

Building Resilient Urban Communities























ISSUE V, 2020 PAGE

Contents

Index

BReUCOM Webinar	II
Details of PDPs: KRVIA	III
Details of PDPs: SPAV	IV
Details of PDPs: SPAB	VI
Details of PDPs: NITH	VII
Review of Covid-19 Situation	IX

Upcoming Events

Advisory Board Meeting

Topics
BReUCOM Webinar
Details of Professional Development Programmes (PDPs)
Details of PDPs: KRVIA
Details of PDPs: SPAV
Details of PDPs: SPAB
Details of PDPs: NITH
Review of Covid-19 Situation

PAGE II ISSUE V, 2020

BReUCOM Webinar | KRVIA

Quality of life is an idea that is often being discussed in various studies as a response to many issues and complexities that have recently emerged within our cities in the process of transformation. Along with that the quality of life the question of vulnerability and resilience is also connected and networked within. The cities in India, as a vast diverse geography at large, is vulnerable to projected climate change related disaster with given social, economic and environmental stressed conditions coupled with population growth, informal housing, and unfair land distribution & planning mechanism. In particular the environmental issues and quality of urban living are the most recent debate that engages the planning and philosophical dimensions as methodological questions within academia. Therefore, the academic interest, directed within the urban realm are often tending towards urban development as an imagination, method as a toolkit that it employs while system as an urban component that get

affected in the process.

The question of resilience and sustainability is about addressing the urban system which can begin to develop the framework as a vision for comprehensive understanding of environmental / social / economic equities with help of following areas of case studies & research:

- Assess the development plan to identify the key challenges | Planning & Infrastructural Resilience
- Identify the various ecological systems (environment & ecology, community & livelihood, network & mobility) that are affected by key challenges | Urban Ecology
- Urban Systems of various networked conditions | Participatory Planning & Urban Resilience
- Theoretical and contextual framework for urban resilience | Urban Cultural Theory & Cultural Studies

MODULES:

PLANNING AND IN-FRASTRUCTURAL RE-SILIENCE ENVIRONMENT AND ECOLOGICAL RESILI-ENCE

URBAN SYSTEMS & NETWORK RESILIENCE

HISTORY AND HERIT-AGE RESILIENCE

COURSES

Development Plan

Land Use and Densities

Urban Infrastructure and ecology

COURSES

Anatomy of Urban Ecology
Livelihood and Ecology
Environmental Stress

COURSES

Economic Network
Sociological Network
Transactional Network

COURSES

Cultural Territories
Cultural Practices
Imaging Crisis
Morphology

ISSUE V, 2020 PAGE III

Professional Development Programmes (PDPs) and Open Course Ware (OCW)

The PDPs are further detailed out in this issue:

Kamla Raheja Vidyanidhi Institute for Architecture and Environmental Studies, Mumbai



I. Understanding Socio-Ecological Resilience in the India Paradigm

The program aims to develop a holistic understanding of urban landscapes as complex ecological systems which encompass the dynamic relation between resilient ecology and space. In particular, it dwells on the ontology of socio-ecological relationships and interdependencies. Such a relationship shall be understood through comparative urban situations, particularly of the lesser explored geographies of the periphery in cities. The program shall reflect on the peculiar and nuanced relationship of society and ecology in the Indian context, and what it means for this relationship to be resilient to challenges of climate change, global economy and politics, societal trends, etc.

2. Enhancing Resilience of Historic Cores

Historic native towns are often neglected when conserving a historic core or a monument. These towns include tangible and intangible assets which can be utilised to further strengthen the resilience of an urban community. The built stock can be retrofitted to contemporary needs or adaptively reused with a much lesser burden on economic and ecological resources. The PDP sensitises

the participants to the diverse factors to be addressed while operating in the context of historic towns and offers methods of achieving the above. It includes a guided city walk within the historic core.

3. Addressing Informality and Urban Resilience

Brief Detail about course: Quality of life is an idea that is often being discussed in various studies as a response to many issues and complexities that have recently emerged within our cities in the process of transformation. It is also connected with the question of vulnerability and resilience. When we consider the nature of Indian cities, particularly one like Mumbai, Informal Settlements, and informality in general comprise a significant share of urban life. Informality is extremely vulnerable to projected climate change related disaster within given social, economic and environmental stressed conditions coupled with population growth, informal housing, and unfair land distribution & planning mechanism.

