BReUCom Webinar Series

WEBINAR REPORT

INTERSECTIONALITY OF TECHNOLOGY, PEOPLE AND PLANNING FOR RESILIENCE

14th August 2021
11.00 am to 01.30 pm (Indian Time)

Organised by

PRIA
Knowledge. Voice. Democracy.

B_RE_U_COM_
Building Resilient Urban Communities

SCHOOL OF HUMAN SETTLEMENTS

Co-funded by the Erasmus+ Programme of the European Union

SPEAKER PROFILES

Prof. Dr. Fr Antony Uvary, S.J., is the Vice Chancellor of XIM University, Bhubaneswar

Dr Rajesh Tandon is an internationally acclaimed leader and practitioner of participatory research and development. He founded the Society for Participatory Research in Asia (PRIA), a voluntary organisation providing support to grassroots initiatives in South Asia, and continues to be its Chief Functionary since 1982. Dr Tandon has undertaken a number of initiatives to promote engagement of institutions of higher education with civil society and local communities to foster knowledge generation and mutual learning. This work found further support when he was appointed in 2012 as UNESCO Co-Chair on Community Based Research and Social Responsibility in Higher Education (www.unsecochair-cbrsr.org). The UNESCO Chair grows out of and supports UNESCO's global lead to play 'a key role in assisting countries to build knowledge societies'. Dr Tandon has authored more than 100 articles, a dozen books and numerous training manuals on themes such as democratic governance, civic engagement, civil society, knowledge democracy and participation.

Dr. Kajri Misra is an architect and environmental planner, and has a Ph.D. in City and Regional Planning from Cornell University USA. She has spent more than 35 years in teaching, research and consulting, and is the founding Dean of two Schools of XIM University - the School of Rural Management and the School of Human Settlements. Dr. Misra's wide-ranging and multidisciplinary expertise in settlement planning, governance and management has led to work on urban and rural water management, governance reform for public service delivery, local self-governance and participatory planning. In the last two decades she also studied the professional capacity gaps for sustainable human settlement development in India, analysing the education and training needs and developing innovative Programs and curricula. She has numerous publications in her areas of interest, has been part of policy groups of the Government of India and the state, and continues to serve in the Governing Boards of state and civil society organizations.

Dr. Partha Mukhopadhyay joined CPR in 2006. He was previously part of the founding team at the Infrastructure Development Finance Company (IDFC), focusing on private participation in infrastructure. In previous positions, he has been with the Export Import Bank of India, and with the World Bank in Washington. He has been on the faculty at Indian Institute of Management, Ahmedabad, Xavier Labour Relations Institute, Jamshedpur and the School of Planning and Architecture in Delhi. He has published extensively, writes frequently for the national media and has also been associated with a number of government committees. Most recently, he was chair of the Working Group on Migration, Government of

India and member of the High Level Railway Restructuring Committee, Ministry of Railways and of the Technical Advisory Committee of the Ministry of Housing and Urban Poverty Alleviation. He has previously been associated with the Committee on Allocation of Natural Resources and with the Prime Minister's Task Force on Infra.

Dr. Darshini Mahadevia has over 25 years of experience in teaching and researching in urban studies, human and gender development, poverty and inequality, and climate change. She did her PhD from the Centre for Studies in Regional Development, Jawaharlal Nehru University, and was the Dean, Faculty of Planning, at CEPT University from 2012-2016. She also headed the Centre for Urban Equity (CUE), a Centre she had set up at CEPT. Professor Mahadevia is an editorial board member of several journals, a member of the Board of Studies of two schools at Tata Institute of Social Sciences, and has been a visiting fellow at University of California, Los Angeles, McGill University, Montreal and Tsinghua University, Beijing. A committed researcher, she has more than 100 publications as books, chapters in books and journal articles, and has managed more than 40 research projects. During 2011-2013, she was a Member and Vice-Chair of the Advisory Board of the Global Research Network on Human Settlements (HS-Net), of the UN.

Dr Tathagata Chatterji is Professor of Urban Management and Governance, Xavier University Bhubaneswar, India. He has over 30 years of academic cum industry experience and held senior managerial positions in the corporate sector before shifting to academia. His research interests are urban sustainability, urban economic development and political economy of urbanisation. He had published four books and has over twenty high quality internal research publications in the areas of urban development; He received the Gerd Albers Award in 2016 from the International Society of City and Regional Planners (ISOCARP), for his research on comparative modes of urban governance in India. He graduated in architecture from BE College (now IIEST) Shibpur, did master's in urban design from Kent State University USA, and PhD in Urban Planning and Governance, from the University of Queensland Australia. He is a Member of the Planning Institute of Australia and Fellow of the Institute of Urban Designers India.

