



### National Workshop \_Vijayawada: BINUCOM final conference

Ainsley Lewis

The final National Conference in Vijayawada is the culmination of the 3-year BINUCOM project. The conference is aimed at :-

- (1) Dissemination of and discussion on the multiple case studies and research findings of researchers from within each of the partner institutions;
- (2) Presentation of and feedback on the various educational modules, courses, and teaching methods developed by each of the partner institutions.

The conference was of interest to a range of personnel in the housing and urban development sector such as: policy makers, bureaucrats, developers, community organizations, NGOs, activists, researchers, and

academics. The conference featured seminars as parallel sessions, where city profiles of Vijayawada, Coimbatore, Ahmedabad and Mumbai were presented.

The Inaugural session had each of the seven partner institutions present their experiences and learnings from the various activities during the course of the project. Dr. Tania Berger the co-ordinator of the project from KREMS screened a video that highlighted the various facets of the BINUCOM project. This video is available on the BinUCom moodle platform. Ainsley Lewis the project co-ordinator for KRVIA, made a presentation that began by stating that KRVIA was one of the architectural institutions in Mumbai that introduced its students to informal settlements through design studios. However, this BINUCOM program gave the institute a structured way to prepare course material to engage with all the various issues of an informal settlement. Nagaraju Kaja the project co-ordinator for SPAV presentation highlighted several

learnings during the course of the project. Dr. Javier Matrinez project co-ordinator from ITC Enchede, Dr. Ebba Brink from Lund, Hiranmayi Shankavaram representing KAHE and Ravi Sanabati representing CEPT spoke about their respective institute's involvement in the program.

The conference was organized as technical sessions along five thematic focus areas.

### 1) Informal settlements, Housing policy

Hussain Indorewala— Researcher from KRVI, Mumbai, paper discusses Mumbai's discriminatory planning system, and the subsequent rise of 'rehabilitation and resettlement' schemes that evoke some of the most deleterious conditions of housing in of late 19th century Bombay. Beginning with the recent case or Mahul Resettlement Township, the paper undertakes a discourse analysis to highlight the various political-economic and regulatory shifts in the production of housing in Mumbai.

### 2) Communities, Livelihoods

Renu Desai – Researcher from CUE – CEPT, Ahmedabad, presented her case-study “Migrant Construction Workers Housing in Ahmedabad: Seasonal Labour Migration, Trans local Lives and Urban Governance” which examines the spatially lived experiences and practices of seasonal migrants who come from the tribal regions of north-east Gujarat, southern Rajasthan and western Madhya Pradesh, to work as construction labour in the city of Ahmedabad. Using two analytical lenses – a multilocal and trans local lens and a lens of urban governance vis-à-vis informal housing – the case draws out an understanding of the factors and dynamics that shape these migrants' experiences, practices, choices and constraints vis-à-vis housing in the city.

Hiranmayi Shankavaram – Researcher from KAHE, Coimbatore, in her case under study focuses on Vellalore, one of the largest resettlement colonies in the city of Coimbatore. Her research addresses the

archaic traits of resettlement and the presumptive repercussions on the livelihood of those displaced. The colony housing 24 different slums displaced mostly from the centre of the city puts forth immediate challenges of the municipal workers (CMC colony) specifically, in terms of access to infrastructure, added financial burdens and social implications delimiting to the current transitional period post resettlement.

Ravi Sannabhadti – Researcher from CUE - CEPT Ahmedabad, discussed the livelihood of the scrap picking community. He identified the typology of scrap picking based on the types of settlements the scarp is picked and the modes of scrap picking, the various intangible ways in which the communities are networked and the manner in which they negotiate with various stake holders in the city of Ahmedabad.

The title of Shweta Wagh's paper is "Commoners as Speculators: Land Tenure and Conflicting Claims in a Mumbai Koliwada." The study explores the transforming livelihoods and the consequent conflicts over land and commons in the city's fishing villages, with a focus on Versova village. The paper is an outcome of an ethnographic research over 6 years with the fisher community in Mumbai. Shweta Wagh is a Researcher from – KRVI, Mumbai.



The case study by Dr. Abdul Razak Mohamed – Researcher from SPA Vijayawada, focused on the level of living of the poor households and the strategies used to get livelihood, social and physical facilities in the Rajarajeswarpeta slum in Vijayawada. The study attempts to understand how the residents satisfy their needs and the role and efforts of local government to provide spatial access to livelihood needs of the slum dwellers. The study also focused on the necessity of creating spatial access to basic needs essential to reduce the poverty situation of the households by inclusion of livelihood needs in to the informal settlement.

