conversion of elephant habitat to settlements and permanent cultivation.

### PROJECT JUSTIFICATION

This project will act as a pilot project to check on the feasibility of using architectural design principles to mitigate the issue. The negative connection between community and wild elephants can be reversed by identifying methods of economically benefiting from their unique situation.

- Mutualism between community and the wild elephants
- Economic mutualism between community and tourist

### ARCHITECTURAL OBJECTIVES

This project attempts to create a "mutualistic" relationship between different parties as well as to identify how elephants and humans experience the built domain and their spaces while they coexist without harming each other. Creating the innovative architectural strategies to mitigate the conflict and symbiosis in the same area interprets the "Mutualistic living" between the affected community and the elephants. Therefore, using that phenomenon as a benefit, this project will also facilitate the tourists to get an experience by observing the behavior of wild elephants, which makes it an "Economical mutualism" between community and tourist.

### BRIEF

In respect to the symbiosis with each other, the 3 key zones have contributed to coexist with the wild elephant while the human functions give zero impact to their habitats. Community participation to mutualistic living with wildlife and transfer knowledge to improve their lifestyle while mitigating the attacks to their properties and crops. The existing local industries and proposed elephant dung paper factory have developed. Spaces provide for main community activities and for their utility services. Researcher's participation to investigate the human-elephant conflict mitigation strategies and contribution in conservation of wild elephants and other species. This category has an important role in the project, which helps to transfer knowledge to the affected community as well as to generate and apply the innovative HEC methods by cooperate with community. Public participation helps to improve the economic aspects of the overall project and generate the mutualism between community and public as the side effect of the human-elephant conflict. The difficulties of the border living would use as the benefit to the affected community by making connection with the public.

### ENVIRONMENTAL COMPATIBILITY

- Construction methods of the building consumes less energy due to the localized and ecological material and indigenous construction techniques ( earth bag techniques, jungle wood and used timber, existing rock boulders and thatched roof )
- The design has been placed with minimal damage to the site as well as giving a life cycle to the building with temporal materials while Easy and flexible construction materials to withstand for Elephant attacks.
- The building will use natural ventilation and lighting during the day time, which is energy efficient in operation.
- Waste management program

### FORM

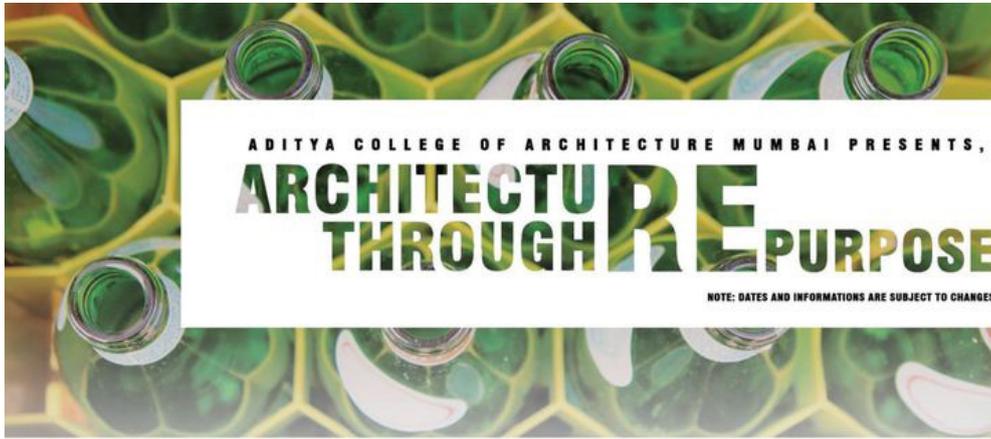
- Structural form perform better in elephant attacks
- Traditional- forms interpret local architectural elements – granary & simple house structure

2020



# ACA's **INTERNATIONAL** **DESIGN COMPETITION**

**2020** | ARCHITECTURE  
THROUGH REPURPOSE



# ACA'S 7<sup>TH</sup> INTERNATIONAL DESIGN COMPETITION

START DATE FOR SUBMISSIONS: 16<sup>TH</sup> AUGUST 2020  
 LAST DATE FOR SUBMISSIONS: 07<sup>TH</sup> NOVEMBER 2020

PARTICIPANTS	ELIGIBILITY	AWARDS
UNDERGRADUATE & ARCH. STUDENTS	The proposed design intervention could be ranging from built form & landscape to urban renewal & systems. If the chosen intervention fits the scope of the brief, the participants are encouraged to think on multiple scales.	Certificates and a Prize amount as follows • 1st Place: INR. 1,00,000/- • 2nd Place: INR. 50,000/- • 3rd Place: INR. 30,000/- • 4th Place: INR. 20,000/- • 5th Place: INR. 10,000/- Note: In case the winners are foreign nationals, the amount shall be transferred in USD at prevailing rates
GRADUATE ARCH. STUDENTS & RECENT GRADUATES	The Competition is open to all Bonafide Students from All Years of their Graduate Architecture (M.Arch / M.S Arch) course recognized by their respective State/Country Board of Education or by their Country's respective Architecture Schools Association. Young architects, who have finished their undergraduate course in 2019 are also eligible to participate.	Challenges: Certificates shall be awarded to 5 Exemplary entries.

**BRIEF**

"Pollution is nothing but the resources we are not harvesting. We allow them to disperse because we've been ignorant of their value."  
 - R. Buckminster Fuller

In a world which has always taken nature for granted and humans have exploited the earth, we as Architects have a major role to play on multiple fronts, to reverse the impending catastrophe. As sensitive professionals, we cannot divorce ourselves from social and environmental exigencies. In the past architects have almost always laid the larger focus on building envelope, active and passive energy systems, pure aesthetics or short-term economics of materials.

The latter has not been studied with respect to long term gains and have remained at experimental levels in small isolated pockets across the globe.

Building materials through are omnipresent. They make up the spaces in which we live, work, study, get well and commute. They create our villages, our cities and our built environment. They have social, cultural, moral and environmental implications and often substantially control our behavioral patterns and reactions to a space.

According to World Bank researchers, the world's generating at least 3.5 million tons of plastic and other solid waste per day, 10 times the amount in 2007.

Over the years several experimental technologies have been developed to create buildings that are sustainable, eco-friendly and assist in the settlement of the community.

One such example is a floating school in the former fishing village of Mbeke, Nigeria that was conceptualized as an answer to the region's frequent floods. Designed by H&E, it was founded by Nigerian-born architect Fund Adeniyi. The Mbeke Floating School is a prototype that could be applied to other areas in Africa that face infrastructural and social challenges due to climate change. It uses renewable energy from a solar panelled roof, recycles organic waste and harvests rainwater. The school is built using local help with salvaged recycled empty plastic bottles as buoy and indigenous bamboo as the framework. The school can take care of those students who were previously denied education due to frequent flooding, it can hold 60 to 100 students and is built with a distinctive 3 story tongue-in form that provides stability and balance in heavy winds. The structure can also be adapted for community events, clinics, markets and social gatherings.

This year's DC 2020 focuses on these issues and seeks to examine the place and use of discarded and recycled materials in architecture, at the same time keeping in mind community spirit and aspirations of the end users. With its 7th edition DC invites to encourage the use of discarded or recycled materials that are endemic to the area due to a prevalent industry or lifestyle. Few of the materials that are currently being explored and proposed as building materials on similar projects in various, which use recycled steel dust from the steel industry to create stronger concrete. Similarly, wooden pallets are often used to create homes in areas where goods are packaged or around docks.

Plastic bricks also have several significant advantages over conventional bricks - they're thinner and lighter, have insulating properties which are 3 times more than that of standard bricks, and are just as strong. They're also great at insulating against noise and it only takes 20 bottles on average to make one brick. Each brick helps do the world of discarded plastic, and a phasing and more fuel efficient to manufacture from conventional bricks. It's also less energy intensive than recycling the plastic into other forms.

**The Design Challenge**

This year's design challenge involves the use of sustainable materials produced using discarded or recycled materials. Participants need to identify an area where the availability of discarded materials or solid waste is high. The material is then used to propose a structure for the local community that will take into consideration their immediate needs and encourage the integration of the society as a whole. The proposed structure maybe housing units that offer dignity of living standards, a school a community hall or any other public facility.

Entries will be judged on the innovative use of the material, in the response to the need of the community and the final resolution proposed in the design. The design must work functionally for the entire life span and should not be a one-off solution for a few years. After all as architects we believe in the Robert Rauschenberg that "The greatest threat to our planet is the belief that someone else will save it."

### CONTACT

In case of any queries feel free to write to us at  
 info@aditya-college.com  
 aditya@aditya-college.edu.in  
 Or visit us at  
 http://adityacollege.org/aca/  
 Phone: +91-1832-500-874 & +91-22-411-04135

### ADDRESS

Aditya College of Architecture,  
 4th floor, Aditya Educational Complex,  
 8, M. Bhamburda Road, From Nigaoa,  
 Bandra (West), Mumbai 400 052

### IMPORTANT DATES

REGISTRATIONS OPEN: 16<sup>TH</sup> AUGUST 2020  
 REGISTRATION CLOSES ON: 31<sup>ST</sup> OCT 2020  
 LAST DATE OF RECEIVING ENTRIES: 07<sup>TH</sup> NOV 2020  
 JURY - 08<sup>TH</sup> TO 30<sup>TH</sup> NOV 2020  
 DECLARATION OF RESULTS: 03<sup>RD</sup> DEC 2020

NOTE: REGISTRATIONS ARE FREE



AR. DEAN D'CRUZ, GOA, INDIA | AR. CHITRA VISHWANATH, BANGALORE, INDIA | DR. PHILIPPE SAMYN, BRUXELLES, BELGIUM | AR. CHINTHAKA WICKRAMAGE, COLOMBO, SRI LANKA | AR. ASHOK B LALL ARCHITECTS, NEW DELHI, INDIA

### DETAILS

**STAGE 1:** Online registration of entries on our website: <http://adityacollege.org/aca/>. Registration closes on: 31<sup>ST</sup> OCT 2020

**STAGE 2:** Last Date for online submission of entries is NOVEMBER 07<sup>TH</sup>, 2020. All submissions shall be placed in PDF or JPEG format only. Submissions shall be made only through the unique USER ID generated after registration on our website.

**STAGE 3:** DC Jury: 08<sup>TH</sup> - 30<sup>TH</sup> NOVEMBER 2020

**STAGE 4:** Results shall be declared on December 03<sup>RD</sup>, 2020.

**SITE:** Participants shall intervene on a site in the urban/rural and geographical context of their choice.

**DESIGN INTERVENTION:** The proposed design intervention could be ranging from built form and landscape to urban renewal and systems. If the chosen intervention fits the scope of the brief, the participants are encouraged to think on multiple scales.

**SUBMISSION:**

- Four reasons for the proposed intervention.
- The process & method of design.
- Representation of ideas: Participants can choose the appropriate drawing scale to a schematic that design scheme effectively.
- They can provide any number of Architectural drawings enough to describe the scheme.
- Photos of Similar Models, Computer generated 3D Views, Renders, etc.
- Diagrams, hand-made sketches and other Representational material.

**FORMAT:**

- National (physical) your entries to a max. of A2 size sheets, not exceeding an overall size of 2186 with the submission specifications duly completed.
- A Bonafide certificate from your College/ University/ Institute certifying your contribution (NOT exceeding a size of 1 MB).
- All participant teams shall be given a unique DC code that you shall have to put in all your deliverables.

**TEAMS:** Participating Teams shall comprise of a maximum of 5 students and a maximum of 1 student.

**JUDGING PROCEDURE:**

- After the receipt of all entries by the stipulated deadline, 50 entries will be selected in round 1 by the review team of ACA.
- Each jury member will be sent 10 entries for evaluation, from which they will choose the best 5.
- The best 5 entries from each of the 5 juries will form the final 15 entries.
- These 15 entries will then be sent to the entire panel for a joint evaluation, moderated by ACA where the final 3 winners will be decided on a joint consensus.
- Official Declaration of the 3 winners.

**NOTE:** Copyright for all material received as part of the competition, its publication and for the reproduction of content shall be solely with ACA. All the entries will be the property of ACA.



## 2020 | ARCHITECTURE THROUGH REPURPOSE POSTER & BRIEF

### THE JURY



Ar. Ashok B Lall  
 Ashok B Lall Architects  
 New Delhi, INDIA



SIR Philippe Samyn  
 SAMYN AND PARTNER  
 Bruxelles, BELGIUM



Ar. Chitra Vishwanath  
 BIOME Environment  
 Solutions Private Limited.  
 Bangalore, INDIA



Ar. Chinthaka Wickramage  
 Chinthaka Wickramage  
 associates  
 Colombo, SRI LANKA



Ar. Dean Dcruz  
 Mozaic Design  
 GOA, INDIA

## BRIEF

“Pollution is nothing but the resources we are not harvesting. We allow them to disperse because we’ve been ignorant of their value.” – R. Buckminster Fuller

In a world which has always taken nature for granted and humans have exploited the earth, we as Architects have a major role to play on multiple fronts, to reverse the impending catastrophe. As sensitive professionals, we cannot divorce ourselves from social and environmental exigencies. In the past architects have almost always laid the larger focus on building envelope, active and passive energy systems, pure aesthetics or short-term economics of materials.

The latter has not been studied with respect to long term gains and have remained at experimental levels in small sporadic pockets across the globe.

Building materials though are omnipresent. They make up the spaces in which we live, work, study, get well and commute, they create our villages, our cities and our built environment. They have social, cultural, moral and environmental implications and often subconsciously control our behavioral patterns and reactions to a space. According to World Bank researchers, the world is generating at least 3.5 million tons of plastic and other solid waste per day, 10 times the amount a century ago.

Over the years several experimental technologies have been developed to create buildings that are sustainable, eco-friendly and assisted in the upliftment of the community.

One such example is a floating school in the former fishing village of Makoko, Nigeria that was conceptualized as an answer to the region’s frequent floods. Designed by NLE, a firm founded by Nigerian-born architect Kunlé Adeyemi, the Makoko Floating School is a prototype that could be applied to other areas in Africa that face infrastructural and social challenges due to climate change. It uses renewable energy from a solar panelled roof, recycles organic waste and harvests rainwater. The school is Built using local help with sixteen recycled empty plastic barrels as buoys and indigenous bamboo as the framework. The school can now cater to those students, who were previously denied education due to frequent flooding. It can hold 60 to 100 students and is Built with a distinctive 3 storey triangular form that provides stability and balance in heavy winds. The structure can also be adapted for community events, clinics, markets and social gatherings.

This year’s IDC 2020 focusses on these issues and seeks to examine the place and use of discarded and recycled materials in architecture, at the same time keeping in mind community spirit and aspirations of the end users. With its 7th edition IDC wishes to encourage the use of discarded or recycled materials that are endemic to the area due to a prevalent industry or lifestyle. Few of the materials that are currently being explored and propagated as building materials on similar pretexts is Ferrock, which uses wasted steel dust from the steel industry to create stronger concrete. Similarly, wooden pallets are often used to create homes in areas where goods are packaged or around docks

Plastic bricks also have several significant advantages over conventional bricks - they’re thinner and lighter, have insulating properties which are 5 times more than that of standard bricks, and are just as strong. They’re also great at insulating against noise and it only takes 20 bottles on average to make one brick. Each brick helps rid the world of discarded plastic and is cheaper and more fuel efficient to manufacture than conventional bricks. It’s also less energy intensive than recycling the plastic into other forms.

### THE DESIGN CHALLENGE:

Design challenge involves the use of sustainable strategies produced using discarded or recycled materials. Participants need to identify an area where the availability of discarded material or solid waste is high. The material is then used to propose a structure for the local community that will take into cognizance their immediate needs and encourage the integration of the society as a whole. The proposed structure maybe housing units that offer dignity of living standards, a school a community hall or any other public facility.

Entries will be judged on the innovative use of the material, in the response to the need of the community and the final resolution proposed in the design. The design must exhibit a sensitivity towards the environment and should address the ecology of the area at various levels. After all as architects we believe in the Robert Swan, that “The greatest threat to our planet is the belief that someone else will save it.”

# WINNING ENTRIES 2020



BYOB is a humble architectural intervention that would help the community to **experiment innovative applications of the unused waste and new material possibilities**. This implementation of low-tech sustainability would also **enhance the skills of the community** that are boat building and fish net knitting/weaving. Also, such similar skill sets will be shared among the younger generations and other inhabitants of the community. As the initial implementation, a simple structure that almost everyone of the community uses will be constructed as it will be beneficial in many ways, which is a bus stop. Starting from that, people can use the gained and enhanced skills for other building typologies that can use the same low-tech construction methodologies.

Ever since the older days of Sri Lanka, creation of a bus stop has always been a collective work of the natives and were often built to celebrate the ones we have lost. It portrays the cohesiveness of the community as it gathered everyone starting from village masons to monks of the community together. These interventions were born even while being bound to economical restrictions and technological limitations. What we are about to see is the beginning of such a story.

This story revolves around the Hamilton canal which is a 14.5 km canal that runs from Puttalam to Colombo and it runs across many urban fishing villages. This canal forms the western borderline of a wetland known as Muthurajawela marsh. The marsh is noteworthy for its unique and rich biodiversity which is now slowly facing its destruction as hundreds of tons of garbage are being dumped in the waterways from the canal and few areas inside the marsh such as Ja-ela, Bopitiya and Dikkowita to name a few. The canal was once a part of the daily routine of the inhabitants but today they fear to set foot in the wetland and canal. As a response the simple formula of BYOB will be the micro level intervention of reviving what they have lost. Dikkowita is the city where a bigger impact can be made as the density is higher, so it will be the starting point of the initiative which draws inspiration from the previous community practices.

# BYOB

## BOTTLE BOAT



Muthurajawela Marsh  
Hamilton Canal  
Garbage dump sites



### Bring Your Own Bottle

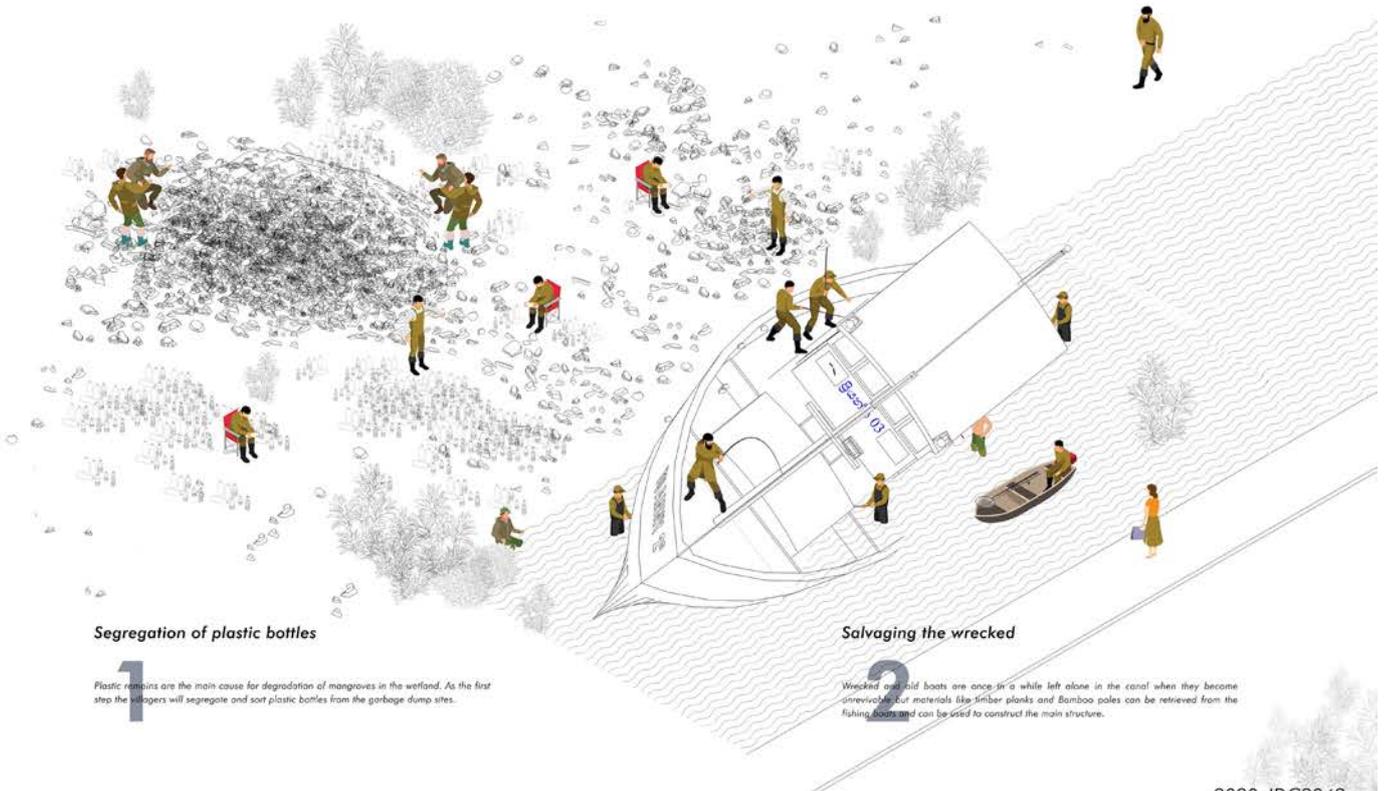
Plastic debris are the main cause for degradation of mangroves in the wetland. It's our own garbage that wind up in the wetland.

"What goes around comes around"



### Bring Your Own Boat

Wrecked and old boats are once in a while left alone in the canal by fishermen when the boats become unrevivable but materials like timber planks and Bamboo poles can be retrieved from the fishing boats.



### 1 Segregation of plastic bottles

Plastic remains are the main cause for degradation of mangroves in the wetland. As the first step the villagers will segregate and sort plastic bottles from the garbage dump sites.

### 2 Salvaging the wrecked

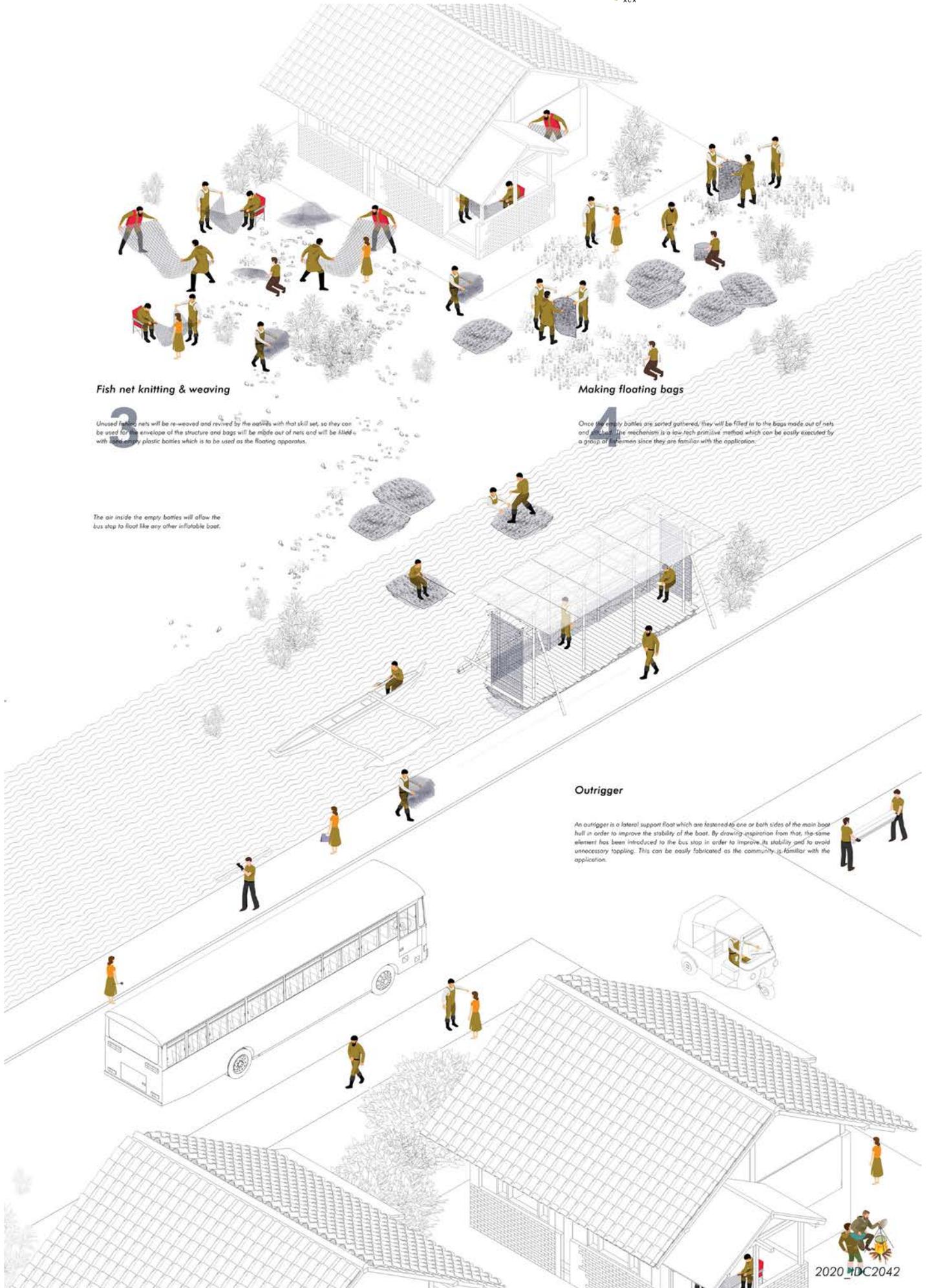
Wrecked and old boats are once in a while left alone in the canal when they become unrevivable but materials like timber planks and Bamboo poles can be retrieved from the fishing boats and can be used to construct the main structure.

# 1st WINNING ENTRY

Lakal Piyarathna  
University of Moratuwa, SRI LANKA

2020\_IDC2042

SHEET 01



**Fish net knitting & weaving**

Unused fishing nets will be re-woven and revived by the experts with that skill set, so they can be used for the envelope of the structure and bags will be made out of nets and will be filled with thousands of plastic bottles which is to be used as the floating apparatus.

The air inside the empty bottles will allow the bus stop to float like any other inflatable boat.

