

ACGSA

Committee on Green and Sustainable Architecture



REPORT

2019 - 2020



ACGSA

Ar. Dr. Acharawan Chutarat
Chairman

Ar. Tushar Sagoni
Deputy Chair /
Zone A (rep)

Ar. Debatosh Sahu
Imm Past Chairman

Ar. Qasi M Arif
Past Chairman

ASA
The Association of Siamese Architecture

IIA
The Indian Institute of Architecture

IIA
The Indian Institute of Architecture

IAB
Institute of Architect, Bangladesh





ACGSA

ZONE A



Ar. Tushar Sagoni
Deputy Chair /
Zone A (rep)



ZONE B



Ar. Alice Leong
Zone B (rep)












ZONE C



Ar. Terukazu Nii
Zone C (rep)



Ar. Gaurav Agarwal	IIA	
Ar. Dr. Zebun Nasreen Ahmed	IAB	
Ar. Damith Premathilake	SLIA	
Ar. Pranita Shamapandit	SONA	
Ar. Yeshey Jamtsho	BIA	
Ar. Rashid Rasheed	IAP	

Ar. Alice Leong	PAM	
Ar. Rodney Tew	PUJA	
Ar. Maria Luisa D.	UAP	
Ar. Dr. Pattaranan Takkanon	ASA	
Ar. Prasetyoadi Tiyyok	IAI	
Ar. Tan Szue Hann	SIA	
Ar. Dr. Nguyen Tuan	VAA	
Ar. Tran Khanh Trung	VAA	
Ar. Wah Wha Myint Thu	AMA	
Association of Lao Architects and Civil Engineers		

Ar. Terukazu Nii	JIA	
Ar. Kyotae Do	KIRA	
Ar. Xiao Yao	ASC	
Ar. Cheung Suet Fai	HKIA	
Ar. Chan Suk Fun (Mary)	HKIA	
Ar. Donna Kim Kam Wu	AAM	
The Union of Mongolian Architects	UMA	

Deputy Chair's message

Some Area for future works of ACGSA :

Over the past 3 years, I very much enjoyed working with our ACGSA committee, ARCASIA friends and family. The last time ACGSA committee physically met was at the committee meeting during the Forum20 in Dhaka in November 2019. There were many of ACGSA representatives participated. Since then, thanks to the COVID-19 that has made it possible to work online, closely among ACGSA committee. From the time we brainstormed during the Roundtable in July 2019 in Jaipur, until today, I am proud to say that we have been working on the agreed direction and to be continued by the next Chair, Ar.Tushar Sogani. First is to learn from the past through heritage/vernacular wisdom towards possibilities for future innovation in sustainable architecture. Second is the New Urban Agenda / harmonizing Green Building Rating System; and third is Resilience. Issues of health, well-being and utilization of digital technology are additional concerns in all aspects. The three pillars have been done through different activities from roundtable, workshops, design competitions, webinar, forum, data collecting and discussions among ACGSA committee and cross-committee. New knowledge through the lenses of ACGSA has been compiled in this report. Certainly, our efforts will be carried through as a reference or guidelines for best practice in green and sustainable architecture. Thank you, our committee, for their hard work and sharpness. I am proud of everyone, the best team ever. I cannot express how much I admire and respect the team. I would like to thank Ar. Rita Soh, our ARCASIA president and her team for their guidance and support. Finally, I am grateful for Association of Siamese Architects for providing me opportunity to contribute to ACGSA and for supporting me as always.

Ar. Dr. Acharawan Chutarat
ACGSA Chairman 2019-2021



Vision

ARCASIA President's Vision

Steewardship in use of all resources

Education + Life-Long Learning

Environmental Sustainability

Design Excellence + Empathy

Social Awareness + Responsibility

Direction

ACGSA's Mission

PILLAR 1 :

Heritage & Future Vernacular

The strength of Asia, in terms of architecture, building and construction lies in the rich culture and heritage of the region and the people. The culture, history and heritage, the vernacular wisdom had always had significant influence on the development of the vocabulary of architecture of a country in the past. Collection of articles and knowledge which portray traditional wisdom in relation to people, lifestyle, habitat, architecture, planning and construction of a country/region shall potentially contribute towards future sustainability.

PILLAR 2 :

New Urban Agenda

Crisis on climate change, resilience and the COVID-19 pandemic require impactful guidelines for actions where any efforts towards improvement can affect a massive change. The aim is to leave no one behind by working together to harmonize new green building guide for Asia with responsible and responsive design. Outcome is expected to increase low/zero-energy buildings, while reducing consumption that shapes more livable and resilient environments for communities with respect to new normal, New Urban Agenda and UN's 17 SDGs.

PILLAR 3 :

Resilience

Resilience Globalization has expanded the scale & vision of human activity beyond restrictions of local resources & power, resulting in a climate crisis at a global level, affecting weak communities the most. Discussions across national borders in ACGSA offers imageability about natural phenomena occurring across various regions and exposes us to resourceful solutions based on local wisdom. As architects, enhancing such regional potentials for new attempts could be a step towards cooperation between various countries for building a resilient future.

Direction

The Entire work of the ACGSA has been previously also based on the following domains on the main 3 pillars as follow:

PILLAR 1

Heritage / Future Vernacular

PILLAR 2

New Urban Agenda

PILLAR 3

Resilience

Activities

We would like to take these forward and add up some new assignment as well, like harmonising the green rating systems & tools of the different countries

Roundtable meeting Built and Natural Heritage - The Sustainable Face of Architecture	Treaty: Jaipur Declaration	E-Book Vernacular Wisdom Asia	Webinar Minding our Heritage : "How to Approach Conservation & Adaptive Reuse of Asia's Built Heritage"
Panelist Discussion "Built and Natural Heritage"	Panelist Discussion - Jaipur Chapter "Learning from Heritage Architecture" - for Green Practices	Forum "Redefining Sustainability Through Vernacular Wisdom"	
Panelist Discussion "Challenge in Implementing Green Building Rating tools"	Green AsiArch 2019 "Selected Green Building Practice Exhibition"	Webinar Embracing Digitalisation : "How Architects Can Leverage New Technologies for Our Future"	Green AsiAarch 2020 @ACA
AAA : Sustainable Design Award Criteria	Webinar "How Green Rating Tools Promote A More Sustainable and Resilient Architecture"	Design Competition " The contribution of green buildings in the fight against COVID-19"	GB w health well-being SDGs guide E-book @ACA
Design Competition "Design for Resilience to Changing Environment"	Webinar "The Evolution of Urban Resilience & Sustainable Future"		Webinar Shared Session/Award Ceremony: ACGSacompetition recognition @ACA

PILLAR 1 : Heritage / Future Vernacular

Index

Rountable
Meeting &
Panelist
Discussion

**Built and
Natural
Heritage**

Treaty

**Jaipur
Declaration**

Treaty/
Panel Discussion

Jaipur Chapter

E-Book

**Vernacular
Wisdom
Asia**

Forum

**Redefining
Sustianability**

Webinar: Cross
Committee 1.0

**Minding Our
Heritage**

Pillar 1 : Heritage / Future Vernacular

Building and Natural Heritage : The Sustainable Face of Architecture

Webinar

Roundtable Meeting : Building and Natural Heritage



Pillar 1: Heritage / Future Vernacular

Building and Natural Heritage

Panel Discussion

Panel Discussion : Built and Natural Heritage

ATTENDEES

8 Local Universities
+200 Students

PANELISTS

ACGSA
ACAE
ACPP



Ganesh Vandana in the Event



Panel Discussion on Built and Natural Heritage



Panel addressing the student and Faculty

LOCATION

JKK, Jaipur RT

DATE

JULY 2019



The Students and Faculty from Architecture colleges



Panel Discussion on Built and Natural Heritage



The Faculty of colleges receiving certificates

Pillar 1 : Heritage / Future Vernacular

Jaipur Declaration

Treaty

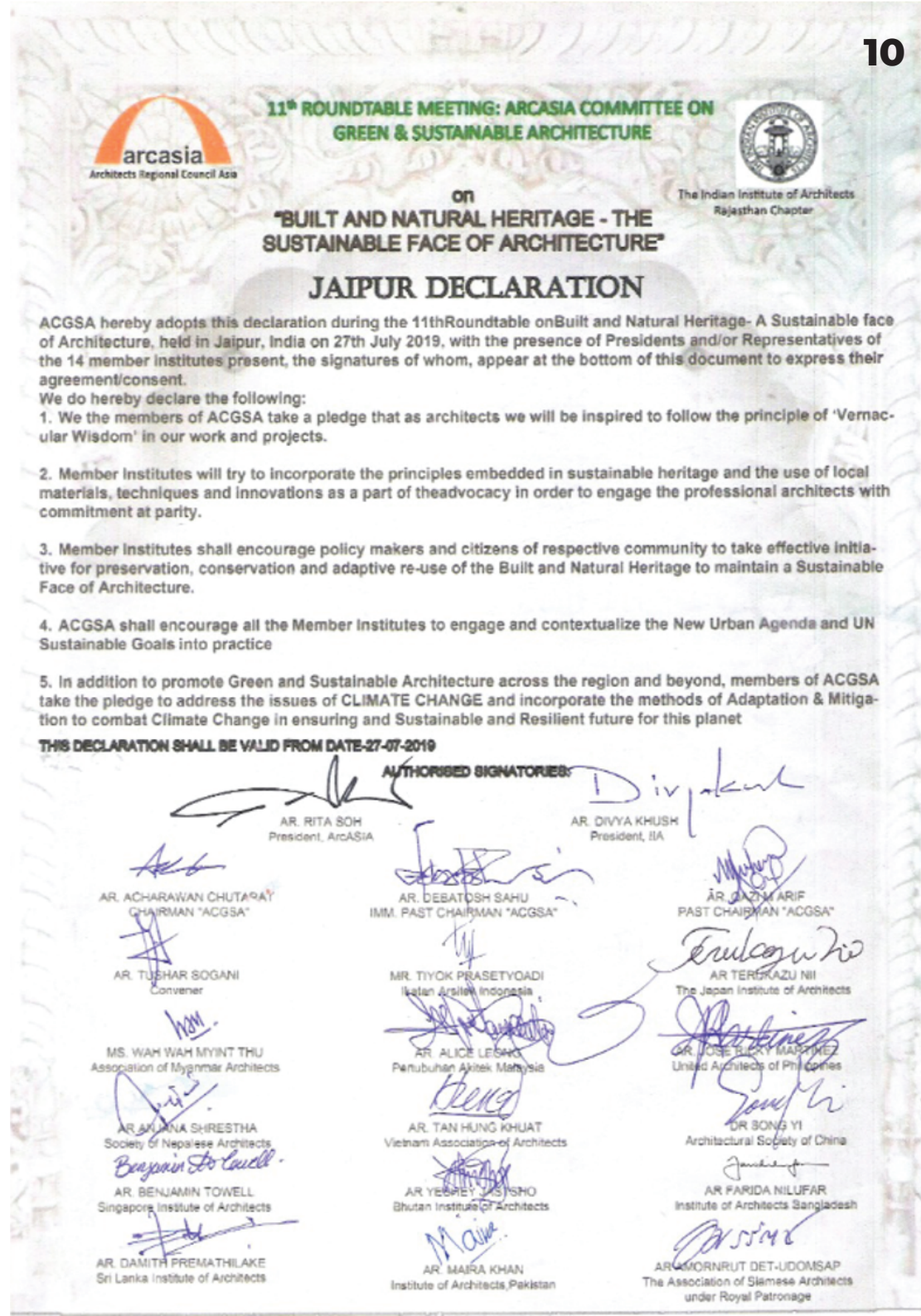
Treaty: Jaipur Declaration

Content

ACGSA hereby adopts this declaration during the 11th Roundtable on Built and Natural Heritage. A Sustainable face or Architecture, help in Jaipur on 27th July 2019, with the presence of Presidents and/or Representatives of the 14 members institutes present, the signatures of whom, appear at the bottom of this document to express their agreement/consent.

