PLANNER’S HEPTAGON
DEPARTMENT OF PLANNING
School of Planning and Architecture Vijayawada
Planning Newsletter Even Semester - 2020

Introduction
The second issue of the ‘Planner’s Heptagon’, gives a comprehensive overview of all the academic and non-academic activities undertaken by the Planning Department of SPAV this semester, highlighting upon its progress, prior to, as well as amidst the ongoing pandemic. Almost all studio projects this semester revolved around various studies and analyses at a regional level, apart from the theses, which varied in scale of application. In addition to this, webinars focusing on Post-COVID futures and planning challenges, were organised by the department during the prolonged lockdown period. This newsletter breaks down the even semester of 2020 into dedicated sections that discuss students and faculty achievements as well as activities. It also elucidates briefly upon the International conference that the department will be hosting later this year, namely, “Resilient and Liveable City Planning (RLCP’2020)”.

Director’s Message
Prof. Dr. Minakshi Jain
Director, SPAV

For the students and Stakeholders, SPAV has been at the centre stage for many big events and very positive congregations this year, from hosting joint SPAV-HYAN 2020 and Sports meets, to conducting the numerous academic and skill related seminars and workshops. It was quite an eventful semester, which subsequently got interrupted by the pandemic outbreak. Despite this interruption, SPAV’s zeal did not die and it has strived to keep up the momentum of the semester amidst the ongoing pandemic, by making use of various online platforms to deliver quality education to students and encouraging its stakeholders to be the part of numerous webinars that were hosted within and outside the institute. The commendable efforts of the faculty, students and administration have contributed to the successful completion of this semester of learning, innovation and excellence at SPAV. I believe this newsletter illustrates adequately the overall progression and performance of the Planning Department of SPAV this semester in a concise manner and hope that it will encourage its readers to grab the opportunities by participation in the various competitions floated that come their way and bring laurels to the Institute, as they have done in the past and made the Institute proud always. Do not forget that there are numerous possibilities that lay waiting for you in the upcoming semesters, so always keep your physical and mental health in the tip-top shape. Let passion and diligence be your mantra and undertake the work and hobbies that inspire you and do every work that you have to do with passion.

HOD’s Message
Dr. Adinarayanan R
Head, Dept. of Planning,
Dean[Faculty Welfare], SPAV

The Department of Planning at SPAV Vijayawada is involved in shaping young minds through quality education with state of the art facilities and resources. The courses offered by the department provide exposure to students regarding various critical issues being faced by the cities and regions currently, and the planning challenges in the coming decades. The department is recognized for its interdisciplinary approach and leadership in community development, land use and transportation planning, sustainable development, economic development, planning analysis and geographic information systems. The academic curriculum is designed to help students understand, analyze and influence the variety of forces, social, economic, cultural, legal, political and ecological, among others, shaping the built environment. The persistent occurrences of various global and local disasters, environmental issues, socio-economic crisis has highlighted the need for Planning at varied spatial scales, in order to have a sustainable future. The Department of Planning organised multiple webinars that shed light in regards to this topic, with a special focus on the ‘Urban Futures’ post COVID-19 pandemic. The continued efforts by the department, amidst the ongoing pandemic, has contributed to the hosting of such insightful webinars and successful completion of the semester.

This newsletter has documented and comprehensively presented the various activities undertaken by the Department of Planning this semester. I am happy to have been part of this and congratulate the editorial team for their efforts in curating this newsletter.

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Department of Planning

The Department of Planning at SPA Vijayawada offers a four year undergraduate degree, a two year Post graduate degree (with specialization in Urban and Regional Planning, Environmental Planning and Management, and Transportation and Infrastructure Planning), and a doctoral research programme in Planning. The students of Planning are exposed to proficient planning expertise through full-time faculty and distinguished visiting faculty. The Alumni of the Department are successfully working across India and the world as professional planners with the government and private sector.

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This logo is a composition, built out of seven triangles, corresponding to the seven dimensions of an Urban and Regional system; namely physical, social, economic, ecological, environmental, infrastructural and institutional. These dimensions are functionally interconnected and interdependent on each other, thus forming a heptagon, whilst reflecting and deciding the dynamic functions of the overall system. The name of the newsletter, “Planners’ Heptagon”, stems from here. This composition encloses yet another heptagon, which, when overlaid with numerous diverging lines connecting the triangles to each other, indicates the complexity of the dynamic nature of all these subsystems and their causal linkages, which in turn, helps us navigate towards a sustainable, resilient and liveable future.

Constitution of MHWBC
Mental Health Wellbeing Committee

The Mental Health Wellbeing Committee was established in pursuance to MHRD (YUKTI) to cater to students’ mental health, psycho-social concerns and well-being. The committee took several measures to address the current situation through tactical mechanisms and tips for students to stay positive. The students were able to access information, advices via digital platforms. Dr. Pratima Murthy (Professor and HOD of Psychiatry, NIMHANS) shared practical tips such as maintaining a daily routine, developing hobbies, keeping oneself busy and reaching out for guidance when in distress.

THE MOTTO IS “TO STAY PHYSICALLY SOCIALY MENTALLY ACTIVE”
Help us to help you

Awareness on Pandemics
Course by UNESCO MGEIP (Recommended by SPAV)

An interactive, self-directed online course on Pandemics developed by UNESCO MGEIP was shared on digital platform. This immersive course delivered on MGEIP’s GDPR compliant digital learning platform, uses videos, games, podcasts, discussions and stories. It provides essential knowledge on pandemics while busting common myths and providing activities that tweaks emotional skills, towards developing peaceful and sustainable societies, in line with the SDG 4.7. The Pandemics course comprises of four modules. Each module takes about 45 minutes to complete.

Modules included:
- All About Pandemics
- Tracking misinformation, rumors and fake news
- We’re in this together
- What are my personal and social responsibilities

Sensitization Programme
Preventive Measures for Coronavirus

In view of the Corona (COVID-19) being declared as Pandemic, a sensitization programme was organized in the institute on 13th March. Dr. Mujibur Rehman Shaik, Resident Doctor of SPAV was invited to deliver a presentation on preventive measures that are to be followed for safety of all the members of SPAV. In addition, posters were displayed on all notice board of the institute and college website to spread awareness on Preventive Measures on Coronavirus. All members of SPAV are also regularly informed to follow the advisory from Central Ministry like downloading of Arogya Setu App, following instructions from Ministry of Ayush related to measures for boosting immunity.
Functioning of College Activities During the Pandemic

Online classes
All the classes were continued via digital streaming platforms, podcasts and videos made by faculty members themselves.

Gate work
Students were asked to contact their respective Gate co-ordinators to continue with their work. Following this, they were asked to submit their works and applications online and the work was assessed eventually.

Internal Assessment
The internal assessments were made via various digital platforms, in particular, Google Classroom and students were asked to submit them with in a stipulated time for final marking.

Jury for Studio
The students had to submit their complete works along with a report of their Semester studio project. Following this, they had viva via digital platforms such as Skype, Zoom, etc. Similarly, a special thesis panel was set up for final year students for their final jury.

Summer training for Students During COVID-19

The Department of Planning, recommended various online courses in lieu of compulsory summer training/ Practical Training for the respective internship batch students of B.Plan and M.Plan (MURP, MTIP and MEPM) under the Even Semester, AY 2020.

All internship batch students were requested to make necessary individual efforts, and register for the recommended online courses in order to successfully complete the same by the end of July 2020, in order to fulfill the requirements of internship/practical training as per the Academic Ordinances 2019. The students were required to complete the minimum hours of practical training and provide verification for the same.

The college provided a recommended list of courses, adhering to a list of necessary topics to be covered.

Courses suggested were briefly based on the following topics:

- Data Science Linear and Machine Learning
- Management of Urban Infrastructure
- Urban Sociology
- Responsive Cities
- Sustainable Urban Development
- Sustainable Tourism Promoting green and blue spaces for public environment and well-being
- Land Market Assessment
- Private financing for Infrastructure and Sustainable growth
- Sustainable Urban Freight Transport: Leveraging Urban Mobility Disruptions
- for the creation of better cities

Agenda put forth Prior to Re-Opening the Institution

Apart from the action plan, the Institute came up with several agendas prior to the students’ arrival on campus.