**Making floating bags**

Once the empty bottles are sorted gathered, they will be filled in to the bags made out of nets and attached. The mechanism is a low-tech primitive method which can be easily executed by a group of fishermen since they are familiar with the application.

**Outrigger**

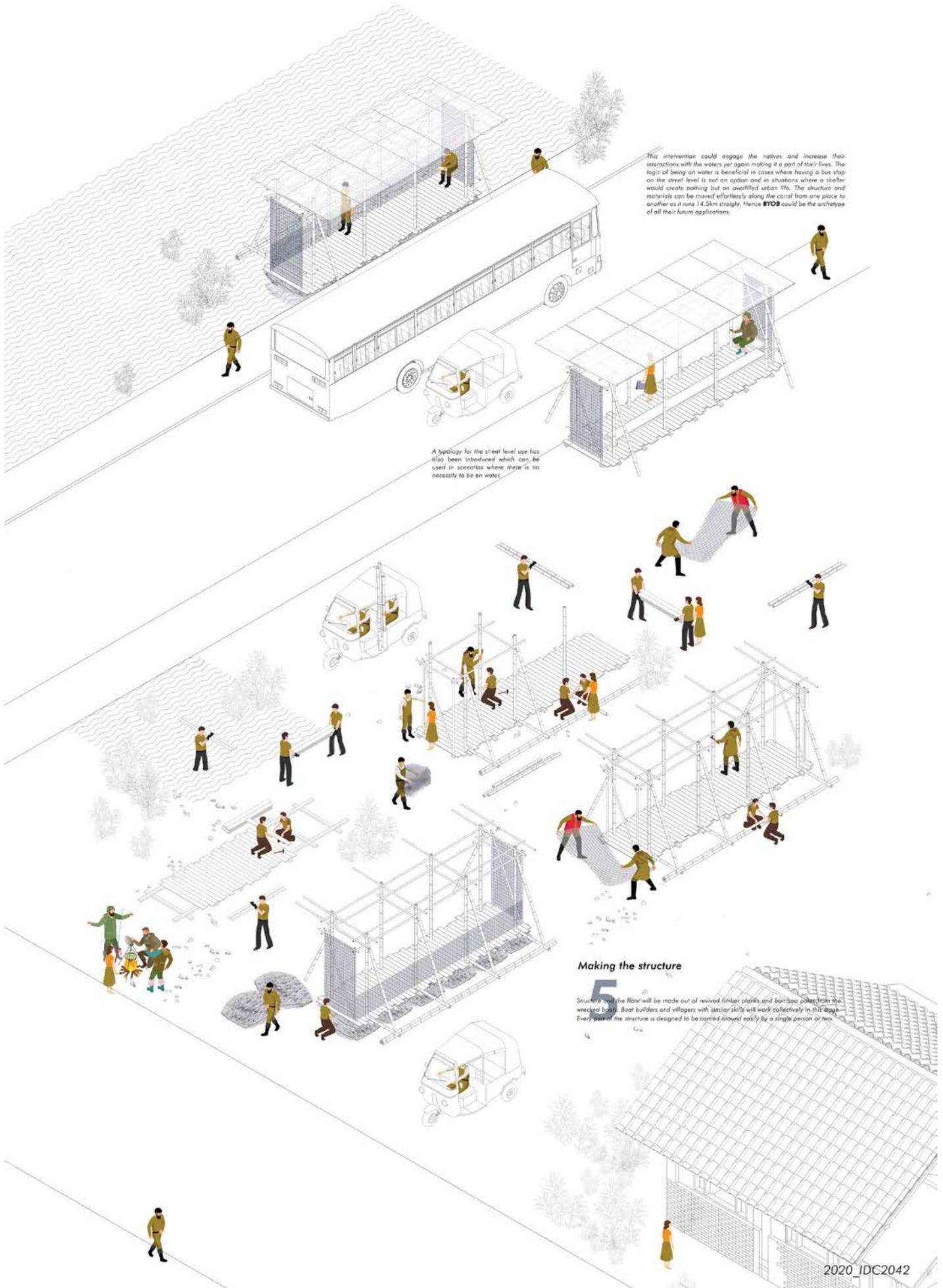
An outrigger is a lateral support float which are fastened to one or both sides of the main boat hull in order to improve the stability of the boat. By drawing inspiration from that, the same element has been introduced to the bus stop in order to improve its stability and to avoid unnecessary toppling. This can be easily fabricated as the community is familiar with the application.

2020 IDC2042

**1st WINNING ENTRY**

Lakal Piyarathna  
University of Moratuwa, SRI LANKA

SHEET 02



This intervention could engage the natives and increase their interactions with the waters yet again making it a part of their lives. The logic of being on water is beneficial in cases where having a bus stop on the street level is not an option and in situations where a shelter would create nothing but an overfilled urban life. The structure and materials can be moved effortlessly along the canal from one place to another as it runs 14.5km straight. Hence **BYOB** could be the archetype of all their future applications.

A typology for the street level use has also been introduced which can be used in scenarios where there is no necessity to be on water.

**Making the structure**

Structure and floor will be made out of recycled timber planks and bamboo poles from the wrecked boats. Boat builders and villagers with similar skills will work collectively in this stage. Every part of the structure is designed to be carried around easily by a single person or two.

2020\_IDC2042

# WOMANIYA



## BUT...!

Men, women, their identities and emotions, positions and possessions, their convergence in thoughts and divergence in equity, all of this has been an unparalleled part of the world's reality. But the nature of this fundamental unit has always been evolving, ever changing and adapting, which at the end intends in shaping societies and giving meaning to generations, then, how can architecture as an occupation that had experienced this phenomenon so closely be deprived of it?

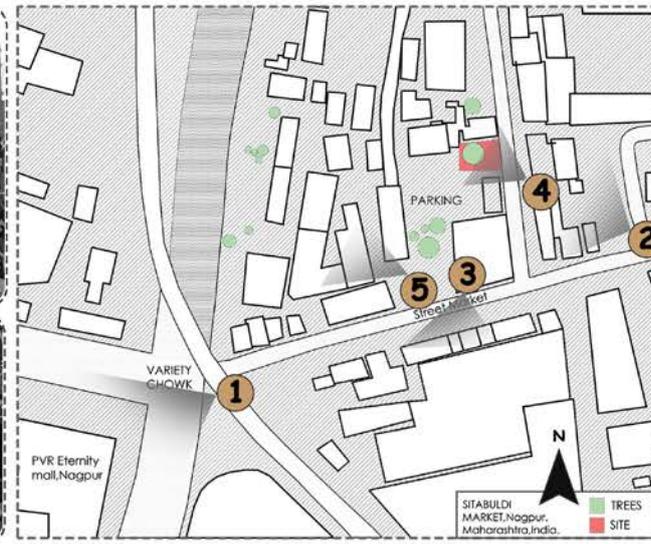
### WHY?

In multitudes of problems, the parity pertaining to women sanitation and toilet is quite on peak. The everyday sexism of women waiting in public toilets for nature's needs, sanitation and baby feeding, with all the discomfort around isn't a minor pet peeve, but a serious question. Gender sensitivity into city wide assessment of voids in public and community toilet provision, and in local implementation and management is yet to bridge a gap.

Eventually in a densely populated country like India, these issues hit the epitome, where markets, street shops, community hubs, etc are a major part of lifestyles of people.

### Site Attributes

A densely crowded area with major market setup, malls, public realms, etc. People coming from all over the city, surrounding cities, towns and villages creating a huge footfall.



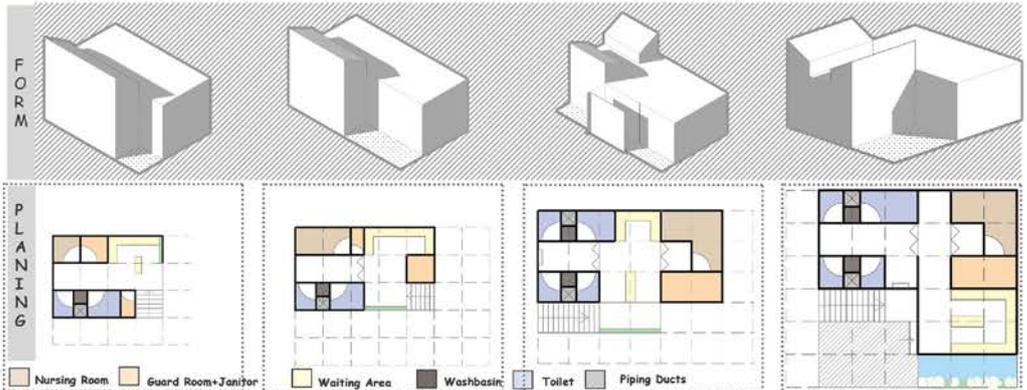
### Female-Friendly Toilets : Needs And Considerations

- Safe & Private
- Accessible to all
- Affordable & Available when needed
- Well maintained & managed
- Cater menstrual hygiene management
- Meet the needs of parenting women

### Modules

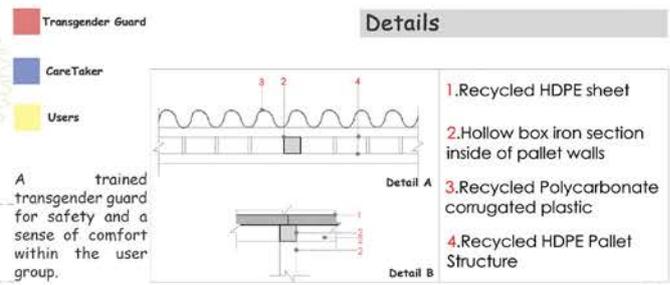
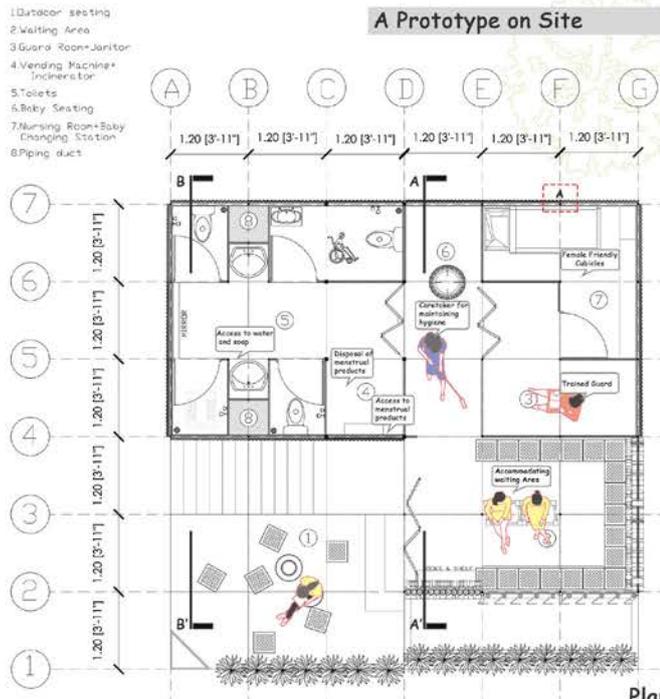
Understanding the spatial constraints in urban areas, the modules have been designed with a sense of versatility to fit into multiple scales and various contexts that can be converted into Prototype.

- MODULARITY
- GRID
- PROTOTYPE
- STANDARDS
- FUNCTIONALITY



## 2nd WINNING ENTRY

Aditi S Itankar, Pranav P Kakade  
47 IDEAS, Nagpur ; INDIA

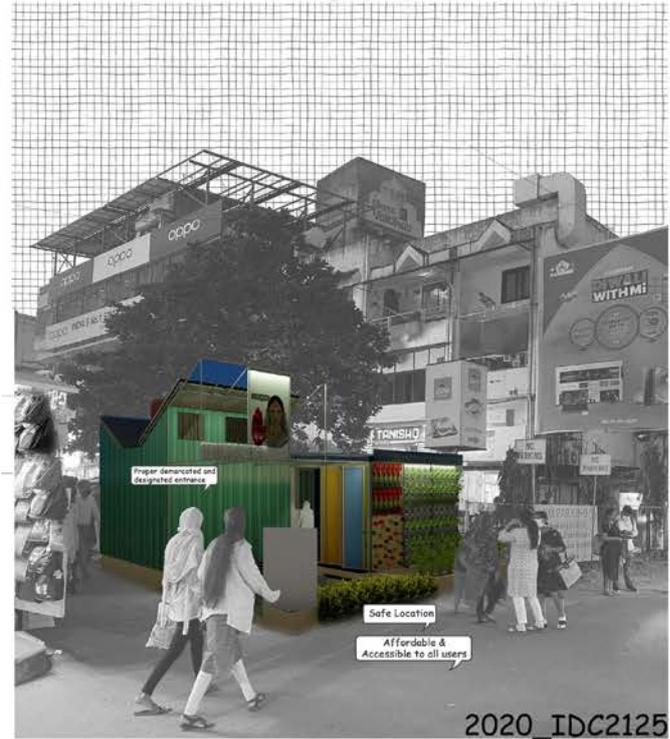
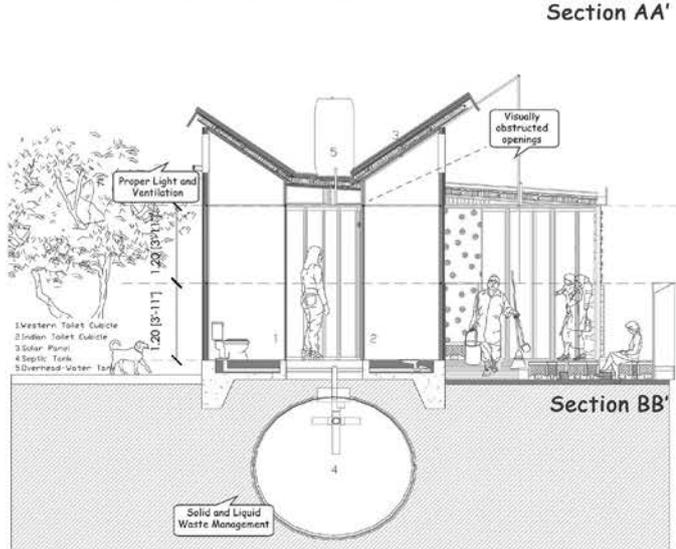
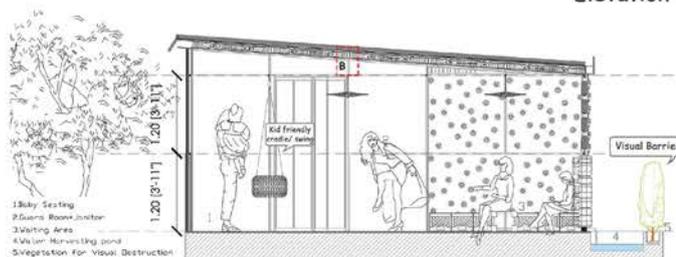
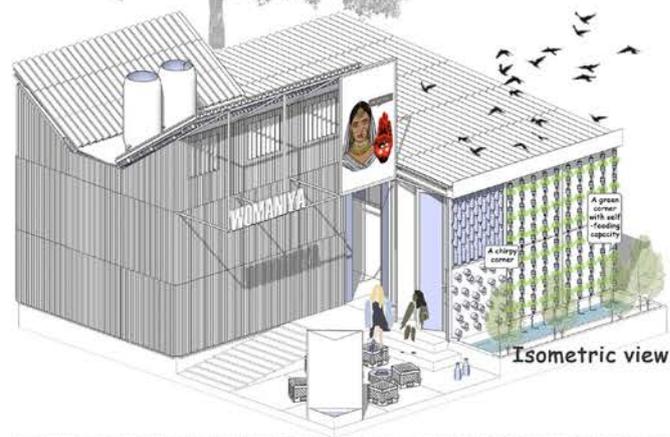
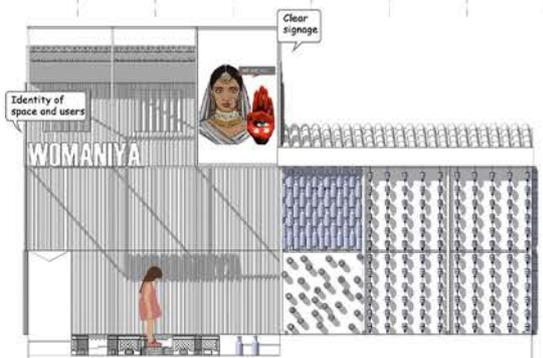


**Material for site?**  
The site being amidst the major market area has a huge potential to procure the raw materials for construction. It generates plastic waste, metal scrap, plastic and glass bottles and other such waste in a huge amount!

**But are these materials suitable for a typology like toilet?**  
After processing these materials, they endure the properties that suits the most for the typologies like toilets, outdoor cabinets, public shades, etc. Thus, sustainable & functional in a wholistic way.

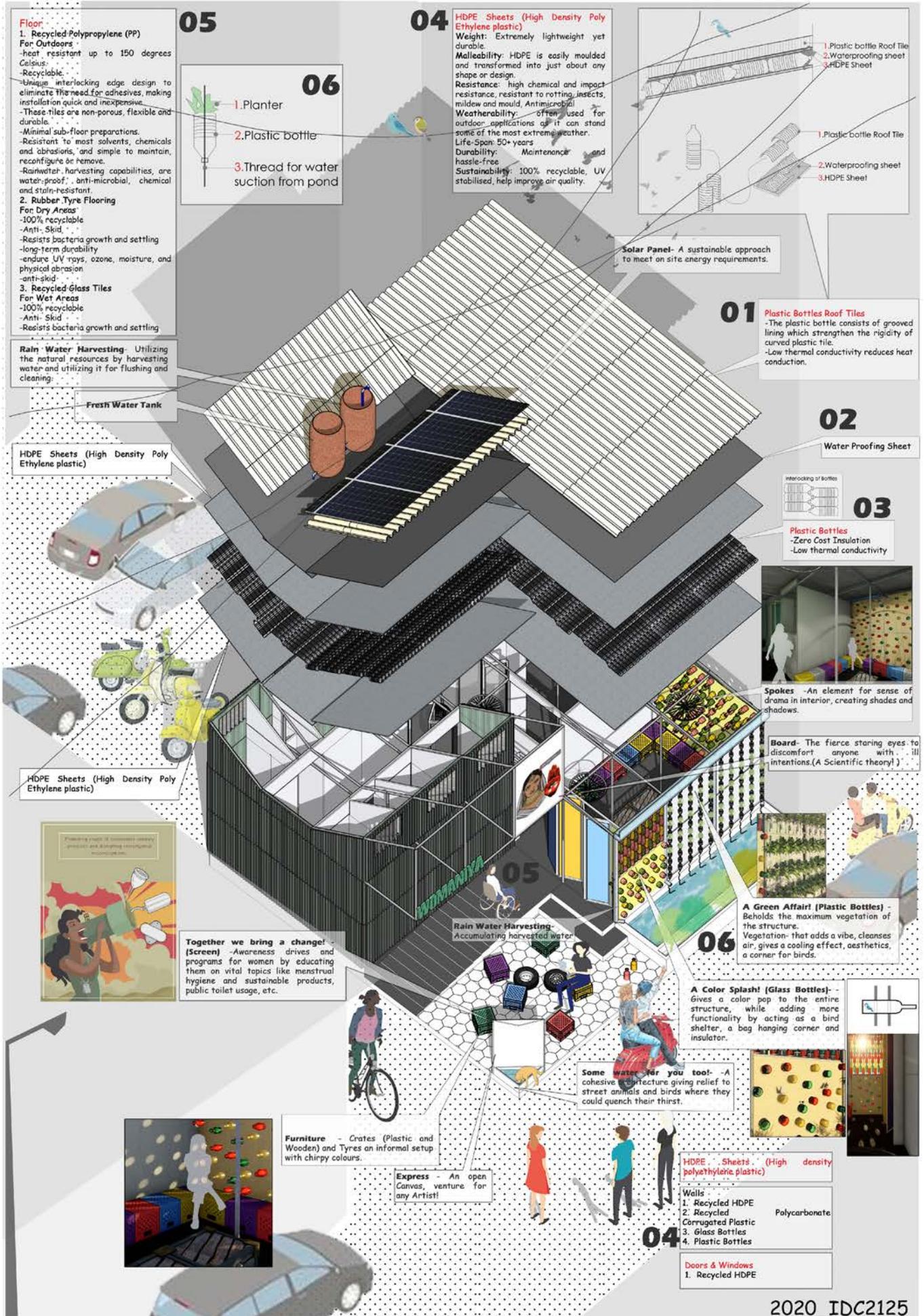
**Properties:** Anti-skid, anti-bacterial, durable, UV stabilized, Recyclable.  
**Bonus!** They also respond perfectly to the climatic conditions prevailing.

Plan



**2nd WINNING ENTRY**

Aditi S Itankar, Pranav P Kakade  
IDEAS, Nagpur ; INDIA



**Floor**  
**1. Recycled Polypropylene (PP)**  
 For Outdoors  
 -heat resistant up to 150 degrees Celsius  
 -Recyclable  
 -Unique interlocking edge design to eliminate the need for adhesives, making installation quick and inexpensive  
 -These tiles are non-porous, flexible and durable  
 -Minimal sub-floor preparations  
 -Resistant to most solvents, chemicals and abrasions, and simple to maintain, reconfigure or remove  
 -Rainwater harvesting capabilities, are water-proof, anti-microbial, chemical and stain-resistant  
**2. Rubber Tyre Flooring**  
 For Dry Areas  
 -100% recyclable  
 -Anti- Skid  
 -Resists bacteria growth and settling  
 -long-term durability  
 -endure UV rays, ozone, moisture, and physical abrasion  
 -anti-skid  
**3. Recycled Glass Tiles**  
 For Wet Areas  
 -100% recyclable  
 -Anti- Skid  
 -Resists bacteria growth and settling

**05**  
**06**  
 1. Planter  
 2. Plastic bottle  
 3. Thread for water suction from pond

**04**  
**HDPE Sheets (High Density Poly Ethylene plastic)**  
 Weight: Extremely lightweight yet durable.  
 Malleability: HDPE is easily moulded and transformed into just about any shape or design.  
 Resistance: high chemical and impact resistance, resistant to rotting insects, mildew and mould, Antimicrobial  
 Weatherability: often used for outdoor applications as it can stand some of the most extreme weather.  
 Life-Span: 50+ years  
 Durability: Maintenance and hassle-free  
 Sustainability: 100% recyclable, UV stabilised, help improve air quality.

**01**  
**Plastic Bottles Roof Tiles**  
 -The plastic bottle consists of grooved lining which strengthens the rigidity of curved plastic tile.  
 -Low thermal conductivity reduces heat conduction.

**Solar Panel**- A sustainable approach to meet on site energy requirements.

**02**  
**Water Proofing Sheet**

**03**  
**Plastic Bottles**  
 -Zero Cost Insulation  
 -Low thermal conductivity

**Spokes** -An element for sense of drama in interior, creating shades and shadows.

**Board**- The fierce staring eyes to discomfort anyone with ill intentions.(A Scientific theory!)

**06**  
**A Green Affair! (Plastic Bottles)** - Beholds the maximum vegetation of the structure. Vegetation that adds a vibe, cleanses air, gives a cooling effect, aesthetics, a corner for birds.

**06**  
**A Color Splash! (Glass Bottles)** - Gives a color pop to the entire structure, while adding more functionality by acting as a bird shelter, a bag hanging corner and insulator.

**Some water for you too!** -A cohesive structure giving relief to street animals and birds where they could quench their thirst.

**Furniture** - Crates (Plastic and Wooden) and Tyres in an informal setup with chirpy colours.

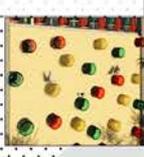
**Express** - An open Canvas, venture for any Artist!

**04**  
**HDPE Sheets (High density polyethylene plastic)**  
**Walls**  
 1. Recycled HDPE  
 2. Recycled Corrugated Plastic  
 3. Glass Bottles  
 4. Plastic Bottles  
**Polycarbonate**

**Doors & Windows**  
 1. Recycled HDPE



**Together we bring a change!** (Screen) -Awareness drives and programs for women by educating them on vital topics like menstrual hygiene and sustainable products, public toilet usage, etc.



# Up-Life Scenario

Muara Angke is a slum village located in North Jakarta. The majority of men in Muara Angke mostly work as fishermen while the women act as shell peelers. The shells that are peeling are left on the ground so they rot and pollute the soil, water and air.

Muara Angke is included in the government's reclamation project, to develop the area into apartment blocks. The government sees that local people live in slum areas and it is not feasible so that residents must be moved to flat-houses. The community does not want to be reclaimed because flat-houses is too far from the sea while the majority of the people are fishermen and they cannot afford to live without the sea. Unlike the reclamation process has found no bright spots.

The Uplife Scenario Project aims to have Muara Angke residence by improving the quality of life of the community. If the people of Muara Angke can improve the quality of life, so the reclamation can be prevented. Improving the quality of life of the poor in coastal areas start from economic improvements because people need to fulfill their most basic needs. Many poor people, even they cannot afford to eat, let alone care for their environment around them.



2020\_IDC2164



### Issue

**Slum Area**  
- Bad Sanitation  
- Semi permanent residence with poor health quality  
- overcrowded population

**Polluted Water**  
difficult access on clean water because the water is polluted by shellfish waste and plastic waste.

**Shellfish Waste**  
People throw shells carelessly and eventually pollute the soil and water

### Solution

- Shellfish and plastic production Effect:**
  - improve the economy of citizens
  - reduce shellfish waste and plastic
- PUBLIC SANITATION effect:**
  - awareness to save water
  - improving the health of citizens
- PROPER HOUSING Effect:**
  - population growth increases as quality of life improves
  - Issues: lack of land due to overcrowded population
- Vertical Village Effect:**
  - facilitates residents to live with vertical occupancy

**Residential Waste Urgency:**  
- Solid Waste : 5.500 kg/day  
- Liquid Waste : 650.400 Liter/day  
- Waste Percentage : 60.17%

### Scenario

3rd residence development

2nd better sanitation & public area

1st co-creating society

"My name is Fatiz. I live in Muara Angke, a very crowded district with poor sanitation."

"My father is the head of the fisherman. At night I used to go with my father to go sailing to catch shellfish and come back during the day. Then my mother peeled the shells and brought them to the distributor agent. The shells are dumped into our yards without being recycled and then causes a bad smell which also pollutes our water and soil."

SHEET 01

# Omah Kerang

material factory from shell and plastic.