We do hereby declare the following:

1. We the members of ACGSA take a pledge that as architects we will be inspired to follow the principle of 'Vernacular Wisdom' in our work and projects.
2. Member Institute will try to incorporate the principle embedded in sustainable heritage and the use of local materials, techniques and innovations as a part of the advocacy in order to engage the professional architects with commitment at parity.
3. Member Institute, shall encourage policy makers and citizens of respective community to take effective initiative for preservation, conservation, and adaptive re-use of the Built and Natural Heritage to maintain a Sustainable Face of Architecture.
4. ACGSA shall encourage all the Member Institutes to engage and contextualize the New Urban Agenda and UN Sustainable Goals into practice.
5. In addition to promote Green and Sustainable Architecture across the region and beyond, members of ACGSA take the pledge to address the issues of CLIMATE CHANGE and incorporate the methods of Adaptation & Mitigation to come bat Climate Change in ensuring and Sustainable and Resilient future for this planet.



Pillar 1 : Heritage / Future Vernacular

Jaipur Chapter :
Lessons from Build Heritage The Way Forward

Panel discussion/Treaty

Panel discussion/Treaty: Jaipur Declaration

Content

We, the undersigned participants to the “ARCASIA ALL COMMITTEES PANEL DISCUSSION” held in Jaipur INDIA, hereby declare to support, work and promote for the understanding of the following objectives agreed upon during this panel discussion.

ARCASIA committee on Green & Sustainable Architecture (ACGSA)

1. ACGSA Commits to incorporate the vernacular wisdom in the built form and further commits to takes the legacy long way.
2. ACGSA Commits to standardized the green building rating tools for all the Members Institute of ARCASIA as a part of Cross Border Collaboration.

We, the undersigned participants to the “ARCASIA ALL COMMITTEES PANEL DISCUSSION” held in Jaipur INDIA, hereby declare to support, work and promote for the understanding of the following objectives agreed upon during this panel discussion:

ARCASIA COMMITTEE ON ARCHITECTURAL EDUCATION (ACAE)

1. ACAE commits to promote Cross Border Education/Student and Teacher Exchange in ARCASIA region to emphasis on understanding researches and historic preservation in different region.
2. ACAE shall encourage to consider the importance of Built & Natural Heritage and to conduct workshops, field trips to the historic/heritage site for experimental learning.

ARCASIA COMMITTEE ON GREEN & SUSTAINABLE ARCHITECTURE (ACGSA)

1. ACGSA Commits to incorporate the vernacular wisdom in the built form and further commits to takes the legacy long way.
2. ACGSA Commits to standardized the green building rating tools for all the Member Institute of ARCASIA as a part of Cross Border Collaboration.

ARCASIA COMMITTEE ON PROFESSIONAL PRACTICE (ACPP)

1. Architects shall be well aware of the Heritage of their region and shall promote and employ the craftsmen who are well versed with the traditional methods of construction.
2. Architects shall discourage any form of demolition of respectable Built Heritage and devise methods of its adaptable reuse so as to encourage the Government or Private client to preserve and reuse the built form.



Ar Rita Soh
ARCASIA President



Ar Lalichan Zacharias
ARCASIA VP Zone A



Ar Saifuddin Ahmad
ARCASIA VP Zone B



Ar Gyanendra Singh
Committee Chair-ACAE



Ar Jonathan Manalad
Panellist-ACAE



Ar Adrianta Aziz
Panellist-ACAE



Ar Acharawan Chutarat
Committee Chair-ACGSA



Ar Tushar Sogani
Panellist-ACGSA



Ar Ridha Razak
Committee Chair-ACYA



Ar Denny Setiawan
Panellist-ACYA



Ar Russell Dandeniya
Committee Chair-ACSR



Ar Sudhir Balakrishnan
Panellist-ACSR



Ar Simon Chan
Panellist-ACPP



Ar Qazi M Arif
Committee Chair-Fellowship



Ar Mukul Goyal
Moderator

PILLAR 1: Heritage / Future Vernacular

Vernacular Wisdom Asia

E-Book

E - Book : “Vernacular Wisdom Asia”



E - Book : “Vernacular Wisdom Asia”

Overview

THEME

It is well-known to all concerned architects, historians, members of academia that the strength of Asia, in terms of architecture, building and construction lies in the rich culture and heritage of the region and the people. The culture, history and heritage, the *vernacular wisdom* had always have a significant influence on the development of the *vocabulary of the architecture* of a country in the past. Many examples of contemporary practice also embraced the lessons from the past in order to be sensitive to the environment and ecology.

It is important to preserve and archive these treasures of knowledge and wisdom for the present and future generations so that the ancient inspirations can survive & persist through ages before they perish and are lost in time.

The book VERNACULAR WISDOM: ASIA envisaged to be a collection of articles that shall *portray the explicit ancient, traditional wisdom* in relation to people, lifestyle, habitat, architecture, planning, building, and construction of a country/region/territory, which shall potentially continue contributing towards future development and sustainability.



PUBLICATION / COMMITTEE

Prepared & Submitted : Ar. Qazi M Arif
 Members : Ar. Debatosh Shu
 Ar. Bernard Gomez
 Ar. Acharawan Chutarat
 Ar. Michaela Rosette Santos
 A. Amina Qayyum Mirza



PILLAR 1: Heritage / Future Vernacular

“Redefining Sustainability Through Vernacular Wisdom”

Forum

Forum : “Redefining Sustainability Through Vernacular Wisdom”

Conclusion

1. Vernacular experiences is the key to preserving identity;
2. Indigenous experiences helps to “cope” with the assimilation pressure of globalization and over-technologization;
3. Design process must pay attention to mental or intangible sustainability factors;
4. To preserve vernacular experiences, we are not only saving a present for future generation, but also our responsibility for future. Keep vernacular experiences and promote it to join our current life is one of key solution for saving for our sustainable future.

CONVENOR

Ar. Tushar Sagoni
Deputy Chair



ATTENDEES

140

DATE

7th November, 2020



REDEFINING SUSTAINABILITY THROUGH VERNACULAR WISDOM

DATE: 7th NOVEMBER, 2020
TIME: 9:00 -11:00 AM, IST

REGISTER ON THE
LINK BELOW:
<https://bit.ly/2SE610r>



AR. RITA SOH
PRESIDENT ARCASIA



AR. CHARWAN CHUTARAT
CHAIRMAN ACGSA



AR. LALICHAN ZACARIAS
VICE PRESIDENT ZONE A



AR. SAIFUDDIN AHMAD
VICE PRESIDENT ZONE B



AR. WU JIANG
VICE PRESIDENT ZONE C



AR. TUSHAR SOGANI
DEPUTY CHAIRMAN, ACGSA



DR. PATTARANAN TAKKANON
MEMBER OF ASA



AR. ROVER CHEUNG
MEMBER OF HKIA



AR. WEI XIAO
MEMBER OF ASC



AR. NGUYEN QUOC TUAN
MEMBER OF VAA



AR. ANJANA SHRESTHA
MEMBER OF SONA



AR. DEBATOOSH SAHU
MEMBER OF IIA



AR. MYA MYA HNINT
MEMBER OF AMA

Forum : “Redefining Sustainability Through Vernacular Wisdom”

Full Summary

ACGSA representatives from different regions share how approaches towards future vernacular are helping create sustainability. Lessons learned how each region does in their own way. The definition of ‘vernacular architecture’ was revisited, analyzed and considered the same as modern term ‘sustainability’. With differences in terms of geographical context, environment, and socio - economic background, vernacular approaches in every country in ARCASIA network have common values as they are based on climate, environment, and local materials and construction techniques. The vernacular architecture of each region has its own unique characteristics. Nonetheless, with the changing environment and the innovation of technologies, they share some problems such as losing identity, no reflection of tradition and culture, and the changing look due to overuse of manufactured building materials. Example from each country show how government and organizations work together to establish programs for architecture coexist with the modern way of living. Adaptive reuse of architectural heritage is a mean to bridge the gap between the past and the present. It is also essential to seek for the new vernacular within the adaptive development as many regions have been progressing to develop the new vernacular architectural language in contemporary architecture. Since vernacular approaches are contextual and resource based which care for the planet earth, the integration of vernacular approaches and modern innovation is considered a way to achieve sustainability. ACGSA representatives shared their directions and lessons learned through various case studies and reseaches

Forum : “Redefining Sustainability Through Vernacular Wisdom”

The vice president emphasized the importance of vernacular architecture that reflects a place, time, and culture. It is built in accordance with the natural environment to fulfill people’s physical, economic, social, and cultural norms. Cities that import identities from others are unfit with their contexts and environment. While over the past three decades we have been suffering from environmental dilemmas so we should focus on sustainability integration with regard to belief, act, use of resources, and built to support society.

Ar. Lalichan Zacarias

Vice president ZONE A

The vice president explained the diverse characteristics of the 9 countries in Zone B in terms of architecture, people, culture, and environment. The regional climate is similar but like most developing countries, the urban landscape has changed regardless of climate and environment. The forum is the platform for sharing knowledge of how each country adapts to changes while maintaining local identity. He urged the committee to work on common findings after the forum.

Ar. Saifudin Ahmad

Vice president ZONE B

The deputy chairman gave an introduction to the forum by emphasizing that sustainability and vernacular architecture are equal as sustainability is the modern-day term for vernacular architecture. There are elements for sustainability including water efficiency, indoor environmental quality, durable and maintainable design, energy efficiency, eco-friendly materials, and waster reduction. Three aspects of vernacular architecture include local climate zone, local materials, and most importantly, local design principles. It is time to think about retaining and reviving the environment.