Encouraging online interaction
In view of the mental health and well being of the students, the committee recommended that the faculty members get in touch with the students through online platforms/via phone calls individually.

Mental health support website
Creation of a website for student mental health counselling by an assigned mentor was discussed.

Campus Sanitation Protocol
The committee requested that our college doctors (Authorised Medical Attendants) to suggest a possible protocol for sanitizing the hostel and institute premises from time to time.

Social Distancing Measures
As per the guidelines by the Ministry of Health and Family Welfare and by the Local Administration, the use of face masks, use of hand sanitizers, social distancing norms, etc. are to be followed by all the staff and students of the institution periodically.

Staff and management training
Care takers, housekeeping and security personnel were trained well in advance to maintain and manage the student crowd with discipline and social distancing norms.

Minimal Contact
Individual rooms [single occupancy] were arranged for all the students in SPAV hostels in order to aid in the to maintainence of social distancing protocol.

Screening facilities
The committee also recommended the procurement of necessary screening instruments for the entrance of the institute. For the same, it was also suggested students bring along a guardian signed undertak ing form for health condition.

PG Admissions 2020
During this phase most of the processes such as submission of applications, list of selected students, etc. were made completely online. Even the viva/ interview is planned to take place via digital platform.
**Application of Geospatial Technology**

Towards Urban and Regional Planning

**Guest Speaker: Dr. Shri P.L.N. Raju**

A special lecture on the "Application of Geospatial Technology Towards Urban and Regional Planning" was delivered by Dr. Shri P. L. N. Raju, Director, North East Space Application Centre (NESAC), Department of Space, Government of India at the Exhibition Hall, SPAV. The lecture took place on 9th March, 2020 from 10am to 12pm and was organised by Dr. Ayon K. Tarafdar. The event was attended by various batches of students from the B.Plan and M.Plan programmes of SPAV.

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**Preservation and Planning of Heritage Zones**

A seminar on the "Preservation and Planning of Heritage Zones" was conducted by the Department of Architecture and Planning, SPAV at the Exhibition Hall. The seminar included special lectures and presentations by Prof. Dr. Michael Tomlin (Dept. of City and Regional Planning, Cornell University, USA), Mr. Thomas Richmond (Planner, New York State Dept. of Conservation, USA), Ar. Kamalika Bose (Conservationist, Mumbai), Ar. Swapna Kothari (Conservationist, Vadodara), Dr. P. Pavan Kumar (Associate Prof., Dept. of Architecture, Bangalore University) and few other speakers and was held on 13th January, 2020 from 10:15am to 3pm. The event was organised by Dr. Ayon Tarafdar and Dr. Adinarayanane R, Department of Planning, SPAV and was attended by students from the department.

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**Swachhta Pakhwada**

A One Week Cleanliness Programme Organised by NSS Cell, SPAV

School of Planning and Architecture Vijayawada NSS Cell organized 31st National Road Safety Week and Swachhta Pakhwada on 16th to 31st January 2020 in the institute. The NSS programme officers assembled for the function at 5:00 Pm. The event began with a welcome address from Prof. Dr. Minakshi Jain, Director SPAV. All the volunteers actively took part in the Swachh Bharat Pakhwa. Some volunteers eagerly cleaned surroundings, some did swatchh survekshan and some of them identified the problems regarding cleanliness in the Campus. All the volunteers divided the tasks among themselves without any hesitation and everyone lead their way towards the success of the event.

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**Application of System Dynamics in Urban Planning**

**Guest Speaker: Prof. Dr. V. Devadas**

A special lecture on the "Application of System Dynamics in Urban Planning" was delivered by Prof. Dr. V. Devadas, Professor, Department of Architecture and Planning, IIT-Roorkee at the Exhibition Hall, SPAV. The talk was held on 24th January, 2020 from 3pm to 6pm and was organised by Dr. Adinarayanane, Department of Planning, SPAV. The event was attended by various batches of students from the B.Plan and M.Plan programmes of SPAV.

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**Fulbright-Nehru**

And other Fulbright Fellowship Opportunities in the US

**Guest Speaker: Dr. Monika Setia**

A special talk on "Fulbright - Nehru and other Fulbright Fellowship Opportunities in the US" was delivered by Dr. Monika Setia at the Exhibition Hall, SPAV. The talk was held on 5th March, 2020 from 10:30am to 11:30am and was organised by Dr. Adinarayanane and Mr. Prasanth Vardhan, Department of Planning, SPAV. Students from various departments from the college participated and showed their interest in the event.

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**International Yoga Day 2020**

The Planning faculty members celebrated the International Day of Yoga 2020 from home on 21st June from 7:00 AM to 7:45 AM with the theme Yoga@Home and Yoga With Family. These asanas were practiced by our faculty based on the video link as advised by the AYUSH Ministry for different asanas with advice / caution as circulated by the competent authority through email dated 20th June 2020.
A webinar on Rethinking Cities: ‘Resilient and Liveable Futures’ was conducted by Department of Planning, SPAV on 27th May, 2020 from 10am to 12pm. The webinar served as a platform for encouraging relevant discussions in the current situation of the COVID - 19 pandemic and its association with Planning, Architecture and Design Community.

The webinar was a unique approach, which through its vehement discussions, shed light on various Planning, Architectural and Design solutions to prepare the world for ongoing and post - pandemic challenges.

The webinar was attended by 264 participants and benefitted a multi-disciplinary group of learners, educators and practitioners in the field of Planning, Architecture and Design.

01 Epidemic Risk Assessment and its Effect on City Planning
A discourse on the use of planning tools and techniques available to assess the risks of disease spread and design planning policies catering to containment and social distancing measures to control spread.

Speakers
- Dr. Monsingh D. Devadas (Former Dean and Chairperson, SAP, Anna University, Chennai), Member - BSG, SPAV & Principal - MEASI Academy of Architecture, Chennai
- Dr. Ar. Harimohan Pillai (Senior Member - Nominee of Council of Architecture, SPAV)
- Ar. Prasanna Desai (Director, IVP College of Architecture, Pune, Maharashtra)

Patron
Prof. Dr. Minakshi Jain
Director, School of Planning and Architecture Vijayawada

Organisers
- Dr. Adinarayanane R
  Dean, Faculty Welfare, SPAV
  Head, Department of Planning, SPAV
- Dr. Ayon Kumar Tarafdar
  Dean, Planning and Development, SPAV
  Associate Professor, Department of Planning, SPAV

Moderator
Prof. Dr. Abdul Razak Mohamed
Professor, Department of Planning, SPAV

A webinar on Resilient Architecture and Dynamic City Planning: ‘Post COVID - 19 Urban Futures’ was conducted by School of Planning and Architecture Vijayawada SPAV on 17th July, 2020 from 11am to 12:30pm. The webinar was a confluence of ideas and perspectives shared by eminent speakers from Planning and Architecture community, seeking solutions for challenges posed by the ongoing pandemic situation. The discussions highlighted on the various Planning, Architectural and Design Interventions critical for creating Resilient and Liveable cities.

The webinar was attended by 127 people and saw generous participation from multi-disciplinary group of learners, educators and practitioners in the field of Planning, Architecture and Design.

01 Non - Pharmaceutical Interventions (NPI’s) of Pandemic Risk Management (PRM)
A discourse on developing a self-sufficient planning unit that would respond to the day to day socio-economic, and cultural aspects in reference to Pandemic Risk Management Strategies. This study also focuses on developing a planning framework to derive appropriate development control rules for post COVID - 19 development considerations.

Speakers
- Prof. Dr. Iyer Vijayalaxmi Kasinath
  Dean, Research, SPAV
  Professor, Department of Architecture, SPAV
- Prof. Dr. Ramesh Srikonda
  Professor, Department of Architecture, SPAV

Moderator
Prof. Dr. Janmejoy Gupta
Head and Associate Professor, Department of Architecture, SPAV

02 Post Covid 19 Urban Future Spurs Rethinking of Mobility and City Planning
A discourse on critical assessment of urban density, health infrastructure, mobility pattern, and their impacts on liveability standards in major cities to deduce strategies for the new upcoming cities and rethinking the way of city planning with reformed ideas.