"I'm so busy these days"

"I want to help my mother"

"I'll help mom"

"due to reclamation issue, my fathers and residents then wanted to prove that we could survive by our self so that our lands was not taken by the government. My father then invited the residents to build a Shellfish processing center called "Omah Kerang" to improve the local economy from processed shellfish and reduce shellfish waste"

"We started learning how to process shells into ready-to-use building materials such as bricks, tiles and ceramic at this facility. Initially some residents were reluctant to join, but after seeing for themselves that Omah Kerang was able to add economic value to the residents, they finally joined. When I was 15 years old, I am no longer joined my father in catching shellfish, I helped my mother more at Omah Kerang"

### Production Phase

- Peeling Station**  
This place consists of 2 floors, located in a place to peel shells. The shells are then immediately shown down and taken to the crushing station.
- Crushing Station**  
This place consists of 2 floors, located in a place to crush shells and plastic into powder. The powder then collected and being to oven to make building material
- Oven**  
There are 4 mix bowl on the oven, the shellfish powder and plastic flakes mixed with water to make batter then the batter will be taken to the drying point
- Dryer**  
The dryer use natural sunlight to dry the batter. There are bricks and ceramic & roof cant. The batter will pour inside the molding and then dry naturally under the sun. This shellfish construction material then can be used to sell to increase local community economy or even saved to increase local community housing quality.

**Zero Waste Structure**  
the structure use waste scaffolding from reclamation project

**Zero Waste Material**  
fishermen use as railing to keep people safe

"we need clean sanitation"

"When I was 20 years old, the conditions has changed a lot. The community is now able to eat properly, the environment is also cleaner because shellfish waste has been drastically reduced. When economic problems improve, residents begin to think about living healthier and cleaner lives. The problem is that our area is very difficult to get clean water, we even usually use sea water for bathing and chapters."

**Plan**  
Peeling Unit 2nd Floor Scale 1:50  
Crushing 2nd Floor Scale 1:50  
Peeling Unit 1st Floor Scale 1:50  
Crushing 1st Floor Scale 1:50

**Section**  
Galvalum  
Scaffolding  
Fisher Net  
Scaffolding

2020\_IDC2164

SHEET 02

## 3rd WINNING ENTRY

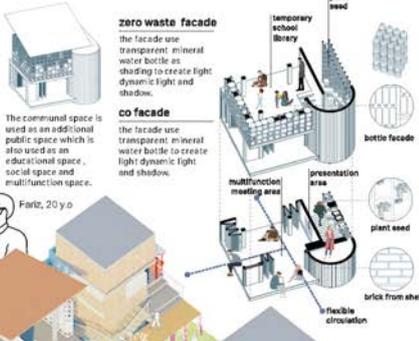
Melisa Akma Sari, Muhammad Ihsan Hernanta, Chairunnisa  
Universitas Islam Indonesia ; INDONESIA

2020\_IDC2164

# sanitation point

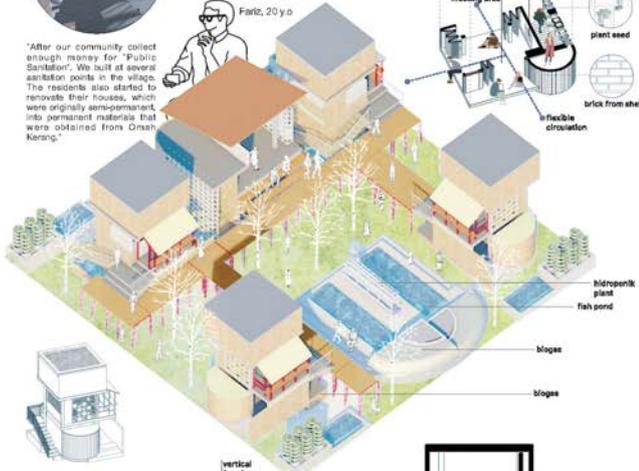


"After our community collect enough money for 'Public Sanitation', we built at several sanitation points in the village. The residents also started to renovate their houses, which were originally semi-permanent, into permanent materials that were obtained from Omah Kerang."

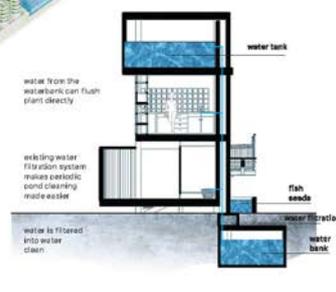
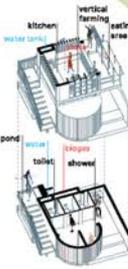


The communal space is used as an additional public space which is also used as an educational space, social space and multifunction space.

Fairiz, 20 y.o



sanitation points are used as public toilets, public kitchen, and water treatment for the residents' daily water needs. this area also used as public garden for society and food production area.



# Vertical houses

In reviving the village that was 'dead' drowned by the rubbish of its own community. This typology responds to a way of life that requires them to start small businesses to support their economy. These small businesses are usually referred to as 'warung' (kiosks) stalls.

Based on the development of the narrative and the growing activity of this small area, the typological patterns of the houses offered are quite diverse and are distinguished by three main basic functions, namely ordinary houses, houses and stalls, and houses for handicraft activities (craftmanship).

This house typology pattern allows flexibility for the community to choose what kind of house to live in.



- Ordinary House**
  - 01. Terrace
  - 02. Kitchen & Public Spot
  - 03. Balcony
  - 04. Room
  - 05. Roo
- Weekend House**
  - 01. Workshop
  - 02. Living Room
  - 03. Family Room
  - 04. Room
- Mura Craftman's House**
  - 01. Queen's Corner
  - 02. Lounge Space
  - 03. Mini Showroom
  - 04. Room
  - 05. Toilet
  - 06. Kitchen Area
  - 07. Green Spot
  - 08. Craft's Garage

# house typology



"When I am 30, our village is very prosperous. Poverty and health problems have been resolved. Currently I will soon get married and build a new house. I still want to live in the village that my father saved and become his successor. With limited land, I invite the residents to develop this village into a lofty village so that expansion can continue."

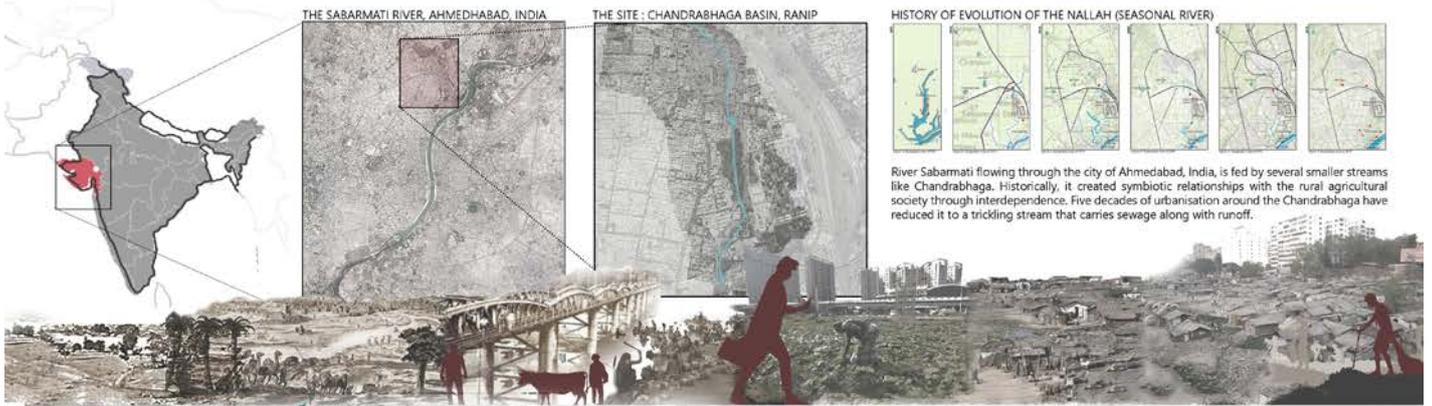
the end.

# 3rd WINNING ENTRY

Melisa Akma Sari, Muhammad Ihsan Hernanta, Chairunnisa Universitas Islam Indonesia ; INDONESIA

# The Chandrabhaga Nallah

## The cradle of River Sabarmati's solid waste problems



THE SABARMATI RIVER, AHMEDHABAD, INDIA

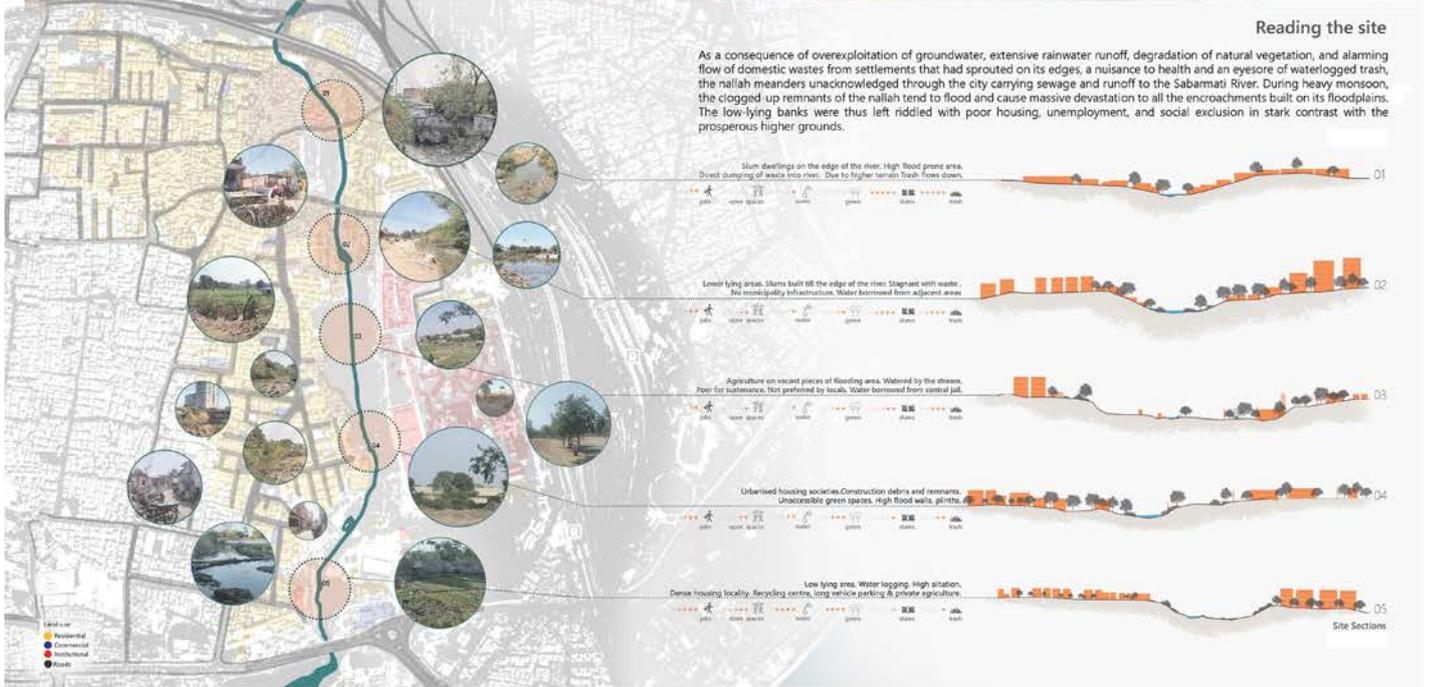
THE SITE : CHANDRABHAGA BASIN, RANIP

HISTORY OF EVOLUTION OF THE NALLAH (SEASONAL RIVER)

River Sabarmati flowing through the city of Ahmedabad, India, is fed by several smaller streams like Chandrabhaga. Historically, it created symbiotic relationships with the rural agricultural society through interdependence. Five decades of urbanisation around the Chandrabhaga have reduced it to a trickling stream that carries sewage along with runoff.

### Reading the site

As a consequence of overexploitation of groundwater, extensive rainwater runoff, degradation of natural vegetation, and alarming flow of domestic wastes from settlements that had sprouted on its edges, a nuisance to health and an eyesore of waterlogged trash, the nallah meanders unacknowledged through the city carrying sewage and runoff to the Sabarmati River. During heavy monsoon, the clogged up remnants of the nallah tend to flood and cause massive devastation to all the encroachments built on its floodplains. The low-lying banks were thus left riddled with poor housing, unemployment, and social exclusion in stark contrast with the prosperous higher grounds.



### What is a Nallah?

Traditionally nallahs served versatile functions. Depending on the time of year, they carried overflows of monsoon rains or were cultivated as fields of holdings. Thus the Chandrabhaga nallah was once the lowest portions of an agricultural surface and local response to the wide fluctuation between dry and wet seasons in India. Apart from providing irrigation for acres of fields, the nallah had once been the source of drinking water and other daily activities for its residents before the 1900s.

### Chandrabhaga nallah vs. the Current Sewage Treatment System

A topographical gradient caused by leveling of land to accommodate the construction of Sabarmati Central Jail and the Concor terminal created a divide between city and stream. Groundwater as well as surface water has become almost non-existent and water dependency for daily needs now shifted to borrowed water due to frequent water scarcity. Only 60% of the area is connected to a proper sewage line since most of them are too poor to afford to pay for it. Garbage collection is not regular and the residents have opted for the easy way out by throwing their garbage into the nallah. They do not have the know-how to segregate or compost their waste, which is 90% biodegradable. The problem is not merely a lack of infrastructure, but also about changing people's behavior. Garbage that floats downstream along the course of the river including their own household wastes overwhelms the communities in the low lying areas along the stream edges, and are blighted by unemployment, poor housing, socially excluded from urbanised higher grounds. The areas adjacent to the stream are characterized by a combination of challenges like lack of access to basic sanitation and clean water, inadequate public green space, annual flooding, unacknowledged. And unsafe environment cobbled together with non-durable materials.



### Choice of site

Garbage that floats downstream along the course of the river including their own household wastes overwhelms the communities in the low lying areas along the stream edges, and are blighted by unemployment, poor housing, socially excluded from urbanised higher grounds. The areas adjacent to the stream are characterized by a combination of challenges like lack of access to basic sanitation and clean water, inadequate public green space, annual flooding, unacknowledged. And unsafe environment cobbled together with non-durable materials.

( Only a stretch of 1 kilometer long along the Sabarmati Central Jail, the Chandrabhaga bridge and the RTO circle is taken up to be analyzed and revived for the purpose of demonstration of this proposal.)

### LONGITUDINAL SECTION OF THROUGH THE SELECTED SITE AREA OF CHANDRABHAGA NALLAH



Chandrabhaga stream was once the lowest portions of an agricultural surface, allowing water to gather and flow. Besides groundwater, surface water is also almost non-existent now. Water dependency now shifted to borrowed water due to frequent water scarcity and flooding.

### I. READING THE SITE

Waste accumulation | Flooding | Unemployment | Poor housing | Social Exclusion

### Out of troubled waters

2020\_IDC2086

# HONOURABLE MENTION

Twinkle Elizabeth John  
CEPT, Ahmedabad ; INDIA

# Imagining interactions / operations

## Developing an operative framework

### Waste as a resource

*"Pollution is nothing but resources we're not harvesting. We allow them to disperse because we've been ignorant of their value." - Buckminster Fuller*

For developing rapidly urbanizing suburbs like Ranip, waste can serve as wealth, with economic potential and viability, both to generate livelihoods and develop the quality of life, for the unskilled urban poor. In a landscape where people, traditional livelihoods and natural systems are being rapidly displaced without proper city planning, we reimagine the nexus of energy, water, and waste management to develop a new pattern of non-definitive, regenerative tactical urban inserts centered on rebuilding natural systems and empowering those dependant on it, while continuing to adapt to the dynamism of the river. Regeneration helps develop a restorative relationship in the hinterlands, its environmental structure, its natural systems, and the resources they depend on. More importantly, it restores value to the urban community and economy of those areas, brings back its connection to the city.

### Design strategy

Holding and Flows



The overall design strategy is to restore the Chandrabhaga nallah into a system of holdings and flows, with platforms and folds in the landscape that allows bio remedial process of water before it reaches the Sabarmati River and benefits the communities it flows through, creating a new system of water dependency on the Urban River.

### Design approach

'Out of troubled waters' aims at

- Empowering and fashioning self-reliant communities
- Indigenously produced, off-the-grid, sustainable, and resilient systems
- Low-cost and low-maintenance operations with simplified rituals.



### Modifying Rituals: Developing a program

The calendar displays seasonal activities and temporal adaptations that are proposed to be phased over four stages depending on the river temperament and climatic conditions to create employment opportunities, recreational spaces, and absorbent landscapes to help overcome decades of environmental degradation.

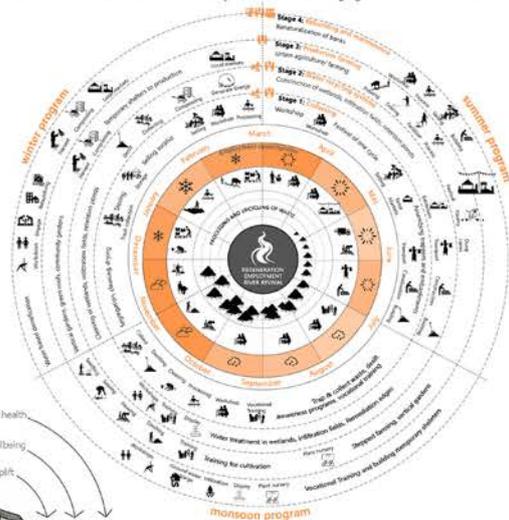
It works towards altering and repurposing its structure, to incorporate operational rituals that privilege both, the setting and its settlement.

Firstly, locals should be counseled about the opportunities and benefits of waste collection and incentivized to be self-motivated to collect trash along the nallah and reduce the amount of waste generated at the source level.

Second, once the trash is collected, locals can start to transform the land and the waste collected for productive purposes directed at flood control, sponge infrastructure, raising of groundwater levels, rebuilding of living spaces. Public land on the edges will be used for water treatment, water retention, and percolation.

In the third stage, the area will become a productive landscape for agricultural produce and the creation of upcycled products. Platforms will start to be introduced across or near the nallah to provide working spaces for agro-processing and crafts. A combination of waste recycling with space independent intensive agriculture in the form of mobile vertical gardens will ensure access to cheaply self-cultivated food.

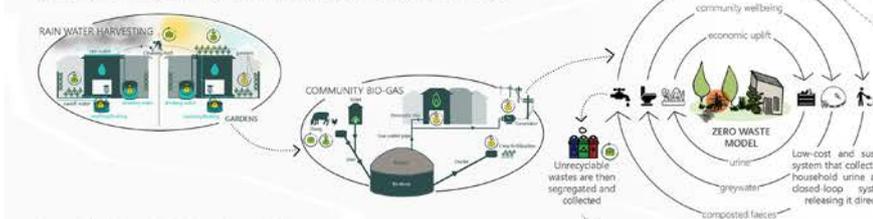
Lastly, the focus is on providing services on these platforms: maintaining public spaces, planting trees or any other services to improve their communities and simultaneously maintain and recharge groundwater levels and the river.



### Stage 1

#### Collecting Waste

Household level - Initiatives to be autonomous and reduce the amount of waste generated at source level.



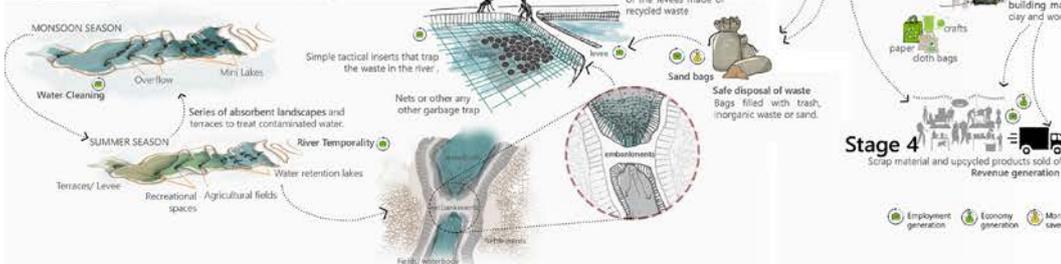
Community level - Removal of existing solid wastes in the stream.



### Stage 2

#### Waste Recycling Systems

Community level - Initiatives to be autonomous and reduce waste generated at source level.



The project addresses lost dependencies on urban rivers as sources of water, energy and occupation. The overwhelming conditions of waste accumulation and dense informal settlements along the floodplains can be seen as opportunities. The rivers are reimagined as systems that could provide dignified occupations and habitable spaces for the marginalised communities, progressing towards becoming indispensable actors of Ahmedabad's society.

--- ReGenerative Communities ---

### Regenerative communities

**Employment generation.** Incentivized collection and regeneration of wastes from the river and from households could serve as a source of revenue generation. Villagers become self-sufficient in their energy needs and not depend on the government as much as possible by practicing RWH and composting techniques for at least 4 to 6 months of the year.

On a small scale, unskilled poor will also acquire extra employment opportunities, lifelong intensive agricultural skills, waste recycling skills, increased food and water security, increased savings from costs of food, ability to raise incomes, clean and healthy environment, reduced pollution, etc.

**Quality of Living.** An ecological understanding of rivers and their temperaments will help create jobs. Healthy floodplains support activities like farming and sustain entire communities.

The repair and maintenance of the project involve low expenditure conservation works such as deepening and widening of streams, construction of levees and berms using sandbags and other locally sourced materials and digging of farm ponds.

This can not only create seasonal jobs for thousands of people but also create an environment that generates long and short term employment opportunities and where livelihoods can flourish.

### II. PROGRAMMING THE SITE

River revival | Self sustaining communities | Shifting edges | Tactical insert | Waste regeneration

### Out of troubled waters

2020\_IDC2086

# HONOURABLE MENTION

Twinkle Elizabeth John  
53CEPT, Ahmedabad ; INDIA

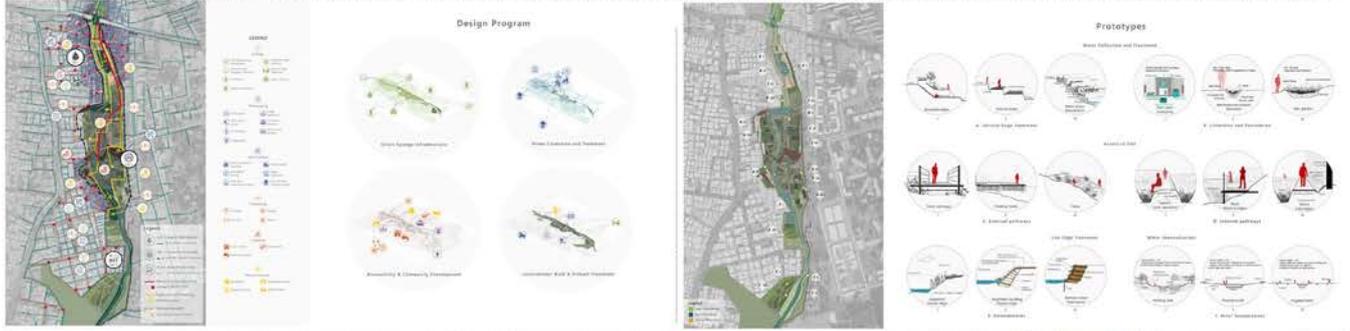
# Reimagining Water

## Operative rituals and temporal adaptations

### Crafting a place:

Translating ritual to space

To alleviate the living conditions of the marginalized dwellers adjacent to the Chandrabhaga stream, various programs and prototypical proposals using the indigenous, low-cost and low-maintenance operations with sustainable strategies are proposed.



## ZONE 1

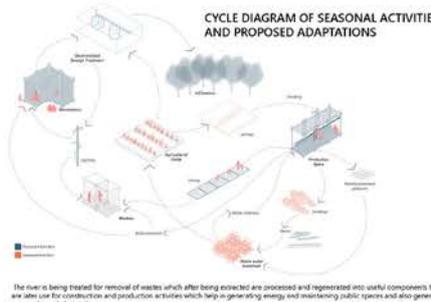
### Nature revival zone

Unplanned urbanization along the river edges has led to severe pollution problems in this zone. **Major collection, cleaning, processing and revival measures** have to be undertaken in this zone.

**Zero waste communities**  
Reduce the amount of waste at source.  
Rainwater collection + Composting

**Recycle and Reuse: Green sanitation infrastructure**  
Reuse treated water at households for flushing/washing or for landscapes

**Sponge Infrastructure**  
Replenish the depleting groundwater table through penetrable greensurfaces.



### Seasonal visualization of proposed rituals and operations

After each stage of restoration, depending on the time of year, all the proposed functions and activities in and around the site will build a new lifestyle, which opens a window to the people in the urbanized higher grounds and attract visitors from the city. Three major components of this new lifestyle can be highlighted.



The community based approaches ensure the rebuilding of healthy living spaces and lifestyles for the marginalized and other social classes as well. Production-based lifestyle helps catalyze 'mid-grounds' of economic and social opportunities like seasonal festivals and local stalls to sell agro-products and crafts. Finally, ecology-based interventions which will secure water and natural resources, replenish groundwater levels, and prevent flooding. This new, flexible lifestyle offers its many stakeholders to have their own alternative to have a better life.



### Phasing and Development Novel Ecology

Because of its non-definitive and transient nature, this prototype is pretty feasible and will become a novel ecology that learns and adapts to the living, natural, and cultural landscape it sits in. Together with the integration of ecology, society and landscape planning, it eschews the image of the river and the lower grounds as unacknowledged parasitic open sewers of the city and moves towards a model for building resilient regenerative communities.