Ar. Tushar Sogani

Deputy Chaif ACGSA

Forum : “Redefining Sustainability Through Vernacular Wisdom”

The ASA representative revisited the definition of vernacular architecture as “it is something that involves living, environment, and knowledge that has been passed down for generations to become the architecture” (Ornsiri Panin). Nothing remains unchanged. Architecture evolves but ‘vernacular architecture’ seems to be separated from ‘architecture’ especially in Thailand in which formal architectural education was established and influenced by the west. Nowadays, while there are various green assessment tools to quantify architecture all over the world, some ingredients such as culture and local wisdom are missing. In order to elaborate how Thais implement criteria and concept of vernacular architecture to the actual design, there were 4 recent case studies from Thailand presented namely, Huean Tham (House of Dharma), Cocoa Valley Resort, Baan Phompet, and Hotel Labaris Khao Yai. They show that it is possible to apply vernacular architecture principles to any scaled and building type. Key elements such as climate-responsive design to enhance thermal comfort and the use of local material was recognized and further developed in quest of finding new Thai vernacular architecture. Redefining sustainability through vernacular wisdom is essential as green/sustainable architecture needs to connect with local tradition and culture.

Dr. Pattaranan Takkanon
Representative of ASA

The HKIA representative brought back the history of HK, how architecture and the city have been transformed through time and how subtropical climate shaped the architecture till today. A number of examples present architectural characteristics for shading and natural ventilation such as verandah, and courtyard, to bring light into the space and create a social interactive area. Balcony, verandah, and communal spaces can become exhibition areas. A wide range of projects includes a hospital revitalized into a community complex, housing estate, shopping center, area for artists and activities, high-rise building, sports center, etc. There can be different designs for projection and we should work with them instead of against the existing material world. Challenges these days include 1) Decision Makers may not know what can be done, 2) Lost of Craftmanship, 3) New Generations may not know the value of Heritage, and 4) Public may not know what we can contribute collectively. In order to overcome these challenges, there are activities to co-vitalize our heritage: 1) Co-tour to appreciate and review what's been done, 2) Co-Craft with Master to draw Awareness and Respect, 3) Co-Create to educate out Secondary Students, and 4) Co-Design to construct Visions. It is suggested for us to work with the public and decision-makers to carry through all great ideas from vernacular architecture towards sustainability.

Ar. Rover Cheung
Representative of HKIA

Forum : “Redefining Sustainability Through Vernacular Wisdom”

The ASC representative gave the presentation covering topics as follows: 1) The role of vernacular heritage in national strategies on sustainable rural development which considers the revitalization of rural areas as a very important basis for a healthy national economy and an effective approach to the inheritance of traditional culture. Theoretical research and practical projects have been carried out throughout China. 2) ASC's effort in promoting vernacular heritage and its role in the modern situation. The ASC emphasized the conservation and modern use of vernacular heritage. Sub-societies of relevant subjects were established to promote theoretical research and practical application. 3) Vernacular heritage and architectural experiments in China. There are examples of design projects that present the coexistence of the past and the present as well as the use of local materials such as bamboo and earthen material. 4) CITIC's projects in Chonhyand County, Hubei province. Rural revitalization strategy was carried out intensively in villages throughout Hubei due to its great variety of vernacular architectural heritage.

Ar. Wei Xiao - Ar. Xiao Yao

Representative of ASC

The VAA representative presented 3 main issues: 1) Vernacular wisdom applied in traditional architecture of Vietnam, 2) Sustainable design based on local experiences, and 3) Future of new vernacular architecture? Since globalization is increasingly widespread, adopting culture architectural duplication has become global problem regarding losing identity especially in Asia. Technology was introduced and replicated, thus duplicating the same identifiable architecture, buildings, and cities with similar content and form. There are questions whether modern technology can solve everything while it is expensive and the more urban area spreading, the less rural area for vernacular living. Are we developing sustainably? Since vernacular experience is rooted in architecture and vernacular wisdom is applied in traditional architecture, we should look into climate, material and skill, and culture and lifestyle. Vernacular is very green. Relationship between people and the environment is very harmonious. Vernacular wisdom is accumulated and passed on from generation to generation. For Vietnam, vernacular architecture respects geography and landscape. Shapes, local materials are suitable to the climate and residential spaces are considered as independent ecological units. These are best demonstrated by design elements including eaves, sunshades, floor lifting and column system, materials, and courtyard. New design trend combines 'modern' and 'vernacular' called 'modern-tropicalised architecture'. There are examples of facade design from the old days that still works very well these days for sun shading and providing ventilation. The comparison between traditional vernacular and the new vernacular show future of vernacular architecture under the current climatic conditions and changing environment. While urban growth and technology affect exploitation of resources, promoting vernacular experience is considered more suitable as it conserves identity and is the key solution for sustainable future.

Ar. Nguyen Tuan

Representative of VAA

Forum : “Redefining Sustainability Through Vernacular Wisdom”

The speaker redefined the term vernacular architecture as it is the core for sustainability and has evolved with the need for human adaptation to the ambient environment and constrain of resources. It evolves local identity but is presently somehow triggered by globalization. However, every place has unique characteristics and identities. Nepal is small but well known for its beauty. It was geographically divided into 2 parts. The loose-settlement pattern on the plain land in Terai region is suitable for a hot-humid climate. Local materials are wood and mud. The settlement of the Hilly region allows winter sunlight. The Himalayan region has a compact settlement to avoid head loss. Dwellings are attached to one another and thermally insulated. Kathmandu, the capital city, is rich in heritage and has its own vernacular architecture showing architectural elements such as a courtyard that functions for climate response as well as social interaction. Rowhouses along narrow streets are built with wood, brick, and mud mortar presenting the beautiful urban fabric. Another example of local wisdom is a traditional pond that collects stream water. However, there is a decline in local identity as shown in an example of the Barpark reconstruction case after the earthquake in 2015. Local identity was lost to modern materials. An attempt to achieve local identity which shows climate responsive design features in terms of orientation, thermal insulation, solar electricity, groundwater recharge, and use of local material, etc. In conclusion, integrating modern innovation with vernacular architecture can preserve the glory of the past and achieve sustainability.

Ar. Anjana Shrestha
Representative of SONA

The IIA representative raised the question about vernacular architecture, the old and the modern, as there is a contradiction between the traditional vernacular approach and the invention of technology. The answer remains within the juxtaposition of the two by adaptive development. There are broad parameters to development sustainability through vernacular approaches namely, environmental aspect, choices of materials and resources, socio-cultural aspect, and project viability which is considered the most important. India has a wide range of climatic conditions resulting in a diversity of design such as wooden structures and big balconies in northern hilly regions, courtyard planning in the hot dry northern India, Jali used for protection from harsh sunlight and dust in western India, lime plaster used with mixed of sandstone and limestone, jaggery, the climate in southern India, and stone-based, burnt clay brick building with terracotta cladding in eastern India. Taking a vernacular approach, an innovative approach can be developed as shown in many examples in Kolkata. Heritage conservation-adaptive reuse projects emphasize the answer to the beginning question that the old and the new are juxtaposed by adaptive development.

Ar. Debatosh Sahu
Representative of IIA

Forum : “Redefining Sustainability Through Vernacular Wisdom”

The AMA representative recaptured definitions and characteristics of vernacular architecture. It is based on culture, construction, and environment so it includes tangible and intangible aspects and shares knowledge from generation to generation. In Myanmar, vernacular architecture depends on the climate, geography, local materials, and construction techniques. The conservation of built vernacular heritage is very important. There are examples of preservation reconstruction and adaptive reuse which lead to sustainability. Various building types include farmhouses, residence museums, and resorts, respectively. Vernacular concepts in contemporary architecture are presented in a contemporary house, the use of traditional materials and construction, traditional form and design, as well as traditional outlook. Challenges of vernacular architecture today could be cultural homogenization or globalization, rarity of traditional expertise, fewness of local materials, widespread use of manufactured equipment. To seek sustainability through vernacular wisdom, it is essential to have awareness programs, research and documentation, and conservation work for vernacular heritage. Therefore, adapting vernacular wisdom into contemporary buildings is an approach to a sustainable way of living and leads towards Sustainable Development Goals.

Ar. Mya Hnist
Representative of AMA

Pillar 1: Heritage / Future Vernacular

ARCASIA Cross Committee Dialogue 1.0
Minding Our Heritage : “How To Approach
Conservation & Adaptive Reuse of Asia’s Built Heritage”

Webinar

Webinar : Cross Committee Dialogue 1.0

Minding Our Heritage : How to approach conservation & adaptive reuse of Asia's built heritage

Conclusion

There is always this argument on Heritage building preservation Vs sustainability, isn't it conflicting with each other? There is always different in preservation and implementing sustainable idea to heritage during restoration / preservation.

Preservation / Restoration

- no further changes on materials and methods
- water and energy use may be limited.

Reversible & Removable repairs

- not affect the condition of original material now & future

However, by inherent sustainability into heritage, then the followings will be revealed:

- High opportunities to optimize water and energy use.
- Preservation reduces landfill waste, demolition energy use and new construction.
- Adaptive re-use concepts, renovations for less energy use, maintenance and type of use also affect heritage building sustainability.

By introducing new green technology and ideas into preservation of old heritage buildings is a way to sustain the heritage in a greener way for future generation. Furthermore with the introduction of SDGs and NUA, they change and make the "Green" or "sustainable" ideas evolved and upgrading into "Sustainable Development" module for heritage itself. This is important to meet our own needs without prejudice to affect the future generation to meet their own needs.

ARCASIA CROSS-COMMITTEE DIALOGUE SERIES
CONNECT 1.0

THEME
 MINDING OUR HERITAGE:
 HOW TO APPROACH CONSERVATION &
 ADAPTIVE REUSE OF ASIA'S BUILT HERITAGE

PANELLISTS

ACSR	ACAE	ACGSA	ACPP	ACYA
AR. THOMAS CHEUNG [HKIA]	DR. ABU SAYEED PRESIDENT ELECT ARCASIA [IAB]	AR. ALICE LEONG [PAN]	AR. ANJU WALLE [SONA]	AR. RIDHA RAZAR [PAN]
"WELL-BEING - THE SOCIAL RESPONSIBILITY OF ASIAN ARCHITECTS"	"REIMAGINING & INTEGRATING ARCHITECTURE EDUCATION"	"SUSTAINABILITY & RESILIENCE THROUGH HERITAGE & VERNACULAR WISDOM"	"RECONSTRUCTION OF THE PAST"	"IMAGINATIVE INTERGRATIONS & PIONEERING"

JOIN US AT THE PENULTIMATE ARCASIA ONLINE EVENT OF 2021!