Dr. Tania Berger is a trained architect and has a PhD in construction and building sciences, entertaining a strong focus on social science. She heads the Cluster "Social sPACe based research in built Environment" (SPACE) at the Department for Building and Environment at Danube University Krems, which works on issues of integration in housing on a national level as well as on global urbanisation processes, and precarious housing in an international context. Tania also coordinates Erasmus projects in the field of "Capacity Building in Higher Education" with a focus on informal settlements in India and Ethiopia.

Dr. Barsha Poricha is an urban and regional planner from CEPT, Ahmedabad with a PhD in Human Ecology from Ambedkar University, Delhi. Over the last two decades, she has been working on issues of civil society engagement and human development and her work particularly has been around engaging, developing and designing inclusive and participatory planning and development mechanisms within governance processes. She also works on issues of gender, youth development and capacity building in an effort to influence and deepen policy discourse and strengthen people engagement in the urban sector.

THE DISCUSSION

Climate adaptation policies are increasingly experimenting with emerging climate-resilient technologies and infrastructure. In the countries most affected by climate change such as India, climate resilient technologies hold a dual purpose of securing livelihoods of urban populations and reducing climate related risks. An intersectional lens for understanding resilience in the context of technological advancements, community needs and sustainable urban planning approaches can assist in creating more nuanced, comprehensive understandings of vulnerabilities that lie at the heart of climate resilience strategies.

The Covid-19 Pandemic has exacerbated the focus on questions about the role that climate-resilient technologies can play in identifying and reducing environmental risks faced by urban informal communities. Higher Education Institutions (HEIs) are increasingly being seen as important stakeholders to foster community-engaged approaches for building climate resilience locally, through incorporation of such approaches in teaching and research across field disciplines.

This webinar centred around the social embeddedness of innovative climate resilient technologies in urban spaces, popularizing technologies to reclaim participation and agency by climate vulnerable communities and ways in which HEIs can use socially relevant approaches to best achieve Sustainable Development Goals (SDGs) and Climate Adaptation Goal.

KEY MESSAGES

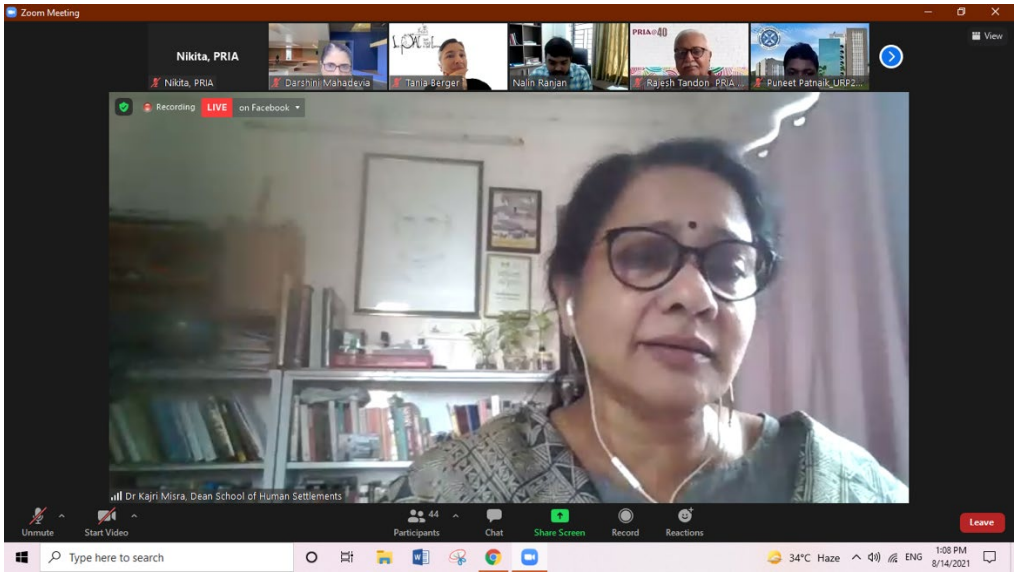
The Covid-19 challenge has called for a collective action and a multi-level governance approach.