### 3) Resilience, Quality of life

Dr S. Ramesh and Daketi Srinivas - Researchers from SPA, Vijayawada, presentation titled "An approach to measure liveability of sums in hill slope areas of Vijayawada." The presentation by Dr S. Ramesh and D. Srinivas questions what is liveability? its importance and the methods to study liveability. Two case studies were chosen based on various parameters on the hill slopes of Vijayawada to study and ascertain the liveability index. The presentation runs along with 4 parameters, 11 variables to understand liveability and the composite index on liveability is derived as the outcome of the study.

Mamta Patwardhan- Researcher from KRVI, Mumbai, studied the nexus of slum conditions, health and climate change impacts in informal settlements in the city. She presented a specific case of the settlements at Deonar slums in Mumbai that are adjacent to one of the largest dump-yards of the city. She emphasized the importance of building resilience of informal communities to climate change impacts.

Ayon Kumar Tarafdar Researcher from SPA, Vijayawada, presentation on Exploring relations between Vulnerability, Tenure and Physical Conditions in Slums along Canals/Sewerage lines of Vijayawada City. The detailed study brought to light the complexities of the vulnerable conditions of the studied communities and their nexus with the tenure and physical conditions.

Dr Ebba Brink from LUCUS, through her presentation impressed that we need to address the issues of hazard. Using social science one should not only look at heat and climate change of 2030 but also consider its effects for future planning.

Dr Karin Steen from Lund University, Sweden highlighted the differences in decision making owing to gender. Women especially in informal settlements need to be empowered in the decision making process.

### 4) Mapping tools and methods

Kimaya Keluskar - Researcher from KRVI, Mumbai, redefined what is the liveability index for an informal settlement in Mumbai. The paper presented her findings through empirical data for site and services at Charkop, Slum rehabilitation scheme at Natwar Parekh Compound and an informal settlement at Dhaisar river edge.

Unequal urban quality-of-life (QoL) conditions represent a challenge towards achieving most of the Sustainable Development Goals set by the United Nations in order to ensure prosperity for all by 2030. Dr. Javier Martinez (ITC, University of Twente) presented on a Geographic and Mixed Methods Approach to map unequal QoL conditions. He emphasized that a better understanding of spatial variations in QoL conditions could help in identifying where people are suffering from relatively low QoL conditions and move towards a just city and inclusive communities. He concluded by claiming that a more sensitive and empathic form of mapping towards just cities is needed. It will require different forms of knowledge, not only the technical or scientific knowledge.

### 5) Education and pedagogic tools

Nagaraju Kaja- Researcher from SPA, Vijayawada, made a presentation on Architectural Education in India. The study extensively examined the introduction of Informal Built Environment and Inclusive urban communities in the curricula of architecture and planning schools. It also looked at the percentage of students opting for theses dealing with conditions of informality.

Andre Mano articulated that education is still lagging behind the paradigms of the Information Age we are living. Realizing that restricting access to knowledge is ultimately useless since the press was invented is the first step to make Education truly 'open'. Besides teaching, Andre Mano works on the development of Distance Education at Faculty ITC, University of Twente using exclusively open tools. From this experience the presentation focused on what makes education 'open', what changes in the role of teachers and institutions when you make your education 'open' and finally it highlighted some of the reasons why Open Education is important.

Parallel sessions were organised during the proceedings of the conference to accommodate the dissemination of the research material that was the bases of the city study.

'City Profile' a document that traced the growth of informal settlements in the four cities namely Mumbai, Ahmedabad, Coimbatore and Vijayawada was presented by the respective authors.

Along with the growth several issue particular to each of the cities such as livelihood of the inhabitants and the various shifts in the same, Migration patterns, the labour markets and the subsequent issues of housing-built form with the government policies and delivery systems was presented.

‘Nostalgia for the Future’ a film directed by Avijit Mukul Kishore was screened by assistant director Rohan Shivkumar. This film is a journey through 4 distinct imaginations of homes and of the bodies that were imagined to inhabit them across 4 examples of buildings built over a century.

These are the Laxmi Vilas Palace in Baroda- a gigantic palace built for a progressive monarch in the late 19th Century; the Villa Shodhan in Ahmedabad, a private residence designed by Le Corbusier, in which the film explores domesticity within Nehruvian modernity; the Sabarmati Ashram where the Gandhian aspirations of the nation-state can be seen; and public housing in post-independence Delhi designed by the Government of India to house refugees from Pakistan and the bureaucrats of the newly independent nation.

Various experts were invited to moderate the sessions and to make presentations about issues relating to informality based on their own work and experience in the field.

Ashok Lall an architect and academician, made a comparison between the low-rise high density and the high-rise redevelopment and presented his findings indicating that the low-rise redevelopment schemes are more sustainable owing to the low recurring costs for maintenance and energy requirements.