The project envisions revival and transformation of the Chandrabhaga River, in a way that attunes its temperament to the needs of its hinterlands. Through a series of regenerative tactical modifications, the project invigorates the floodplain and the urban pool it holds. It works towards altering and repurposing its structure, to incorporate operational rituals that privilege both, the setting and its settlement.  
--- Integration of society ---

### III. CRAFTING THE SITE

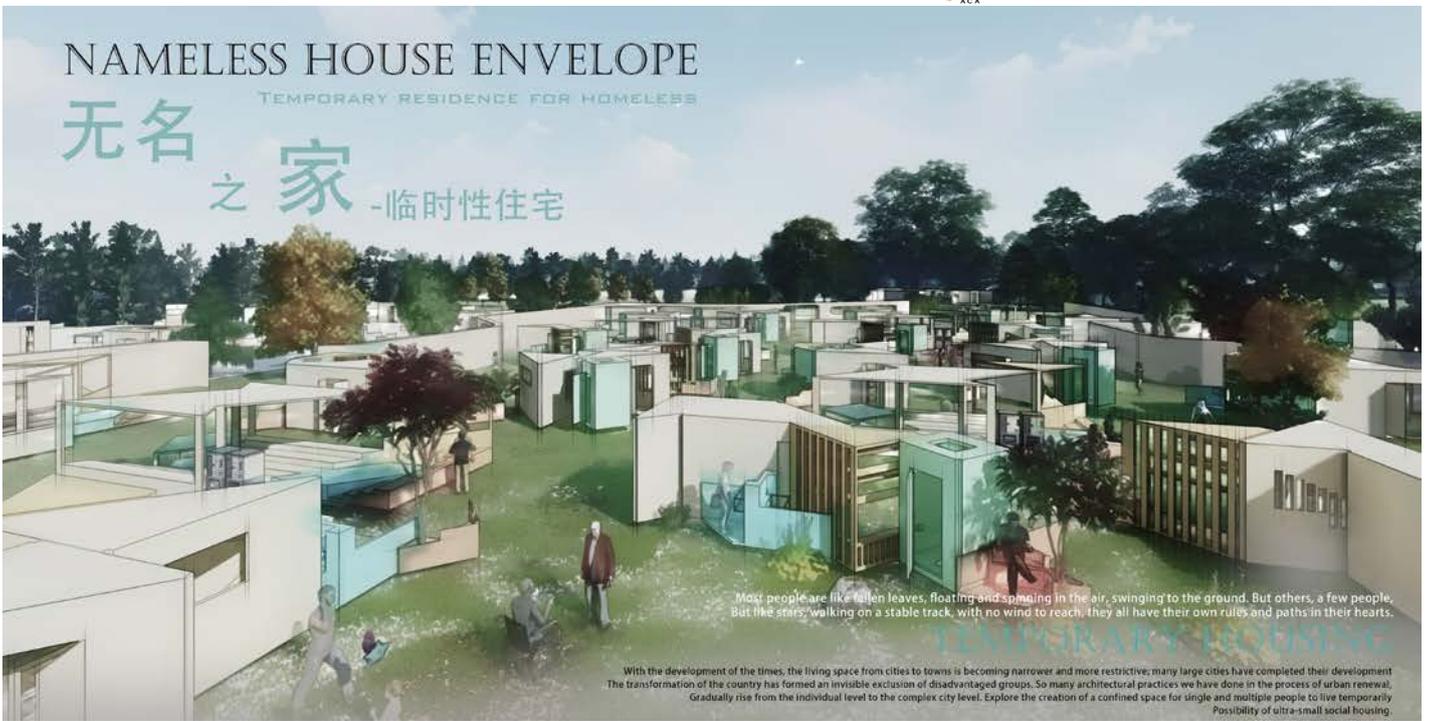
Green Sponge and Blue Infrastructure | Temporal Adaptations | Waste regeneration | Quality of living | Integration of society

### Out of troubled waters

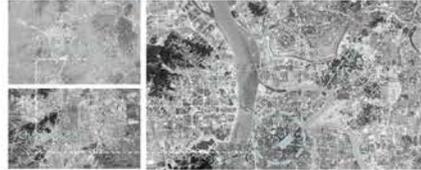
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# HONOURABLE MENTION

Twinkle Elizabeth John  
CEPT, Ahmedabad ; INDIA



**[District Analysis]**



**[Situation Analysis]**

The documentary "Sleep", by connecting a group of living Streets near Changsha Railway Station and suburban park Wanderers, beggars, etc. They have different reasons for gathering here. Not the same, what they do is the same as the documentary. Like a group of people, begging and wandering. For people meeting and leaving the station, this is a Tale. For the tramp, at the train station there is a seat on the open space next to it. The added items piled up next to the summer seat, here it becomes. These home Working people near the train station. The staff seems to have acquired to their residence permit. This also makes the position of the Beggars more powerful.



**[Problem resolution]**

The tramp on the edge is like an abandoned island. In the past few years, through reports, reports to the whole city to donate. We want to give clothes and warmth together, but the problem was not solved and the crew of the problem was unclear. Once, Wang Feryang sang the tears of many people. If one day, I am old and hairless, the world is impression, and all beings may be in a difficult situation. Those who doubt it may also become wanderers if you apply. Preservation. One day, if it is or who is wandering. What should we do. What to do.

How to solve the housing, survival and heart of the homeless. Management and other aspects, how to provide timely assistance and assistance so that the city is the city's public service a virtuous circle?

**[Crowd analysis]**

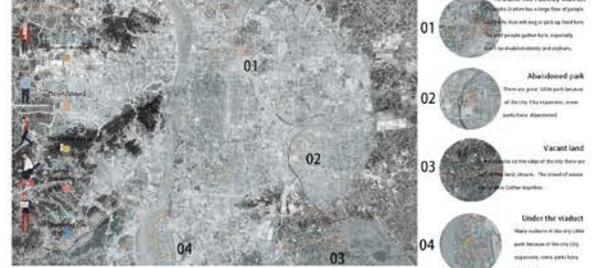


How to activate the shared community?

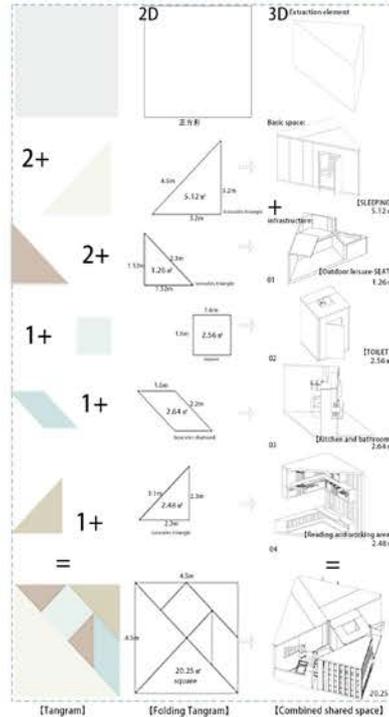


[Public service]  
 [Psychological counseling]  
 [Skill Training]

**[Population density analysis]**

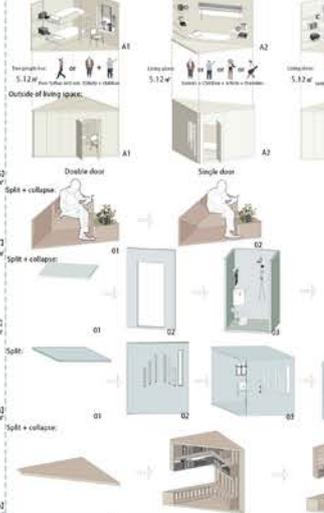


**[Morphological analysis]**



**[Combination deformation]**

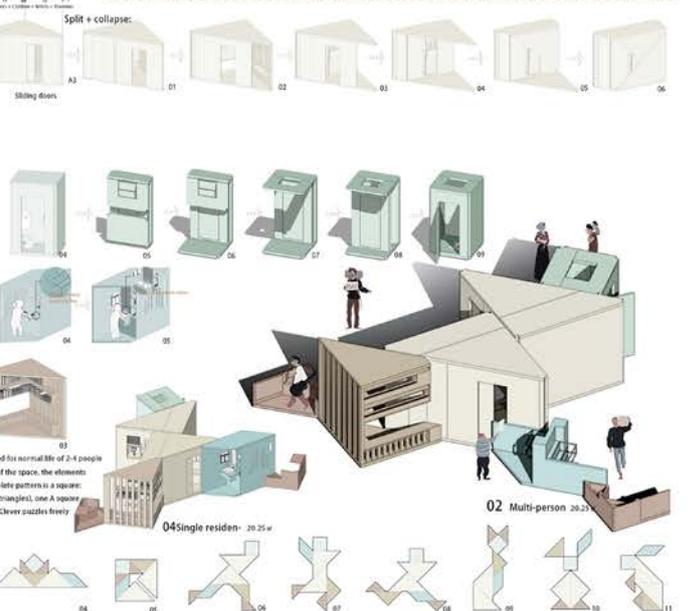
**[Functional composition]**



**[Design Strategy]**

Create a collection of homeless people with flexible small spaces. So we have developed a kind of shared housing idea, those trains in the city Stations, vacant plots, abandoned parks, under the viaducts, using the way of mobile houses, integrated homes with living functions in the folded and assembled houses. It allows people to live independently or together. We hope that in this way, among the disadvantaged groups and the fragmented living space Build a shared community.

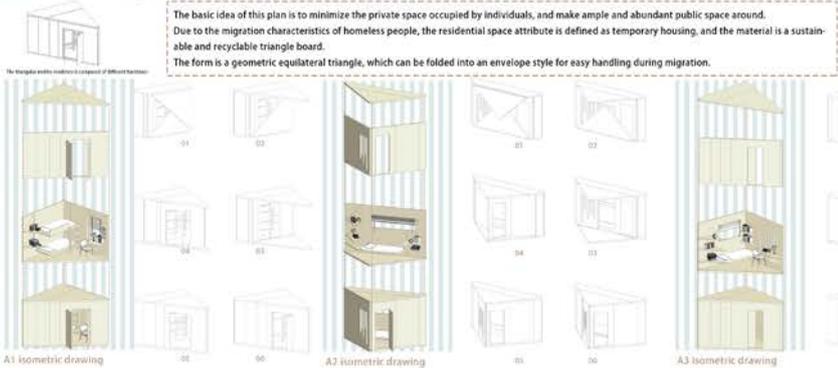
**[Combination deformation]**



**HONOURABLE MENTION**

Yali Tan, Team -Annan Ye, Tianqi Wang  
 Beijing Institute of Fashion Technology, CHINA

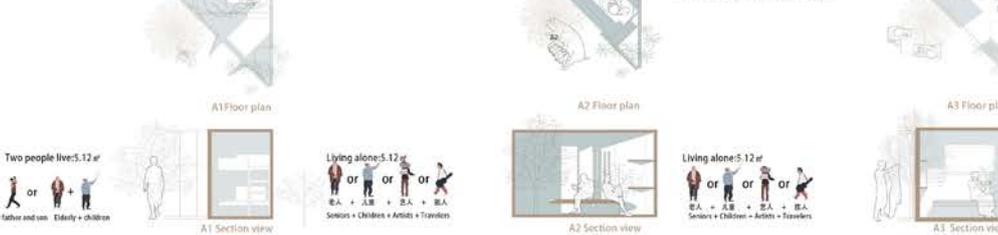
[Functional composition of living space and folding method]



A1 Upper and lower bed + work table + folding board (for two persons) A2 Single bed + work table + folding board (for one person) A3 Single bed + work table + folding board (for one person)

scale: 3.2\*3.2\*4.5\*H2.3

scale: 3.2\*3.2\*4.5\*H2.3



[Behavior occurs]



Residency exchange area

10 bottles or = 1 night residency

Exchange the right of residency by picking up discarded bottles and putting them in the blue smart storage box.



Outdoor leisure seating area

Turning on the small table provides a comfortable seat for the rest. Public welfare organizations and social psychological counseling agencies provide psychological counseling to traffickers with mental illness, enter society and normal life as soon as possible, and end the vagrant life.



Residential area (two persons OR one person living area)

The bedroom serves as the basic living space to ensure basic sleep.



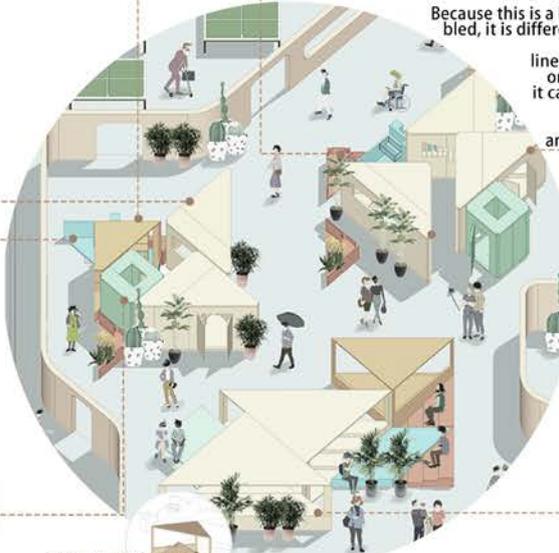
Kitchen area

Homeless people often choose fast food or pick up raw and cold objects in the trash can to solve. Decide to solve three meals, a simple kitchen, heating and simple food processing, let him. We have a bit of hot tea to eat.



Restroom

There are shower facilities in the bathroom and hot water is supplied regularly.

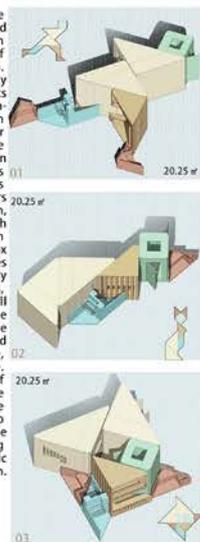


[Shared life community]

For example: People who like books can choose houses with large bookshelves to create their favorite reading space. Put your favorite books on the shelves, sit on the bed or read them underground. By observing the books that users like, people who have the same preferences will naturally communicate and gather together. If you move the box, gather several homeless people with the same hobbies to discuss the future, communicate and help each other. The surrounding space becomes an open discussion space and simple meeting room, a semi-public and ambiguous shared space.

Because this is a living space that can be easily assembled, it is different from a traditional home. It can be manufactured on the assembly line of a nearby furniture factory without on-site construction. After completion, it can be transported to the required site to complete the site transformation. The plan will transform these large amounts of idle land to create a shared community and give new life.

In the city of the individual age wandering man, conception of life A new type of sharing society Area. Those empty in the city Buildings and streets In the crevice, abandoned park, Urban open space, under the viaduct Private space opens, a Human space design becomes one. A small size less than 5 square meters Moving box, kitchen, Toilet, shower, wash Cloakroom-life function security Public outside the box In space, between boxes Can be placed freely Tables, chairs, sofas, avatars Used a small square. Box home Inside the tool is a private space, It is both private and Have a common nature, expand Community space. This side The basic idea of the case is to put a Private space occupied by people shrinks To the smallest, to make room for the surrounding Wide and rich public space between.



[Streamline analysis diagram]



[Function zoning map]



[General plan]



- 01 Central Exchange Place
- 02 Multi-person living area
- 03 Multi-person living area
- 04 Single living area
- 05 Single living area
- 06 Recreation and fitness facilities

HONOURABLE MENTION

Yali Tan, Team -Annan Ye, Tianqi Wang  
Beijing Institute of Fashion Technology , CHINA

2021



# ACA's **INTERNATIONAL** **DESIGN COMPETITION**

**2021** | MONADIC ARCHITECTURE

# MONADIC ARCHITECTURE

## POSTER & BRIEF

**MONADIC ARCHITECTURE**

"Repetition is the Mother of learning, the father of Action, which makes it the architect of accomplishment"  
- Zig Ziglar

**Monad, noun**  
a single unit, the number one. When the term "Monadic" is manifested in architecture, it can translate to various interpretations.

Is it the scalability of the building or a repetition of a unit to form a larger whole?  
Is it a subdivision into basic components, originally juxtaposed to attain entirety? Possibly all of the above. Modularity in design refers to an approach that multiplies a unit to attain a larger entity. A repetition of a standard radical of space and form in configurations that can result in a plethora of design solutions, without using a large variety of prototypes.

This mitosis of modules in architecture has been its basis since it began. The ancient Greeks adopted the concept in their proportioning systems of classical orders. The diameter of the column was used to derive the proportions of the building and define its structural system. Vitruvius, accentuated this principle with his alternating triglyphs and metopes in Roman classical architecture as well. In ancient China, The Yingzao Fashi technical treatise on Architecture and craftsmanship by Li Jie describes a unified set of standard modules for various aspects of construction while the Japanese, derived building dimensions based on the number of Tatami mats. Ancient Indian architecture too derived its construction ethos from modules. Their configurations gave way to majestic temples, forts, palaces and cities. The basic grid as a module continued to provide a practical tool, flexible in its application over a number of centuries. It is evidenced in the urban planning of the Indus Valley Civilization, Buddhist stupas and the majestic ancient temples across the sub-continent. These grids not only provided the aesthetics but also determined the thickness of the load bearing capacity of the structure. The size of the entrance hall, Mandapa and the Sanctum were also derived from vedic human proportions interpreted through a cosmic Mandala.

In a relatively recent context, architecture achieved through Monads has been successfully implemented in Moshe Safdie's Habitat housing in Canada and Kohji Kurukawa's Nagasaki college tower. When imaginatively formulated, Monads, can contribute algorithms that surge from a single volume of space, scaling up to form the urban fabric of a city. As our cities continue to grow and expand rapidly, there has been an increasing demand for architects to build and design structures that provide more, interactive solutions with respect to cost and time. In this case, the concept of Monadic architecture can involve the assembling of multiple prefabricated units on site to create a working unit with more flexibility in design and standardization of repair. With the advent of 3D printing, the monads can be mass produced with a significant reduction of Manual Labour and time. Units can Display Complex Designs in Better Detail and Finishing, Low Equipment with a Range of Materials and Colours, while at the same time achieving economic proficiency.

We at ACA believe that the time has come to reintroduce Monadic architecture in the contemporary domain as an undeniable answer to meet some of the rural and urban building needs.

**The Design Challenge:**  
This year's IDC 2021 attempts to inculcate this need of the future and encourage young minds to embrace this method of design evolution. The competition entails the elaboration of a design proposal that employs the repetition of a single module to create space and form. The building typology can range from housing to schools to budget resorts and office complexes. The proposal must address a solution to a specific problem in their country of origin.

Entries will be judged based on the solution proposed and how sensitively the issue has been addressed. The complexity of the issue being resolved along with the manner in which the unit is multiplied to achieve spatial quality and economic advantage shall also be taken into consideration.

**STAGES:**  
**STAGE 1:**  
Online Registration of entries on our website - <http://adityacampus.org/idc/>  
Registration open on - 20/08/21  
**STAGE 2:**  
Last Date for online submission of entries is 30/11/21  
All Submissions shall be made in PDF or JPEG format only.  
Submissions shall be made only through the unique USER ID generated after registering on our website.  
**STAGE 3:**  
IDC - July -12/12/21 TO 17/12/21  
**STAGE 4:**  
Results shall be declared on 18/12/21

**SITE:**  
Participants shall intervene on a site in the urban/rural and geographical context of their choice.

**DESIGN INTERVENTION:**  
The proposed design intervention could be ranging from built form and landscape to urban renewal and systems. If the chosen intervention fits the scope of the brief, the participants are encouraged to think on multiple scales.

**SUBMISSION:**  
Description of your understanding and interpretation of the Brief.  
Your argument for the proposed intervention.  
The process & method of design.  
Representation of Ideas: Participants can choose the adequate drawing scale to communicate their design schema effectively.  
They can provide any number of Architectural drawings enough to describe the scheme.  
Pictures of Sealed Models, Computer generated 3D-Views, Renders, etc.  
Diagrams, hand-made sketches and other Representational material.

**FORMAT:**  
Submit (Upload) your entries using a maximum of 3 A3 sized sheets (Portrait/ Landscape). This shall NOT exceed a combined file size of 21 MB in PDF or JPEG format only, with the above submission specifications duly complied.  
A bank side certificate from your College/ University/ Institute certifying your admission (NOT exceeding a file size of 1 MB).

**CONTACT US EMAIL/WEBSITE:** In case of any queries feel free to write to us at [adityacampusidc@gmail.com](mailto:adityacampusidc@gmail.com) or visit us at <http://adityacampus.org/idc/>  
**PHONE:** (+91-9833-300-496 & +91-22-611-06135)  
**ADDRESS:** Aditya College of Architecture, 6th floor, Aditya Educational Campus, R. M. Bhattad Road, Harn Nagar, Borivali (West), Mumbai-400 092  
**SOCIAL MEDIA:** Facebook: ACA's International Design Competition  
Instagram Handle: adityacampus.idc

**IMPORTANT DATES**  
Registrations open: 20<sup>th</sup> August, 2021  
Last date of Receiving Entries : 30<sup>th</sup> November, 2021  
July - 12<sup>th</sup>-17<sup>th</sup> December, 2021  
Declaration of Results: 18<sup>th</sup> December, 2021

**TEAMS:** Participating Teams shall comprise of a maximum of 5 students and a minimum of 1 student.

**AWARDS:** B.Arch. Students Student entries at the IDC 2017-18 shall receive Certificates and a Prize amount as follows

1st Place: INR. 1,00,000/- (\$ 1550)  
2nd Place: INR. 50,000/- (\$ 716)  
3rd Place: INR. 30,000/- (\$ 430)

Winning entries will be published in ACA's COA approved publication for 2021-22. Citations/ Certificates shall be awarded to 4 Exemplary entries.

Exclusive Young Architect Category (Graduate / M. Arch. Students and Recent B.Arch. Graduates)  
Winning entries will be published in ACA's COA approved publication for 2021-22. Citations/ Certificates shall be awarded to 3 Exemplary entries.

**ACA'S IDC 2021**

**ADITYA COLLEGE OF ARCHITECTURE**  
ACA MUMBAI - INDIA  
ISO 9001-2015 CERTIFIED

**CA** Council of Architecture  
**CA** Council of Architecture  
**TRC** Technical Regulation Council  
**CAA** Council of Architectural Associations  
FOUNDED IN 1985

**Guest Of Honour**  
Dr. Vinod Patil  
Director, Board Of Examination & Evaluation, University of Mumbai

**Sachin Rastogi**  
Founder, Zero Energy Design Lab

**Shimul Javeri Kadri**  
Principal Architect, SJK Architects

**Muhammad Nur Fajri Alfata**  
Research Institute for Human Settlements  
INDONESIA

## 2021 | MONADIC ARCHITECTURE POSTER & BRIEF

### THE JURY



**Ar. Sachin Rastogi**  
Zero Energy Design Lab  
New Delhi, INDIA



**Ar. Shimul Javeri Kadri**  
SJK Architects  
Mumbai, INDIA



**Dr. Eng. Muhammad Nur Fajri Alfata**  
Research Institute for Human Settlements  
INDONESIA

## BRIEF

"Architecture is a discipline that requires a deep cultural, sociological, economical, political and ethical understanding of the world. This is what students need to learn because, when we are in a state of crisis like we are today, we have to rethink the world."

- ODILE DECQ

The first purpose of architecture is to create habitat that fulfil the needs of society or individuals for places to work and live. It is a manifestation and expression of cultural values of the society with which it interacts. Over the years Architectural Design and perception have changed dramatically, transcending through the passage of time, absorbing and reflecting the changing trends in human behaviour brought about by technological advances and modernization. The entire spectrum from space to urban planning needs to follow a direction that amalgamates tradition and technology capturing the psyche of the society.

Mainstream Urban architecture has inherently remained universal or generic enough to be easily replicated anywhere else in the world thereby losing its connect with the local context. Whereas, the 2018's Pritzker Prize winner B. V. Doshi's Aranya Township Project (1983) in Indore, Central India which was a low-income incentivised site and services vernacular housing project. It is an ideal example for understanding the concept of designing for community inclusiveness and proposing vernacular architecture as a medium while dealing with modern day complexities of high-density urbanisation.

The round building housing complex designed by Urbanus architects in Guangzhou is inspired by ancient 'Tulou' that has encouraged community living in China over centuries. The traditional Tulou dwelling is a rural Chinese housing typology originating in the 12th Century, particularly to the Hakka mountains. Following the Chinese dwelling tradition of 'closed outside, open inside', the self-contained structures formed a small walled city, each housing up to 800 people. The Fortified walls built contained the individual dwellings, enclosing a generous inner-courtyard and communal facilities. The homes themselves were small and modest but shared amenity spaces including ceremonial halls, water-wells, bathrooms and washrooms.

This Aga Khan winning project involved the design of a 220-apartment housing complex for low income families. The urban Tulou consists of an outer circular block with a rectangular box within that is connected to the outer ring by bridges and a courtyard. Both the circular and rectangular blocks contain small apartment units; the spaces in between are for circulation and community use. The lower floors contain shops and other community facilities.

How do we continue to evolve as a society without neglecting our past? What are the ways by which architecture can take on the present-day challenges posing as a global driver of change and simultaneously engaging with the local culture? Perhaps if one discovers as of 'why' inheritance matters while looking forward in time, the 'what' and 'how' of responsive design will reveal itself.

## THE DESIGN CHALLENGE

ACA's 6th International Design Competition wishes to investigate the various possible outcomes through which inheritance can perform as a catalyst while creating a design that respects both past and present. Moreover, the competition puts forth the question on how to identify our inheritance and where do we start looking for it in the ocean of tangible and intangible heritage which is futuristic yet sustainable. When it comes to engaging with contemporary architecture, how can we adopt contextual parameters of culture, socio economic values, political and ethical understanding of Inheritance.

The competition invites students of the architectural fraternity to evolve a design that successfully bridges these gaps in an urban precinct that integrates the community and encourages sustainable expression through built form. After all, as Frank Lloyd Wright, once put it, "Architecture is life, or at least it is life itself taking form and therefore it is the truest record of life as it was lived in the world yesterday, as it is lived today or ever will be lived."

# WINNING ENTRIES 2021



**GROWING IN THE STREET**

Location: Dashiwan West Pedestrian Street, Beijing, China  
 Project type: Individual work  
 IDC code: 2021\_IDC0098

Standing in the center of Beijing, Dashiwan has a history of 600 years. The city is developing, but this pedestrian street still maintains its old appearance, and many problems have been exposed, such as the old-fashioned atmosphere and the old environment. In this regard, this project will seek an organic renewal method to solve the existing problems of the entire pedestrian street and inject new vitality into it.