The Beneficiary-Led Construction under PMAY is a space where there is agency for the individual to design.

Stakeholders need to reflect upon how next-generation professionals can be prepared to be sensitive about these issues and take them forward in their professional careers.

The over regulations for universities and colleges do not allow flexibility, and there is also an over-emphasis on job-oriented learning. This is the reason that students lose on actual learning and eventually pick up on market-oriented skills. It needs to be seen how IPCC learnings can be applied to local contexts for addressing local issues.

Interventions where the structures are built hand in hand with people requires trust building. This is why partnerships are needed between HEIs and Civil Society Organisations to together build urban resilience in the community, where trust and technology intermingle with each other.



Panel Discussion

Dr. Kajri Misra discussed the vision and objectives of XIM University's School of Human Settlements that include preparing professionals, community facilitators and knowledge base that can support the ways in which people shape their built environments. The current system in India is insufficient in range, skills and attitudes for building resilient habitats.

Dr. Misra asked whether there are only kind of planners for building climate resilient urban centres? If not, what kind of stakeholders can be included if we broaden the scope of actors who can contribute to this issue, seeing that urban settlements are at the highest scale of complexities. Using a map, she analysed how there are a range of actors with technical expertise, operational and managerial competencies, as well as strategic skills which can help build sustainable settlements. Although India has a large number of architects and engineers, there are inadequate number of competent planners. We do not have city managers, people who understand the city well. Finally our administrators involved with policy and governance are ill-equipped as they are not privy to the local and contextual challenges faced by cities.

Dr. Barsha Poricha introduced BReUCom, that is a project partnership instituted by two European Institutes to build capacities of people living in vulnerable cities to address climate-based challenges that have a direct impact on lives and livelihoods. This project is unique because it wants to bridge the gap between higher education institutions and civil society organisations. By building evidence from the ground, it aims to influence curriculum and pedagogy of planners, architects and urbanists so that they are able to address climate challenges most effectively.

The project partners along with Higher Education Institutions have developed case studies which can be the building blocks for curriculums for planning and architecture institutes. Open courseware material has also been created under this project which will be available on the BReUCom website. The purpose behind this endeavour is for HEIs to take on the role of building awareness and local capacities of various stakeholders for an equitable and climate-adaptive city.

Dr. Poricha discussed 3 case studies amongst others conducted under the BReUCom Project: Climate Responsive Planning and Design – A Thermal Comfort Study for Mitigation of Heat Stress

(SPA, Vijaywada); Resilience in Historic Native Towns: Case Study Kalbadevi, Bohra Bazaar, Mumbai (KRVIA, Mumbai); and Urban Energy and Spatial Dynamics towards Climate Resilience: A Case of Bangalore (SPA Vijaywada).

The first was a thermal comfort study to understand heat stress for climate responsive planning and design. The tools used by researchers in this study were not limited to the conventional technical tools used in schools of architecture and planning, but also the qualitative tools using personal interviews with community members amongst others. This approach threw light on details about impacts of light, wind, existence of certain ventilation systems, etc on the human mind and body which often get hidden in studies. These insights proved very useful for forming resilience building strategies proposed through this case study.

The second study looking at the historicity of the city in the context of urban settlement planning. The team tried to identify the inherent resilience of the historic Bohra Bazaar in Mumbai and tried to strengthen the nature of resilience based on interests, values and aspirations of various stakeholders. The study also found cultural resilience within the community.

The third study involved a secondary research study, exploring the urban heat islands and spatial dynamics in Bangalore. It highlighted how the ecology, environment and their relationship with people have to be understood in an integrated manner to build urban climate resilience. These case studies also reminded us of the importance of including all kinds of stakeholders contributing to urban scenarios as well as the climate data infrastructure within the framework for planning and architecture.

Prof. Anthony Uvary initiated his presentation by pointing out the relevance of the theme for this webinar in the world we live in today, where climate change is taking place rapidly and affecting our lives adversely. The global temperatures are rising leading to changes in weather and seasonal patterns, there are poor urban settlements that are vulnerable to climate change and therefore urban planning needs to be seen in a wholistic manner. Cities today are not planned according to people's needs; people lack basic amenities, basic food, fresh air and a clean environment to live in. He urged the participants to listen and discuss the nuances surrounding the issues of urban planning and climate resilience, and use this knowledge to share solutions and create an impact.

