

Building INclusive Urban COMmunities

N E W S L E T T E R October 2018

B IN U COM



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ELECTIVES DESIGNED FOR THE BINUCOM PROGRAM:

Ainsley Lewis Project Co-ordinator for KR VIA

External training in Mumbai and Ahmedabad

KRVIA and CEPT hosted two external trainings in Mumbai and Ahmedabad between 24th September and 5th October 2018 with the support of ITC / University of Twente. ITC was responsible for coaching the participants. The training aimed at facilitating the assessment of quality of life in communities through Geographic Information Systems (GIS) applications. The trainings were conducted by André da Silva Mano and Javier Martinez (ITC). As part of the dissemination process of the BInUCom Erasmus + project, the trainings were targeted to students and staff members of the host institutions. The trainings brought in new insights in the use of open software mapping tools, qualitative GIS methods such as walking interviews and assessment of quality of life in communities.

In KRVIA, ITC staff carried out a five-day training in the use of Q-GIS mapping tools. They started with a short introduction to qualitative GIS methods and assessment of quality of life in communities in order to framework for the cases and exercises within the BInUCom Erasmus + objectives. Twenty bachelor students of architecture and landscape planning attended the course. KRVIA offered the course as an elective. The level of the students was excellent and they were very motivated.

ITC staff carried out a training involving mapping tools and GIS open source software (QGIS) at CEPT for their staff members (Centre of Urban Equity). They discussed the training material applied in the program carried out at KRVIA and complemented it with specific topics identified by the participants. They also discussed the possibility of using Q-GIS combined with walking interviews methods.

Sustainable Local Development: perspectives on risk, gender and sanitation.

Mamta Patwardhan Researcher – BinUCom

The KRVA conducted electives this year that were structured around four verticals-Culture, theory, systems and methods. Dr. Ebba Brink and her team, (Lund University Centre for Sustainability Studies (LUCSUS) in Sweden), conducted an elective on “*Sustainable Local Development: perspectives on risk, gender and sanitation.*” The intent of the course was to give students an introduction to three key topics in sustainable local development – climate risk, gender and sanitation.

The course was unfolded over 7 days with a series of lecture presentations, talks, discussions, games and site studies.

Dr. Ebba initiated the course with a talk on Sustainability Science followed by a presentation on Climate change adaptation and disaster risk reduction. The students were informed about developing risk frameworks that would eventually assist in CCA and DDR and the exercise for the day was to develop Risk frameworks taking physical, environmental, social, economic and institutional positions.



Dr. Karin Steen – Director of studies for Lund University International Master’s Program in Environmental Studies and Sustainability Science brought to light the relationship between gender and sustainability. She focused on the association between gender, space and environmental justice as well as between gender and intersectionality. The lecture was followed by group discussions around various sustainability challenges and how gender dynamics play a role in the impacts and responses. The students presented their reflections to the class.

Dr Sara Gabrielsson – associate senior lecturer, discussed sensitive issues like urban sanitation and

menstrual health management issues that are looked at as social taboos. The students were encouraged to speak up about similar issues that they may have encountered and they participated in a class discussion regarding tackling these problems faced particularly by the urban poor.

This was followed by Noomi Egan’s talk and workshop on science communication which stressed on the importance of the use of technical terms, appropriate language and structure of papers that facilitate authors to make arguments and present findings in a technically appropriate manner. She conducted a very interesting and unique exercise in communication which involved playing with cards and communicating with the absence of speech.

Dr. Ebba Brink reconstructed the lectures and discussions of the past days and introduced the course assignment to the class. The assignment involved a study of the vulnerable communities selected by the students and developing risks frameworks and suggestions for adaptive measures.

The students were given a day to visit their respective study areas and carry out investigations based on their learning’s from the course. Their examinations of the site, their analyses and results were presented to the class on the next day. The students had carried out an in-depth study of the hazards the communities were exposed to and identified the risks, mapped them and analyzed the vulnerabilities of the communities. They also came up with recommendations with the help of sketches and diagrams and prepared impressive reports that they presented to the class.