Speaker
- Dr. Adinarayanane R
  Dean, Faculty Welfare, SPAV
  Head, Department of Planning, SPAV

Organisers
- Prof. Dr. Abdul Razak Mohamed
  Professor, Department of Planning, SPAV
### SEMESTER II

**Map preparation exercises**

Thematic Maps- Gunnavaram, Krishna, Andhra Pradesh

The aim of the learning process in this particular studio is to inculcate in the students an understanding of the symbology used in creating maps. It aims to teach map making and it’s importance to the students, which then enables them to improve their skills and helps them to learn it’s digital applications in planning.

- Elements of a map
- Preparation of a base map
- Preparation of various kinds of thematic maps

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### SEMESTER IV

**STUDIO TOPIC**

Design, Development and Management of the various elements of a Transportation Network- Vijayawada

**INTRODUCTION**

The Studio aims at exposing students to the various kinds of transportation surveys and aims at helping them understand how to design the various components of a transportation network.

- Transportation survey methodology
- Design of the various elements of a transportation network

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### SEMESTER VI

**Master Plan 2031- Madurai**

**FOCUS**

- Systems of an urban settlement
- Understanding of the impact of floating populations
- Infrastructure and Tourism

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**INTRODUCTION**

The Studio aims at developing an understanding and detailed knowledge on different systems of an urban settlement, aiming, in particular, at improving and developing the physical, social and natural environment of the people in synergy.

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#### AREA OF STUDY

- Gunnavaram, Krishna (M), Andhra Pradesh
- Vijayawada (M), Andhra Pradesh
- Madurai, Tamil Nadu

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#### OUTCOME

The students were required to arrive at different targets based on case studies and guidelines from various sources. The end product required the students to give design proposals on TOD for a BRTS corridor, parking design and management, junction improvement, NMT and Station Area Plan.

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#### STUDIO COORDINATORS

- Mr. Yaliappan A L
- Mr. Albert Hefferan
- Dr. Natraj Krantki

- Mr. Prasanth Yardhan
- Mr. Piyush Kumar
- Ms. Naina Gupta

- Mrs. Ekca
- Dr. Ayon K. Tafadar
- Mr. Albert Hefferan

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#### B. PLAN

**PLANNING EVEN SEMESTER STUDIO ‘20**
MURP - SEMESTER II

Urban Development Plan 2040-Lavasa, Pune, Maharashtra

The studio was carried out with the intention of understanding the challenges involved in reviving and developing a ghost city whilst providing an in-depth understanding of the processes and issues involved with the planning, as well as, the legal implications involved in decisions made, including bankrupt investors.

- Sustainable Development
- Integration of tourism
- Transformation of the area into a resource generation town

INTRODUCTION

The studio focuses on inculcating in the students a detailed understanding of the various surveys and processes of data collection and analysis that a transport planner is required to carry out in order to develop the four stage model for a city.

FOCUS

- Four stage modelling process
- Travel demand studies
- Sustainable transportation

AREA OF STUDY

- Lavasa, Pune, Maharashtra

A critical analysis of the existing Master Plan and its feasibility was carried out, leading to a revision of the boundaries of the planning area. Further, a sustainable development plan for the urban area was prepared with the aim of densification, whilst focusing on the overall well-rounded development of the study area keeping in mind the environmental norms.

OUTCOME

An analysis of the existing scenario and travel demand in the study area was performed and four stage modelling was carried out. Various analyses were performed in order to understand the transportation needs of the area and a Comprehensive Mobility Plan was prepared in accordance with this.

STUDIO COORDINATORS

Ms. Jivantika Satyarthi
Prof. Dr. Abdul Razak Mohamed

Ms. Naina Gupta
Mr. Aman Singh Rajput
Mr. Prasanth Vardhan

Mr. Rajeer R
Dr. Adinarayanane R
Mr. Ankit Kumar

M. PLAN

Progressive internal assessments were carried out throughout the semester and the final examination completed in May, including written, viva-voce and jury exams. The semester included a 10-day site visit which was completed in February 2020, wherein the students carried out various surveys and data collection for their studio projects. The students from the IXth semester (B.Plan) and the IVth semester (M.Plan) worked on their Thesis projects during this semester’s timeframe.

MTIP - SEMESTER II

Comprehensive Mobility Plan 2040-Ujjain, Madhya Pradesh

The studio aims at introducing environmental baseline studies and detailed assessment of environmental status and impacts at an urban level to create an Environmental Management Plan of the study area.

- Environmental Management and development
- Identification and analysis of environmental concerns

MEPM - SEMESTER II

Environmental Management Plan 2031-Mangalore, Karnataka

An Environmental Management Plan was prepared which details out eco-centric developmental strategies dealing with different sectors and parameters of environment in order to achieve physical and social well-being.
Planning and Mapping Studio

Mr. Valliappan A L
Mr. Albert Hefferan
Dr. Natraj Kranti

Key Aspects of Study
- Elements of a Map
- Map preparation and interpretation.

Location of Study
VIJAYAWADA, Andhra Pradesh

<table>
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<tr>
<th>Need for Study</th>
<th>Surveys Performed</th>
<th>Analysis and Proposal</th>
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<tr>
<td>The students were introduced to map-making and measurement techniques, for familiarisation with the various types of maps that are commonly used in planning, such as topographical maps.</td>
<td>With the base maps prepared, the students visited the villages, and consequently updated their base maps whilst collecting necessary data.</td>
<td>The outcome of the surveys were presented via hand drafted thematic maps exploring the spatial variability of specific distributions or themes, such as population density, average annual income, etc.</td>
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<tr>
<td>This exercise helped build the students’ map reading, preparation and interpretation skills. An exercise on symbology, helped the students understand the symbols used on maps by different organisations, and their meaning.</td>
<td>Various surveys were performed on site, including village and household surveys to gather information.</td>
<td>Students were required to, individually, select a state of their choice and prepare thematic maps based on census data from 1991, 2001 and 2011 following various methods of representation.</td>
</tr>
<tr>
<td>Site Visit: Duration  6 days</td>
<td>- Limitations on the time allotted for surveying made it harder to reach the sample count minimum, exacerbating the difficulties in communication of the non-native students.</td>
<td>Towards the conclusion, the students were made aware of the techniques of map preparation and interpretation, at various scales.</td>
</tr>
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The class was divided into 5 groups, to prepare base maps for 5 selected villages and for the Joint Studio. i.e. Kesarapalli, Ajampudi, Bhudhavaram, Savarigudem, Jakkulanakalam in the Gannavaram mandal of Krishna district.

The outcome was presented via hand drafted base maps exploring the spatial variability of specific distributions or themes, such as population density, average annual income, etc.
Key Aspects of Study
- Transportation Network elements
- Relevant Survey methodology.

Location of Study
VIJAYAWADA, Andhra Pradesh

Need for Study
Transport planning is a complex task linking a number of dimensions of planning such as land use, economic development, social equity, energy, local and global air quality etc.

The objective, methods and procedure of conducting surveys and reference to the guidelines applicable studied for two weeks prior to the site visit.

Site Visit: Duration - 6 days

Surveys Performed
Surveys were conducted in order to analyse, interpret, and produce reports on various traffic and transport planning issues at sub-city level.

- Road and intersection inventory
- Traffic volume counts
- Origin destination
- Spot speed, speed and delay
- Parking
- Pedestrian
- Public transport surveys, etc.

These surveys focused on 5 themes:
- Public transport and NMT
- Traffic volume counts
- Roadside interviews
- Household and speed and delay
- Road inventory and parking

Special days, when the traffic count touched its minimum and maximum extremes were excluded and a gap in continuous monitoring of data made it hard to obtain 24hr period data

Analysis and Proposal
The final stage was a rapid appraisal aimed at helping the students comprehend the traffic and transportation scenario at a larger city level scale.

This exercise focused on the trip and travel behaviour from the secondary data, the assessment of land use and transportation integration, and road hierarchy and accessibility aspects.

From the identified issues, policy level proposals and strategies were suggested based on case studies.

Proposals included plans for junction improvement, parking design and management, transit oriented development, NMT improvement and the station area.
Key Aspects of Study
- Systems of Urban settlements.
- Preparation of a Master Plan.

Location of Study
MADURAI, Tamil Nadu

Choice of city/ Preliminary Studies
The city has great historical significance, tourism, culture and notable social infrastructure such as educational institutions and hospitals.

Surveys Performed
Surveys conducted during the short site visit include TVC’s, parking surveys, household surveys and pedestrian surveys collected via interviews and visual observation.