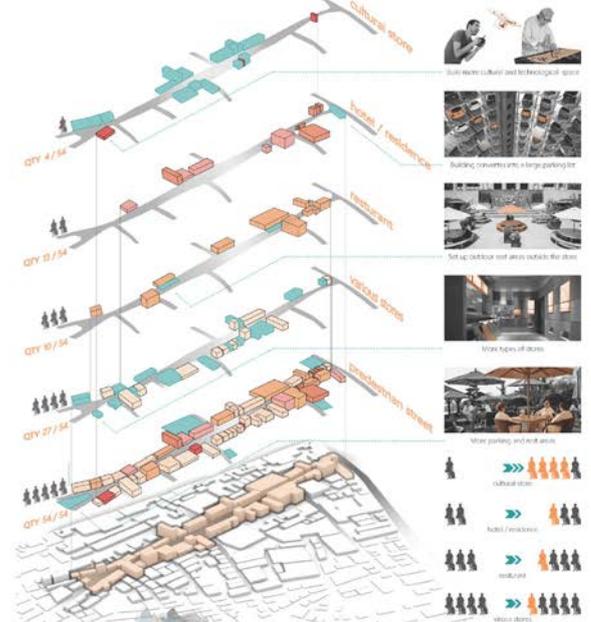
**BACKGROUND**

The "street economy" in Beijing, China is regarded as a representative case of the commercial streets in the old city, but the imperfect merchant entry mechanism has led to the ecological imbalance in the commercial area. As its representative, the status quo of Dashiwan West Street Commercial Pedestrian Street: poor living environment, serious aging, and lack of historical and cultural attributes.

**NEIGHBOURHOOD INVESTIGATION**

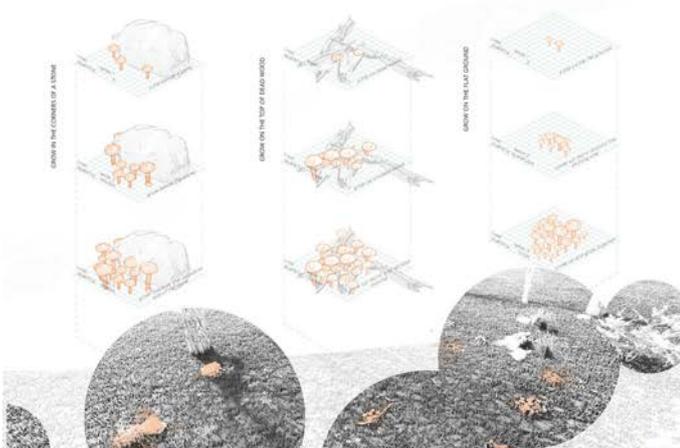


**SITE ANALYSIS**

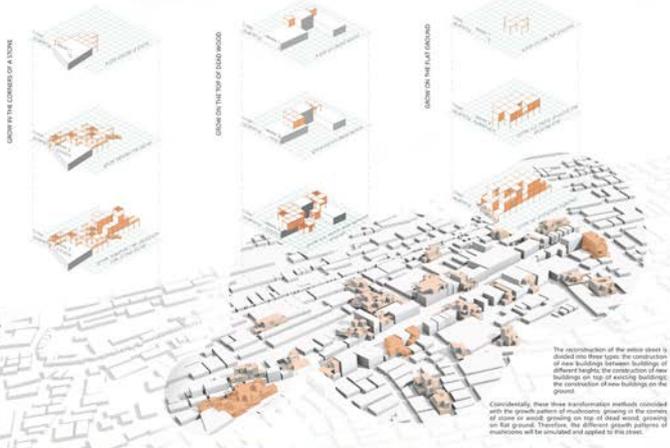


2021\_IDC0098  
**SHEET 01**

**THE GROWTH PROCESS OF MUSHROOMS**



**THE GROWTH PROCESS OF 'URBAN MUSHROOMS'**

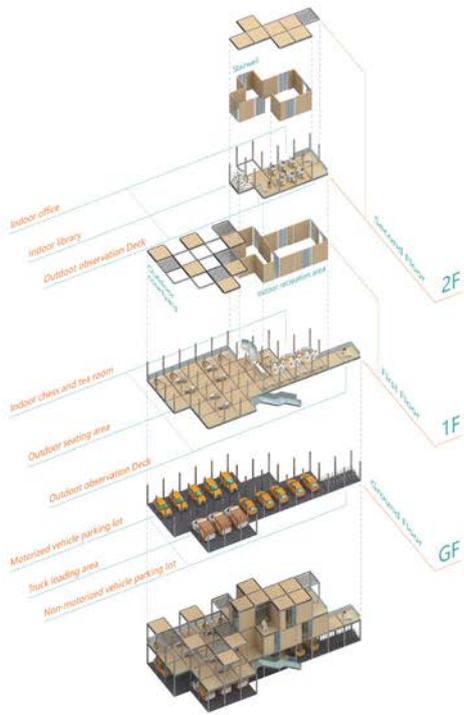


2021\_IDC0098  
**SHEET 02**

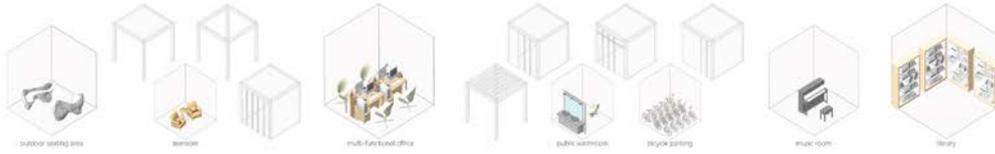
**1st WINNING ENTRY**

Yiqun Tang  
 University of Liverpool ; UNITED KINGDOM

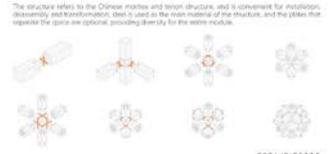
EXAMPLE OF FUNCTION ANALYSIS



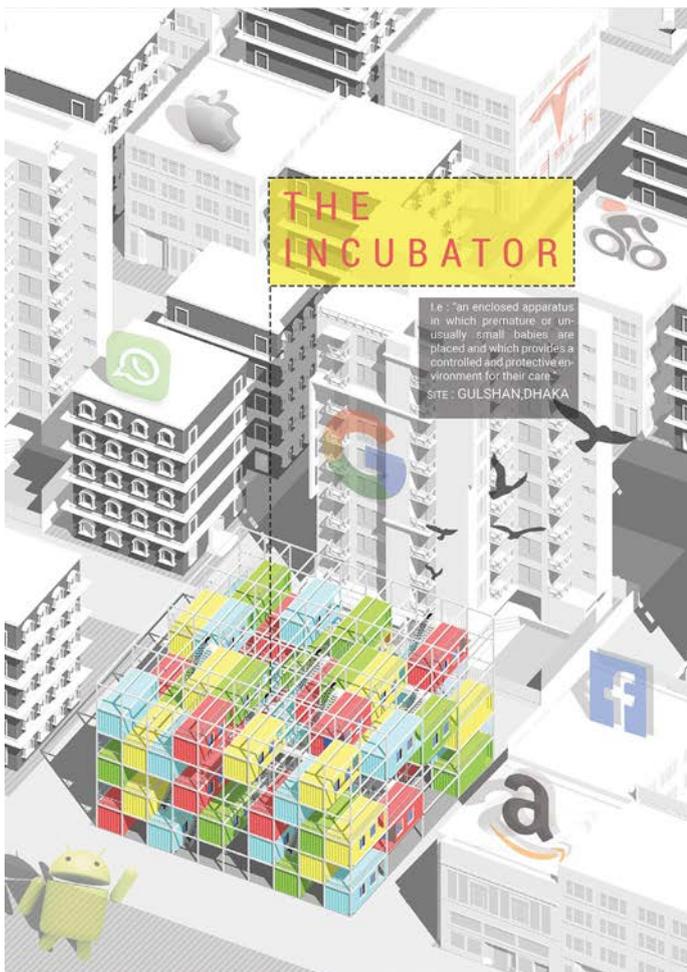
COMPONENT



STRUCTURE NODE



2021\_IDC0098  
SHEET 03



### TOWARDS A BRIGHT AND SUSTAINABLE FUTURE

Concrete block: "Costly, heavy, not good for the environment."

Used cargo container: "Cheap, lightweight, good for the environment."

Recycling the container for domestic use.

Adding services and furniture for daily use.

**MATERIAL AND COST:**  
A used 30' shipping container costs about 1200 USD.  
Wood planks for insulation and furniture cost about 400 USD.  
Recycled steel square bars roof frames and structural support.  
Floor mat and fabric made from recycled plastic and rubber.

**DESIGN STATEMENT:**  
Bangladesh is a land of opportunities. Some 47.6 million or 30 percent of the total 156.5 million people in Bangladesh are young (10-24 years), and it will be between 10 and 19 percent by 2050. But according to world bank report Bangladesh is 168th in global ease of doing business. Throughout the world young entrepreneurs and visionaries like Mark Zuckerberg, Elon Musk have shaped the world that we live in now. But Bangladesh young talents are finding it very difficult establishing their startups due to proper guidance, facilities and services.

**THE INCUBATOR** provides the young populace in Bangladesh with a low cost option of living close to their workplace and adequate services like fast Wi-Fi and network connection, easy global transaction access and a cooperative and congenial environment with both creative professionals and marketing persons.

The built form incorporates used and recycled materials into the building process and decreases its carbon footprint at its birth. Ensuring proper ventilation and natural light its dependence on electrical energy sources is greatly mitigated. Moreover, it encourages collaboration between different professionals that can result in the growth of multi-disciplinary start up and business effort which will certainly be beneficial to our country's economic development as a whole.

**TOTAL UNIT COST** approx 2000 USD

50 Housing units made from used cargo containers.

Steel frames made of 30"x60"x6mm acting as scaffolding for the living units.

Flattened balconies on top of living units for immersion.

Ground plane for gathering and indoor games.

PLAN at 4500 mm  
SCALE 1:150  
PLAN at 10500 mm  
SCALE 1:150

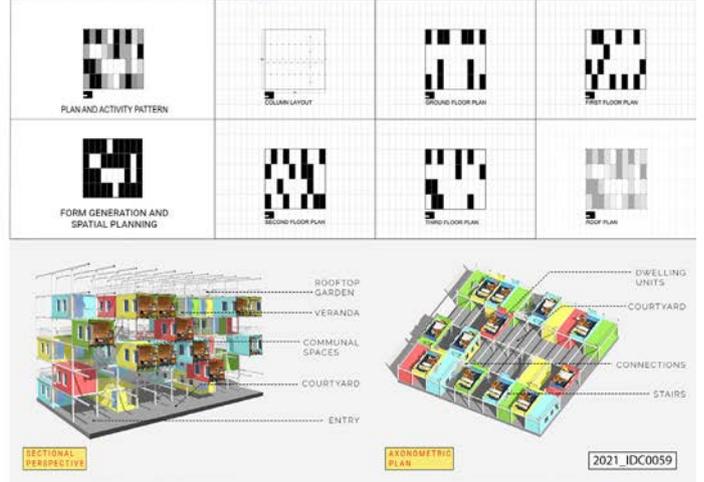
2021\_IDC0059

2nd WINNING ENTRY

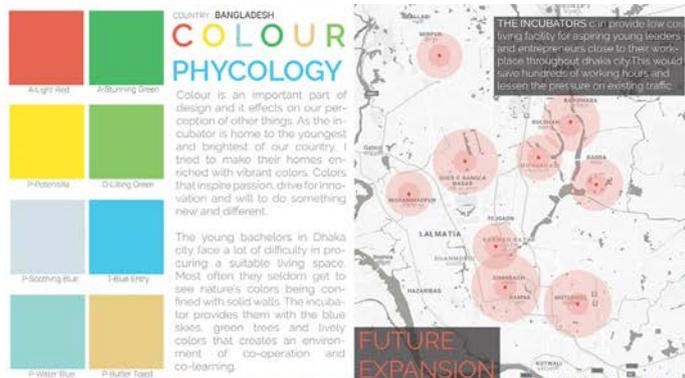
Sudipto Das  
BUET ; BANGLADESH



**SPATIAL ORGANIZATION**



SHEET 02

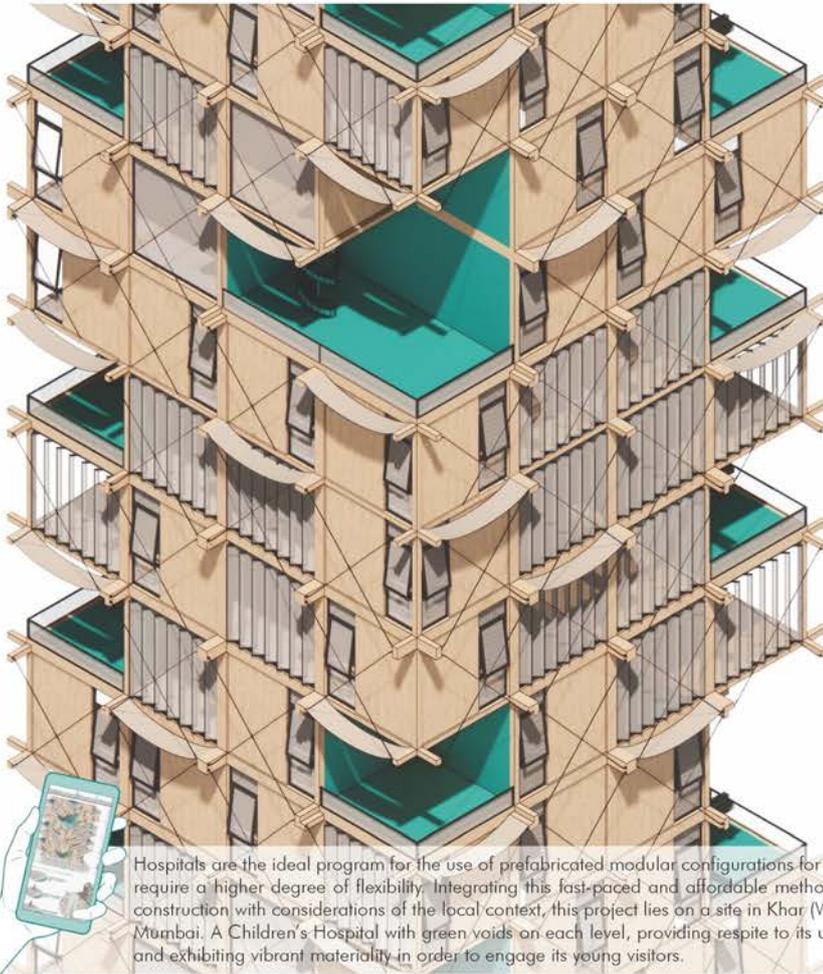


SHEET 03

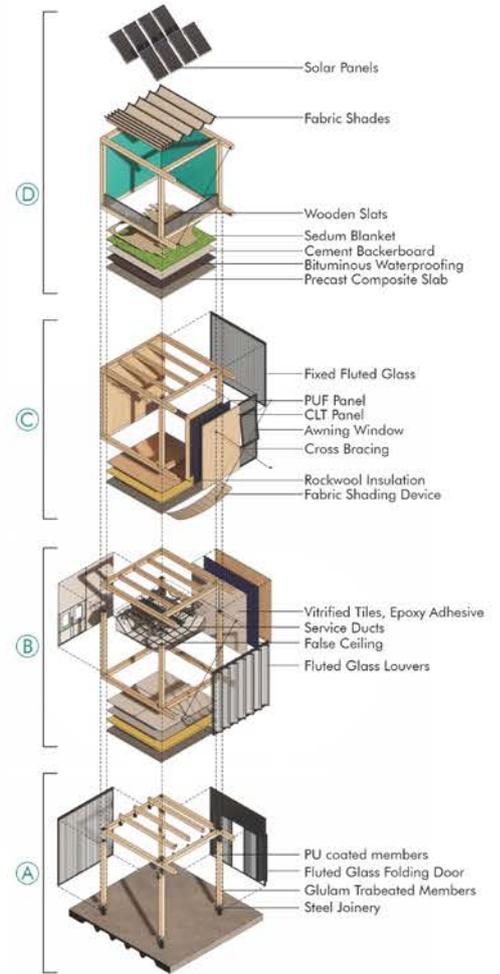
**2nd WINNING ENTRY**

Sudipto Das  
BUET ; BANGLADESH

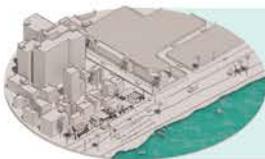
# MEDICAL MODULES



Hospitals are the ideal program for the use of prefabricated modular configurations for they require a higher degree of flexibility. Integrating this fast-paced and affordable method of construction with considerations of the local context, this project lies on a site in Khar (West) Mumbai. A Children's Hospital with green voids on each level, providing respite to its users and exhibiting vibrant materiality in order to engage its young visitors.



## CHILDREN'S HOSPITAL IN KHAR (WEST), MUMBAI



A range of socio-economic groups in the context implies that the structure has to provide affordable health-care to a range of patients.



SpeedCore technology helps create a pre-fabricated core that reinvents the way we look at core-cantilevered structures.



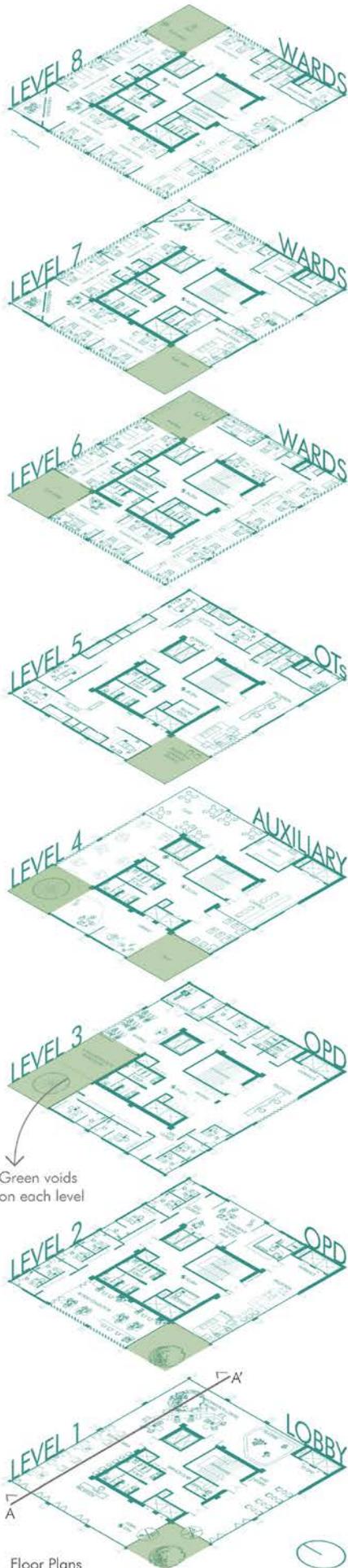
A lightweight network of glulam beams and columns creates a flexible periphery, whereas the core houses the services and circulation.



Medical facilities need a sea change in the way they are perceived, with cheerful spaces and natural light filtering in. This culminates in a program that clubs a hospital with auxiliary features that are personalized to the contexts needs, including a daycare, creche, and post-school meal services for those studying in neighbouring schools.

### 3rd WINNING ENTRY

Ambika Lambah  
65 KRVIA, Mumbai

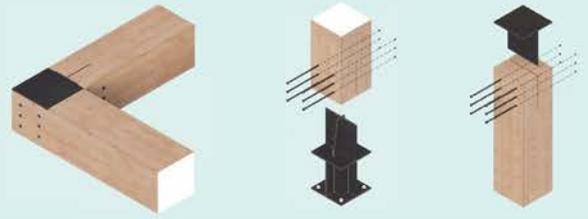


Green voids on each level

Floor Plans

**STEEL JOINERY:**

The use of sleek steel joinery such as knife and gusset plates with bolted connections are optimal for prefabricated structures that save the time of construction by a considerable degree.



West Elevation



South Elevation



Modules of 6x6x6m are deployed. This height is optimal for a hospital as they have heavy ducting requirements which cut down on the amount of clear head height. Glulam is a material that can take the aforementioned spans and still retain its lightness. This, along with its natural and warm tone makes it ideal for a Children's Hospital. Any issues of moisture are dealt with by PU coating and the use of rigid steel joinery.



Section A-A

**3rd WINNING ENTRY**

Ambika Lambah  
KRVIA, Mumbai

2022



# ACA's **INTERNATIONAL** **DESIGN COMPETITION**

**2022** | BUILDING EVELOPE

ADITYA COLLEGE OF ARCHITECTURE, MUMBAI, PRESENTS

# IDC 2022 DESIGN COMPETITION

EVERYTHING WE DESIGN IS A RESPONSE TO THE SPECIFIC CLIMATE AND CULTURE OF A PARTICULAR PLACE - AR. NORMAN FOSTER

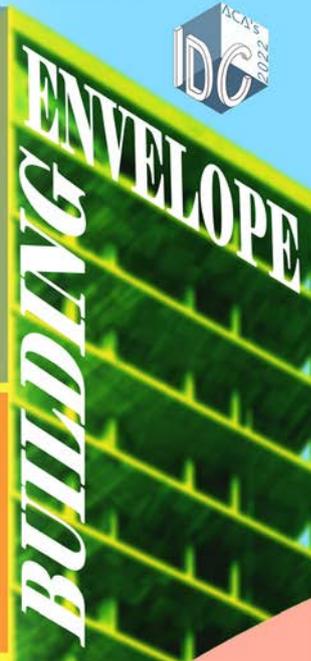


## BUILDING ENVELOPE

**THEME :** A building envelope is the physical separator between the conditioned space and external environment. Building envelopes play key role in a structure's energy efficiency and can account for up to 30% of the primary energy consumption. However, building envelopes are significantly more than this as they act as an integral part of the overall design and contribute to the identity of the structure in the skyline. Building skins also influence our emotions and behaviour within the enclosed spaces and govern our response to them. They are the language of structural and material expressions for buildings. Understanding the vital role of building envelopes in overall performance of structures along with its aesthetic and cultural functions, this year IDC intends to design the building envelope and its transformations. The architecture industry has witnessed a huge evolution in the building envelope trends in terms of form, materials, and installation technologies. There has been an ample variation in the traditional and contemporary building envelopes in respect of appearance, aesthetics, and thermal comfort.

The façade of the building is a manifestation of environment controls and technological advances for energy efficiency. Traditional building envelopes that use passive controlling techniques for indoors have governed vernacular architectural forms since millennia. However, in modern times active or semi-active control is achieved in the structures with the range of materials and various technical solutions. It is the result of hundreds of years of optimization to provide a comfortable shelter in a local climate using available materials and known construction methods.

For IDC 2022-23 the Participants, need to create a prototype of an architectural envelope for a building typology of their choice in the country of their residence. The structure maybe in the urban or rural context but must respond to the climatic as well as socio-cultural environment of the region. the participant must produce his/her own unique design.



**SITE :**

Participants shall intervene on a site in the urban/rural and geographical context of their choice.

**DESIGN INTERVENTION :**

The proposed design intervention could be ranging from built form and landscape to urban renewal and systems. If the chosen intervention fits the scope of the brief, the participants are encouraged to think on multiple scales.

**SUBMISSION :**

- Description of your understanding and interpretation of the Brief.
- Your argument for the proposed intervention.
- The process & method of design.

**REPRESENTATION OF IDEAS :**

- Participants can choose the adequate drawing scale to communicate their design scheme effectively.
- They can provide any number of Architectural drawings enough to describe the scheme.
- Pictures of Scaled Models, Computer generated 3D-Views, Renders, etc.
- Diagrams, hand-made sketches, and other Representational material.

**FORMAT :**

- Submit (Upload) your entries using a maximum of 3 A3 sized sheets (Portrait/ Landscape). This shall NOT exceed a combined file size of 21 MB in PDF or JPEG format only, with the above submission specifications duly complied.
- A bona-fide certificate from your College/ University/ Institute certifying your admission (NOT exceeding a file size of 1 MB)
- All participant teams shall be given a Unique IDC code that you shall have to put in all your deliverables.

**TEAMS :**

Participating Teams shall comprise of a maximum of 5 students and a minimum of 1 student.

**IMPORTANT DATES :**

**STAGE 1:**

- Online Registration of entries on our website - <http://adityacampus.org/idc/>
- Registration closes on: 09<sup>th</sup> December 2022

**STAGE 2:**

- Last Date for online submission of entries is 19<sup>th</sup> Dec 2022.
- All Submissions shall be made in PDF or JPEG format only.
- Submissions shall be made only through the unique USER ID generated after registering on our website.

**STAGE 3:**

- IDC Jury - 4<sup>th</sup> & 5<sup>th</sup> January 2023

**STAGE 4:**

- Results declaration - 21<sup>st</sup> January 2023

**AWARDS :**

**UNDERGRADUATE / B. ARCH STUDENTS CATEGORY:**

Student entries at the IDC 2022-23 shall receive Certificates and a Prize amount as follows:

**WINNING ENTRIES**

- 1st Place: INR. 50,000/-
- 2nd Place: INR. 25,000/-
- 3rd Place: INR. 15,000/-

Citations: Certificates shall be awarded to 3 Exemplary entries.

Winning entries will be published in ACA's COA approved publication for 2022-23.

**REGISTRATIONS ARE FREE**

**EXCLUSIVE YOUNG ARCHITECT CATEGORY:**

(Graduate / M. Arch. Students and Recent B.Arch. Graduates)

Winning entries will be published in ACA's COA approved publication for 2022-23. Citations: Certificates shall be awarded to 3 Exemplary entries.

**NOTE :**

Copyright for all material received as part of the competition, its publication and for the reproduction of content shall be solely with ACA. All the entries will be the property of ACA.



Ar. Damith Premathilake  
Founder: DPA Studio,  
Sri Lanka



Ar. Sanjay Patil  
Principal Architect,  
Environ Planners



Ar. Ujjwala Hawre  
Director, Hawre Engineers  
& Buildings Pvt. Ltd.

**CONTACT US :**

✉ [idc.aditya@aditya-arch.edu.in](mailto:idc.aditya@aditya-arch.edu.in)

☎ +91-22-352-06135

📷 @ADITYACAMPUS.IDC

**COLLABORATORS:**




## 2022 | BUILDING ENVELOPE POSTER & BRIEF

### THE JURY



**Ar. Damith Premathilake**  
Council Member (SLIA)  
Colombo, SRI LANKA



**Ar. Sanjay Patil**  
Environ planners  
Nashik, INDIA



**Ar. Ujjwala Hawre**  
Haware Legacay  
Navi Mumbai, INDIA

## BRIEF

“Everything we design is a response to the specific climate and culture of a particular place”  
- Ar. Norman Foster

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The façade of the building is a manifestation of environment controls and technological advances for energy efficiency. Traditional building envelopes that use passive controlling techniques for indoors have governed vernacular architectural forms since millennia. However, in modern times active or semi- active control is achieved in the structures with the range of materials and various technical solutions. It is the result of hundreds of years of optimization to provide a comfortable shelter in a local climate using available materials and known construction methods.