SATURDAY 24TH JULY 2021
14:00 [UTC+8] VIA ZOOM

CONNECT 1.0 MODERATOR //
 AR. MURDU GOYAL - DEPUTY CHAIR ACPP

AR. RITA SOH //
 PRESIDENT ARCASIA

REGISTER TO ATTEND
<https://bit.ly/CONNECT-1>

Webinar : Cross Committee Dialogue 1.0

Minding Our Heritage : How to approach conservation & adaptive reuse of Asia's built heritage

Conclusion

The role of Heritage buildings in urban Sustainable development and resilience. These are because:

1. To direct the activities of intervention in historic areas;
2. Safeguard the cultural and historical interest of the area and its memory;
3. Promote the generation of jobs and activities that develop the area and respects its neighbours;
4. To create conditions to return a part of the urban fabric that values the city existence;
5. Promote social spaces and rest areas, open spaces and its relationship with the interior;
6. Apply the principles of sustainability & resilience; and
7. Return to the dialogue between the habitat and the environment that has existed since the dawn of human existence, as a way to reduce its impact.

Sustainable aim to put the world back into balance while resilience is to look for a way to manage the imbalance world. Same applies to heritage buildings, hence the 3 Bs "build back better" concept is becoming more alarming to the whole nation. It is also proven that by implementing Reuse, Rehabilitation, Regeneration, Renewable & Rejuvenation to sustain the heritage buildings do contribute to urban living communities a better livability, competitiveness, inclusion and resilience.

DATE

24th, July 2021

LOCATION

Zoom

ARCASIA CROSS-COMMITTEE DIALOGUE SERIES

CONNECT 1.0

THEME
MINDING OUR HERITAGE:
HOW TO APPROACH CONSERVATION &
ADAPTIVE REUSE OF ASIA'S BUILT HERITAGE

PANELLISTS

ACSR	ACAE	ACGSA	ACPP	ACYA
AR. THOMAS CHEUNG [HKIA]	DR. ABU SAYEED PRESIDENT ELECT ARCASIA [IAB]	AR. ALICE LEONG [PAN]	AR. ANJU WALKER [SONA]	AR. RIDHA RAZAK [PAN]
"WELL-BEING - THE SOCIAL RESPONSIBILITY OF ASIAN ARCHITECTS"	"REIMAGINING & INTEGRATING ARCHITECTURE EDUCATION"	"SUSTAINABILITY & RESILIENCE THROUGH HERITAGE & VERNACLULAR WISDOM"	"RECONSTRUCTION OF THE PAST"	"INNOVATIVE INTERGRATIONS & PIONEERING"

JOIN US AT THE PENULTIMATE ARCASIA ONLINE EVENT OF 2021!

SATURDAY 24TH JULY 2021
14:00 [UTC+8] VIA ZOOM
CONNECT 1.0 MODERATOR //
AR. MURDU GOYAL - DEPUTY CHAIR ACPP

AR. RITA SOH //
PRESIDENT ARCASIA

REGISTER TO ATTEND
<https://bit.ly/CONNECT-1>

PILLAR 2 : New Urban Agenda

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Panel
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**Challenge in
Implementing
Green Building
Rating tools**

Awarding Criteria

**AAA-ARCASIA
Awarding of
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Green AsiArc

Webinar

**How Can
Green Rating
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A More
Sustainable
And Resilience
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Design Competition

**The Contribution
of Green Building
in The Fight
Against COVID-19**

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Committee 2.0

**Embrace
Digitalisation**

Pillar 2 : New Urban Agenda

Challenge in Implementing Green Building Rating Tools

Panel Discussion

Panel Discussion : Challenge in Implementing Green Building Rating tools

PANELISTS

Ar. Jayantha Perera
Former ACGSA from SLIA

Mr. Pankaj Dharkar
Chairman Assocham Gem India

Ar. Benjamin Towell
ACGSA from SIA

Ar. Acharawan Chutarat
ACGSA Chairman

LOCATION

JKK, Jaipur RT

DATE

JULY 2019



PILLAR 2 : New Urban Agenda

Green AsiArch

Selected Green Building
Practice Exhibition

Exhibition : Green AsiArch

Overview

THEME

GreenAsiArch is a yearly exhibition event initiated by ACGSA (ARCASIA Committee of Green and Sustainable Architecture) to create awareness in the built environment and to present selected green building design practice from ARCASIA country members. Two selected green and sustainable building project are featured every year. They are normally exhibited in print media and electronic media during FORUM and ACA, organized by host country. Database of all GreenAsiArch will be launched on ARCASIA website.

It is interesting to find that directions of the best green building practice submitted ARCASIA country members are aligned with concerns from ACGSA representatives. Those are Heritage/Adaptive reuse; New Urban Agenda; And Resilience.



Exhibition : Green AsiArch

Resilience

MALABAR HEADQUARTERS CALICUT, KERALA

Architect: Mohandas P. Stapati & Vanam

Brief Description:
A steep sloping site, facing the west presented a unique challenge for the design of the Malabar Group Headquarters at Calicut, in the tropical context of Kerala, India. The design is resolved as a series of levels along the contours which reduces the intervention on site to a minimum. Landscaping is an integral part of the design, working symbiotically with the architecture to create spaces which are one with nature.



DESIGN EVOLUTION

The design evolution shows a series of levels along the contours of the site, reducing the intervention on site to a minimum. The design is resolved as a series of levels along the contours which reduces the intervention on site to a minimum. Landscaping is an integral part of the design, working symbiotically with the architecture to create spaces which are one with nature.



URBAN FOREST AT BANANI, DHAKA, BANGLADESH

Architect: QUEST ARCHITECTS

CLIENT: QUEST ARCHITECTS

PROJECT DATA:

- COUNTRY: BANGLADESH
- PROJECT NAME: URBAN FOREST
- LOCATION: BANANI, DHAKA
- LAND AREA: 10,000 SQ. FT.
- BUILT AREA: 10,000 SQ. FT.
- YEAR OF COMPLETION: 2015
- ARCHITECTS: QUEST ARCHITECTS



CONCEPTS:

- Vertical Greenery
- Biophilic Design
- Urban Forest
- Green Building
- Sustainable Design
- Green Architecture
- Green Building
- Sustainable Design
- Green Architecture







RMPC, Karupannya

Project Description:

Social development and eco-friendliness are the primary motto of the brand Karupannya. Maximum efficiency in the usage of electricity and fuel is an option but mandatory. The factory demands a healthy and refreshing work environment for its 5,000 female workers and employees which inspired the design team like IBA that, alongside industry is committed to addressing environmental concerns. Besides the working area, the building should house: Medical center, Grocery Shop for employees, Canteen, Prayer rooms and ATM booth.

Concept:

A company that only uses waste garment products as primary raw material, not only believes in re-use and recycling but is also playing an active role to protect the environment. This factory building would be a visual representation of the company's ideal of sustainability.

Site Context Analysis:

Location: South Guptapara, Iloilo, Iloilo City, Philippines.
Site Area: 12,182.94 sq. m. | BUIF Area: 6,796.21 sq. m.





Co-op Kyosai Plaza Tokyo, Japan

Architect: QUEST ARCHITECTS

CLIENT: QUEST ARCHITECTS

PROJECT DATA:

- COUNTRY: JAPAN
- PROJECT NAME: CO-OP KYOSAI PLAZA
- LOCATION: KYOSAI, TOKYO
- LAND AREA: 10,000 SQ. FT.
- BUILT AREA: 10,000 SQ. FT.
- YEAR OF COMPLETION: 2015
- ARCHITECTS: QUEST ARCHITECTS



PILLAR 2 : New Urban Agenda

ARCASIA Awards for Architecture (AAA)

Sustainability Award Criteria

AAA : Award Criteria

INTENTION

In 2021, ARCASIA has revised its special award in sustainability in response to AAA 2020 Jury's request for clearer evaluation criteria. ACGSA proposed revised criteria for AAA 2021.

The objectives :

- To ensure that architects are not just responsive to the Sustainable Development but also prescriptive in its implementation and evolution,
- To create a bridge between the initiatives of the UN, UIS and the practical activities of architects in Asia
- To promote :
 - Sustainability Engagement and Performance
 - Environmental Quality and Well-Being
 - Resource Conservation

ADOPTED CRITERIA

Special Award for SUSTAINABILITY should demonstrate outstanding achievement in :

- **Sustainability Engagement and Performance for example :**
 - Design that demonstrate strategic commitments to combat climate change Encouraging stakeholders' engagement to build resilient infrastructure, promoting inclusive and sustainable design, conducting postoccupancy evaluations on user satisfaction & effectiveness of sustainable design measures.
 - Design that inspires and promotes principles of sustainability considering durability, flexibility adaptability in the long term.
- **Environmental Quality and Well - being for example :**
 - Quality of outdoor and indoor environment that promotes health and well-being through integration of architecture with light, view, water, air, acoustics and accessibility.
 - Quality of built environment that values the ecological, social and cultural aspects of the site and its surrounding neighbourhood.
- **Resource Conservation for example :**
 - Building Design that promotes outcomes towards net zero-energy, low carbon emissions, and innovative use of renewable energy sources.
 - Building Design that reflects reduction in material and resource consumption from a life-cycle perspective. (use of reusable/recyclable/recycled materials, use of clean energy, cost efficiency)
 - Design, construction and operations that adopt effective waste management, minimizing material waste and environmental pollution.

PILLAR 2 : New Urban Agenda

“How Can Green Rating Tools Promote A More Sustainable And Resilient Architecture”

Webinar

Webinar : “How Can Green Rating Tools Promote A More Sustainable and Resilient Architecture”

Overview

THEME

New Urban Agenda

PANELISTS/SPEAKERS

Ar. Acharawan Chutarat - Chair of Webinar

Ar. Rita Soh(SIA), President ACGSA

Ar. Amornrut Det Udomsap(ASA)

Ar. Rashid Rasheed - Founder Director of Pakistan
Green Building Council

Ar. Xiao Wei - Vice President of CITIC General Insitute
of Architectural Design&Research

CONVENOR

Ar. Tan Szue Hann
Merator
Chair, Pillar 2, ACGSA



ATTENDEES

35 (not included Facebook
Live audience)

DATE

12 December, 2021

arcasia
ARCASIA COMMITTEE ON GREEN & SUSTAINABLE ARCHITECTURE
WEBINAR
SATURDAY, 12 DECEMBER 2020
10AM PK. 1030AM IN. 12PM TH. 1PM CN. 1PM SG

“How can green rating tools promote a more sustainable and resilient architecture?”