Dr. Tathagata Chatterjee contextualised how the cities were the epicentres of Covid 19 owing to their roles as networks for a variety of activities. Covid-19 also brought out the urban divide, and inequalities even within the major cities. The urban settlements have been particularly disadvantaged and preventive measures such as social distancing, sanitising and washing hands every little while was a distant reality for inhabitants of these settlements.

The Covid-19 challenge called for a collective action and a multi-level governance approach. It is useful to look at building city resilience from a urban livelihoods framework, that looks at multiple dimensions. The Orissa government's policies have come closest to this framework; firstly it is the first government to come up with urban employment guarantee scheme while Mission Shakti provides support for finance capital to women Self-Help Groups (SHGs). The JAGA Scheme provides land rights to slum dwellers and facilitates financial support for them through PMAY. Once drones do initial mapping under the JAGA Scheme, participatory needs assessment is done within the local communities by slum development associations. The infrastructure gap analysis is then conducted for specific slums which results in project implementation stage. These schemes have also helped build social, human and physical capital among vulnerable communities. Many challenges facing them are been addressed holistically within the UN SDG framework at the city

level. So the key is that we need to see cities beyond the physical dimension and instead approach them as a combination of multiple actors.

Another project that Dr. Chatterjee discussed was one where SHS's students were engaged in analysing solid waste management process at Angul. Mission Shakti's women led Self- Help Groups were being mobilised to work in the area of solid waste management. They were trained to operate E-vehicles and collect waste from neighbourhoods, from where the waste was taken to recycling plants. This project again shows the inter-relationships and intersectionality between people, planning and technologies.

Dr. Partha Mukhopadhyay stated that the BREUCOM case studies questioned what the appropriate engagement between is the human and the built environment and what effect it has on the natural environment. The second issue is that in the context of gender, caste, and occupation, to what extent do these actors exercise agency and power in making decisions on the relationship between the built and the human. So, regarding built environment, what say did actors have in intervening in that space, and with respect to the human aspect what are the relative power positions of gender, caste and occupation. Planning then becomes an exercise for balancing the demands between different actors.

The next question is regarding governance, who will use this technology, engage these people and carry out the plan. In India the problem is that people involved in the planning exercise are not people with the local interaction between the natural and the built environment because they are at a different level of governance than the local government, and it's the local government who are most familiar with these aspects. There the critical issue is knowledge and administrative capacity, where the question is do those who best know this interaction have the power to intervene.

Dr. Mukhopadhyay commented that the JAGA initiative in Odisha is an interesting project because it encompasses all three elements- technology, people and planning. Should we accept that the tensions and mediation that is necessary in the larger cities is of a different order of magnitude and the ability of planning to meditate between the human, the natural and the built is much attenuated when you are moving into the larger cities due to the importance of land values and other infrastructure interventions? Should we then try and demonstrate the feasibility of these resilience systems that work with technology, involve people and can result in a really broad-based planning process?

In the smaller cities, the share of the Beneficiary-Led Construction (BLC) in the PMAY program is much higher and above 70% of most PMAY construction. The BLC is a space where there is agency for the individual to design. HEIs can do some ground breaking work here, like CURE has done in identifying agencies in design and resilience technology for these kind of housing structures, which are being built by people themselves. To help people build more resilience, more comfortable structures for them is important and interventions where the structures are built with the people requires trust building. Therefore, partnerships are needed between HEIs and Civil Society Organisations to together build urban resilience in the community, where trust and technology intermingle with each other. For building such cities, technology people and planning must intersect constructively.

Local governments curiously enough are often more salient in smaller cities than in the larger cities, because the stakes in smaller cities are lower and therefore the desire to exercise control over that space and the benefits of exercising control are lesser, therefore the competition to exercise control among government stakeholders is lesser. Finally in terms of these triads of intersection of gender,

caste and occupation, intersection of built natural and the human, of technology, people and planning, the time has come for intensive and wide-spread interventions in smaller cities. Moreover, the knowledge needs to be embedded in the local governance systems to allow that aspect to move temporally over time, because otherwise the ability of that particular governance system to respond to long term change is hardened. Within this framework there is lots of scope for action, practice and engagement which will influence the lives of people.