Prasanna Desai architect and academician, presented his project where in a participatory approach was used for in site rehabilitation for an informal settlement in Pune. This approach involved all the stakeholders whether it be personnel in the government or the community members. The resultant intervention proved to be a win-win situation for all.

Dr Balninder Singh made a comparison between the informal settlements in the planned city of Chandigarh and the un planned city of Amritsar. He argued that the learnings from both these cities can be used to inform the planning methodology for smart cities.

Sheema Fatima presented her paper that maps the spatial history of urban Patna through the projects of Bihar State Housing Board.

It highlighted the role of the housing board which played an active role in building houses for the Middle class and higher income groups but performed poorly when it came to housing for the urban poor. It is this failure over the years which has led to large scale proliferation of slums in the city

Professor Jit Kumar then offered his views on the question of land in the country. He spoke about how various ideologies and politics have directed the effects on land value, land use and urban development process in the city.

Mrs. Anurima Mukherjee, the invited expert for the session gave a talk on the land governance in the country which aptly addressed issues that were of concern in the previous case studies that were presented.

Dr. Monika Kuffer made an important point about the inaccuracy between the official records and the data available on site. She made her point by stating that according to UN-Habitat, around 1 billion humans live in slums, areas lacking basic necessities of life, where inhabitants are faced with unhealthy living environments.

However, data on the locations and growth dynamics are often unavailable, outdated and population data are commonly very uncertain. For example, small settlements are often neglected by official statistics as they fall below size thresholds, while also for larger slums, the population is dramatically underestimated by official statistics. Reliable and up-to-date data are urgently required, for urban planning and basic service provision, humanitarian response or to address the large differences in health outcomes (such as the much lower life expectancies in slums as compared to planned urban areas). Images of VHR sensors on board of satellites can provide consistent spatial data on slums, where machine learning has shown in the past years its robustness to produce city level maps of slums across the globe.

### **Conclusion & Learnings**

The National conference showcased various lacuna in framing and implementation of policy in various cities. With no definite solution proposed it was evident that institutes of architecture and planning need to be the fore runners to a micro level approach to address issues in the informal settlement.

- The first step is to prepare course material that can be shared with other institutes across India through an open source. BinUCom offered the first step in that direction however it was limited to four cities in India. Research material thus prepared for other cities and towns, can become a valuable source for design studios for young graduates, who are the professionals for the future.
- Course material needs to be prepared for courses that deal with contemporary issues such as climate change and resilience. The course work with appropriate case studies in the Indian context will become relevant for the learner in institutions of higher education.
- The BinUCom program showcased in depth research work of various informal settlements studied in each of the cities. However, settlements are constantly metamorphosing owing to the transient nature of the context in which they exist; thus, prompting the need to formulate more dynamic approach to capture information about communities in informal settlements. Various presentations during the National Conference highlighted the fact that mapping tools and qualitative Geographical Information Systems can be used effectively to capture this information. Institutes of higher education can periodically have repetitive engagement with each of the settlements.

This engagement can help articulate appropriate policies and tweak them based on the changing dynamics on ground. Such programs if undertaken through several institutes in various cities can become a valuable resource. This information can then be used by ALM's to formulate Local areas plans at the grass roots and inform Municipalities the way forward to address issues in informal settlements.

## Accounts of the BINUCOM final conference

Amanda Elgh and Ebba Brink, LUCSUS

### Conference and inauguration

The final conference of the BINUCOM project took place in the second week of February 2019 at the School of Planning and Architecture Vijayawada (SPAV) in their beautiful, newly constructed campus in central Vijayawada. Participants from all four Indian project partners and all three European partners joined the event, most of which also presented at the conference.

External experts, researchers and practitioners were also present, including Dr Balvinder Singh, Prof Prasanna Desai, Mr Ashok Lal, Mrs Sheema Fatima, Prof Jit Kumar Gupta, Mrs Anurima Mukherjee and Dr Panner Selvam who had key roles in the conference schedule.

The scholarly event kicked off on the 6th of February with an inauguration and conference dinner. Representatives of all seven higher education institutes were invited up on stage and form a panel:

Mr Ravi Sannabhadti from CEPT, Ahmedabad, Dr Javier Martinez from University of Twente, Netherlands, Dr Ebba Brink from Lund University, Sweden, Dr Tania Berger from Danube University Krems, Austria, Dr Minakshi Jain, director of SPAV, Ms Hiranmayi Shankavaram from KAHE, Coimbatore, Mr Ainsley Lewis from KRVA, Mumbai, and Mr Nagaraju Kaja from SPAV, Vijayawada. A traditional lamp was lighted by the joint effort of the panel members, and these were thanked with flowers and framed gold-plated certificates.