Here the challenge was that the offices were sometimes unwilling to share 

for the data collection and analysis.

i.e. Land use, Heritage and tourism, Environment, Mobility, Commercial, Industrial, Physical infrastructure, Social infrastructure and Housing.

Site Visit: Duration 6 days

The class was divided into 9 sectors

Analysis and Proposal
Under the analysis, population projections, catchment analysis, the scope for tourism, LOS, identification of accident prone zones, bus stop coverage areas, parking demands, NDBI, NDWI, NDVI, ward wise economy analyses, taxation/revenue optimization analyses, unemployment projections, etc. were carried out.

These helped understand the gap in the existing provisions and provided an understanding of the city’s major issues.

The final outcome established an urban road hierarchy, new bus routes and roads, and gave suggestions for pedestrianization, footpaths, new industrial areas, etc. Focusing on industrial and commercial growth, strategies for riverfront improvement, conservation, air quality improvement and housing were proposed. These were ultimately included in a proposed Land Use Map and presented in the form of a report.
Key Aspects of Study
- Revival of a ghost city (Lavasa).
- Sustainable economic development

Location of Study
LAVASA, Maharashtra

CHOICE OF CITY/ PRELIMINARY STUDIES

Home to a massive, prestigious integrated township project that lost course and lay entangled in a dozen planning issues, legal implications and bankrupt investors.

Ghost town that has been deserted by its occupants due to a lack of economic opportunities.

Potential Tourist hotspot

Site Visit: Duration- 6 days

The students split the time between Pune and Lavasa with the weekend in Lavasa for the field visit and the weekdays collecting data from government offices in Pune.

Students visited the various offices in small groups to collect the data related to their respective sectors on the basis of a pre-planned data requirement checklist. Offices visited were located in both Pune as well as in Lavasa requiring back and forth travel to both locations, which imposed a tighter time constraint.

Surveys, study patterns etc. that were generally used for most development projects were not applicable here, given the nature of the project requiring improvisation.

- The controversial nature of the project made it difficult for to obtain certain data required for analysis especially those pertaining to the existing development project of Lavasa and its stalling.
- There were also certain mobility issues to parts of the study area due to the lack of proper roadways.

A critical analysis of the existing Master Plan of Lavasa and its feasibility for implementation was studied and changes were proposed.

The planning area boundary was modified in accordance with this for the most sustainable development solution for the urban area.

The main aim of the new plan was the densification of the city in order to achieve its planned for occupancy.

This was aimed to be achieved by overall development, be it tourism, agriculture, policy making or capacity building, but pertaining to the environmental norms.

The final report was proposed as a guide for government officials and the owners of Lavasa for revamping the Township & making it economically self-sustainable.

URBAN PLAN – LAVASA
Key Aspects of Study
- The Four Stage Modelling process.
- Preparation of a CMP report.

Location of Study
UJJAIN, Madhya Pradesh

Choice of city/ Preliminary Studies
The previous plan failed to connect personal health and safety of residents with its mobility patterns and didn’t cover the environmental aspects of such a plan.

Considering the tourism potential of the region, the lack of properly managed bus transportation was also included for necessary improvement.

Site Visit : Duration- 6 days
The city was divided into a number of Traffic Analysis Zones based on various criteria and data was collected on a Zonal basis.

Surveys Performed
Reconnaissance surveys, TVC surveys, Road inventory surveys, Parking and Pedestrian surveys, terminal surveys, etc.

Traffic characteristics ascertained and a road inventory built based on observation.

Travel characteristics were obtained via data collected during roadside interviews with pre-prepared questionnaires.

Households, establishments, vehicles at outer cordon points and public transport were covered.

Various government offices were visited for collecting data related to transport and infrastructure.

In addition to these, air and noise pollution data were also collected.

Special days were omitted due to the time constraint. A lack of monitoring instruments limited the time over which the data could be collected to just 6 hours per day.

Analysis and Proposal
The final collected data was analysed to understand the existing travel characteristics and predict the travel pattern for the horizon year based on the 4 stage travel demand modelling.

- Trip Generation
  - Trip Distribution
  - Modal Split
  - Trip Assignment

Data was modelled using VISSUM and MATLAB for 3 scenarios and the assigned values were then used to propose strategies for improvement:

- Road development plan
- Traffic management plan
- Integrated public transport plan
- Non-motorized pedestrian-friendly plan
- Parking plan
- Institutional framework required

The final proposals were combined as part of a report outlining the results of the entire process.

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**NUTP Scenario**

**Integrated Transit System**

**Dispersion Modelling of Mobility Corridors**

**Speed and Delay**
Overall Ujjain Avg. Speed = 20.78 kmph
Average Running Speed = 36.63 kmph

- Average Journey Speed
- Average Running Speed

**Proposed Layout of Deoval gate bus terminal**
**Key Aspects of Study**
- Identification of environmental concerns.
- Preparation of an EMP report.

**Location of Study**
MANGALORE, Karnataka

**Choice of city/ Preliminary Studies**
The location was chosen with the intention of exploring the environmental impact of urbanised development and industries.

Mangalore was chosen due to several reasons, including its biodiversity- rich location as well as industrial opportunity.

**Environmental aspects:**
- Coastal city with 2 rivers
- Biodiversity gardens, mangroves and protected green areas
- Proximity to the Western Ghats
- Urban aspects:
  - A large industrial area of about 3.35% of the study area.

**Site Visit: Duration- 6 days**
The students were placed in 2 sectors each, one focusing on planning as a whole and the other relating to an important environment aspect.

**Surveys Performed**
Surveys related to city planning and environment were carried out.

A general analysis of the environmental scenario was carried out for the preliminary study to determine the methodology of data collection.

Various administrative offices in the city were visited in order to collect accurate data and to understand the trends and working of different sectors.

Local markets, estuary points, tourist locations and industries were visited by the students for clarification of doubts and filling in the unknowns.

Due to a lack of knowledge of the local language, there was some difficulty in taking the surveys and the short duration of the period of visit made it harder.

**Analysis and Proposal**
Different methods of analysis were studied, and the most appropriate ones were used to identify possible strategies.

The focus here lay on interlinking different aspects of development and environment.

The causes of the environmental problems occurring in the city were gauged and by understanding these issues, suitable proposals in relation to environmental wellbeing were suggested as part of a report.

All-round well being of the natural environment, and the various species, including humans, co-existing in the area as well as sustainability for the resources was kept in mind for the final proposal.
Municipal Bonds -
An Alternative Source for Funding Infrastructure Projects

Mr. Chadarajupalli Leelavamsi from the Department of Planning won the Prof. Dr. D. S. Meshram Best Thesis Award for US students presented by the Institute of Town Planners, India in 2019.

In India, 31 percent of the population lives in urban areas, and the trends are indicative of the rapidly increasing urban densities. This has resulted in an increased demand for improving and extending the existing urban infrastructure to meet the needs of the urban areas. The McKinsey report has assessed that around Rs.325,000 crore of urban infrastructure ventures are required annually. Currently, the national urban missions are contributing monetary investments of up to Rs.32,500 crore annually, thereby creating an investment gap of nearly Rs.65,000 crore. Therefore, there is a dire need for municipalities to look into alternative sources for funding projects. Furthermore, India has a huge potential for municipal bond market. Many countries like the US and China are funding billions of dollars through municipal bonds; whereas India has limited number of municipal bond issuances. According to ‘SEBI’ the municipalities can opt for municipal bonds when it has an approved credit rating which has a stable outlook. Hence, credit rating is the first step that the ULB has to undertake before opting for municipal bonds.

Vijayawada, now part of the capital region of Andhra Pradesh, was selected as the study area for further research and investigation due to its increasing population and the need for infrastructure upgradation to accommodate them. The ‘24/7 Water Supply Project’ proposed by Vijayawada ULB (which is not yet implemented) was considered for further investigation to assess the ULB’s potential to opt for municipal bonds for funding the project.

Credit Rating
Credit rating is used to analyse the financial and non-financial aspects of the ULB in implementing the undertaken infrastructure projects. It also highlights the underperforming areas of the ULB, which are liable for improvement.

Trend Analysis (Regression Method)
Analysing the financial and budget reports of the last 5 years helps us understand the fiscal and financial trends of the ULB associated with the project.