Dr. Misra concluded by stating that on one end of the spectrum we have architecture, design and planning and a nuanced understanding of the natural environment consequences that came out of the Vijayawada and Bangalore case studies. On the other end we have the layer of governance and policy that overlays the structures and the work done. Although architects and planners are aware and often sensitive to the impacts of built environment on natural environment, they are unable to partake in interventions to influence this impact, due to decisions shaped by financial, state and decision-making power. So, the space for professional planners and architects to act needs to be available more freely.

Roundtable Conversation

Dr. Rajesh Tandon stated that conversation is very important to understand the kind of environment which needs to be created for future young professionals to deal with issues identified in the several case studies, particularly with the increase in climate change and the urban built environment, and to reflect upon ways for improving and enhancing approaches for educating young professionals coming out of schools of planning, architecture, etc.

The New Education Policy has highlighted three very relevant points that are important to this conversation:

1. Improved teaching and learning techniques
2. Focus on actionable and useful research
3. Identifying ways of engaging with local communities and be able to access local experiential practical knowledge including discussion on local language and local culture.

He further spoke about how the IPCC report has highlighted the dangers that climate change poses to the urban environment in the broader context of SDG. He urged speakers to reflect upon how next-generation professionals can be prepared to be sensitive about these issues and take them forward in their professional careers.

Dr. Darshini Mahadevia began by answering the question of how planning education can respond to climate challenges. Planning initially was something that dealt with public health and then public goods, and over time, particularly since the 1980s planning has moved towards supporting the market functioning. Thus, planning schools have started following curriculums that led towards job-oriented training. Taking forward on what Dr. Tandon shared about NEP, Dr. Darshini stated that the NEP highlighted the new ways for teaching and learning through interdisciplinary education and experiential learning. However, planning as a program has been interdisciplinary in nature – but academicians/educationists struggle with teaching through an interdisciplinary lens.

Planning schools are very rigid and follow a male-centric approach. Planning education needs to challenge the practice and start influencing the same through small and interactive ways. This will also require a politically supportive environment. The over regulations for universities and colleges do not allow flexibility, and there is also an over-emphasis on job-oriented learning. This is the reason that students lose on actual learning and eventually pick up on market-oriented skills. She stressed the need to see how IPCC learnings can be applied to local contexts for addressing local issues. Lastly, climate mitigation is also an important yet complex issue that needs to be addressed. There is a huge field open for students of what they can do in the professional world.

Dr. Tania Berger stated that though the context is different, there are a lot of similarities of climate change challenges between the Indian and European contexts. Having been involved in the case studies conducted as part of BReUCom, she realized that individuals and communities do not have agency over their built environment, due to which their everyday life activities get severely impacted by climate change events. This has a greater impact on the lives of women.

Dr. Berger emphasized on how the employability of students has gained a lot of attention in higher education planning (which may be dangerous). As planners, we need to look through a societal framework and play a certain role. Planners need to push their limits to perform a role that is beneficial for the citizens and society. This will also require an understanding of the power relations before influencing the built environment. It is the responsibility of HEI's to generate interest in students to go beyond the present stage and seek improvement, seek solutions of what needs to be done.

Dr. Kajri Mishra from her professional experience of working in the sector for so long raised two very relevant questions:

1. What is the profession of planning?
2. What does it consist of?

The debate around these issues has been extremely limited and has particularly taken plan in closed room settings with a small bunch of individuals. As a professional in this field, individuals need to offer society something useful and meaningful. They need to have a unique character of content to offer. The profession needs to be structured through institutional parameters, and lastly, should follow certain regulations. There is a need to questions us as professionals based on these parameters – If we truly are a professional? And how has education shaped our professions?

Planning is still seen from the lens of architecture and designing parameters. There is a need to look at architecture and planning separately. This can also promote community engagement and community participation. The institutions regulating education also need to be looked upon, and the livelihood needs of students need to be understood. Planning is in the public domain, it deals with public spaces, and thus state should employ planners. HEI's need to educate students on how they can serve the country and its citizens.

Concluding Remarks by Dr. Rajesh Tandon

Dr. Tandon concluded by stating that narrowly defined master planners are not what urban planners and professionals would be needed going forward. Students need to discuss their professional interests, and further take charge of what they want to learn by sharing it with the authorities. Students also need to combine their education with climate change issues to address them within their local communities. One of the ways is to have conversations on the issues

of informality, resilience, among others. Lastly, unlike in Panchayats, Urban Councillors have not gone through the training and counselling. The academic institution can play a role in collectivizing them and leading this conversation by discussing the challenges of urbanization.