4. Water Resilience: Adaptations, Coping and Transformations

Water is an invaluable resource in the context of Indian cities and the ever-growing demand for tap water is ever increasing. On the other hand traditional water bodies and systems are thoroughly neglected whereby they become sites for disuse and disposal. The course looks at historic cities and how they managed their need for water sustenance both in supply and disposal through comparative case studies. Vulnerability of both the cities as well as these systems is understood and how the same can be sensitively addressed by empowering officials, communities and institutions.

PAGE IV ISSUE V, 2020

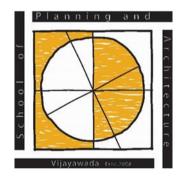
Kamla Raheja Vidyanidhi Institute for Architecture and Environmental Studies, Mumbai

5. Rising Waters, Safer Shores: Resilience Awareness Building and Flood Preparedness Workshop

Coastal flooding is a recurring threat to lives and livelihoods of the coastal communities that inhabit these regions. The children in the affected communities are the most vulnerable to such threats. The lack of preparedness and awareness to deal with such situations often result in disastrous consequences. The current education systems in schools do not sufficiently address the notion of creating resilient societies made up of resilient individuals, to deal with the surging waters due to climatic events. This PDP (Professional Development Programme) is designed to be conducted in schools targeting the younger generation, as opposed to the usual format of imparting knowledge in the 'professional realm'.

The intend is to actively engage the NGO Partners of the BReUCom Project to be intrinsically involved in the formulation and conducting of the PDP. The PDP consists of a series of interactive workshops with Children form the schools in coastal sites which are vulnerable to flooding. The intention is to create awareness regarding individual and community safety and ways of ensuring it during an event of a catastrophe. As part of the workshop, the activities will be designed in order to involve the kids to put together a "flood awareness educational kit" designed by kids for kids. The output of the workshop can be collated to put together awareness kits which can be used to train volunteers as well as to generate awareness in similar areas.

School of Planning and Architecture, Vijayawada



I. Traditional Wisdom and Resilience in Hill Settlements

This course shall pave the way to explore the traditional wisdoms and best practices which can be applied in contemporary world with respect to adaptation to disasters and climate change with a focus on built environment. Indigenous knowledge is often evolved on the principles

of trial and error, which is then followed in mainstream sciences. On the contrary, modern planned settlements that are based on man-made scientific interventions are designed to deal with resilience towards calamities. However, in hilly terrains, we often find that rampant, unregulated and accelerated modern urbanisation has led to new urban fabric that is inorganic in nature and not tolerant to environmental requirements of a hilly region. This has led to incidences of frequent landslides, flash floods and large-scale losses during earthquakes. Given the significance of rich local indigenous knowledge, this course attempts to critically evaluate the traditional construction techniques, skills and knowledge prevalent amongst the local communities in north-western part of Himachal Pradesh region.

ISSUE V, 2020 PAGE V

School of Planning and Architecture, Vijayawada

2. Heat Stress and Thermal Comfort

This course shall overlay the approach to investigate in development of comprehensive methodology for carrying out thermal comfort studies with a focus on resettlement colonies. In India, the planning and design of low-income housing or resettlement of colonies has historically been dominated by politics with cost of the unit and quantity being prioritized over quality and comfort. In a country that experiences different climatic conditions throughout the year, buildings need to be responsive to the local climate that helps in improving the thermal comfort of the inhabitants. For understanding, mapping and drawing planning & design guidelines for accessing and improving the thermal conditions of a low-income rehabilitated housing settlement.

3. Settlement Planning and Design in Hilly Terrain

As vernacular practices are proven to be sustainable, therefore it is essential to take lessons from sustainable vernacular practices for new development and formulation of building regulations for achieving contextually appropriate and sustainable development in hill settlements. Planning and designing of buildings in a hilly terrain are tedious and difficult task due to complicated terrain, steep gradient, adverse climatic conditions, rich flora and proneness to natural hazards. In response to these harsh development situations, numerous vernacular practices and styles have evolved with local materials and indigenous techniques to fulfil the needs of people, which cause minimal damage to environment and are sustainable. But, in spite of numerous benefits of these vernacular practices, these are often not used for new development due to increased demand for more built spaces due to rapid growth, availability of new construction materials and techniques and reluctance of residents

to adopt vernacular practices.