Project Feasibility Techniques
Assessing factors like net present value (NPV), internal rate of return (IRR), benefit-cost ratio (b/c ratio) helps in gauging the feasibility of the project.

This research employs the idea of credit ratings, to tell whether a municipality has potential to opt for municipal bonds for funding infrastructure projects, by identifying its opportunities and assets, keeping in mind the financial and non-financial aspects associated with the municipality.
Planning and Management of Coastal Ecosystem Services of Puducherry coastal region

A large number of diverse and rich ecosystems thrive in the coastal region of Puducherry. Some of the components of the coastal ecosystems, such as beaches, mangroves, sea, estuaries, coral reefs, coastal vegetation, etc., provide various ecosystem services to the residents of the region. Some of the ecosystem services, such as provisioning services (fisheries, agriculture) and cultural services (through tourism), provide livelihood to a considerable amount of population. Other ecosystem services, such as regulatory (protection against tidal/storm surge) and supporting (habitats such as turtle nesting sites and coral reefs), provide natural protection and balance to the coastal region and opportunity to conduct research.

Most of these ecosystem services have declined over the past decade and some of the ecosystem services have not yet arrived at their optimum potential. The coastal ecosystem services have not been included in any coastal zone management plan or in planning process to date. Therefore, this study aims to evolve a planning framework for the identified coastal zones of Puducherry region derived from the coastal ecosystem services assessment without influencing the potential of the coastal zones.

The study is limited to the Puducherry coastal region with a population of 2,24,120 which spans over an area of 71.2 sq. km with a coastal length of 33.5 km and maximum depth of 4.3 km from the coastline. For the purpose of study, the Puducherry coastal region has been divided into three coastal stretches depending upon the inherent characteristics of each zone. Zone 1 or the northeasternmost zone has a coastal length of 12.15 km and spreads over an area of 30.85 sq. km while zone 2 or the central zone stretches over 7.85 km with an area of 8.84 sq.km and zone 3 or the southernmost zone extends over a coastal length of 13.5 km and an area of 31.1 sq. km. Zone 1 is agro rural and institutional with an eroded coastal length of 4.2%, sand dunes and home to four endangered species of turtle. Zone 2 is the built heritage zone with 70% eroded coastal length which is protected by sea wall. It is the commercial and cultural centre of the study area with the maximum influx of domestic and foreign tourists and it has an eco-sensitive zone of the Thengaiyittu estuary and mangroves towards the south. Zone 3 is agro rural with 100 percent pristine beaches and sand dunes and an archaeological site of the Roman port at Arikamedu. Considering the ecological and cultural richness of the entire study.

The aim is achieved through the following five objectives:

1. To appreciate the degree and nature of multiple coastal ecosystem services rendered by the coastal stretch of the Puducherry Region and understand the associated transformations.
2. To observe the livelihood patterns of the local residents and their level of dependency on the multiple identified coastal ecosystem services.
3. To derive the valuation of the key coastal ecosystem services identified among the existing provisioning, cultural, supporting and regulating services.
4. To study the development vision planned by the urban local bodies and determine its dependency on the identified coastal ecosystem services.
5. To evolve a planning and coastal management strategic framework that incorporates the changing coastal ecosystem services.

Framework Description
A suggested framework for ecosystem services based planning of coastal zones is evolved as the outcome of the study as shown in the figure below. This would serve as the foundation for planning of any coastal zone management plan irrespective of the location.

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>The methods used to achieve the <strong>first objective</strong> are Direct Cost Method, Damage Estimation and Replacement Cost Method, Utility Cost Method, Contingent Valuation Method (Willingness to Pay) and Travel Cost Method and Scoring and Ranking Method. The methods used to achieve the <strong>second objective</strong> are Livelihood Framework Analysis and Income Dependency, the <strong>third objective</strong> is Estimated Loss or Potential Gain of Coastal Ecosystem Service Value and the fourth objective is Land Use Change Identification.</td>
<td>The aim is achieved through the following five objectives:</td>
</tr>
</tbody>
</table>
Potential for Green and Blue Infrastructure towards
Climate Responsive Planning: A Case of Navi Mumbai, India

Research Concern
Cities with high-density contribute to an increasing thermal stress in urban areas through various factors. Thereby, it is important for the planners to strategize the city planning process in coherence with the climatic conditions of the place to achieve thermal comfort and reduced energy consumption, whilst contributing to a cleaner and comfortable environment.

This research is an attempt to understand how urban climate maps can be operational to arrive at plausible decisions in urban planning, thereby undertaking measures to regulate thermal comfort in the city through green and blue infrastructural interventions.

The researcher has chosen Navi Mumbai as study area for further investigation.

Methodology
- Exploring the existing situation of the Green and Blue infrastructure (GBI) of the study area.
- Establishing and mapping the linkage of urban green and blue infrastructure on urban climate.
- Evaluating the factors affecting Thermal Load (TL) and Dynamic Potential (DP).
- Application of theories, concept and techniques.
- Preparing Urban Climate Map.
- ENVI-met simulation of climate in the most affected zone.
- Planning interventions and quantification of the same.

Planning Tools and Techniques
- Climate Analysis Tool
  Climate Analysis Tools in ArcGIS were used to process data acquired from Landsat 8 imagery (of USGS portal) into useful information that helped develop the the Urban Climate map for the study area.

- Statistical Techniques
  Statistical techniques like correlation, regression, ranking and weighted sum were used to establish the linkages between various parameters that defines the climatic condition in the study area.

- Simulation Tool
  Simulations were performed at administrative city nodes, in order to understand and analyse their outdoor thermal comfort considering the climatic conditions of the place.

Thermal Load Map

Dynamic Potential Map

Urban Climate Map

ANALYSIS
The thermal load and dynamic potential of each node was analysed using various planning tools and techniques to generate ‘Urban Climate Map’, which was later integrated with the Land-Use map of the place to understand the thermal comfort associated with various land-uses and thereby, come up with blue and green infrastructural interventions capable of reducing the thermal stress and contribute to a comfortable environment.

FININGS
It is observed that the nodes experience higher thermal loads in built-up areas, while areas within the built-up spaces, where the green and blue infrastructure are present, had considerably lower temperatures. A very strong cooling factor can be observed in the system which can convert the higher temperature areas to lower or moderate temperature zones. Therefore, areas with stronger dynamic potential is able to influence the thermal load of the system resulting to lower temperature and thermal comfort in their respective area.
The following infographic illustrates the diversity of thesis topics selected by the bachelor’s and master’s students of Planning Department, School of Planning and Architecture Vijayawada, during the year 2020.

How to read the Infographic?

1. Bigger the boxes, more is the number of thesis presented in that particular topic.
2. Use the grids to navigate through the composition.
3. If the icon has a colour gradient, it means that two or more classes have equal number of thesis presented in that particular topic.
4. Each colour represents a class (refer to the legend in the top right corner of the sheet).

* Kindly visit the SPAV website to access the detailed list of thesis topics undertaken by the bachelor’s (B.Plan) and master’s (M.Plan, M.URP, M.EPM, M.TIP) students of Planning in 2020.
Paper Publications

- "Revenue Potentials of Public Leasehold System for Urban Infrastructure, a Case of Guntur Municipal Corporation" was published by Mr. Prasanth Vardhan P., Dr. Ayon Kumar Tarafdar on Journal of Critical Review (ISSN 2394-5125); Scopus on June 2020.

- "Public Land as a Resource to Finance Urban Infrastructure" was published by Prasanth Vardhan P., Dr. Abdul Razak Mohamed, Dr. Ayon Kumar Tarafdar on LIAST (ISSN 2005-4238); Scopus on June 2020.

- "Land based Revenues and its Sufficiency for Infrastructure Investments in Small and Medium Towns of Andhra Pradesh, India" was published by Mr. Prasanth Vardhan P., Dr. Ayon Kumar Tarafdar, on Journal of Advanced Research in Dynamic and Control Systems (ISSN: 1943-023X) Scopus on 2020.

- "Are Accessibility Indices, a Smart Decision Support System Tool for Measuring Access of Mobility Impaired in Public Spaces? A Review" was published by Mr. Valliappan, Saratha Valliappan on International Journal of Trend in Scientific Research and Development (jitsrd), ISSN 2456-6470 on October 2019.