GIS in Sustainable Urban Planning and Management: A Global Perspective

Sandeep Menon

Assistant Professor, KRVI

Landscapes are complex systems of systems in which various natural processes and biotic-abiotic entities are constantly interacting with one another. These interactions are often in a state of flux, creating unique scenarios which cannot be addressed adequately with the conventional methods employed in analysis since it requires holistic as well as a layered understanding of the various interacting forces. Geographic Information Systems technology offers a great virtual platform for geo-referenced documentation-storage, assimilation of multiple layers of information, a multifaceted analytical tool and can function as a generator of comprehensive and appropriate graphic outputs for further study and decision making. It is interdisciplinary and facilitates integration of datasets over a geo-referenced base thus making the process easy to comprehend and allows for working with large sets of spatial data.

The elective conducted by Javier Martinez and Andre Da Silva Mano, ITC, University of Twente at the Kamla Raheja Vidyanidhi Institute of Architecture, Mumbai in the month of September was an effective week long program to introduce the technology to the students of Architecture. The elective was planned as part of the BinUCom Program.

The elective was designed for students without any prior working experience of GIS. Hence the exercises/lectures were introduced as modules exploring various levels of complexities of GIS, each carefully chosen to impart a new set of skills to the students.

The introductory lecture by the conductors emphasised on the importance of open source software and introduced QGIS- the software in which The course explored the possibilities of using GIS not just as an interface but also as an integrated platform for methodical analysis. Effective tools like creating “geopictionarratives” were also explored. Working with SQL Code and its importance was also dealt with

briefly as part of the explanations for the modules. Methods of geo-referencing projects and styling the outputs were also explained in the sessions

The sessions were spread over a span of five days giving the students ample time and space to research and explore more on each topic discussed in the class, on their own as well. The last session was dedicated to resolving queries from the students. The instructors encouraged interactions and questions from the students which were extremely helpful in resolving the commonly perceived ‘difficulties’ in using GIS. The cheerful demeanour of the instructors and an air of dignified informality during the sessions rendered them effective in encouraging the students to express their views and learnings.

As a core faculty member of KRVI, I would like to take this opportunity to thank Mr. Javier Martinez and Mr. Andre Mano for the enriching and informative series on GIS.



BinUCom GIS Elective

Conductors: Javier Martinez and Andre Mano

Kartik Juvekar Student Vth Year, KRVI

The elective conducted by Javier Martinez and Andre Mano began with an introduction to QGIS open source software, its interface and possible applications in real world scenarios. They explained that though GIS softwares are used for quantitative analysis of geographical data using satellite imagery, it can also be

used for qualitative analysis of experiential data that is often neglected while designing spaces. Quantifying qualitative data could make site and/or public space analysis more wholesome. Several small exercises were given by the conductors to illustrate possible applications of the software in spatial planning.

A series of GIS-based visualizations were generated in order to get a reading of the data and assess the social dimension of the public spaces in Nicosia, Cyprus. The base data for the exercises was provided in the form of a packaged folder by the elective conductors. It was interesting to carry out the analysis because most of the data consisted of Volunteered Graphic Information (VGI) from the sites making the learning experience more hands-on. The perceptions of a group of twenty-eight children aged 10-17 years were quantified and mapped in the city of Enschede in Netherlands. These were depicted in QGIS in such a way that all the relevant information could be accessed by clicking on the respective locations for a qualitative analysis. Flood events from 2013-14 for the city of Jakarta were used to compare the location of the official shelters with the location of the actual places where people sought refuge in order to evaluate the value of VGI for spatial planning. The shape-files of route segments and junctions were styled to highlight the key characteristics of each of two possible routes and also to decide the best cycle route based on a series of weighed average calculations. This exercise was based on VGI for the city of Christchurch in New Zealand.

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