4. Urban Heat and Spatial Dynamics

An understanding of the relation between heat stress zones and urban elements in order to guide future planning processes that can be heat resilient shall be explored.

The health impacts of heat are an emerging global environmental health concern. Climate Change is expected to increase the intensity and frequency of periods of extremely hot weather with significant effects on human health. Large Southern cities, where concentration of poor people within certain pockets is high, are having higher instances of heat strokes and deaths In India, in between the year of 2012 and 2018 due to heat stress in urban areas. Exposure and sensitivity to hazards related to climate increase, when there are social inequalities. While it takes immense efforts to ease out socioeconomic inequalities, Hence, this study helps in bringing the thoughtful spatial planning process, if focused and evolve, informed processes that are adaptive to climate change.

5. Applications of GIS in Resilience

This course shall help the participants in developing skills in using geo-spatial decision support tool like GIS for resilience planning. These skills are required to process the complex spatial dataset available to understand the dynamic of urban growth and resilience planning. In India, there is a growing demand for the use of geo-spatial tool applications to understand urban planning and growth. At the moment, the use of GIS is predominately limited to mapping, however, capacity building programs such as this, would help the professionals understand the analytical aspects of GIS.

PAGE VI ISSUE V, 2020

School of Planning and Architecture, Bhopal



I. Urban Resilience and Transforming Communi-

ties Peri-urban areas are the contested regions due to rapid transformation in socio-economic structure and ecosystems. Changes in land use, built environment and livelihood pattern results into a transformed socio-spatial structure of villages located in peri urban areas. The continued degradation of ecosystem due to this rapid transformation is affecting the socio-ecological resilience. Strengthening of resilience to climate change and other environmental challenges in village community located in these areas is needed. The relationship between resilience and the way these transformations are taking place are vital for building resilience.

The focus of is to make village community especially the next generation the dynamics of natural systems, agricultural systems and urban systems. PDP will be conducted for school kids and other residents of villages including NGO's working in villages to know their knowledge about the transformations taking place with respect to: natural resources; changes in built environment and livelihood. The adverse impact of these transformations through the concept of socio-ecological resilience will be explored through field experiences of the community.

2. Marginalized Communities and Resilience

As the world experiences the climate change, low income countries and developing countries are be the most affected one. The level of poverty, the rapid pace of urbanization and a lack of education about climate change and the missing planning and design mechanism increases vulnerability and aggravate the impacts of cli-

mate change in these countries.

The idea of this program is to develop holistic understanding of how climate change affects the marginalized one. The course will sequentially explore the stages of analysis through the mapping to bring the compressive understanding of communities and their spatial pattern

Innovative urban policies and practices have shown that adaptation to climate change effects is possible and can be built into development plans and design. These include co-design through existing networks and systems, community-based initiatives, role of NGOs and governance. This program will explore innovative approaches to put above things in larger perspective of climate change.

3. Institutional Resilience for Informed Decisions

There is a limited reflection on knowledge of community responses and social behaviour in addressing environmental and disaster related challenges faced by a city. The course will emphasize on the importance of understanding the natural, societal, economical, infrastructural and technological risks arising out of climate change impacts and disasters. The focus would be on role of various formal and informal institutions in building up resilience of the city. The participants would be exposed to: new perspectives on preparedness and disruption managements for the challenges; various methods to capture the level of exposure to the different types of aforementioned risks and; the community and institutional responses towards these risks. The methods would include assessing risks both at various spatial scale as well as institutional scale.

The wider dissemination of the development programme would help in sensitizing the professionals for inclusion of the risks for various kinds of shocks and stresses. This would further help professionals in informed decision making through capturing responses of community for the development of more resilient city, with regard to the ability to manage challenges more effectively.