- "Strategizing for Management of Protected Areas using Ecosystem Approach" was published by Mr. Rajeev R, Ms. Garima on conference proceedings of International Conference on Future Cities 2019, IIT Roorkee.

- "Social Infrastructure Deficits in Chittoor District, India" was published by Mr. Rajeev R, Mr. Akhil Chibber on conference proceedings of International Conference on Future Cities 2019, IIT Roorkee.

Manuscript under review


- Anusha Roy, Adinarayanan Ramamurthy, and Faiz Ahmed Chundelii, 2020, “Green and Blue Infrastructure (GBI) for Climate Responsive Planning- A Case of Navi Mumbai City, India”, technical paper under review, An international journal of “Sustainable Cities and Society (SCS)”, ISSN: 210-6707, Impact Factor: 5.268; Elsevier’s Journal focused on fundamental and applied research aimed at designing, understanding, and promoting environmentally sustainable and socially resilient cities.


- Mr. Prasanth Vardhan P., Dr. Abdul Razak Mohamed, Dr. Ayon Kumar Tarafdar 2020, “Exploring Potential of Public Land Revenues to Finance City Infrastructure? An assessment using a linear programming model for Guntur Municipal Co.”under review in International Journal of Built Environment and Sustainability (ISSN 2289-8948) Emerging Sources Citation.

- Naina Gupta, Dr. Sewaram, Dr. Bhaskar Gowd and Ms. Poojitha Surapu 2020, “Statistical approach for background air pollution modelling” under review in Urban India Journal, National Institute of Urban Affairs (NIUA).

- Abdul Razak Mohamed, 2020, Book Chapter: “Integrated Approach Towards Participatory Redevelopment of Urban Neighbourhood Spaces - Chennai, India” in “Almussa Aljum, Jonkoping University Sweden & Almssaad Assad, Karlsk- tad University Sweden [eds], 2020 Urban Sustainable Planning and Design” Open access peer-reviewed chapter Online First, IntechOpen (www.intechopen.com), Chapter distributed under the terms of Creative Common Attribution License (http://creativecommons.org/licenses/by/4.0/).
Faculty Achievements

- Dr. Adinarayanane R was one of the external panel member for Doctoral Committee: Mr. Kunwar Rajendra Kopil, (Assistant Professor, AMIT, Arba Minch University, Ethiopia), Department of Architecture, Centre for Research and Consultancy, Hindustan Institute of Technology and Science, Padur, Chennai, Tamil Nadu.

- Dr. Adinarayanane R was appointed as PhD. Examiner for Ph.D. thesis entitled “Geospatial Techniques for Planning Sustainable Green Spaces in Rapidly Urbanizing Countries.” of Mr. Sathyam Kumar V., Department of Civil Engineering, Indian Institute of Technology Bombay, June-July 2020.

- Dr. Adinarayanane R participated in seven days Symposium, Project meeting and field visit, as part of European Union ERASMUS+Research project “Building Resilient Urban Communities” (BreUCom)-International Capacity Building in the field of Higher Education (CBHE), during February 22- March 01, 2020, organized at University of Twente, ITC, The Netherlands.

- Dr. Ayon Kumar Tarafdar was one of the external juror member for the thesis batch of M.Plan (Urban Planning) and M.Plan (Infrastructure Planning) in CEPT University.

- Ms. Jivantika Sayarathi presented paper on “Understanding The Significance of a Historic City and Inherent Historic Urban Landscape with Linkages to the Past and Present: Context of Lucknow city and Kaiserbagh” at conference held between 11-13 December 2019 by International Conference on Future Cities.


- Dr. Abdul Razak Mohamed presented the topic “How Smart are Our Cities to Handle Pandemics & Lockdowns” under the theme Habitat Management & Human Resilience staged by 3 other speakers on 5 June 2020 by Human “E” Connect, Chennai, (www.themightyearth.org)

- Dr. Abdul Razak Mohamed was invited by the Head, Dept of Geography, Faculty of Arts and Culture, South Eastern University of Sri Lanka 2020, as the “Urban and Regional Planning Expert” to review the proposal for the Introduction of 4 years new degree course “Bachelors of Town and Regional Planning” (BTRP).

- Dr. Ayon Kumar Tarafdar was one of the external juror for SPA-Delhi B.Plan - 3rd yr (Master plan studio) batch.

- Dr. Abdul Razak Mohamed was appointed by Vice-Chancellor as an Examiner for Evaluation of Ph.D. thesis Report “Role of Formal Private Sector in Residential Habitat of Amritsar” by Gursharan Kaur, Research Scholar, The Faculty of Physical Planning & Architecture (Planning), Guru Ramdas School of Planning Guru Nanak Dev University, Amritsar, Punjab, on June 2020.


- Dr Abdul Razak Mohamed was appointed as one of the Jury Member of the Dept of Urban Planning Master Thesis School of Planning and Architecture, Delhi during 24 July 2020.

- Aditya Academy of Architecture and Design invited Mr. Ankit Kumar to conduct a one day workshop about ‘Geographical Information System’ for 3rd year BArch batch on 29th Feb’ 2020.

- Dr. Abdul Razak Mohamed was appointed as Odisha State Public Service Commission (OSPSC) Selection committee member Assistant Director, Town and Country Planning, at the office of the OSPSC, Cuttack, during Jan 14-15, 2020.

- Mr. Ankit Kumar completed online course on “Remote Sensing & GIS Technology and Applications for University Teachers & Government Officials” which was conducted by Indian Institute of Remote Sensing (IIRS), ISRO Dehradun.

- Dr. Abdul Razak Mohamed, 2020, was invited for lecture on “Rural Housing Standards and Planning” during the International Training Program on “Planning and Management of Rural Housing and Habitat Projects” organized by the National Institute of Rural Development & Panchayat Raj, Hyderabad. on 10 Jan, 2020.

- Ms Naina Gupta attended a two week course on “Transportation systems: dynamics and control for traffic, vehicles, and pedestrians” during dec 2-14, 2019 at IIT Delhi.

- Mr. Prasanth Vardhan attended a webinar on “Safe Management of COVID waste in India” on 30 April 2020 by ASCI and Centre for Innovations in Public Systems.

- Mr. Rajeev R (IPC member) attended the two days webinar on GeM, GFR 2017 and Arbitration and Conciliation Act 2019 held from 22-23 July 2020 by Indian Rubber Manufacturers Research Association (under DPIIT, GoI).


- Mr. Rajeev R and Ms. Ekta attended an international conference on “WOMEN IN DESIGN 2020+ curated” held between 8-10 Jan 2020 by The HECAR Foundation, Mumbai.
"Mobility loss is ability gain”
Covid-19 and beyond

Author : Dr Abdul Razak Mohamed, Professor, Dept. of Planning, SPAV

Many days have passed yet people are experiencing the wrath of COVID-19 and its effects on people’s mobility loss at various levels (streets, towns, cities and nations) to reach out their kith and kin, or most importantly medical emergencies too. This lead to complete shut down of activities to maintain social distancing creating more rukus and a complete tople down of functioning of the global economy. At this prime time when “mobility loss” is a concern, people have to stay safe at home, and reinvent the wheel to do things on their own as a family to sustain “ability gain”.

Green Infrastructure Planning: A New Paradigm to Enhance the Quality of Life for Urban Residents

Author : Dr Adinarayanan R, Head and Associate Professor, Dept. of Planning, SPAV

The world is increasingly an urban environment. An urban population that is aware of the factors that improve quality of living puts pressure on the environment with respect to dependable utilities, water distribution and sewerage systems, and complicates efforts to maintain the sustainability of the environment and the limited urban sprawl. This pressure extends to green spaces and recreational areas, aesthetics and conservation of heritage sites, and efficient use of real estate and public space within urban environment. Development of Green Infrastructure (GI) is the most important and major issue nowadays in many countries due to changes in climate condition. High quality environments have an important role to play in building competitive cities and regions and in contributing to quality of life for a people. There are many evidences that green infrastructure can help to improve people’s health and wellbeing in many other ways in the system. The primary objective of this article is to discuss about green infrastructure and also to encourage people to understand the benefits of the Green Infrastructure. There is a need to understand present planning, design and management approaches of cities with diverse cultures, forms, structures and histories which have used Green Infrastructure to economic and environmental services, and to strengthen social cohesion and public involvement.