For IDC 2022-23 the Participants, need to create a prototype of an architectural envelope for a building typology of their choice in the country of their residence. The structure may be in the urban or rural context but must respond to the climatic as well as socio-cultural environment of the region. the participant must produce his/her own unique design.

# WINNING ENTRIES 2022

# WHY FACADE

A building envelope is a seal of protection for the people and things inside a structure. It's like a shell — a barrier against the world outside of the building. In the winter, the building envelope helps prevent the transfer of heat from inside to outdoors.

A building envelope is commonly defined as the separation of the interior and exterior of a building. It helps facilitate climate control and protect the indoor environment

# WHY SUSTAINABLE FACADE

## A SUSTAINABLE COOLING SYSTEM WITH MODERN TECHNOLOGY

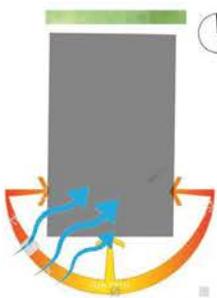
A sustainable green building can be described as structures with minimal to no negative environmental impact. In addition, these structures consume much less energy when compared to traditional structures. Use Greener Materials—A sustainable building should be constructed of materials that mini-mize life-cycle environmental impacts such as global warming,

# SITE STUDY

LOCATION - CHENNAI ,ANNA NAGAR  
 BUILDING - LIBRARY  
 HEIGHT OF THE BUILDING - 15M

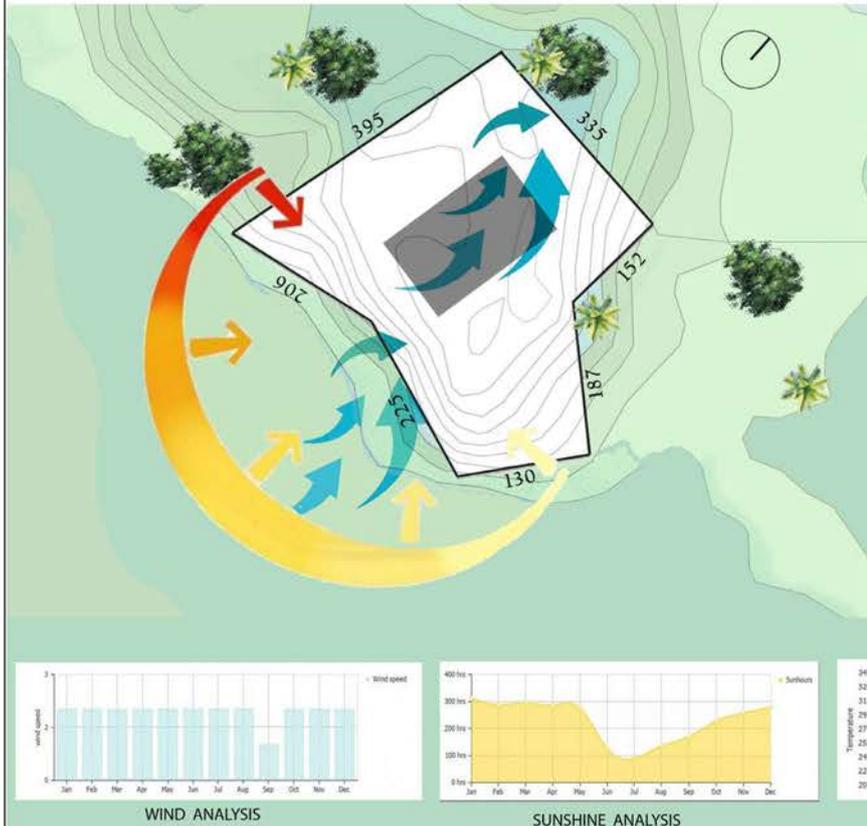
# GEOGRAPHY

As of 2018, Anna Nagar zone had a green cover of more than 20 percent, as against the city's 14.9 percent average.



1 north-facing wall, where the plants can get adequate sun. If this isn't possible, consider setting up synthetic UV lighting in an indoor area.

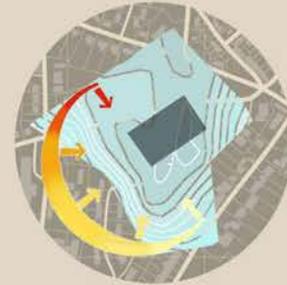
In warm climate normally we get light on the north and south can be managed easily , so exposed area is north and south 50-70 % of energy is reduced through this techniques



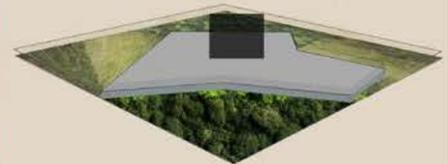
## SITE ANALYSIS



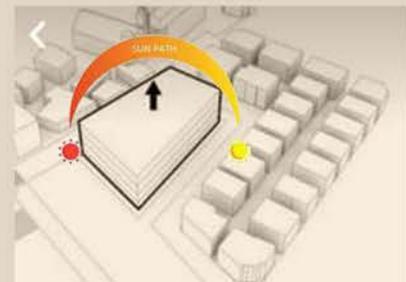
## WIND ANALYSIS



## SOLAR ANALYSIS



## BUILDING ANALYSIS



# RETHINKING WITH NATURE.....



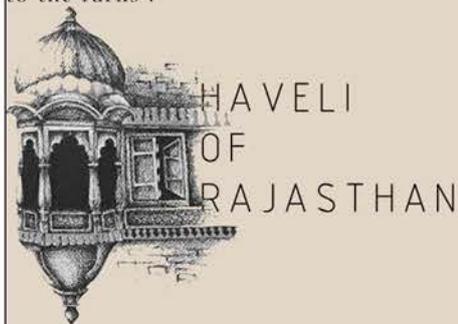
## NEW IS NOT ALWAYS GOOD

We have rich cultural and heritage which has beautiful methods. We want to enhance our traditional method

## TRADITIONAL METHOD WITH NATURAL METHODS



Traditionally earthen pots are used to cool water when we looked at the ancient times Egyptian slaves were fanned the pots filled with water to blow cold on to the furns.



## HAVELI OF RAJASTHAN

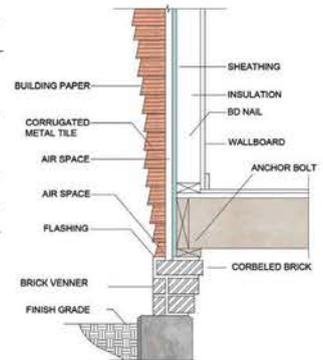
Similarly in our own country all the havelis and forts are popular for channelizing air through stone and forts are popular through stone jailers and jerokas

## DETAILS



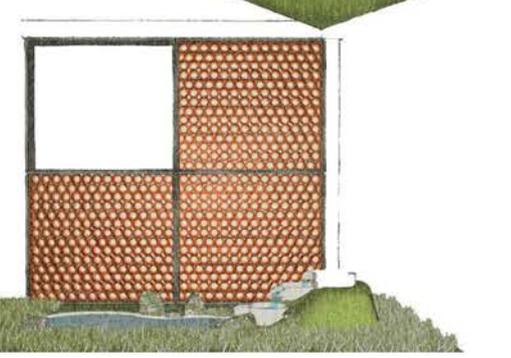
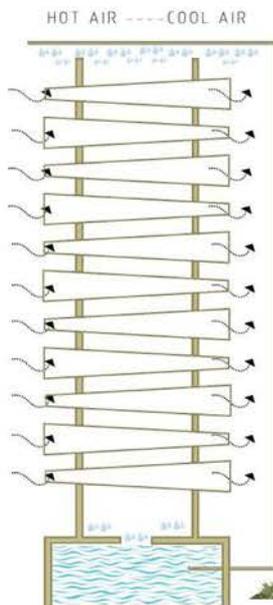
## CLAY BRICK -RAINSCREEN FACADES

Use of clay brick facades and claddings transform and enhance the entire look of a building in an elegant way. rainscreen cladding on the outer layer in collaboration with a frame, weather resistant membrane, insulation, sub-frame, and a ventilated cavity. A rainscreen facade system can be described as a double-wall construction, whereby the outer surface protects the build from rain and other adverse weather, whilst the inner layer aids thermal insulation and helps to prevent excessive air leakage and carry wind loading.



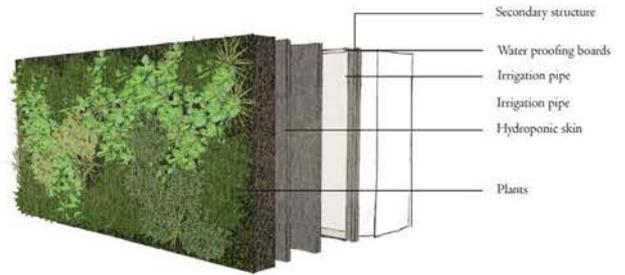
## A SUSTAINABLE COOLING SYSTEM MADE WITH WET TERRACOTTA CONES.....

When the air passes through the terracotta cones and comes out, it's naturally cooled the same way the water stays cool in the pot." The cooling system passes water through earthen cones that facilitate evaporative cooling.



## GREEN LIVING WALL

Maintain a comfort environment for the building occupants without having any negative impact. Designed as an enclosure that use least possible amount of energy to maintain comfort environment for the building. Improves the building aesthetic value  
How is a green wall installed?  
Green wall construction. Protect all floors and surfaces. Install frames. Install irrigation controller and hardscape. Install pre-planted panels. Install irrigation drip lines and sensors.  
Test the irrigation system of the living wall construction.  
Initiate plant maintenance.





ADVANTAGES

Most significant ,instead of giving out waste heat it consumes the acessive heat around it .

It is not only a cooling device or system it is rather a solution how we can actually reduce the energy that we consumes in cooling operate spaces .

No harmfull emissions is released .

Only needs natural materials

Affordable

DISADVANTAGES

It is applicable to only small and medi-um sized

It produces more aerodynamic noise.



ADVANTAGES

Durability.

Clay facing bricks are calcined from clay at high temperature so that they are anti-weathering and anti-corrosive.

Excellent thermal Insulation.

Enhancement of construction efficiency.

High safety.

Sustainability and Low-maintenance.

DISADVANTAGES

Clay brick's soundproof effect is poor.



ADVANTAGES

Purify the Air.

Decrease the Ambient Temperature.

Decrease Noise.

More Productivity.

Make a Building More Fire-Resistant.

Extend the Life of Your Wall.

Give Your Building More Value.

Create a Community Feel.

DISADVANTAGES

Living Walls Require Maintenance

They Can Damage Your Home if You Choose the Wrong Plants. ...

UNDERSTANDING AND DESCRIPTION OF BRIEF

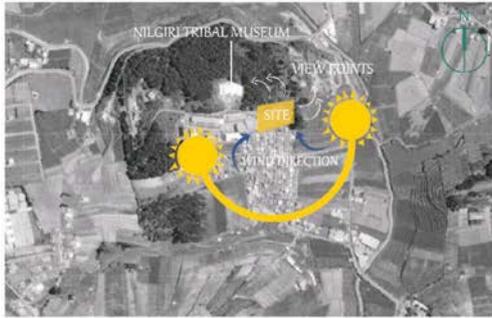
BUILDING SKIN VISUALLY SETS THE EMOTIONS AND BEHAVIOUR OF THE BUILDING AND THEIR ENVIRONMENT. ENVELOPE SHOULD BE DEVELOPED BASED ON THE FORM AND MATERIAL. FACADE OF THE BUILDING DECIDES THE THERMAL COMFORT OF THE INTERNAL ENVIRONMENT. THE DESIGN OF THE FACADE SHOULD REPRESENT THE SOCIAL, ECONOMICAL AND CULTURE OF ANY REGION INSIDE THE COUNTRY.



THE ENVELOPE OF THE BUILDING HAS BEEN DEVELOPED EVEN FROM THE ANCIENT TIMES TO MODERN WITH NEWLY IDENTIFIED MATERIALS AND TECHNOLOGIES. BUILDING ENVELOPE AS THE SYMBOL OF STRENGTH AND POWER. EMOTION FOR ART CAN BE DEPICTED AS THROUGH MATERIALS.



SITE AREA : 7105 SQ.M  
LOCATION : NILGIRI TRIBAL MUSEUM.  
LATITUDE : 11°22'01.9"N  
LONGITUDE : 76°39'43.9"E



PROPOSED INTERVENTION



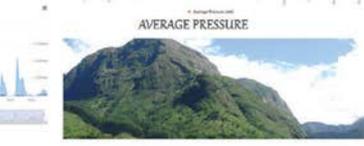
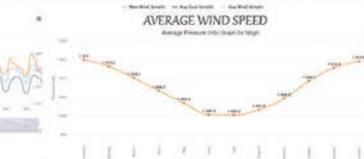
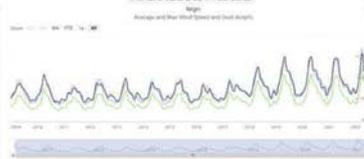
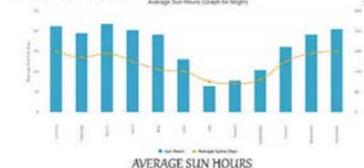
TODA PEOPLE ARE A DRAVIDIAN ETHNIC GROUP WHO LIVE IN THE INDIAN STATES OF TAMIL NADU.

THEY ARE STRUGGLING FOR THEIR BASIC NEEDS SUCH AS FOOD, SHELTER, EDUCATION AND HEALTHCARE FACILITIES

TODA SETTLEMENT IS DECLARED AS THE UNESCO WORLD HERITAGE SITE.



NILGIRIS, ONE OF THE OLDEST MOUNTAIN RANGES, LOCATED AT THE TRI-JUNCTION OF TAMIL NADU, KERALA AND KARNATAKA. NILGIRIS IS A PART OF THE WESTERN GHATS. OOTY THE 'QUEEN OF HILL STATIONS', COONDOOR 19 KMS FROM OOTY AND KOTAGIRI 31 KMS FROM OOTY, ARE THE THREE HILL STATIONS OF THIS DISTRICT.



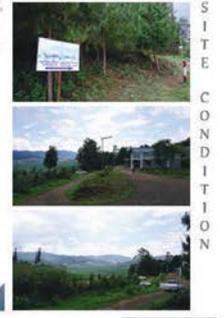
SITE DESCRIPTION



NEIGHBOURHOOD UNITS



THE BUILDING HAS ROAD ON SOUTH AND WEST SIDE AND SURROUNDED BY EMPTY LAND ON EAST AND RESIDENTIAL UNITS ON SOUTH.



2022\_JDC2016

SHEET 01

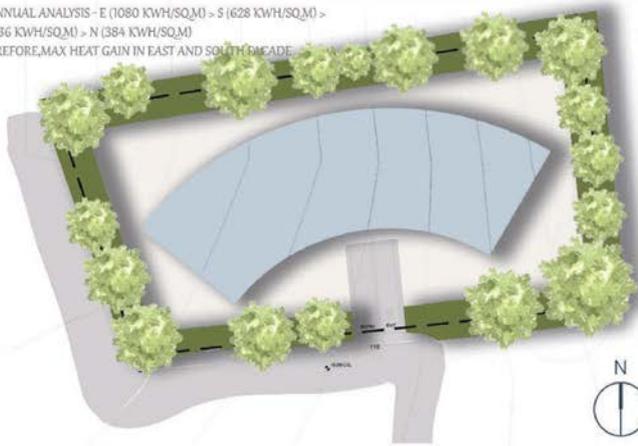
CONCEPT

CONCEPT - TODA CULTURE  
TODAS LIVE IN SMALL HAMLETS CALLED MUNDS



TODA EMBROIDERY, ALSO LOCALLY KNOWN AS "PULIKHOOR", IS AN ART WORK AMONG THE TODA PASTORAL PEOPLE OF NILGIRIS

IN ANNUAL ANALYSIS - E (1080 KWH/SQ.M) > S (628 KWH/SQ.M) > W (436 KWH/SQ.M) > N (384 KWH/SQ.M)  
THEREFORE, MAX HEAT GAIN IN EAST AND SOUTH FACADE

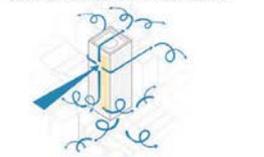


CONCEPT, SITE & ELEVATION

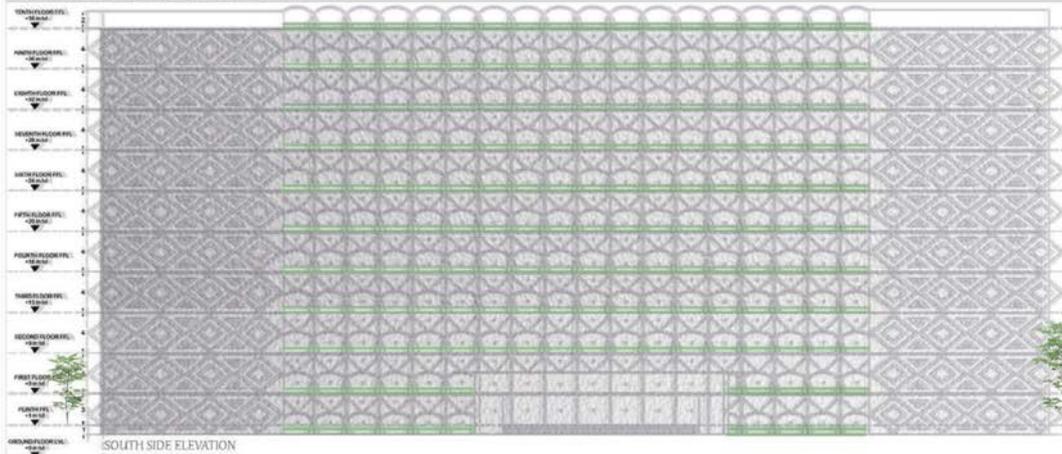
MATERIALS USED

TANTALUM CARBIDE - HIGHEST HEAT RESISTANT CAN BE MIXED WITH CONCRETE IN CERTAIN RATIO TO MAKE IT MORE HEAT RESISTANT

PANCHALOHA METAL IN FACADE  
THIS CONSISTS OF COMBINATION OF FIVE METALS SUCH AS COPPER, IRON, ZINC, GOLD AND SILVER. CAN BE USED AS COATING IN THE FACADE.



GASOCHROMIC FACADE AND HYDROCHROMIC FACADE STRATEGIES CAN BE ADOPTED



2022\_JDC2016

SHEET 02

2nd WINNING ENTRY

G.Abinaya

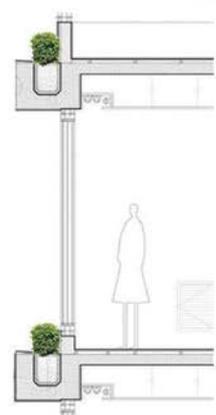
75 FA, Dr. M.G.R. Educational And Research Institute, INDIA



VIEWS



DETAILS



SPECIES IDENTIFICATION



PEPEROMIA DINDIGULENSIS IS ONE OF HABITAT SPECIES IN NILGIRIS THAT NEEDS TO BE CONSERVED.



HOMEIO HERBS IN NILGIRIS



2022.IDC2016  
SHEET 03

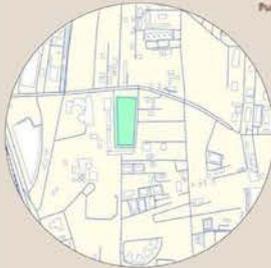
## 2<sup>nd</sup> WINNING ENTRY

G.Abinaya  
FA , Dr. M.G.R. Educational And Research Institute, INDIA

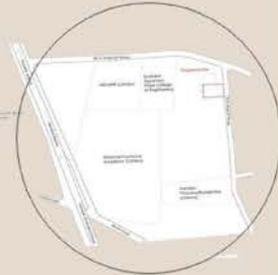
# SITE ANALYSIS



Near Genba Sopanrao Moze College Of Engineering ,DP Road, Pune, Maharashtra.



PROPOSED SITE WITH SURROUNDING AREAS



ACCESS TO SITE



## Strengths

- Set back from main road reduces noise level.
- Good connectivity.

## Weaknesses

- Area yet underdeveloped
- May have traffic issues

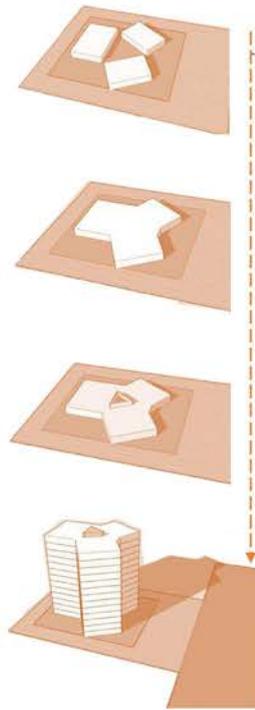
## Opportunities

- Good developed spaces
- Growing it section. area yet undeveloped.

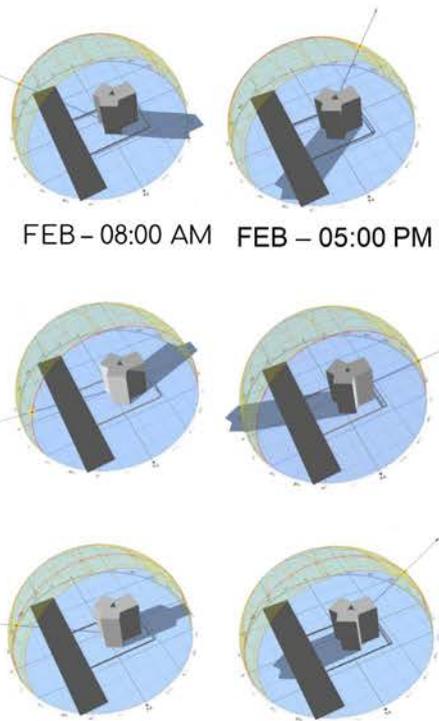
## Threats

- Presence of a lot of neighboring commercial spaces has lead to increase in amount of carbon footprint

## FORM DEVELOPMENT



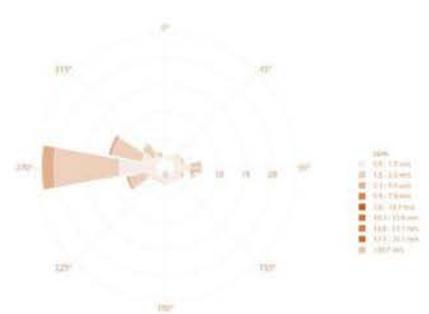
## SHADOW ANALYSIS



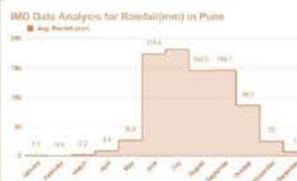
## VEHICLE PEAK LOAD



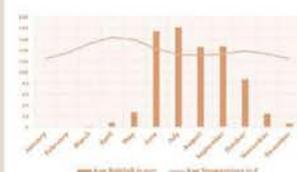
## WIND DIRECTION



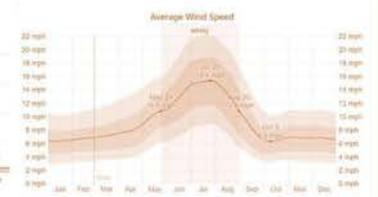
- The wind direction is from west for maximum of the year, which also brings in moisture along with it.  
- Air coming from south-west is comparatively cooler than the north-west winds



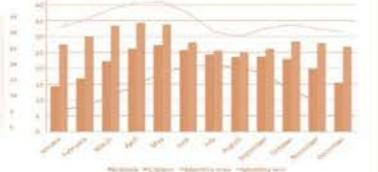
## RAINFALL



## HUMIDITY



## WIND SPEED



## TEMPERATURE

CLIMATE ANALYSIS

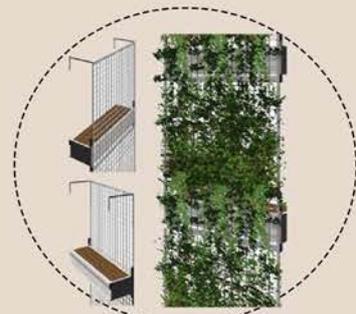
## 3rd WINNING ENTRY

Aditi , Ankita , Priya , Sakshi , Samiksha

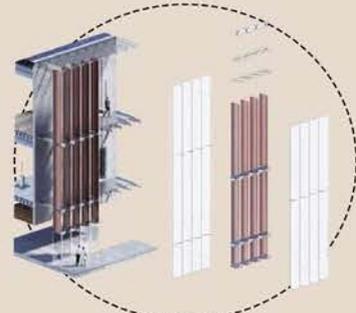
77Dr. Bhanuben Nanavati College of Architecture, Pune



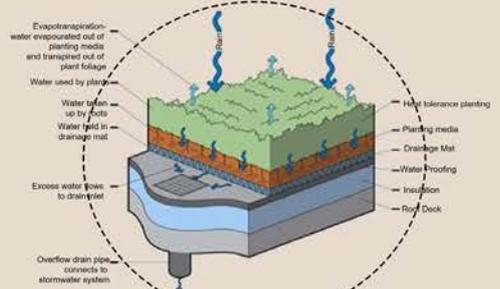
STRATEGIES USED



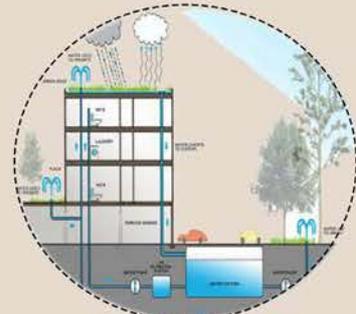
Standout balconies covered with Metal mesh and ornamented with green creepers



Louvers



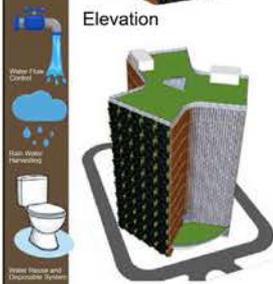
Green Roof



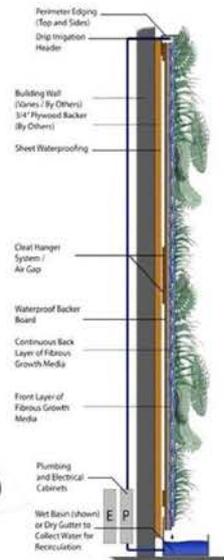
Rain Water Harvesting



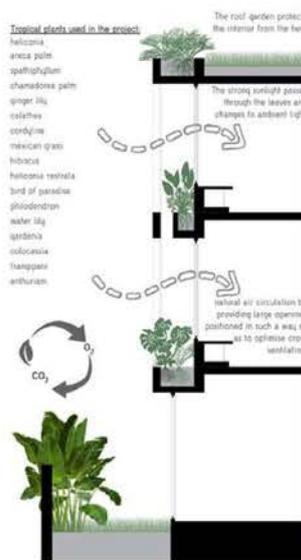
Elevation



Reduction of almost 50% in use of potable water due to rain water harvesting used



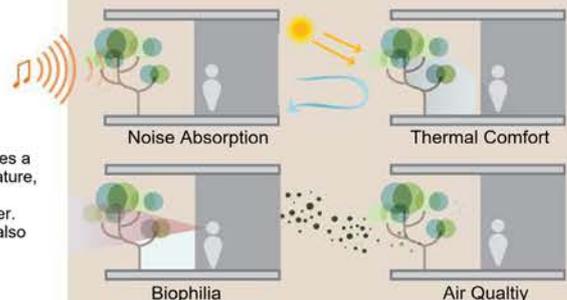
Section of Jali covered with vegetation



Standout Balcony Details

How does Facade Creates An Energy Efficient Building?