ISSUE V, 2020 PAGE VII

School of Planning and Architecture, Bhopal

4. Culture, Resilience and Indigenous Communities

With a series of pre-event course material, the PDP intends to locate itself on the site of indigenous culture and way of life. It would be a unique opportunity for the students and professionals working in various environmental and urban domains encountering the cultural logic of indigenous communities in the hinterlands of central India. As Madhya Pradesh is one of the wealthiest states in India in terms of tribal heritage, the programme would benefit from the locational access to the site. The five-day programme would explore the Community-Craft-Culture framework to map out the practices at the ground and understand climate change and resilience principles. Some of these practices will be further interpreted for urban systems. They would add to the exist-

ing knowledge bank on resilience.

5. Urban Resilience - Enabling Knowledge Providers

The PDP intends to inform and enable the change-makers in the school education, the school teachers involved in teaching the subjects of Environmental Sciences. The programme will first introduce the basic concepts of Urban Resilience through existing literature and various case studies. Further, it will facilitate the participants in designing multiple assignments for the school-going students regarding the themes: Climate Change, Urban Resilience, Environment, Community, Culture, Indigenous and Traditional Knowledge etc. The idea is to extend the benefits of the Urban Resilience literature to the young minds through their mentors.

National Institute of Technology, Hamirpur



1. Socio-ecological Resilience in Hills

Increased frequency of natural hazards and sea level rise are expected impacts of climate change in India. Marginalized urban settlements are often vulnerable to disaster due to their location in hazardous areas and the use of non-durable building materials, already today their inhabitants are therefore strongly affected by climate change. But amidst strives to meet climate targets, the poor's needs are mostly overlooked. But amidst strives to meet climate targets, the poor's needs are mostly overlooked.

In this context, there is an urgent need for paradigmatic shift in the education of graduate students in spatial planning and design as well as training of urban professionals from different backgrounds in order to confront upcoming challenges related to climate change impacts on urban informal settlements.

2. Traditional Knowledge in Urban Resilience

Increased frequency of natural hazards and sea level rise are expected impacts of climate change in India. Marginalized urban settlements are often vulnerable to disaster due to their location in hazardous areas and the use of non-durable building materials, already today their inhabitants are therefore strongly affected by climate change. But amidst strives to meet climate targets, the poor's needs are mostly overlooked. But amidst strives to meet climate targets, the poor's needs are mostly overlooked. In this context, there is an urgent need for paradigmatic shift in the education of graduate students in spatial planning and design as well as training of urban professionals

PAGE VIII ISSUE V, 2020

National Institute of Technology, Hamirpur

from different backgrounds in order to confront upcoming challenges related to climate change impacts on urban informal settlements.

3. Learning's from Vernacular Hill Settlements

Recent Climatic disasters in hill areas due to uncontrolled and non-scientific growth have increased the need for making urban settlement resilient in nature. This calls for careful attention and study of the vernacular settlement examples and implementation in design of buildings and settlements in hilly terrain. This course tends to provide a base knowledge about the Learning's from Vernacular Hill Settlements for building resilient settlements.

4. Disaster Resilience and Risk Management in Hills

Demand for innovation, awareness and education for building culture towards safety and resilience in vulnerable urban hill settlements is major concern. Prevention of loss to life and property due to natural calamities and putting in place policy framework for disaster mitigation and management is an area where architects and planners input is vital. This course attempts to critically evaluate the role and contribution of various Govt. Institutes of Himachal Pradesh in building Disaster Resilient region.

5. Flood Resilience Mitigation and Adaptation

Climate change has led to incidences of frequent landslides, flash floods and large-scale losses during earthquakes in hill towns. The venerability of settlement due to such sudden events is a concern. To build a resilient community there is a need to equip the society with understanding of Mitigation and Adaptation due to floods. This course intends to do the same while building resilient communities. ISSUE V, 2020 PAGE IX

Review of Covid-19 Situation in India

Society for the Promotion of Area Resource Centers (SPARC)

The Alliance of SPARC-NSDF-MM (NSDF is National Slum Dwellers' Federation and MM is Mahila Milan) has been working the urban poor in slums and relocation colonies since 1984 and have supported them through various housing, water and sanitation and relocation projects. From the time when the lockdown was announced, SPARC has been communicating with the leaders of the federation and Mahila Milan through phones calls and Whatsapp messages. In this way we are in a position to better understand the ground situation, what support do different groups need, how well we can assist them. One of the major challenges faced by these groups was of food insecurity knowing the fact them most of them are daily wage earners, and through the leaders we could get a list from every area of the families that were in most need of food supplies. Amongst the daily wage earners, were also vulnerable groups like widows, single earning member, the aged and lonely. They were given dry ration as well as cooked food in some cases.