The author employed exploratory research techniques through extensive literature survey and case studies and made an attempt to explore different components, benefits, characteristics, dimensions of GI and urban community’s perception towards GI. Based on discussion and findings, the author evolved control parameters which decide the functions of GI dynamism and recommend the Research Operational Framework for Green Infrastructure planning, to enhance the quality of life for urban residents.

Urban green infrastructure does not create by themselves sustainability but they can contribute to sustainable development in several ways: covering social demands of population as recreational and sports spaces, improving urban image, improving air quality, removing carbon-dioxide emissions, reducing electrical power consumptions and adding value to properties; in sum, contributing to well-being of population. Urban green infrastructure plays an important role in cities development, so they must be revalued within urban planning process and municipal authorities must take leadership and recognize them like essential spaces in cities by their contribution to population quality of life; they should be considered as an investment in long term and not as a cost in the short one. A better understanding of urban green areas and an environmental consciousness among population and authorities is needed to preserve them, because green infrastructure is somehow of all of us, everybody enjoy them from one or another way their vital benefits.
Unlearning to Re-learn:
To create a better tomorrow!

Author: Dr. Jivantika Satyarthi, Asst. Professor, Dept of Planning, SPAV

The urbane of the 21st century's Indian context consists of a multitude layers of co-habitation of communities suffused with inadvertent inequalities of access to basic infrastructure, healthcare, education and livelihood, while presenting itself as the "charming" epicenter of visible development, contrary to the pace existing in our rural centers. The global pandemic of the year 2020, puts forth a bare truth before us, with glimpses of these inequalities widening and poising a viable question, encompassing many dilemmas: "Are you safe, if you are affluent?" It's too farfetched to think about the post-pandemic urban futures, while presently our inadequacy of managing a health adversary, with intermittent regional outbreaks of climate change induced nature's wrath stare at us blatantly, as we stare at the future with blank eyes, hidden in four walls of our homes! While, international organizations focus on investment in human capital as a priori to attain the SDGs, it is pertinent for developing countries like India to choose long term policies for a parallel development of human capital at both rural and urban centers, spearheaded by trained planners.

The human disaster as the country faces, enforces our refocus on policy creation and execution which is bereft of sufficing political agenda, yet caters to human development! Solutions have to be sought at the ground level, awareness to be created to change the citizen's "Not in my backyard" attitude, especially in urban centers and reduction of this apathy which is surmounting during the pandemic!

[The only key that exists for the emerging world is in today's leaders accepting humbly the key, "Unlearning to Re-Learn", which stands beyond the colonial hierarchical approach!!... One day, someday....]

The End!

Observation Swachh Bharat Pakhwada 2020 in campus

Many events such as cleanliness drive in hostels with active participation of students and hostel staff and special stress on maintenance of kitchen, food waste management and cleanliness was given and competitions on Best out of waste - Creating useful items out of waste materials from our surroundings were conducted to create awareness.
Research & Consultancy
Projects under progress

Research Projects
- Building Resilient Urban Communities (BREUCom)
- Building Inclusive Urban Communities (BInucom)
- Unnat Bharat Abhiyan (UBA)
- Design and Innovative Centre

Consultancy Projects
- “Gram Panchayat Spatial Development Plan for Paritala & Telaprolu Gram Panchayats, Krishna District, A.P.”, funded by Ministry of Panchayati Raj, GoI.
- “Planning and Architectural Design for Polavaram Multi-Purpose Irrigation Project”, on Godavari River in West and East Godavari District, Government of A.P.
- Revision of Town and Country Planning Act for DTCP (AP)
- GIS based Masterplans for AMRUT towns Bhimavaram and Eluru for DTCP, Andhra Pradesh
- Grid of roads project sponsored by Chennai Metropolitan Development Authority (CMDA)
- Redelineation of erstwhile Vijayawada Guntur Tenali Managaligiri Urban Development Authority (VGTMUDA) planning jurisdiction limits.

Building Resilient urban communities

It is a European Union Research Project Building Resilient Urban Communities (BREUCom), funded under Erasmus + Programme of the European Union in the field of Capacity building in higher education. Marginalized urban settlements are often vulnerable to disaster due to their location in hazardous areas and the use of non-durable building materials.

BREUCom therefore will:
- Produce Open Educational Resources by developing 10 comparative case studies & 10 descriptions of new courses for graduate students in existing programs, following MIT’s Open Course Ware model.
- Pilot 5 new courses on urban resilience in existing curricula for graduate students.
- Develop 20 new Professional Development Programs (PDPs) modules on urban resilience for urban professionals from different backgrounds and working experiences, pilot 10 modules including internships with NGOs in India and Europe.
- The BREUCom project conceives and pilots postgraduate short term Professional Development Programs (PDPs) targeted at real world problems.

Unnat Bharat Abhiyan (UBA)

“Unnat Bharat Abhiyan”, a Ministry of Rural Development, Govt of India sponsored project coordinated by Indian Institute of Technology, New Delhi.

The UBA Project Team consists of Dr. Minakshi Jain, Professor Dept of Architecture & Director, SPAV as the Head of the UBA Cell, Dr. Abdul Razak Mohamed, Professor Dept. of Planning, the Coordinator and Dr. Faiz Ahmed, Assistant Professor, Dept of Architecture, SPA Vijayawada as a team member.

Grid of Roads (GoR)

It is the development of Grid of Roads for 29 Villages along Southern Sector of Chennai Metropolitan Area – Extended work for the Member Secretary, Chennai Metropolitan Development Authority, Chennai, Govt of Tamil Nadu.

The GoR - Extended Project Team consists of Dr. Abdul Razak Mohamed, Professor Dept. of Planning, the Coordinator and Mr. Prasanth Vardhan, Assistant Professor, Dept of Planning, SPA Vijayawada, Research Associate Mrs. Jaya Priya Rajiv. P, SPA Vijayawada (Urban and Regional Planner, based in Chennai), as the team members.

Joint Studio Programme on Humanitarian Design

University of Melbourne and SPA, Vijayawada undertook a Joint Studio Programme on Humanitarian Design from 19 January - 04 February 2020 with second year students of University of Melbourne and second year B.Plan. and B.Arch students of SPA Vijayawada.

Dr. Adinarayanan R, Head (Dept of Planning) Coordinated the program.

Kick off start meeting for BREUCom project held at SPA Vijayawada

Building Resilient Urban Communities partners of EU Erasmus + project BREUCom and first secretary of Embassy of India visit University of Twente.
Various personalities like Mr. Arjuna Rao (International Kabbadi Player) and Mr. Srinivasa Rao (Associate Professor and Head, Department of Physical Education, P.B.Siddhartha College of Arts & Science College, Vijayawada) were invited to motivate the students. School of Planning and Architecture, Bhopal bagged the overall trophy with 105 points in the meet and SPA Vijayawada won first prize in volleyball (men) and football (men).

INYAN 2020, the most anticipated cultural fest by students became more opulent by sharing the celebration with the entire SPA family. The event kicked started by launching of Annual Report by our Director. Kudos to all SPAV student clubs for managing come vup with an exhaustive list of ingenious events like Quintessence - Battle of Bands, Muse, Recluso, Impromptu, Pixelcience, Monologue skit, ramp walk organized by Avant Garde etc. to name a few. "Book Elements of sociology" compiled and published by the joined efforts of Architect D. Srinivas and the students of 2nd year B. Plan and the annual Chhaya magazine by Club Aaira were also launched during the event.

### NSS Cell activities

The NSS CELL this year rendered their approach creatively to deliver very creative initiatives that’s pragmatic yet effective and judicious.

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Activities</th>
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<tbody>
<tr>
<td>Day 1</td>
<td>Dissemination of information to the villagers and Panchayat officials</td>
</tr>
<tr>
<td>Day 2</td>
<td>Stakeholder meeting with panchayat officials</td>
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<tr>
<td>Day 3</td>
<td>Preparation of Base Map</td>
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<td>Day 4</td>
<td>Documentation of Traditional Houses</td>
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<tr>
<td>Day 5</td>
<td>Plantation</td>
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<tr>
<td>Day 6</td>
<td>Swachh Bharat Campaign</td>
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<tr>
<td>Day 7</td>
<td>Wall &amp; Black Board Painting in Anganwadis</td>
</tr>
</tbody>
</table>

Two villages were adopted namely Kesarpalle and Jakkulamkalam, Gannavaram Mandal, Krishna District, A.P. under each of the units.