5 min - Welcome Address
Ar. Rita Soh, SIA
President, ARCASIA
Managing Director, RDC Architects, Singapore

5 min - Introduction by Chairperson
Ar. Dr. Acharawan Chutarat, ASA
Chair, ARCASIA Committee on Green and Sustainable Architecture (ACGSA)
Chair, Architecture Program and Building Technology and Innovation Track, School of Architecture and Design, King Mongkraj's University of Technology Thonburi

5 min - Introduction by Moderator
Ar. Tan Szue Hann, SIA
Chair, Pillar 2, ACGSA
Chair, Sustainability, Singapore Institute of Architects

15 min - Green rating tools in combating climate change
Ar. Tushar Sogani, IIA
Deputy Chair, ACGSA
Principal & Managing Director, TSDPL, Jaipur, India

15 min - The Thai green rating system in health & wellness
Ar. Amornrut Det-Udomsap, ASA
ASA Representative, ACGSA
Technical advisor on Sustainable Development to Director of LPN Academy, Thailand

15 min - The SEED tool and a Platinum-rated case study
Ar. Rashid Rasheed, IAP
Co-founder, SR Design Works, Pakistan
Founding Director, Pakistan Green Building Council (PGBC)

15 min - Modular healthcare facilities in the pursuit of resilience
Ar. Xiao Wei, ASC
Vice President of CITIC General Institute of Architectural Design & Research, China
Member of Expert Committee of Green Building Evaluation Index, China Ministry of Housing & Urban-Rural Development

20 min - Q&A and Moderated Discussion

Webinar :

“How Can Green Rating Tools Promote A More Sustainable and Resilient Architecture”

Overview

Green Rating Tools in Combating Climate Change

The first speaker, Ar. Tushar Sogani, Deputy Chair, ACGSA, talked about Green Rating Tools and their role in combatting climate change. In the context of India given the five distinct climate zones, rating tools are contextualized, to address climatic differences and cultural needs. He mentioned the UCCR, which works on the capacity of cities to function and survive disasters, emphasizing the need to develop green infrastructure, to enhance resilience to climate change. Present architecture must reflect on lessons of the past, and on passive and practical means, that had been used in pre-technological eras to suit the climate.

Ar. Tushar Sagoni
Deputy Chair, ACGSA

The Thai Green Rating System in Health & Wellness

Ar. Amornut Det Udomsap, ASA representative, ACGSA, from Thailand, talked about TREES, Thai Rating of Energy Environment and Sustainability. Their focus now is on the aging society, and psychological comfort in addition to physical comfort. She highlighted the main difficulties being faced by urban populations in Thailand; traffic, bad air quality in winter, flooding in the rainy season, head island effect, overpopulation, and messy infrastructure. In Thailand, they are now developing SOOK to address health and well-being as an integral part of building design. Case studies were presented of the five categories of SOOK neighborhood and outdoors, architectural design, interior design and materials, environmental systems, and engineering and Innovation.

Ar. Amornut Det Udomsap
ASA representative, ACGSA

Webinar :

“How Can Green Rating Tools Promote A More Sustainable and Resilient Architecture”

Overview

The SEED tool and a Platinum Case Study

Ar Rashid Rasheed, Founder Director of Pakistan Green Building Council talked about the SEED (Sustainability in Energy and Environmental Development) tool, developed in 2016 for Pakistan, and a platinum-rated case study based on it. The building process was videoed in the 5500 sft home, intending to document the achievable data for the stipulated variables in SEED, to share on various social media platforms, the achievements along with their financing, in order to courage other professionals to adopt green building measures to conserve water, electricity, and reduce waste. The showcase project also aimed to enhance the importance of craftsmen involved in the construction industry, focusing on their qualities and roles in the building construction process, to retain their experience in the building crafts and prevent them from seeking other employment, which would make their learning through to go to waste. Social media sharing also helped to educate all stakeholders in the ease of use of rating tools and in benefits gained in the short and long term economy.

Ar. Rashid Rasheed

Founder Director of Pakistan Green Building Council

Modular Healthcare Facilities in The Pursuit of Resilience

The final speaker was from China, AR. Xiao Wei, Vice President of CITIC General Institute of Architectural Design & Research, who spoke on Modular Healthcare Facilities in the pursuit of Resilience, He focused on the design of Huoshenshan Hospital in Wuhan, an immediate and swift response to the COVID 19 pandemic. Modules of highly contaminated to low infection areas were conceived and completed in approximately 2 weeks, and these facilities were used effectively to give the urgent care that was needed under the present emergency. In the short time that the buildings were constructed it wasn't possible to check with building codes in a regular manner, but as the professionals have previous experience of using codes and of collaborating with various related professionals, it was likely to adhere to the required standards.

Ar. Xiao Wei

Vice President of CITIC General Institute of Architectural Design & Research

Webinar : “How Can Green Rating Tools Promote A More Sustainable and Resilient Architecture”

Initiation

In late January 2020 facing the surging number of infections and the overloaded operation of local medical facilities, Bangkok local authority decided to speed up the construction of two modular hospitals, namely Mochancharon Bhumibol Eye-Cat Memorial Hospital and Udonchai Hospital Specialty Trauma-Cat Memorial, after the outbreak of Coronavirus Hospital outbreak in 2020.

TREES – Thai's Rating of Energy and Environmental Sustainability
Green building rating system developed by TGBI, which specially design for green buildings in Thailand context

Timeline: TREE-NC → TREE-Pre NC → TREES-CS → TREE-EB → TREES-A (500+ Accredited Professionals)

Factors of Health and Well-being of Building Occupants

- 1 Safety & Security (31.6%)
- 2 Air Quality (23.7%)
- 3 Comfort (19.3%)
- 4 Lighting (11.4%)
- 5 Materials & Construction Chemical (7.7%)
- 6 Aesthetics (6.4%)

WHAT ARE GREEN BUILDING RATING TOOLS?

GREEN BUILDING RATING TOOLS
ALSO KNOWN AS CERTIFICATION- ARE USED TO ASSESS AND RECOGNISE BUILDINGS WHICH MEET CERTAIN GREEN

Environmental Stewardship, Efficient Power Consumption

GREEN RATING TOOLS IN COMBATING CLIMATE CHANGE
TUSHAR SODANI, IIA

PILLAR 2 : New Urban Agenda

Cross Committee Dialogue 2.0
Embracing Digitalisation : “How Architects
Can Leverage New Technologies for Our Future”

Webinar

Webinar : ARCASIA Cross Committee Dialogue 2.0

Embrace Digitalisation: “How Architects Can Leverage New Technologies for Our Future”

Under President Rita Soh’s guidance and direction, the five ARCASIA Committees and Fellowship have been working collaboratively during their term. This second dialogue session is to consolidate these discussions in the spirit of cross-committee cooperation. The event explores Technological empowerment of architects, and Cross-border collaborations. In this report, concerns written in this section reflects ACGSA's view points.

SPEAKERS

Ar. Lim Choon Keang (SIA)
- “The Future of Design & A Life-Long Education”

Ar. Tony Wong (HKIA)
- “The Way Forward”

Ar. Fujinuma Masura (JIA)
- “Transition Into New Visual Softwares”

Ar. Tan Szue Hann (SIA)
- “Wellness a Future Cities Resilience”

Ar. Sunnie Lau (HKIA)
- “Design Resilience For Future Cities”

DATE

4th, September 2021

LOCATION

Zoom

ARCASIA CROSS-COMMITTEE DIALOGUE SERIES

CONNECT 2.0

THEME

EMBRACING DIGITALISATION:
HOW ARCHITECTS CAN LEVERAGE
NEW TECHNOLOGIES FOR OUR FUTURE

PANELLISTS

ACAE	ACSR	ACPP	ACGSA	ACYA
				
AR. LIM CHOON KEANG [SIA]	AR. TONY WONG [HKIA]	AR. FUJINUMA MASURA [JIA]	AR. TAN SZUE HANN [SIA]	AR. SUNNIE LAU [HKIA]
"THE FUTURE OF DESIGN & A LIFE-LONG EDUCATION"	"THE WAY FORWARD"	"TRANSITION INTO NEW VISUAL SOFTWARES"	"WELLNESS & FUTURE CITIES' RESILIENCY"	"DESIGN RESILIENCY FOR FUTURE CITIES"

JOIN US AT THE PENULTIMATE ARCASIA ONLINE EVENT OF 2021!

 **SATURDAY 4TH SEPTEMBER 2021**
14:00 [UTC+8] VIA ZOOM

CONNECT 2.0 MODERATOR //
AR. MUKUL GOYAL – DEPUTY CHAIR ACPP

AR. RITA SOH //
PRESIDENT ARCASIA 

REGISTER TO ATTEND
https://bit.ly/ARCASIA_CONNECT2 



Webinar : ARCASIA Cross Committee Dialogue 2.0

Embrace Digitalisation: “How Architects Can Leverage New Technologies for Our Future”

Overview

CONCERNS :

- A quick overview of the state of sustainability on our planet over the past three years, and the impact that the pandemic has had.
- In response, various modes of environmental mitigation, with Singapore as an example - the UN SDGs, as well as Singapore’s responses - the Singapore Green Plan 2030, the SIA EDGs (Environmental Design Goals), and the response in the building sector - the BCA Green Mark
- The SIA Green Book is a mode of guiding, understanding and rationalizing sustainability processes in both the build and natural environments, including its digitization process and potential in being an extended design tool for the Architect.
- Likewise, the HKIA and HKGBC publication, “Hong Kong Smart Green Building Design”, as a document that can be cross-referenced with the SIA Green Book, with its commonalities identified.
- The Malaysia Smart City Framework is a document that reinforces the need to embrace and leverage CIT and its impact on our environment.
- Digitalization tools-a text laboratory that is fully equipped with sensors, that can guide and influence the performance of fresh air exchange for instance, useful in the time of the COVID 19 pandemic.
- Using digital tools early on in the design process-from a district level (city planning with parametric tools), to building level (planning of massing and voids based on natural ventilation performance), to material level (simulation of electrochromic and thermochromic glass performance based on glare and heat), can greatly enhance the sustainable performance of our built environment.
- When the building is in use, digital tools allow for the identification of workspace allocation (in an office building) that can best adapt to team segregation purposes (e.g. employee attendance control systems during the pandemic); the workstations themselves can adapt to human circadian rhythms by tuning of lighting intensity and color temperatures.
- Moving from a regular power grid to a smart grid system can allow for a higher granularity and tracking of performance, with a means of identifying granular high output area that can then be moderated
- Digitalization of the master plan can allow for a higher granularity of green and blue planning spaces, allowing for varying levels of “productive green plot ratio”.
- Digitalization also extends to carbon accounting and carbon footprint, enabling for full carbon accounting to happen-leading to lower-carbon building
- Potential expansion for digitalization to evaluate building performance based on green rating tools, and universalization of such a process (e.g. IFC Edge), and use of blockchain in tracking building energy and wellness components.

Webinar : ARCASIA Cross Committee Dialogue 2.0

Embrace Digitalisation: “How Architects Can Leverage New Technologies for Our Future”

Overview

DISCUSSION POINT :

- Possible overlaps between the various green practice guides? (SIA, HKIA, PAM, Zone A's new vernacular wisdom)
- Fear of obsolescence-we is always on the heel of evolving technology. But if we don't adopt, we'd get left even further behind!
- Renewables-PV sharing, and distribution of energy across multiple sites.
- Technology being used for education too-parametric design and environmental simulation as part of student curriculum.
- Digitalization in social architecture and emergency response architecture.
- Architects not just as agents to the state and our client, but as agents of environmental preservation, and as both enablers of development and stewards of the planet, with digital tools as part of the Architect's larger toolkit.
- To identify relevant topics and themes for ACGSA's Pillar 2-New Urban Agenda
- Identify overlaps in ARCASIA member nation's endeavors-e.g. commonalities amongst the various green books and guides that have been published
- Define a possible digitalization roadmap for sustainable architecture?