After introduction and welcome address by project coordinator Tania Berger and SPAV director Minakshi Jain, all panel members were invited to share their perspective on what BINUCOM had meant to them and their institution. The Indian project partners related how the three years in the project had allowed them to address the issue of informality and inclusion in a multitude of ways, including the time for teaching faculty to do empirical research and learn new theories and methods, engaging with community representatives, the development and in some cases implementation of new courses at the department, and engaging students in both classroom discussions and field-based activities around the topics of informality, sustainability, liveability and disaster risk reduction.



Meanwhile, the European partners highlighted the two-way learning process, how the project's meetings, site visits and review process has enriched their pre-existing disciplinary knowledge with new insights about the planning and architecture fields and the Indian context. In several cases they also had the opportunity to engage directly with Indian students in the different cities. They further emphasised how the detailed and diverse case studies which they have seen developed by the Indian teaching faculty during these years also form a rich material that they will be sure to use in their future teaching in Europe in disciplines such as sustainability and resilience.

The evening's programme was enlivened by the cultural programme prepared by SPAV students, including traditional Indian song and dance.

#### **Technical session**

This is a reflection on the first technical session of the conference took place on the morning of 7<sup>th</sup> February on the theme of Resilience and Liveability. The session took off with a presentation by Kimaya Keluskar from KRVA Mumbai on her BINUCOM case study on liveability in informal settlements. The study included both technical aspects of liveability, such as the impact of building design on natural ventilation, and social aspects, such as vulnerability to heat stress of elderly and disabled citizens resettled into high-rise buildings. A key lesson for her was the idea of comfort and liveability, of "what is a good neighbourhood", in the informal settlement was quite different than the usual target group. She also emphasised the role that ecosystem services and green infrastructure can play in planning interventions.

Next, Dr Karin Steen from Lund University, Sweden presented about the various ways in which gender influences notions of resilience and vulnerability.

A feminist lens on the research process goes beyond counting the number of women versus men in knowledge and decision-making processes: it entails questioning "who can know, and what can be known?".

As a practical example, relevant to the issue of heat waves, she referred to an example from a settlement in Dhaka, Bangladesh, where women tended to spend their time in the (hotter) interior of the house, while men more often frequented the (cooler) semi-public areas in the exterior, leading not only to that women were more exposed to heat stress, but also that the men's experience did not lead them to question the building design and the problem of heat.

Further presentations followed by Srinivas Daketi from SPAV, Vijayawada, who presented his case study on government interventions on hill slope settlements in Vijayawada, and Dr Balvinder Singh, an invited expert with a background in sociology who shared insights from his ample experience of working with informal settlements. The session was chaired by Prof Prasanna Desai and Dr Ebba Brink.

Taking stock of the session, a few reflections can be made with regard to resilience, vulnerability and liveability in informal settlements. It is clear that climate change will lead to a warmer and more unpredictable climate, with increased occurrence of extreme events such as heat waves, flooding, landslides, water scarcity, and heightened sea levels. As we have seen in the presentations, informal settlements are particularly exposed to these hazards, for various reasons: Lack of affordable housing forces people to settle in hazardous land such as hillslopes, close to water bodies, dumpsites or factories. The dense housing patterns in many settlements mean that natural ventilation is limited, fire can spread easily from one house to another, and when hazards strike, the limited access makes it difficult for residents to evacuate as well as for emergency vehicles to enter. There are also political reasons that relate to the low priority and lack of services in informal settlement, for instance proper sanitation, and water provision - when water is scarce in the city, it is even scarcer in the slum. Moreover, as Kimaya's and Karin's presentations have demonstrated, there also are differences within informal settlements, and even within single households, as to how people are affected by and how they act upon such calamities, based on categories such as gender, age, mobility, etc.

Two key messages stand out for the continued integration of issues of resilience to climate-related events and liveability of informal settlements into planning and architecture research and education:

First, as eloquently demonstrated by Dr Singh, the importance of mixing in social science and sociology, in order to not only describe problems at the superficial level, but to get to their root causes. While quantitative methods are useful for describing patterns and correlations (“what?” and “to what extent?”), qualitative and ethnographic methods such as interviews are useful for uncovering causal mechanisms (“how?” and “why?”).

Second, is the importance of researchers and professionals to not only focus on the level of heat, thermal comfort or flooding that we can observe today, but to look to projections of what our climate will look like in 20, 50 or 100 years, and combine those with people’s everyday experiences from living in these areas, using the spaces and dealing with present hazards. Only by the integration of people’s situated knowledge, and our expert knowledge as researchers and practitioners, will we be able to create relevant scenarios for the kind of future problems we urgently need to address in today’s planning.

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