Srikanta Bhargava Teja studying in MTIP - 1st year student, participated in national level technical event "consolution" conducted by Sathyabama Institute of science and technology-chennai on behalf of our University and won 1st prize on the topic "Strategic plan formation for private Buses Utilization in Transportation Sector during Covid 19 pandemic - Chennai."

Jagrat Jain studying in MTIP - 1st year student has published a paper titled “Gender Inclusive Planning in Mobility and city development” in IRJET on July 2020.

The Vijayawada Municipal Corporation (VMC) is transforming walls and other spaces in the city through paintings to discourage urination in public place, thereby to improve its ranking in Swachh Survekshan-2020.

A team of 10 students from our School of Planning and Architecture Vijayawada has painted a wall along Gopala Reddy Road to educate on hygiene & sanitation.
Resilient Planning

Lessons from the Pandemic

Author: Ar. Meenu Nair (MURP, 1st Year)

The COVID-19 crisis has proven that cities, globally, were not prepared for the event of a pandemic. This happens to be the very reason why planners should discard the age-old traditional single dimensional focus: flooding, earthquake, typhoons etc. This calls for an integrated approach from professionals from all fronts in the city service provision. A city may be ranked for its liveability, sustainability, HDI etc., but to serve its citizens well and efficiently is the main purpose behind these. Empowering the citizens with its emergency and proactive services will makes them, and in turn the city, resilient. We live in an era where technological innovations have changed our lives greatly. Knowledge is power and data sharing makes all the difference in creating an integrated approach required to fight the pandemic efficiently. Arup, a multinational professional services firm headquartered in London have formulated 5 city resilience lessons from the pandemic.

- Multi-hazard approach while planning
- Resilience must be proactive, not just reactive
- City-wide data to generate real insights
- Knowledge of critical systems and how they connect
- Frameworks that solve the complexity problem

In conclusion, “Digital infrastructure might be the sanitation of our time.” - Michele Acuto.

Post-COVID Urban Densities

Integrating Healthy and Green concepts

Author: Mr. Subrajoti Paul (B.Plan, 3rd Year)

The world has seen largescale disruption of healthcare and urban facilities due to the onslaught of Covid-19, affecting the activities of people of all kinds, especially in constricted areas. and bringing highly recommended concepts like Transit Oriented Development and concentrated development under scrutiny. World Bank studies on 284 Chinese cities with extremely high population densities showed fewer confirmed cases per 10,000 people. Economic geographers state higher density helps economic growth and more exposure to opportunities as proximity increases for business and parts of the supply chain, etc. However, the major reason behind the failure of cities due to COVID was related to inadequate social and physical infrastructure. The need for incorporating the Healthy and Green city concept into the development frontier has become essential in the current situation. The mode of integrating this can be done via the Development bubble model, where the city will have small zones or bubbles which will have mixed land-use along with high-rise concentrated development thus increasing the activity within the zone while avoiding the major flow of population to another part of the city. The buffer between the zones will house urban forests and greens necessary to mitigate pollution while each zone will have ample units of Primary Health Centres for the resident population of the zone.

Being “Rhapsodic”

The Dynamic Urban Coexistence solution?

Author: Ar. Zorba (MURP, 1st Year)

The global race has taken a blow due to the imbalances in our habitat. With new challenges emerging from pre-existing ones, more ruckus has been created. One such matter is the conundrum of Wildlife/ Nature vs Humans. Data recorded by the Indian government shows that around 2361 people were killed in elephant attacks and 333 and 100 out of the 510 elephants that died were electrocuted and poached, respectively. Solutions should be hybridised from a diverse bandwidth of expertise.

- Petite Interventions: Such as Bird-bath by Rona Binay, Bird house by Rakesh Khatri, etc. in new urban dynamics which lack open spaces for nesting, actually agitates the conception of the web network.
- Technological Interventions: This can be adapted for spreading awareness and harnessing information, via apps such as Wildspotting, encouraging public participation and thereby cataloguing the web network.
- Indigenous Techniques: Farming practices already existing have been found to share their ideology with Permaculture for land intensification, improving food cum water security.
- In-situ conservation: A basic concept studied by environmentalists needs collaboration with planners, stakeholders, officials with public to identify animal corridors.

[ STRATEGY = ENERGY]

“Planners have to truly explore their potential, be rhapsodic and address co-existential issues.”

Image Source: Ecoroots Foundation
A Series of Works by the Students
Art in Isolation

The Evolution of a City

Artist: Mr. Nirwan (B.Plan, 3rd Year)
Multiple theories in the field of Planning compare settlements and their functions to living organisms. Viewing the evolution of these settlements as an organism, interacting and growing in its environment, the human settlements exert a tendency to consume all available resources (especially those rising from industry-oriented development).

Traffic

Artist: Mr. Aravind MG (MURP, 1st Year)
The burgeoning number of vehicles on our roads call for careful planning. Covid-19 has put a dent in our plans for Public Transportation growth while at the same time boosting its digitisation. Although, it operates at reduced frequencies, other measures have to be put in place for an effective comeback.

Respite

Photographer: Ar. Sneha A P (MURP, 1st Year)
From busy schedules and overlapping footsteps to empty corridors and silent mornings. The pandemic wreaked havoc to our daily schedules, but it brought us the moment of peace we needed.

A Hymn to the Night

Artist: Ms. Meghana Tirupathi (B.Plan, 1st Year)
“From the cool cisterns of the midnight air
My spirit drank repose;
The fountain of perpetual peace flows there,—
From those deep cisterns flows.”
- Henry Wadsworth Longfellow

The Migrant worker

Artist: Ar. Chandavi Bisoriya (MURP, 1st Year)

A Simple Conversation

Artist: Ms. Sneha Krishnasri (B.Plan, 1st Year)
International Conference on Resilient and Liveable City Planning
- Transforming Urban Systems -

Overview
The urban population which was around 30 per cent in the year 1950, has been projected to be 66 per cent by the year 2050. Currently, slightly less than 55 per cent of the world’s population live in urban areas. The urban population has been showing rapid growth since 1950, i.e., 74 million in 1950 to 3.9 billion in 2014. Even the countries in Asia, which have a lower level of urbanization, are home to 53 per cent of the world’s urban population, followed by Europe at 14 per cent and Latin America and Caribbean at 13 per cent. The literature suggests, although urbanization creates social and economic opportunities, it shatters and disintegrates the natural ecosystems and infers high pressure on natural resources and the environment. Urbanization is one of the serious causes for the degradation of the natural habitat, which further leads to the deterioration of the air quality and urban environment.

Planners, Urbanists, Architects and Policy Makers have to work together in order to ensure that planning and development can meet our present needs without compromising the ability of future generations. The challenge of planning sustainable contemporary cities lies in considering the dynamics of urban systems, exchange of energy and functional integration in urban metabolism. In this RLCP 2020 conference, the issues pertaining to resilience and livability shall be deliberated to promote overall sustainable planning and development of cities.

Objective
RLCP objectives is to serve as a platform for sharing knowledge and new insights to the academicians all around the world in the field of urban planning and urban design. The conference offers an opportunity for engagement among international organisations, research institutions, representatives from the government and private sector. This conference opens the door to all the industry practitioners and academic researchers to share their viewpoints.

In this awake the conference calls for papers. All selected papers will be published as RLCP-2020 conference proceedings with ISBN number. Screened high-quality paper will be published in Web of Science (Emerging Sources Citation Index) and SSCI/SCI indexed Journal.

Editor’s Note & Acknowledgements
We, the editorial team, are glad to have taken part in curating the second issue of the newsletter namely the ‘Planner’s Hesperos’ from the Department of Planning, SPAV. Even as yet another fun yet challenging semester comes to an end, it has shown itself to be a conflux of some of the most joyous and difficult times we’ve had, from hosting many big events to an emergency evacuation due to the pandemic outbreak, it has truly been quite eventful at SPAV. This newsletter is an attempt to document the progression of this semester amidst the ongoing pandemic in order to present you the compendium of various events, activities, etc., associated with this semester. We heartily acknowledge everyone who has contributed to the making of this newsletter.

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