One of the relocation colonies, Indian Oil which has more than 50 buildings was sanitized by Mahila Milan and the local community volunteers. While there was news about getting an additional 5kg ration to each ration card holder, the federation witnessed a complete different story where the ration officer did not receive any guidelines stating the above and noticed long queues outside the ration shops.



Volunteers sanitise buildings© 2020 SPARC



Long queues outside a local ration shop at one of the relocation colonies in order to get free ration.

© 2020 SPARC

PAGE X ISSUE V, 2020

Society for the Promotion of Area Resource Centers (SPARC)

What the alliance of SPARC-NSDF-MM is doing to support their network of slum families –

- The team at SPARC has been communicating with the federation, Mahila Milan and the community through mobile phones and whatsapp to spread awareness regarding the virus, sharing messages that help prevent the virus.
- Realizing how it has affected the poor man's livelihood in a span of few weeks, the federation and Mahila Milan started tracking families and supporting them with dry ration and cooked food.
- Interventions from the government are also being tracked to make sure they reach the urban poor and the neediest.
- Online raising funds to buy food grains for slum communities and for families living in relocation colonies is an ongoing process.
- While in Mumbai it was still possible through the Mahila
 Milan and federation leaders to distribute food grains in

communities, in cities outside Mumbai it was not possible to do so. Therefore, the leaders in those cities were asked to give bank and contact details of a local shop and they were paid directly through online banking for providing ration to the families in need.

- Movement pass for some leaders were sought that would allow them to move around in the city for distribution.
- For each city and centre list with number of families supported, receipt from the local vendor to be made available for the auditors are being maintained.
- We already have a pitch page/ on our democracy for Credit Cards and UPI
- Individual donations in cash and kind have also been secured and kept track of.
- A total of 4716 families in Mumbai as well as in cities outside Mumbai have been supported so far.

Centre for Urban and Regional Excellence (CURE)

The vulnerable and marginalized communities have been most susceptible to the widespread impact of the pandemic. However, with low mobility, compromised access to resources, and the risk of spreading the virus looming large, the communities went on to play the dual role of the providers as well as the beneficiaries. Ensuring their safety and well-being has been paramount for all. UN Habitat has said that "the impact of COVID 19 will be most devastating in poor and densely populated urban areas, especially for the one billion people living in informal settlements and slums worldwide".

However, with low mobility, compromised access to resources, and the risk of spreading the virus looming large, the communities went on to play a very critical role of both providers as well as the beneficiaries. We at Centre for Urban Regional Excellence (CURE), supported by USAID, have engaged continuously with settlements that we work with to connect and facilitate the communities in their newfound roles successfully.

As CURE, investing in community capacity building and strengthening has enabled a strong response in the fight against the virus. For instance, the nation-wide lockdown led to a shortage of masks, which were crucial to keeping the front-line responders safe. The women of Krishna Kunj Area Level Fed-

eration (ALF) a federation of Self Help Groups from Dharamshala, stitched 200 masks which the Dharamshala Municipal Corporation (DMC) distributed to its Safai Karamcharis, police personnel, the non-medical staff at hospitals and ASHA workers. The DMC also was able to compensate the ALF members for making the masks, and they have since then supplied many more masks.

The physical distancing norms paved a new way of creating inclusive communities by using virtual outreach. **CURE's feet on the ground approach** allowed us to take supportive action for these settlements, leveraging technology to create awareness on the need for physical distancing and hygiene and supporting local governments to facilitate access to basic services.

Information dissemination has been seminal in fighting this pandemic, and in a country with multiple languages and diverse dialects, it is integral that information reaches all. Local municipal bodies have leveraged visual mediums like graphics and drawings to explain the best hygiene and sanitation practices that need to be followed at the community level. This collaborative effort of government bodies, communities, and active citizen groups have enabled the swift spread of much-needed information to address the pandemic challenges.



20

NEXT ISSUE:

Topics

Advisory Board Meeting