- The vast majority of office-goers are resigned to spend their entire day within the confines of air-conditioned space with very little access to fresh air from the outdoors.
- All the windows and doors are operable making the balcony accessible from all the workspaces, enabling the opportunity to open the windows for cross ventilation. This also gives the users the option to reduce their dependency on air conditioning.
- This Office transcends the most common approaches to deal with Pune's heat, and offers a method for passive cooling that benefits its occupants and as importantly, challenges the typical glass box typology of the office building.
- A green roof has many benefits at economic, ecological and societal levels. A green roof provides a rainwater buffer, purifies the air, reduces the ambient temperature, regulates the indoor temperature, saves energy and encourages biodiversity in the city.
- A green roof absorbs rain water by the water buffering in the plants, substrate and drainage layer.
- This delays the discharge of rainwater to the sewage system, purifies the rainwater, and water also evaporates through the plants.
- This all helps to stabilize the groundwater level, reduces the peak load on the sewage system and reduces the risk of flooding.

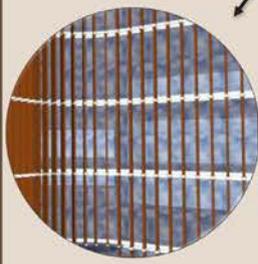


3rd WINNING ENTRY

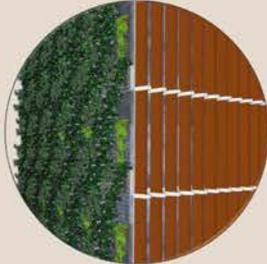
Aditi , Ankita , Priya , Sakshi , Samiksha  
Dr. Bhanuben Nanavati College of Architecture, Pune



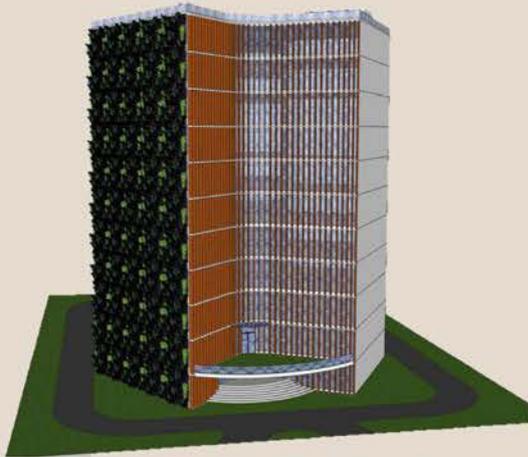
GROUND FLOOR  
SCALE 1:750



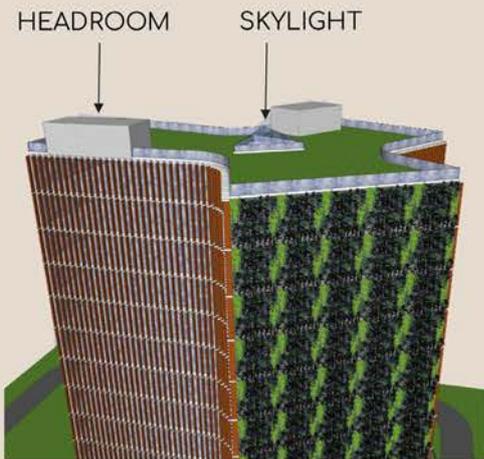
LOUVERS



GREEN FACADE

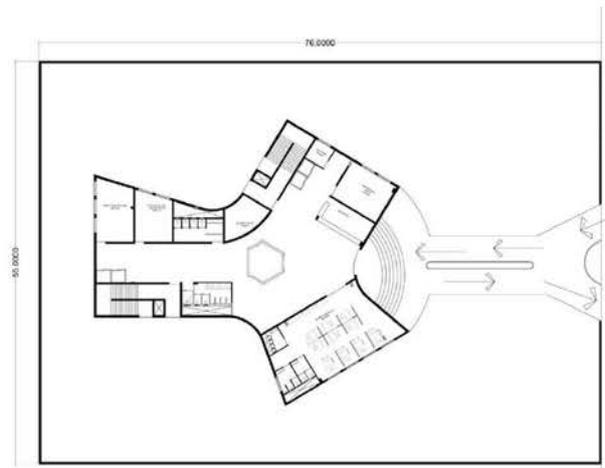


ENTRANCE TO BUILDING

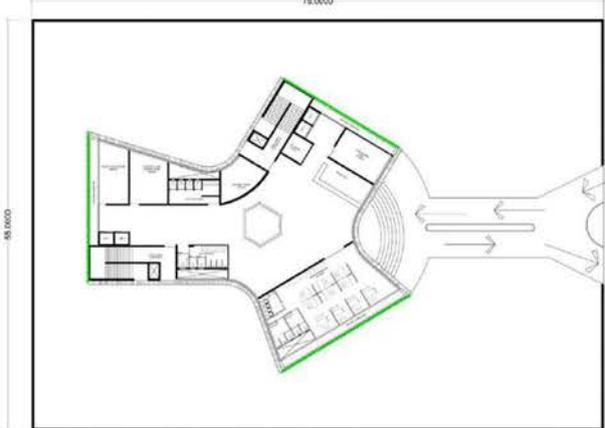


HEADROOM

SKYLIGHT



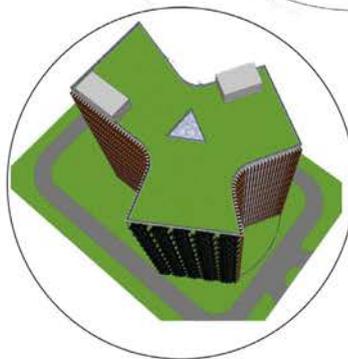
PREVIOUS GROUND FLOOR SCALE 1:1500



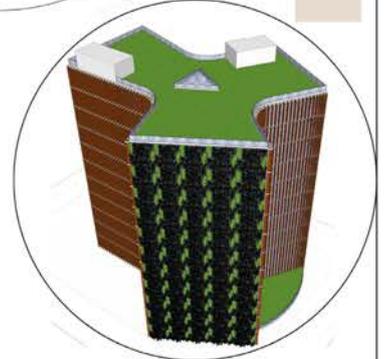
MODIFIED GROUND FLOOR SCALE 1:1500



VIEWS



GREEN ROOF WITH SKYLIGHTS



Team Mates  
-Aditi Ranaware  
-Ankita Tambade

-Samiksha Bhosale  
-Priya Shinde  
-Sakshi Shedge

### 3rd WINNING ENTRY

Aditi , Ankita , Priya , Sakshi , Samiksha  
79Dr. Bhanuben Nanavati College of Architecture, Pune

ADAPTIVE REUSE - FACADE DESIGN

IDEA - KINTSUGI "Golden Joinery"

The idea is to create a threshold between the past and present time, that the present exist as a result of its past and making itself strong from the past. And to transform the abandonment of space into liveliness by adapting such a design concept which makes earlier architecture stand out, both architecturally and functionally in the context with the amalgamation of past and present architectural materials. i.e: architectural language adapted by heritage in the context merging with contemporary time and makes it environment friendly.

STRATEGIES

1. Using contemporary materials i.e. Glass & Metal
2. to make it environment friendly adding the green belt in the form of extended planes.

CONCEPTUAL PRECEDENCE

Cristo Rey St. Martin College Prep  
BY JGMA, Illinois



Amalgamation of contemporary materials with heritage for adaptive reuse.

LIVING ARCHITECTURE PRECEDENCE



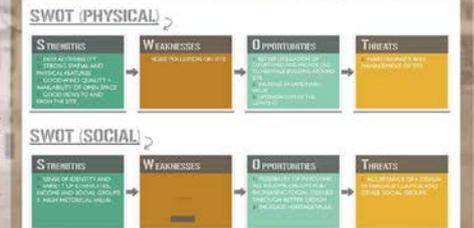
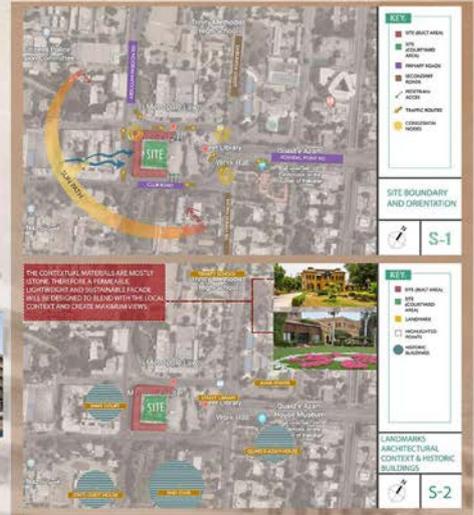
SITE: METROPOLE HOTEL



"Historic buildings are not a constraint but an opportunity for creative endeavor"

Buildings' facades are the most strategically important and observable component, which enhances their aesthetic appeal and environmental performance. The quality of a building's and a city's identity is significantly influenced by its facades. It creates a barrier between the inside and outside environments. This indicates that the facade serves as a conduit for interaction between inside and outside activity. Cracks and fissures are considered unpleasant and upsetting by community of architects. Buildings go through many changes over the period of time are restored or renovated in a way that traces of its origin fades away. Architecture being valuable part of the physical environment must express "reverence" towards existing built-up heritage and hold their aesthetic. Metropole Hotel being a Heritage building intrigue us with unique opportunities to adapt, evolve and visualize it in ways that enrich the environment around it and to keep its historical value intact. The idea is preserving existing structure and creating an opportunity for adaptive reuse. Nevertheless, in the chaos of global warming the Better Alternative is "Not to Build New Things". It's a common saying in the green building movement that "the greenest building is the one that isn't built." The U.S. Green Building Council's LEED®-BM is a guideline for Existing Buildings, used while undergoing improvement work with little to no construction, like one in which systems are being upgraded. Still, no changes are being made to the overall layout.

SITE ANALYSIS



IDC code is- 2022\_IDC2029

SHEET 01

ADAPTIVE REUSE - FACADE DESIGN

DESIGN DETAILS



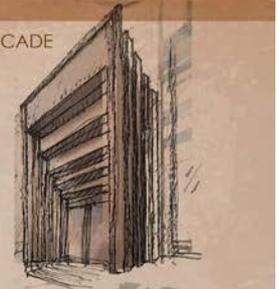
ELEVATION (SOUTH EAST FACADE)



SKETCH VIEW (SOUTH EAST FACADE)



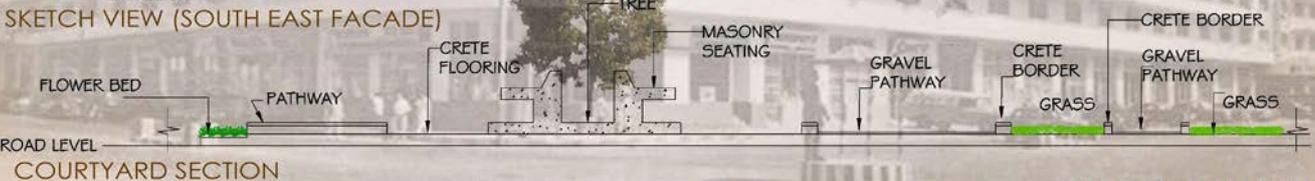
PLAN



PERCEIVED ENTRANCE VIEW



SKETCH VIEWS



COURTYARD SECTION

IDC code is- 2022\_IDC2029

SHEET 02

HONOURABLE MENTION

Minal Shamim , Samia Sarfaraz , Suniya Rasheed  
NED University of Engineering & Technology, PAKISTAN

ADAPTIVE REUSE - FACADE DESIGN

DESIGN DETAILS



SOUTHEAST FACADE

In Facade design, we propose Glazed glass window, RCC planters, Concrete finish plaster to enhance the two diff. materials and Indeginous plants for low maintenance.

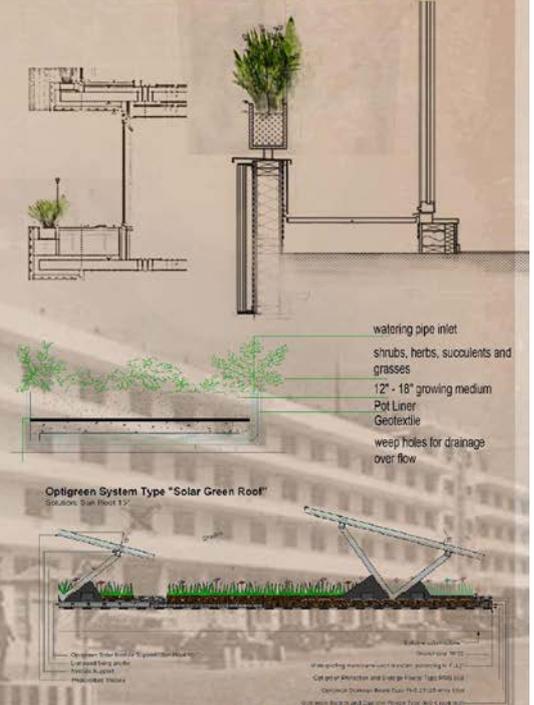


BLOWUP OF ELEVATION

Variety Of Plants Considered For The Façade:

FLOWERING PLANTS	GREENERY PLANTS / PALMS / SHRUBS	FERNS
Sneezeweed	Pandanus plant	Bracken Fern
Petunia	Aspidistra Plant	Meadow Fern
Marigolds	Corn Plant	Northern Maidenhair Fern
Lantana	Pandanus plant	Water Fern
Fuchsia	Snake plant	Boston fern
Nasturtiums	Aglaonema	Curtain creeper
Byzantine Gladiolus		

DESIGN SECTION CONCEPT



IDC code is - 2022\_IDC2029

CONSOLATION PRIZE

Minal Shamim , Samia Sarfaraz , Suniya Rasheed  
NED University of Engineering & Technology, PAKISTAN

SHEET 03

IDC DESIGN COMPETITION 2022

BUILDING ENVELOP REDESIGN OF METROPOLE HOTEL IN KARACHI

SITE:



LOCATION: KARACHI  
9:30 AM



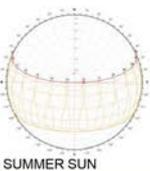
EXISTING SITE PLAN OF METROPOLE HOTEL



3:30 PM



BUILDING WITHIN THE CONTEXT



SUMMER SUN



WINTER SUN



OLD PICTURES OF THE HOTEL METROPOLE

CASE STUDY:

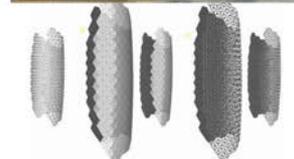
AL BAHAR TOWERS RESPONSIVE FACADE / AEDAS



LOCATION: ABU DHABI , UAE  
YEAR: JUNE, 2012

Aedas Architects have designed a responsive facade which takes cultural cues from the "mashrabiya", a traditional Islamic lattice shading device.

The screen operates as a curtain wall, sitting two meters outside the buildings' exterior on an independent frame. Each triangle is coated with fiberglass and programmed to respond to the movement of the sun as a way to reduce solar gain and glare. In the evening, all the screens will close.



WINTER GARDEN FACADE

PROJECT: CULTURAL  
LOCATION: BRISBANE , AUSTRALIA  
ARCHITECT: STUDIO 505  
YEAR: 2012

The brief for the new facades to the three street frontages of the Winter garden Shopping Centre in central Brisbane required the creative application of a coherent identity and architecturally holistic sensibility in order to realise a multitude of intentions – to create an entertaining and engaging retail experience, a lifestyle destination and a 'must-go-to' meeting place and thoroughfare – at the heart of Brisbane's city centre.



HONOURABLE MENTION

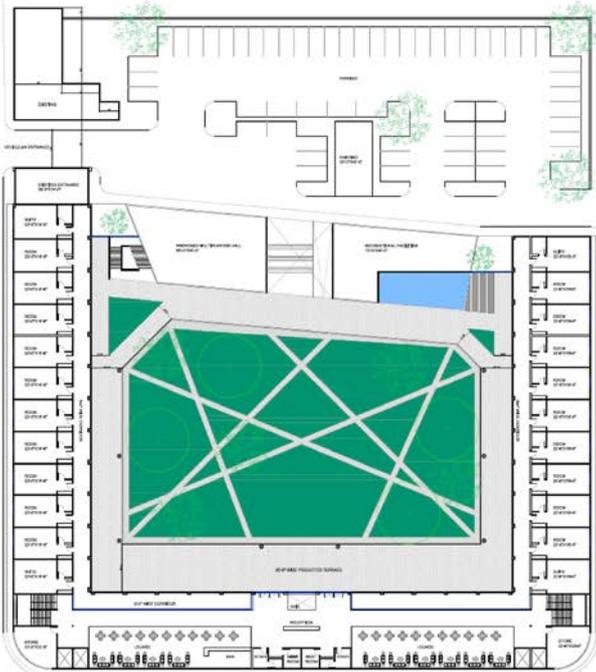
Sana Hassan, Huma Afzal, Sabeeh Uddin, Mujtuba  
NED University of Engineering & Technology, PAKISTAN

SHEET 02

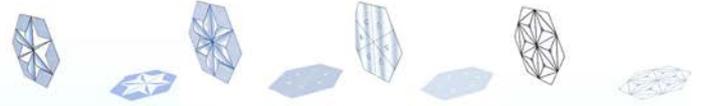
# IDC DESIGN COMPETITION 2022

## BUILDING ENVELOP REDESIGN OF METROPOLE HOTEL IN KARACHI

### DRAWINGS



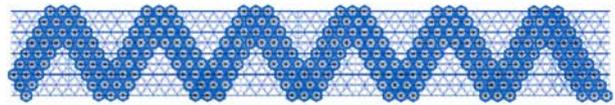
FIRST FLOOR PLAN



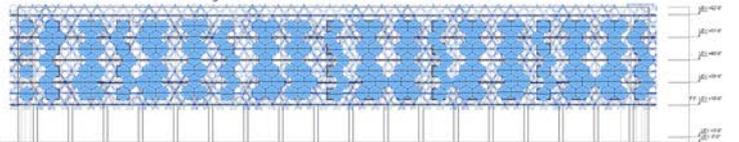
MODULE APERTURE AS PER THE SOLAR ORIENTATION



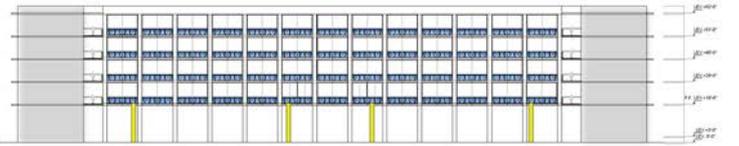
GRID BASED ON ISLAMIC GEOMETRIC PATTERN



FAÇADE ITERATION ON THE GRID



FRONT ELEVATION (JUXTAPOSED)



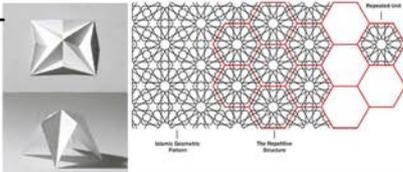
INTERNAL ELEVATION

SHEET 01

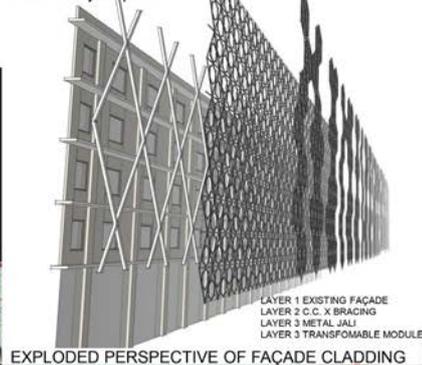
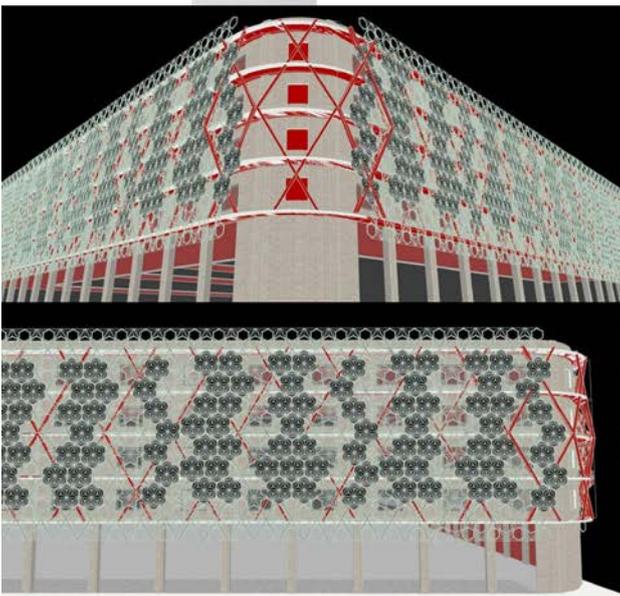
# IDC DESIGN COMPETITION 2022

## BUILDING ENVELOP REDESIGN OF METROPOLE HOTEL IN KARACHI

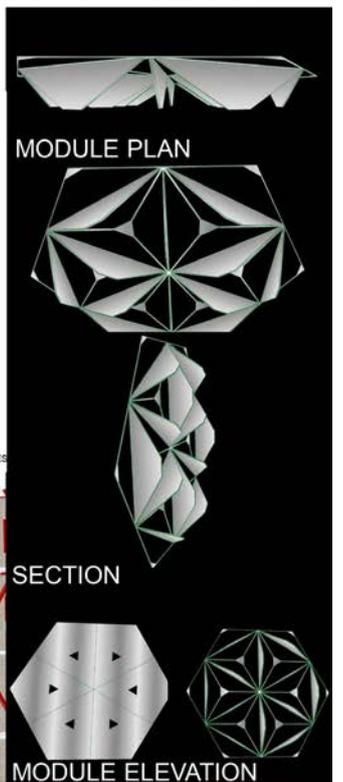
### CONCEPT



Studying Origami tessellations and folding behavior and the Islamic Geometric patterns with infinite repetitions to design the Grid mesh and the transformable parametric module which can act as a shading device on the existing external windows of the building. Thus making the building environmentally responsive.



EXPLODED PERSPECTIVE OF FAÇADE CLADDING



MODULE PLAN

SECTION

MODULE ELEVATION

SHEET 03

## HONOURABLE MENTION

Sana Hassan, Huma Afzal, Sabeeh Uddin, Mujtuba  
NED University of Engineering & Technology, PAKISTAN

2023



# ACA's **INTERNATIONAL** **DESIGN COMPETITION**

**2023** | ARCHITECTURE BY THE EDGE



**Aditya College of Architecture, Mumbai Presents**



## INTERNATIONAL DESIGN COMPETITION

# ARCHITECTURE BY THE EDGE

### DESIGN INTERVENTION

Participants are required to study the context chosen by them and propose measures to integrate a selected edge of water as a component and as an integral axis to their proposal. The selected context can be urban, peri-urban, or rural.

The design proposal should exhibit an understanding of ecological, social, and cultural characteristics of the place. The proposed design could be part of a built form, landscape, conservation, adaptive reuse, technological or sustainable effort. The participants are encouraged to think on multiple scales.

*"Water plays a fundamental role in our psychology. We need constant access to water, all around us, and we cannot have it without reverence for water in all its forms."*

**- Christopher Alexander, 1977**

Water signifies life and beginning! It is an essential element, providing physical, dimensional, and sensory characteristics to many architectures. Water has the capacity to transform any space with its size, placement, and proportion. With its dimensional quality, it acts as a dynamic axis in every context. Architecture has, from the beginning, engaged with water, often serving as an aesthetic purpose but more so as a center for human activity. Not only has it served as a transportation network promoting trade and business for centuries, but it has also provided opportunities for recreational activities on an urban scale. Waterfronts have transformed the space into activity hubs.

Water, or its presence, can influence the microclimate of a place, creating a comfortable zone, and it holds the capacity to affect and evolve a place at a macro level for any community.

Symbolically, water represents a powerful purifying element; hence, it has been a part of many rituals in most religions. Water is associated with life, death, and rebirth.

However, water is a limited resource and extremely vital to humanity. Our ability to manage water has now become extremely essential to look at using water effectively from an environmental, scientific, artistic, or creative perspective.

Extreme events such as climate change, wars, and political upheavals are increasingly susceptible to water-related disasters. Furthermore, the human population explosion has adversely affected water and the various natural habitats of organisms dependent on water.

Water is central to many socio-political conflicts. It is predicted that future wars will be the cause of these very conflicts. It is necessary to break our silence over this cycle of neglect and put the issue of the water crisis under the spotlight. Furthermore, a dialogue around it is needed to adopt more sustainable methods of living.

### REGISTER FOR FREE

**Eligibility of Participants:**  
 Undergraduate- B. Arch. students  
 Graduate- M. Arch. students  
 Recently graduated- B.Arch. students

Registration date - Sept, 19<sup>th</sup> 2023  
 Registration closing - Oct, 18<sup>th</sup> 2023  
 Submission deadline - Dec, 1<sup>st</sup> 2023

Winning entries will be published in ACA's COA approved publication with ISSN no. and ACA website for 2023-2024.