PILLAR 2 : New Urban Agenda

“ The Contribution of Green Buildings in TheFfight Against COVID-19”

Design Competition

Design Competition : “Fight Against COVID-19”

The purpose of this design competition is to raise awareness of the importance of green building and how it contributes in the fight against COVID-19. Green building maximizes health and well-being, minimizes resource consumption and emission. Green building does not mean only energy efficient building, but also means to provide comfort, well-being and pleasant atmosphere. Results from submissions are good references that can be used as guidelines, where summary of key issues has been described here:



ARCASIA COMMITTEE ON GREEN & SUSTAINABLE ARCHITECTURE

invites entries for

**“THE CONTRIBUTION OF GREEN BUILDINGS
IN THE FIGHT AGAINST COVID-19”**

with text and illustrations

Open to all ARCASIA members. Members can participate in groups or as single leads.

Last date for submissions- 25th April, 2020

The submission must have :

Only 5 powerpoint slides with text and illustrations to explain the topic.

The file should be submitted in both PDF and PPT formats.

The files should contain necessary information i.e. name/group name, institute name, country name.

All entries must be mailed to :
competitionacgsa@gmail.com

Organizing Committee:

	
Ar. Acharawan Chutarat Chairman	Ar. Tushar Sogani Deputy Chair

Jury Members:

		
Ar. Debatosh Sahu India	Ar. Alice Leong Pek Lian Malaysia	Ar. Qazi M. Arif Bangladesh

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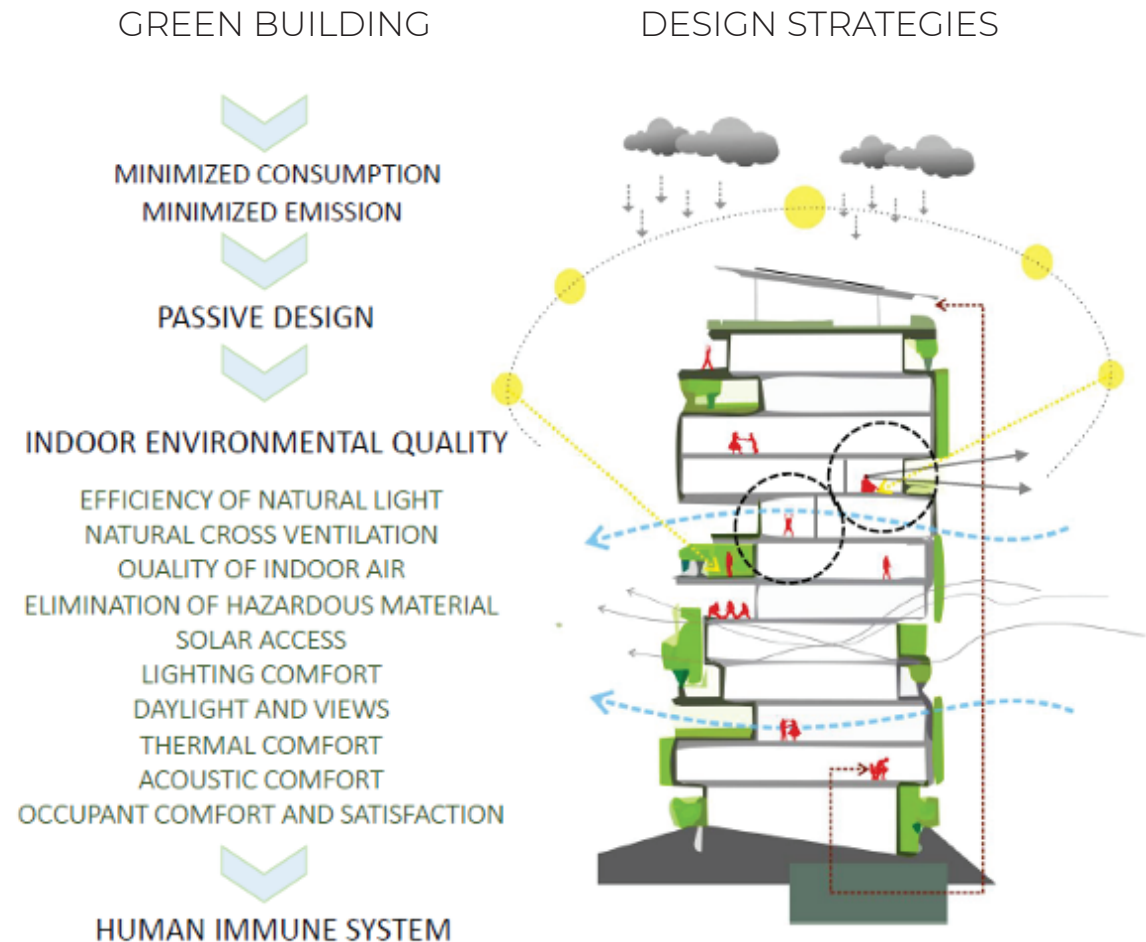



Design Competition : “Fight Against COVID-19”

MAXIMIZE HEALTH/LIVING CONDITION FOR OCCUPANTS

COVID 19 patients often advised staying home in an isolated condition where the recovery paved up by improving a patient’s immune system. Along with other prescribed activities, passive design plays a substantially important role to boost up immune system. Cross ventilation decontaminates the space. Sunlight provides Vitamin D and UV of Natural light sanitizes area, resets biological clock as well as the view to outside can boosts up mental health.

Similarly, for a non-infected person, the indoor environmental quality such as low VOC, anti-bacterial materials, good acoustic design, and high-performance building envelop would be great additions to improve self-immune and mental health. Air conditioning controlling by zones reduces risk in air contamination with adequate ventilation, good air quality reduces infection rate. Since humans work from home, building must be planned with fitness areas and outdoor landscaping with personal and vehicle sanitizing area.



Design Competition : “Fight Against COVID-19”

MINIMIZE RESOURCE CONSUMPTION

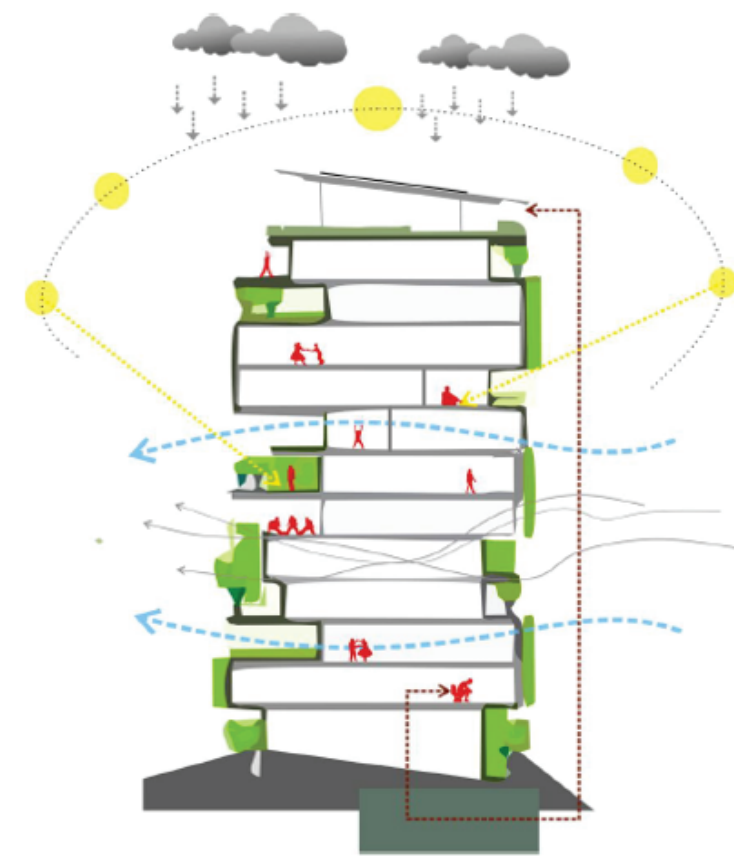
Green Building minimizes resource consumption like energy and water. Green Building utilizes potential from nature for example, natural light provides brightness, reducing artificial light consumption. Photovoltaic and Wind Energy keep the demand to an optimum level. During COVID 19 Pandemic many countries have gone through economic and resources constraint, where Green Building would be an effective solution to face the challenge of limited resources.

Green Building design strategies emphasize rainwater recycling and grey water recycling. During COVID 19 Pandemic water usages become substantially higher due to the prescribed personal and community hygiene. This extended demand for water can be balanced with the recycled water without creating extra demand for water from external supplies.

GREEN BUILDING



DESIGN STRATEGIES



Design Competition : “Fight Against COVID-19”

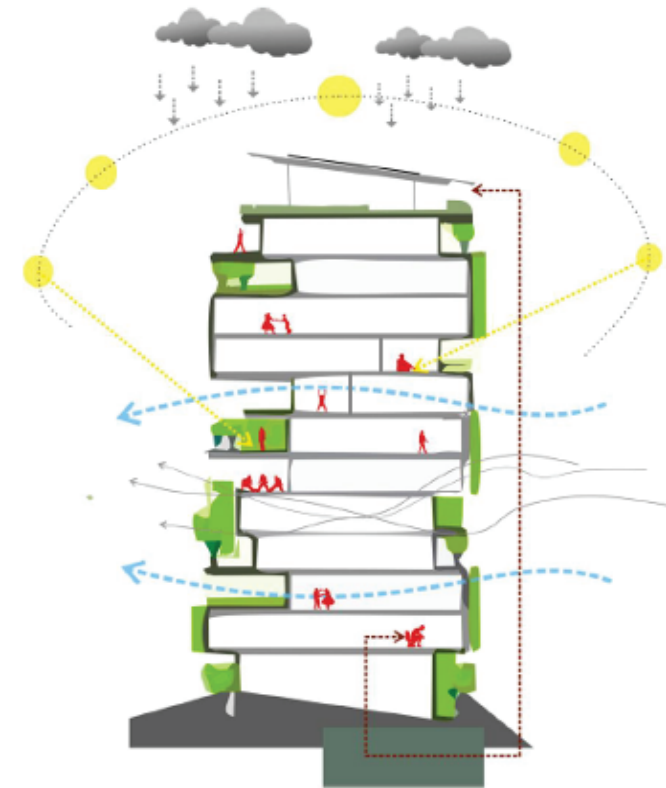
ECOLOGY AND URBAN VEGETATION

The most effective strategy adopted by the world in order to fight COVID 19 is Home Quarantine for a long period. It has become a great difficulty to procure fresh food and vegetable regularly from the outside in the lockdown situation. Green Buildings often promote urban agriculture, vertical gardening and community farming. During the Quarantined period, Green Buildings could ensure the supply for fresh vegetable and fruits for the occupants, allow them to stay home and ensure own safety.