### AWARDS:

**UNDERGRADUATE STUDENTS CATEGORY**

Certificates and a Prize amount as follows:

**WINNING ENTRIES**

1<sup>st</sup> Place - ₹ 75,000  
 2<sup>nd</sup> Place - ₹ 50,000  
 3<sup>rd</sup> Place - ₹ 30,000

Citations: Certificates awarded to 3 exemplary entries.

### COLLABORATORS:



### CONTACT US:

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Scan for more details

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## 2023 | ARCHITECTURE BY THE EDGE POSTER & BRIEF

### THE JURY



**Ar. Alan Abraham**  
Principal architect  
Abraham John Architect



**Ar. Vinayak Bharne**  
Architect, Urbanist,  
Professor at USC School of  
Architecture



**Dr. Martina Spies**  
Architect,  
Urbanist, Activist,  
Founder at Anukruti

## BRIEF

We came from the water; our bodies are largely water; and water plays a fundamental role in our psychology. We need constant access to water, all around us; and we cannot have it without reverence for water in all its forms (Christopher Alexander, 1977)

Water signifies life and beginning! Water has been sacred to many civilizations and its water around major world civilizations flourished. It can be said that Architecture has been born out of Water. Water is an essential element, providing physical, dimensional, and sensory characteristics to many architectures. Water has the capacity to transform any space with its size, placement, and proportion. With its dimensional quality it acts as a dynamic axis in any context.

Architecture has from the beginning engaged with water, often serving an aesthetic purpose but more so as a center for human activity, not only has it served as transporting network promoting trade and business from centuries; it has provided opportunities for recreational activities, on an urban scale. Waterfronts front have transformed the space into activity hubs.

Water or its presence can influence microclimate of a place creating a comfortable zone and has capacity to affect and evolve a place at a macrolevel for any community. The aesthetic quality of water has been of a paramount importance right from Mughal landscape. Symbolically water represents a powerful purifying element, hence it has been a part of many rituals in most religions. Water is associated with Life, death, and rebirth.

However, water is a limited resource and extremely vital to humanity. Our ability to manage water has now become extremely essential to look at using water effectively from an environmental, scientific, artistic, or creative perspective. Extreme events such as climate change, wars, political upheavals are increasingly susceptible to water-related disasters. Further human population and explosion has adversely affected water and the various natural habitats of organisms dependant on water. Water is central to many socio- political conflicts; It is predicted that future wars will be the cause of these very conflicts. It is necessary to break our silence over this cycle of neglect and put the issue of water crisis under spotlight. Furthermore, a dialog around is needed to adopt more sustainable methods of living. With this insight we bring forth the 10th IDC conference with the theme as 'WATER' with the aim to bring into poignant concern of water as a perishable resource and the need to bring back sanctity synonymous to use of water in Architecture.

Water acts as a connector between the physical and the metaphysical. It serves as a reminder of our connection with our ancestors, while also serving as a bridge to connect us with the future. Given the current water crisis we find ourselves in, we invite students to produce designs that further this idea of water and its connect with the built environment.

## OBJECTIVES OF COMPETITION

- To bring to the forefront the symbiotic relationship we humans share with water
- Bring out qualities of water such as tranquillity, fluidity, sensory and its sense of vastness through design
- Reflecting on how our ancestors shared their relationship with water and how that can be revitalised to suit today's context
- To keep focus on rising water crisis how can we as architects use water responsibly and wisely
- Leveraging modern technology into constructing with water
- From a historical perspective water always associated with architecture – revitalising water storage facilities and its association with existing urban fabric
- Water and climate change – Coastal degradation

## COMPETITION BRIEF

The competition is open to architecture students. Participants are required to study the context chosen by them and propose measures to integrate a selected edge of water as a component and as an integral axis to their proposal. The selected context can be urban, peri-urban, or rural. The design proposal should exhibit an understanding of ecological, social, and cultural characteristics of the place. The proposed design could be part of a built form, landscape to conservation, adaptive reuse, technological or sustainable effort. The participants are encouraged to think on multiple scales.

# WINNING ENTRIES

# 2023

# Reclaiming Urban Waters

A story about urban agriculture as a form of urban conservation ensuring a resilient chain of food supply in Slave Island, Colombo 02, Sri Lanka.

For Lanka in facing its world economic crises since its independence in 1948. As a consequence, a quarter of the population in Sri Lanka is now estimated to live below the poverty line, which compromises their ability to access sufficient, nutritious food (World Bank, 2022:20).

Avoided those unprecedented challenges, urban poor of Colombo have turned to urban farming as a coping mechanism to ensure food security in their neighborhoods (Figure 01). However, despite its potential, urban farming encounters a critical barrier, the inability to ensure sufficient water supply. Due to spatial constraints and other limitations, urban farming often relies on only a shallow layer of rain to be sufficient. This compromises the nutritional diversity which is crucial for fighting against food security deficiency.

As a solution to overcome those limitations, a Mistry community in Slave Island, known for its rich culture and tradition of food, introduced urban fish farming in Slave Lake (Colombo) to tackle food security, all while promoting their cultural practices, social values, and environmental stewardship. And this is their story!



Figure 01



Figure 02

Fishing in the Slave Lake is no breaking news story. Not very long ago, fishing for small to popularly known as 'Betta Bolly' was a leisure time activity or a personal consumption that being being in the urban lake has become a sustainable business (Figure 02). Unfortunately, unregulated waters and overfishing has made it an unsustainable fish because it is heavily overfished the fish population making it hard for the ecosystem to sustain itself. Therefore, the submission attempts to achieve broader ecological goals while creating a resilient chain of food supply.



Map of Slave Island, Colombo 02

The design introduces productive infrastructure into Slave Lake, redefining the current food farming practices. A novel way of construction and usage of materials will be employed to allow for greater design flexibility while reducing assembly cost and also, it allows more locals to participate in the process of design and construction. The climate operates across multiple scales, starting from the immediate household level it responds to, extending towards broader ecological goals on a larger urban scale.

## Broader ecological goals

- Water quality improvement**  
Floating Treatment Wetland (FTW) systems are being used to filter and purify water, enhancing the overall water quality of urban areas. Fish farming helps in multiple phases and FTW can collectively help in maintaining local water bodies.
- Ecosystem restoration**  
Urban agriculture will be evolved by reintroducing native fish species to urban waters and by controlling the environment from invasive species.
- Climate resilience**  
The team can adapt to varying natural conditions, such as fluctuations in water levels during rainy seasons, ensuring continuity in fish production despite climatic variations. The will be achieved by employing local way of construction that can respond to local conditions. The team will be designed in a human scale that is easier to be controlled, so the locals can respond to local in happening.
- Sustainable water use**  
Incorporating rainwater harvesting into fish farming practices provides responsible and sustainable use of water.
- Educational and awareness**  
These farms will be used as a tool to raise awareness about aquatic ecosystems, sustainable food production, rainwater harvesting, environmental stewardship and best-practice sustainable construction systems.

## Understanding local ways of construction



The details of aesthetics and the structural type of this scheme is inspired by the local ways of construction, materials, and ways of occupying space as a support to retain construction and assembly cost while allowing for greater design flexibility. Incorporating traditional and innovative local methods ensures better adaptation and durability in changing environmental contexts.

## Existing building systems

Existing building systems in common single and multi-story residential and public buildings were studied to understand their existing knowledge on materials and construction methodologies.

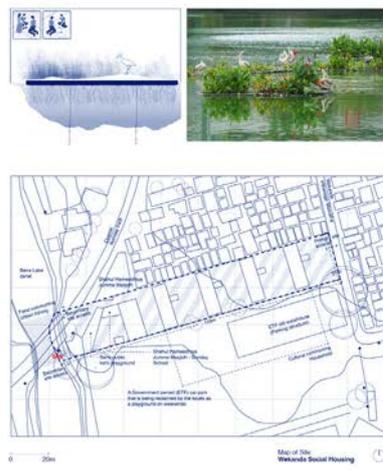
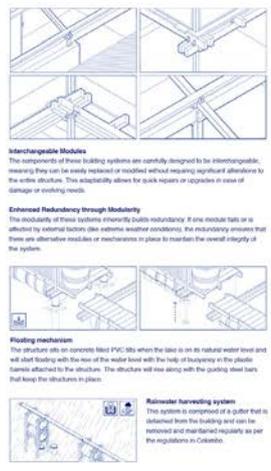
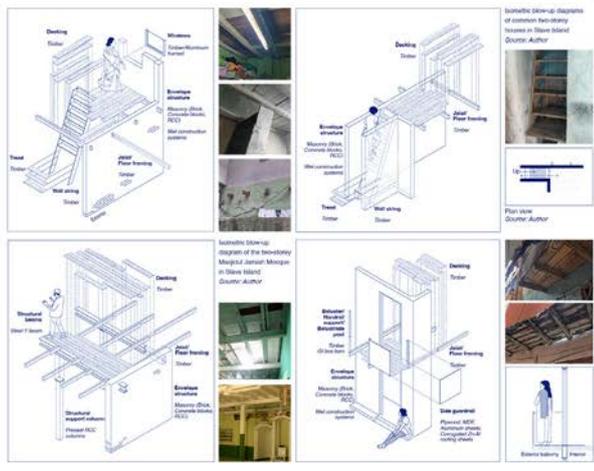
## New building systems

New building systems have been derived for the interventions, building upon the existing materials and methodologies. The new modular systems allow for a wider range of interventions, ranging from small modular add-ons to large fish farms.

## Floating Treatment Wetland (FTW)

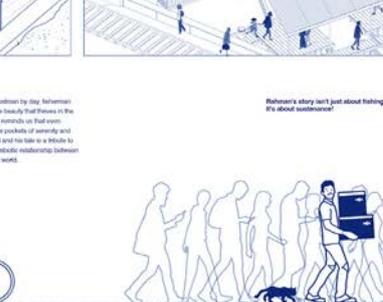
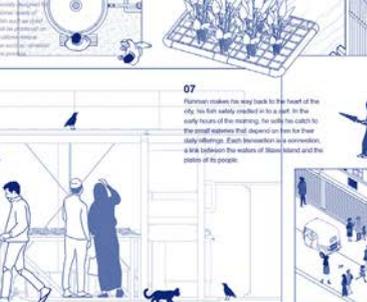
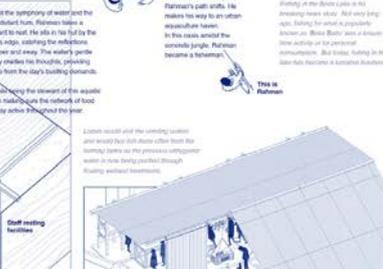
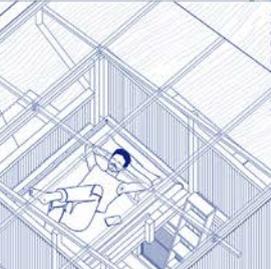
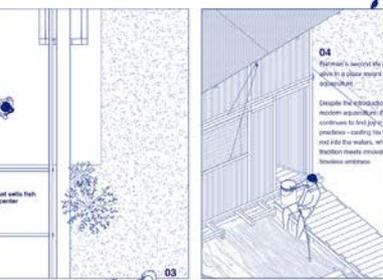
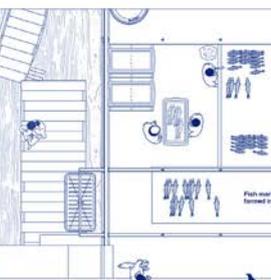


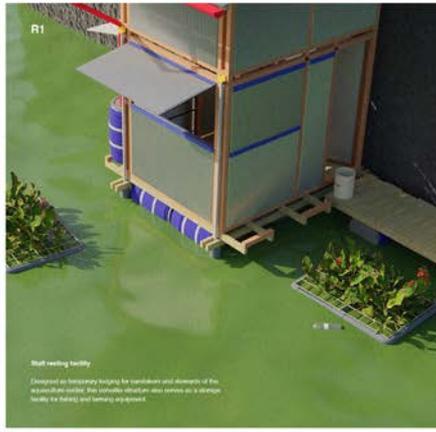
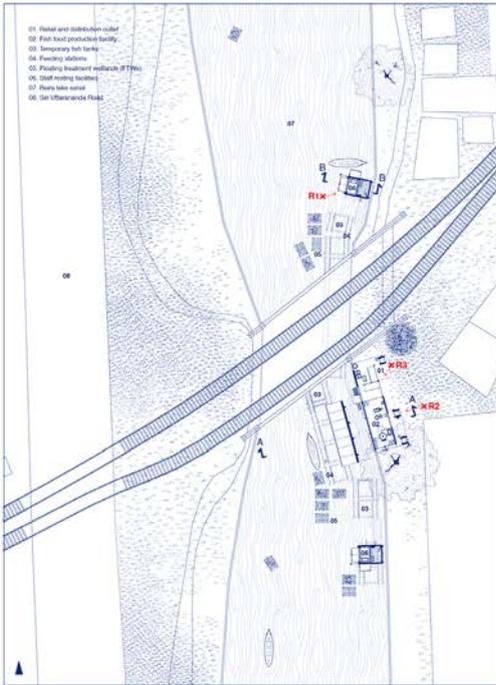
Locals of Slave Island will get together and make FTW by planting plants such as Cattail, Water hyacinth and Water hyacinth, bamboo, and foam mattresses as floating supports. Plants in floating wetlands absorb excess nutrients present in the water. This reduces the amount of algae in the water and purifies the water, eliminates odors, and maintains an ecological balance by providing habitat for water-dependent organisms.



## Reclaiming Urban Waters: A short story

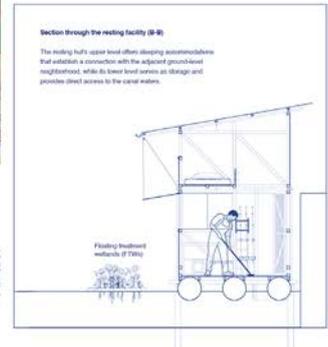
**Local scenario:** Material resources: Betta Lake canal  
Community: Local residents  
Concerning: Urban loss of food connectivity





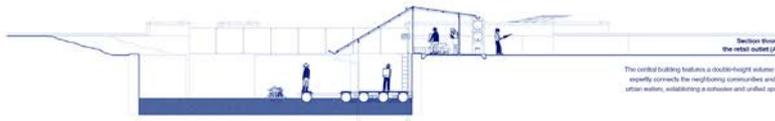
**Fishwater harvesting system**

This setup involves a design where gutters are not directly fixed onto the building but instead are mounted to an external frame structure. This frame structure not only supports the gutters but also functions as a storage unit for the collected rainwater. This arrangement allows for easy access to the collected water directly from the external unit. With this setup, the gutters can be easily removed or accessed for maintenance without interfering with the operations of the farm.



**Ground floor plan**

The aquaculture center is strategically placed along the canal, integrated seamlessly into the landscape. The placement serves to harmoniously connect the local neighborhood with the urban system, resulting in a cohesive arrangement where these two domains unite.



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SHEET 03

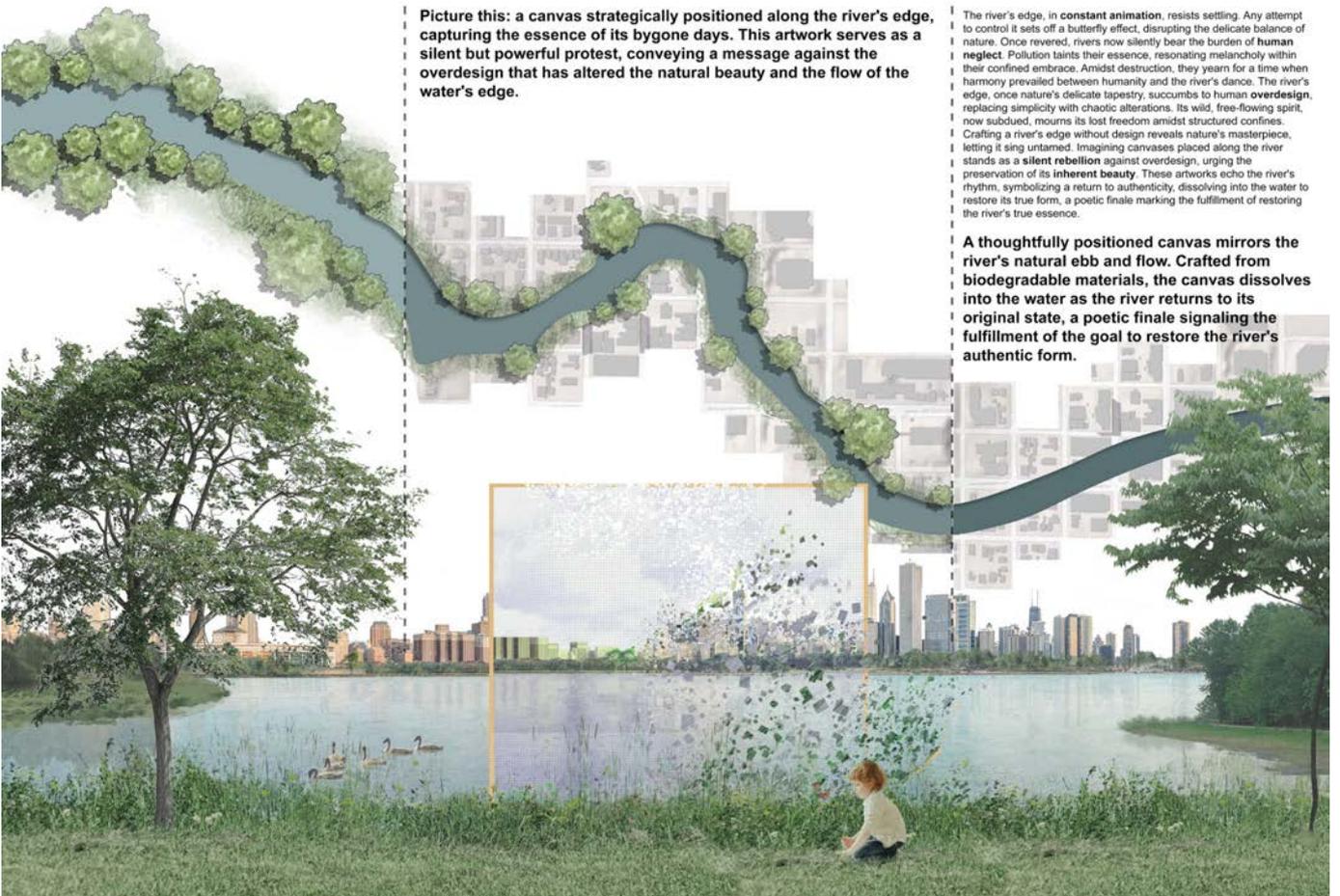
**1st WINNING ENTRY**  
 Lakal Piya Rathna  
 University of Moratuwa, SRI LANKA

# The Value of Null.

"I do not believe architecture has to speak too much. It should remain silent and let nature in the guise sunlight and wind"  
-Tadao Ando



SHEET 01



Picture this: a canvas strategically positioned along the river's edge, capturing the essence of its bygone days. This artwork serves as a silent but powerful protest, conveying a message against the overdesign that has altered the natural beauty and the flow of the water's edge.

The river's edge, in constant animation, resists settling. Any attempt to control it sets off a butterfly effect, disrupting the delicate balance of nature. Once revered, rivers now silently bear the burden of human neglect. Pollution taints their essence, resonating melancholy within their confined embrace. Amidst destruction, they yearn for a time when harmony prevailed between humanity and the river's dance. The river's edge, once nature's delicate tapestry, succumbs to human overdesign, replacing simplicity with chaotic alterations. Its wild, free-flowing spirit, now subdued, mourns its lost freedom amidst structured confines. Crafting a river's edge without design reveals nature's masterpiece, letting it sing untamed. Imagining canvases placed along the river stands as a silent rebellion against overdesign, urging the preservation of its inherent beauty. These artworks echo the river's rhythm, symbolizing a return to authenticity, dissolving into the water to restore its true form, a poetic finale marking the fulfillment of restoring the river's true essence.

A thoughtfully positioned canvas mirrors the river's natural ebb and flow. Crafted from biodegradable materials, the canvas dissolves into the water as the river returns to its original state, a poetic finale signaling the fulfillment of the goal to restore the river's authentic form.

SHEET 02

**2nd WINNING ENTRY**  
Golam Ahmmad Sunny, Julkarnain, Nafisa Anjum  
BRAC University, BANGLADESH

# WATERQUARRY: A HOLISTIC TRANSFORMATION OF NEGLECTED LANDSCAPES

## Project intent

The world is still rife with industrial wastelands, each one representing a stark rift in the contemporary landscape. It is within this challenging context that WaterQuarry emerges as a groundbreaking initiative, aiming to breathe new life into abandoned quarries. Rather than viewing these quarries as desolate spaces, WaterQuarry perceives them as untapped opportunities for transformative regeneration. This visionary project seeks to leverage the dynamic potential of water to create vibrant, sustainable spaces that harmonize both community life and the natural environment.

### Why? Preserve industrial heritage and altered landscapes



Community Consciousness



### Post industrial landscape



Site Image 2022

"Landscapes give us an alternative impression about the economic and technical development of a particular society. They are, in fact, more informative as they are a comprehensive, detailed and precise account of the state of the environment as a factor better than any measure could be better."



Site Zones



Site Photographs



Slope Analysis - Elevation

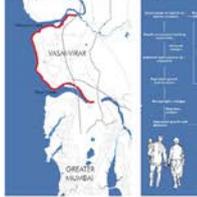


Water Flow, Ridge Valley Analysis

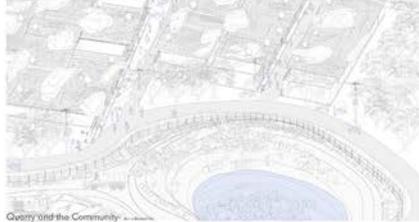
Taking in account the industrial part of the region, where sensitive ecology is being altered for years with no apparent results for these peri-urban areas, alteration of morphologies in a variety of ways can be seen. Many of these abandoned industrial wastelands in industrial zones are left with deteriorated negative spaces that once held significance. This thesis found its premise on the question of what happens to such desolate landscapes and how one may turn such spaces into positive ones since, as of yet, one has only gained poorly from the ugliness it creates. What emerges in these wastelands?

1. What has led to the divide between the waste land and the community? What's the possibility of reviving such spaces?
2. How does architecture tend to play its role or as a connecting bridge between the quarry as a waste land and community?

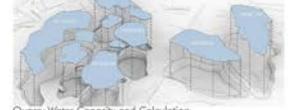
### Site Location - Northern Mumbai Range (East)



### Regeneration and Planning



Quarry and the Community



Quarry Water Capacity and Calculation

Water stored per house: 1355, 99 L from Municipal corporation  
 \*231: Building footprint coverage from outside or beyond area  
 Water stored in quarry (area in 45% of surface)  
 Total: 118,05,23,200 L per year  
 45 L per person per day  
 No. of people served: 70,000  
 Water will be used for secondary purpose like Fishing, washing etc. Also in industrial nature.

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SHEET 01



Design Strategy



Concept Sketch



Site Analysis

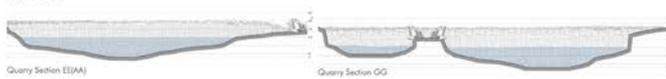
1. Enhancing local food sustainability and fostering community connections.
2. Promoting biodiversity and contributing to overall ecological balance.
3. Establishing spaces where water unifies, encouraging social interactions and a sense of belonging.
4. Integrating markets and recreation areas with water features, fostering local economic growth while respecting nature.
5. Create unique breathing spaces in the industrial region, departing from traditional processes to offer unconventional hubs for regeneration.



Site Plan



Proposed Masterplan



Quarry Section EE(A)

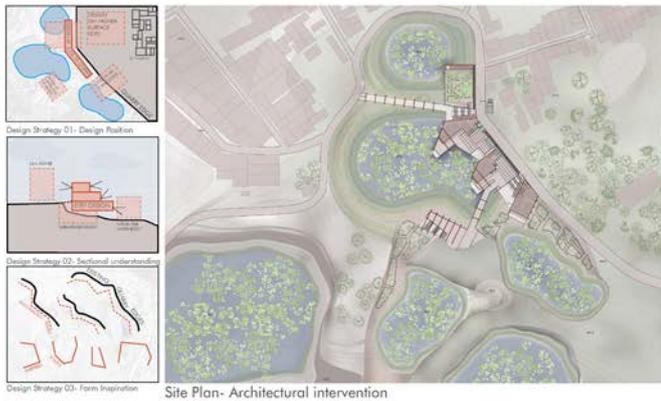
Quarry Section GG



Building Section CC

Building Section DD

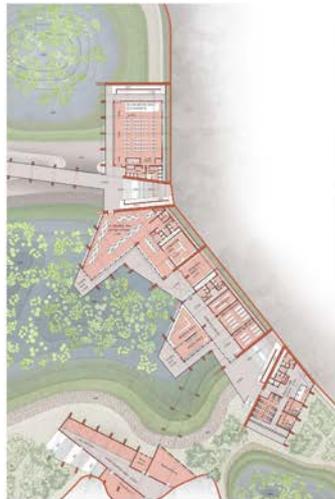
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Site Plan- Architectural intervention



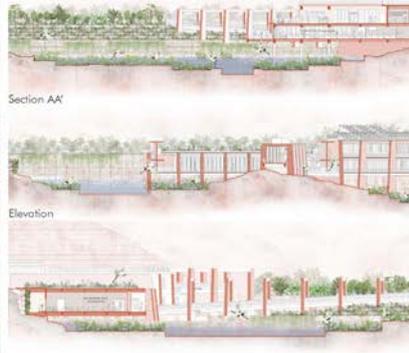
Exploded Axonometric View, Framing the Design, Quarry Greens and Water



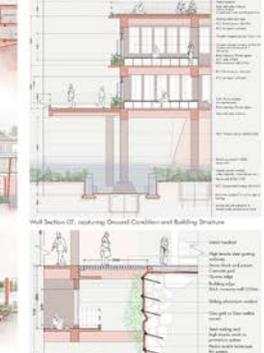
Ground Floor Plan



First Floor Plan



Section BB'



Quarry Edge with Steel Deck Detail

2023\_IDC3956

SHEET 03

# 3rd WINNING ENTRY

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