GREEN BUILDING



DESIGN STRATEGIES



Design Competition : “Fight Against COVID-19”

Conclusion

In summary, while staying home for a long period, it is conclusively seen that consumption of resources become higher than ever. Whereas, this crisis situation demands to descend of resource uses due to the economic recession. Green Building minimizes consumption of resources, maximizes climatic efficiency, and allows nature to interact in an indoor environment. Indoor Environmental Quality in a Green Building is highly beneficial for improving self immune and mental health, which is a great contribution in the fight against COVID 19.

Credit to
Ar. Shafique Rahman
Ar. Surya Prakash Kumawat

WINNERS

1st Prize Winner

Ar. Surya Prakah Kumawat
Architect | B.Arch | CoA | AIIA 21558
Surya Prakash Design Studio, Jaipur | India
Institute Name : The Indian Institute of Architecture (IIA)

2nd Prize Winner

Shafique Rahman (MIAB)
B.Arch (K.U), M.Des.Sc. Sustainable Design (Uni.Syd, Australia)
Assistant Professor at The Department of Architecture,
Ahsanullah University of Science and Technology (AUST),
Dhaka, Bangladesh.
Trikon Architects, Baridhara DOHS, Dhaka

3rd Prize Winner

Ar. Sameer Ratna Bajracharya
Ar. Sujata Shakya
Institute name : Society of Nepalese Architects (SONA)
Country : Kathmandu, Nepal

Special mention

A.M. Sewwandi Senevirathne
Institute name : Sri Lanka Institute of Architects
Country : Sri Lanka
Architects Registration Board Registered Number-CA19544

PILLAR 3 : Resilience

Index

Design
Competition

**Design for Resilience
to Changing Environment**

Webinar

**Shared Session &
Awarding Ceremony**

Webinar

**The Evolution of
Urban Resilience &
Sustainable Future**

PILLAR 3 : Resilience

“Design for Resilience to Changing Environment”

Design Competition

Design Competition : “Design for Resilience to Changing Environment”

It is time to prepare our home for today's pandemic and future possible climatic and health crisis. Our resilience as individuals, as communities and as countries needs to be elevated. Lets contemplate on how we, designer, use resources/materials, and construct, that enhances the occupant's well being and safety.

ENTRIES

8 Countries
73 Entries

SPONSOR

Thai Green Building
Foundation

DATE

May 12, 2021

CATEGORIES

Student and Professional

arcasia
Architects Regional Council Asia

ACGSA

DESIGN COMPETITION 2021

for Students and Professionals

DESIGNING FOR RESILIENCE TO THE CHANGING ENVIRONMENT

It is time to prepare our homes for today's pandemic and future possible climatic and health crisis. Our resilience as individuals, as communities and as countries needs to be elevated. Lets contemplate on how we design, use resources/materials and construct, that enhances the occupant's well being and safety.

Categories
Student and Professional

Site location
An existing residential project

Submission requirements
Study of the existing design and a proposal of a Conceptual Design with illustrations on use of resources and design measures taken.

SUBMISSION DATE
May 12, 2021

AWARDS
ACGSA will award all 3 winners (from both categories) with honorable mentions, formal certificates and cash prizes:

Professional Category:
1st Prize: 50,000 Baht (\$1625)
2nd Prize: 35,000 Baht (\$1137)
3rd Prize: 20,000 Baht (\$650)

Student Category:
1st Prize: 25,000 Baht (\$812)
2nd Prize: 17,500 Baht (\$569)
3rd Prize: 10,000 Baht (\$329)

NB: Thai Baht is fixed. Exchange rate may vary.
Details and Registration form are available in ACGSA FB page. All participant must fill up the form and register via email before the submission.

arcasia
Architects Regional Council Asia

ACGSA

DESIGN COMPETITION 2021 Terms of Reference

DESIGNING FOR RESILIENCE TO THE CHANGING ENVIRONMENT

After the COVID 19 pandemic, we prefer to live, work and play at our homes. Since we spend most of the time indoors, it is the need of the hour to design our living space in a holistic manner that is both sustainable and resilient. Let's put all efforts to realize how the home you have been living in should be transformed to a sustainable home resilient to the possible climatic and health crisis.

The competition is open to all architects (or students of architecture undertaking Bachelor's degree). The participants holding/studying Master's degree shall apply for professional category.

Design proposals can be submitted individually or as a teams (maximum 4 members).

PROCEDURE
Choose any one existing residential project. The project may be in use or abandoned. The project may be a flat in an apartment or a town house or any detached home. Study the existing project in terms of design, building materials and construction technique, surrounding, and accessibility. Study the climatic context of the site in relation to the geographical region. Propose a better design accordingly. Modifications shall be done in the existing design or a new design shall also be proposed in the existing site.

REQUIREMENTS OF SUBMISSION
Participants are required to submit maximum two A2 size landscape presentation sheets in pdf format (must not exceed 5mb per file) with minimum illustrations of plans, sections, elevations, perspective 3d views, details if any to express their proposal.
Drawings should be in appropriate scale in SI unit or feet/inches of 1:100 or 1:200 (1/8"=1'-0" or 1/16"=1'-0").
A short write-up of maximum 200 words in one of the A2 sheets including your perception to this competition, and your definition of 'sustainability' and 'resilience'.
All submissions must be sent via ACGSA's email ID: competitionacgsa@gmail.com.
Presentation sheets must not indicate any identity of participants.
Animations will not be considered.
Computer simulation and energy calculations are optional.
Participants who do not comply with the mentioned requirements will be disqualified.

FOCUS
Passive green design measures, use of local resources, use of simple renewable energy technologies.
Design for the urban context of the region (Climatic data needs to be cited)

EVALUATION CRITERIA
Originality with innovation and creativity. Quality of presentation; with clarity of thought, communicable and comprehensive illustrations. Feasibility, realizable and site specific contextual viability.

SUBMISSION
May 12, 2021

AWARDS
3 best proposals each, will be selected from both professional and student category. ACGSA will award all 3 winners with honorable mentions and a formal certificate, apart from the cash prizes.
Registration form is available in ACGSA FB page. All participant must fill up the form and register via email before the submission.

TGBI

Design Competition :

“Design for Resilience to Changing Environment”

BACKGROUND

The Design Competition was initiated after the 2019 worldwide COVID pandemic hit with a vision to put hands together and keep connecting as well as sharing ideas. The competition tried to reflect how any existing building could be made sustainable as well as services during any seen and unseen pandemics or disaster. Society of Nepalese Architect (SONA) conducted the design competition on behalf of ARCASIA - ASGSA subcommittee under the topic “**Designing for resilience to changing environment**”. It was an initiative taken to prepare our homes for today as well as future possible climatic and health crises. It was a project in which the participants could take any existing residential building and modify it to meet the objective-based of health and sustainability. The existing building was first to analysis in the existing state and then modify as per to fulfill the gap. This was divide into two categories students and professionals, where individual, as well as group submissions, were allowed. Due to less amount of submission, the competition was extended for a year which proved to be effective, and got over 8 countries participated with 25 professionals and 48 students submitted for the final among 278 registrations.

JURY AND SPONSOR

Under the supervision and guidance from Acharawan Chutarat (Chairman ACGSA), Qasi M Arid (Past Chairman of ARCASIA), and Pranita Sharma Padney (Treasurer and Green Committee Coordinator, SONA) And the jurors: **Rita Soh** (ARCASIA President), **Tushar Sogani** (Deputy Chair-ACGSA), **Zebun Nasreen Ahmed** (IAB), **Athena Chau** (HKIA), and **Prasetyoadi Tiyok** (IAI) the marking criteria was as per A-Originality with respect to innovation, creativity and sustainability, B-Quality of presentation: with clarity of thought, communicable and comprehensive illustrations and C-Feasibility, realizable and site-specific contextual viability. Seven from the professional and nin from the student category were shortlisted and asked to do a final presentation in front of all jurors on 12th June 2021.



The prize was sponsored by **Thai Green Building Foundation**, which was 160,000 Thai Baht or around 5000 USD: Professional 1st won 50,000 Baht, 2nd won 35,000 Baht and 3rd won 20,000 Baht whereas in the student category 1st won 25,000 Baht, 2nd 17,500 Baht, and 3rd 10,000 Baht and other shortlisted were given honorary certificate. Note that the Thai baht is fixed, and the exchange rate may vary.

Design Competition : “Design for Resilience to Changing Environment”

Contestant Projects

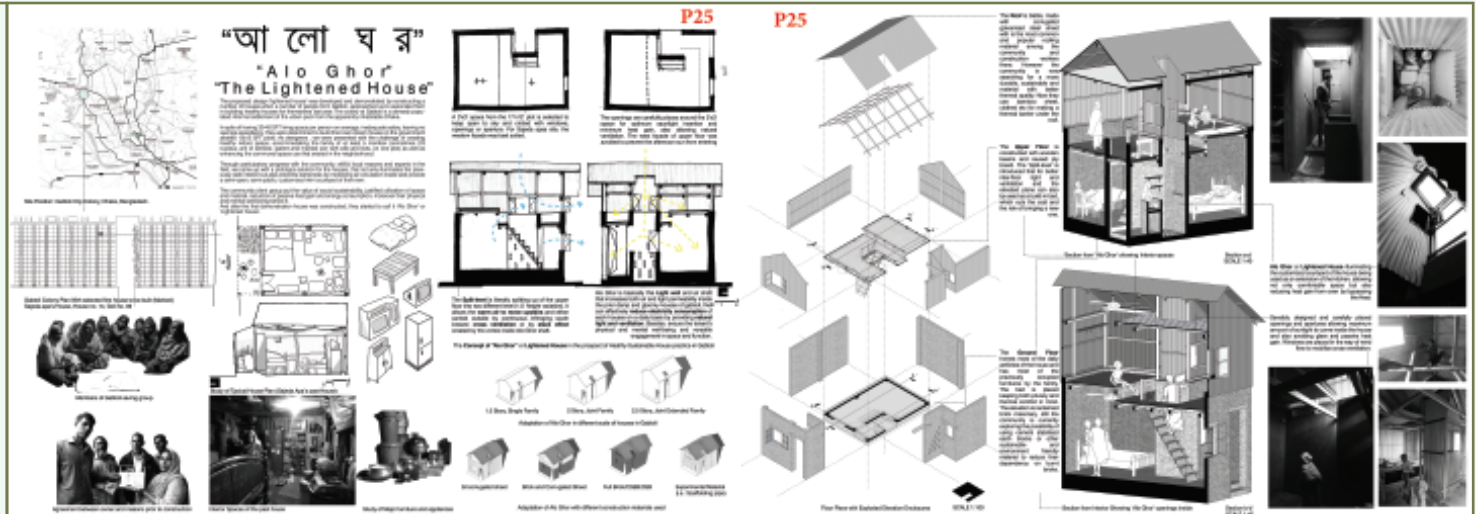


Design Competition : “Design for Resilience to Changing Environment”

Contestant Projects

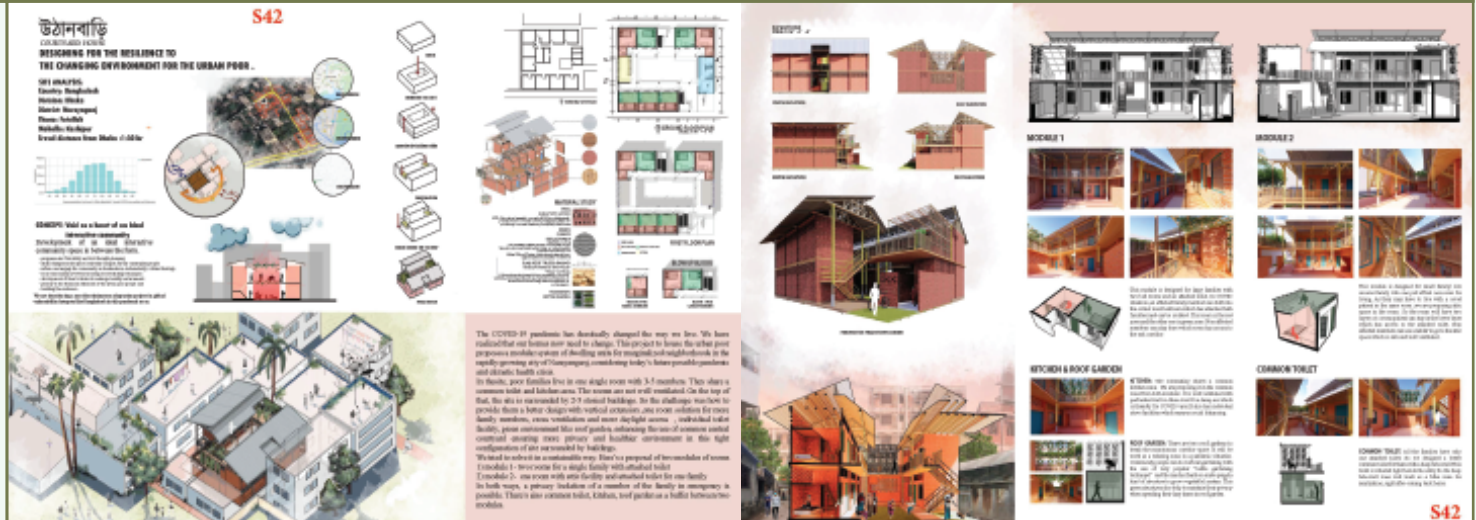
1st Place Award: PROFESSIONAL

Shahreen Mukashafat Semontee,
Sabbir Ahmed, Asif Elahi Rocky
Raquibul Hassan Bhuiya
Bangladesh



1st Place Award: STUDENT

Md. Ferdous Rahman
Fatema Tuz Zohora
Ashefa Washema Basure
Bangladesh



Shared Session : Award Ceremony

It is ACGSA's mission to outreach to audience both students and professionals in architecture. This the organizing committee decided to host webinar to share lessons learned and to recognize the winners. SONA has kindly offered to host the webinar on behalf of ACGSA and Thai Green Building Foundation sponsored awards to all winners.

PANELIST

Professional

Shahreen Mukashafat Semontee
Sabbir Ahmed
Asid Elahi Rocky
Raquibul Hassan Nhuiyan
Mahmuda Alam
Samia Anwar Rada
Naheyam Islam
Nuuhash Akondo
Khairun
Sisanne Zeidler
Huat Lim
Kamen Lee
Lee Han Liang
Bethany Lim
Jarod Yap
Gwan Sui Fei
Terence Ong

Attendee

121 participants

Student

Md. Ferdous Rahman
Fatema Tuz Zohora
Ashefa Washema Basure
Lim Chen hee
Chor Zhao GEN
Lau Chi Ying
Lee Ze Bin
Shahriar Kabir
Naila Alam
Md. Tanveer Bashir Uday
Farhana Chowdhury

Date

July 3rd, 2021

The screenshot displays a Zoom meeting grid with 16 participants. The participants are arranged in a 4x4 grid. Many participants have ACGSA award ceremony banners in their backgrounds. The bottom of the screen shows Zoom controls: 60 participants, Q&A, Chat, Share Screen, Raise Hand, Record, and a Leave button.

PILLAR 3 : Resilience

“The Evolution of Urban Resilience & Sustainable Future”

Webinar

Webinar : “The Evolution of Urban Resilience & Sustainable Future”

Overview

Cities are facing increasing environmental, social and economic challenges amplified by the effects of climate change that threaten the resilience of urban areas and their residents. The COVID-19 pandemic crisis has evidenced the need and showed the benefits of nature in cities and green spaces, since the contact with nature offers a way to deal with and counteract stressors of everyday life, while still allowing for social distancing. Building resilience requires identifying and assessing hazard risks, reducing vulnerability and exposure, and lastly, increasing resistance, adaptive capacity, and emergency preparedness.

The purpose of this webinar is to share ideas from experts in urban resilience and sustainable architecture through the lens of ACGSA. Despite all speakers being from Asia, the diverse problems specific to region lead to the changing role of architectural profession that is beyond designing standing structures, but a social act. More information from each speakers can be found in the next page.

THEME OF EVENT

Attendees

Sustainability and Resilience

110



The Evolution of Urban Resilience & Sustainable Future

Date: 3 April 2021 (Saturday)
Time: 11am - 1pm (MYT, SGT)
9am (BST) 10am (ICT)
12pm (JST, KST)



https://us02web.zoom.us/webinar/register/WN_7v529szpR_-ekIWIX6wPQw

OPENING SESSION



Ar. Rita Soh
President
ARCASIA



Ar. Acharawan Chutarat
Chairman
ACGSA



Ar. Tushar Sogani
Deputy Chairman
ACGSA

MODERATOR



Ar. Alice Leong
Member of
PAM

SPEAKERS



*Regional Perspectives:
Build Back Better*

Ar. Ishtiaque Zahir Titas
Member of
IAB



UN.SDG in ACTION

Ar. Joel Chan
Member of
HKIA



*Resilience Design for
Healthy Cities in
the Post-Covid Era*

Ar. Xiao Wei
Member of
ASC



*Towards self-reliance
of the region –seeking
potentiality for the future*

Ar. Terukazu Nii
Member of
JIA

Cities are facing increasing environmental, social and economic challenges amplified by the effects of climate change that threaten the resilience of urban areas and their residents. The COVID-19 pandemic crisis has evidenced the need and showed the benefits of nature in cities and green spaces, since the contact with nature offers a way to deal with and counteract stressors of everyday life, while still allowing for social distancing. Building resilience requires identifying and assessing hazard risks, reducing vulnerability and exposure, and lastly, increasing resistance, adaptive capacity, and emergency preparedness.

This webinar session will showcase the benefits of resilience planning with nature for a healthier urban future by displaying successful city cases around the world.

Sponsored by:



Supported by:



Webinar :

“The Evolution of Urban Resilience & Sustainable Future”

Regional Perspectives: Build Back Better

Ar. Ishtique Titas reiterated the significance of the topic that the challenging intersection of culture, heritage, and innovation is critical to address sustainability in architecture. Underlying factors such as short-term political cycles and short-sighted economic motives would bring devastation to urban development and resilience. Efforts of all stakeholders are required to build better cities for the benefit of all people while conserving resources utilizing them wisely for sustainable solutions. The subject of sustainability often revolves around the 2030 Agenda: UN's SDG goals, Sendai framework, and the Paris agreement, which Ar. Ishtique addressed that should be the core of actions.

Ar. Ishtiaque Zahir Titas
Member of IAB

UN.SDG in Action

Ar. Joel Chan discussed a critical issue in Hong Kong on density. There is a shortage, lack of affordable housing, and current situation on sky-rocketing housing prices, which offered a glimpse of what the housing market scene would be in 2030 when the Asian population reaches 5 billion. The Hong Kong housing crisis today heralds an imminent arrival of a social crisis not only in Asia but other developing regions of the world. He remarked that 'Architects live by design and not only just numbers', calling an urge for architects to come up with solutions through various aspects of design that is applicable in the world such as communal living, affordable housing design, modular construction, facilities design, outdoor room design, versatile design, multi-layer connectivity design, transitional (temporary) housing design and urban farm.

Ar. Joel Chan
Member of HKIA

Webinar : “The Evolution of Urban Resilience & Sustainable Future”

Resilience Design for Healthy Cities in the Post COVID Era

Ar. Xiao Wei also addressed the situation in China that was perceived as the epicenter of the COVID pandemic when it began. Its goals are to provide a network for early prevention, quick recovery, and effective disposition; to focus on the well-being of individuals. Lessons learned from the pandemic lead to a definition of resilience that starts from a basic good healthcare system. Remarking that the ‘COVID-19 pandemic sounds an alarm in the field of urban and rural planning in China’, China focuses on careful urban planning and design for healthy cities, while developing a fast-paced economy. This reflects in Wuhan’s 3-year Post-Covid Revival Action plans. The action plans include Enhancement of Medicare and public health facilities; Build integrated facilities; Improvement of Environmental sanitation + Emergencies preparedness facilities; Ease of connectivity through Integrated transportation + Emergency logistic system; Enhancement of Quality of healthy urban space, ecological protection.

Ar. Xiao Wei
Member of ASC

Towards self-reliance of the Region-Seeking Potentiality for the Future

Ar. Terakazu Nii discussed natural threats in Japan they are preparing for major earthquakes & tsunami in the near future. In order to mitigate disasters, a regional approach enhancing local potentials could be appropriate for sustainable recovery and resilience for future generations, by understanding the topography, history, climate, and safety of the site. There is a need to rebuild an enriching relationship between Man and Nature, Man and Man within each region, for achieving support and cooperation. There should be an implementation of environmental awareness through a new form of education. The economic crisis brought on by the pandemic simulates the impact on lifestyle that reduced Carbon emissions. Thus, it indicated the urgency to use renewable energy, distributed network working style, utilization of local materials. Wood is encouraging in Japan, The pandemic will also result in increasing economic disparity in the future. In this context, reviewing past experiences in relation to emerging new values offer a philosophy for resilience for the future. The awareness and roles of mutual help systems like commons and community need to be developed for reducing disaster risk and its impact. This will lead to strengthening the self-sufficiency of local communities and regions.

Ar. Terukazu Nii
Member of JIA

Deputy Chair's message

ACGSA Forward...

Some Areas for future works of ACGSA :

The Entire work of the ACGSA has been previously also based on the following domains on the main 3 pillars as follows :

- Heritage & Vernacular Wisdom of the built environment
- Urbanism : The challenges & Solution of it
- Resilience

We would like to take these forward and add up some new assignment as well, like harmonising the green rating systems & tools of the different countries.

Ar. Tushar Sagoni

