Introduction

The fourth edition of the Planner’s Heptagon provides an extensive overview of the academic and co-curricular activities that were undertaken by the Planning Department of SPAV in this pandemic affected semester. This semester was all about realizing and exploring the potential of online education. The difficulties of online education are many but we overcome them by unified efforts of the students and the institution and maintained the same level of education as the pre-COVID era. The studio exercises were carefully crafted to counteract the limitations posed by the online mode of data collection and the research projects were more dedicated towards redevelopment and restoration. The newsletter breaks down the even semester 2020-21 into dedicated sections ranging from studio exercises to faculty research works and student achievements and institutional events and more.

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<tr>
<th>Director’s Message</th>
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<td><strong>Prof. Dr. Minakshi Jain</strong>&lt;br&gt;Director, SPAV</td>
<td><strong>Dr. Abdul Razak Mohamed</strong>&lt;br&gt;Professor and Head&lt;br&gt;Dept. of Planning, SPAV</td>
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It brings me immense pleasure to contribute to the Newsletter July 2021 edition for the Department of Planning and share with all that SPAV ranked 8 in the NIRF rankings and 6th in India Today rankings 2021. It is a milestone in the history of SPAV and we expect to rise higher in the upcoming years. All of it was rendered possible by the combined efforts of the faculties and the students even through the pandemic expanded the physical gap between the students and the faculties. We at SPAV did not let this gap become a hurdle and we overcame it quiet well as it is substantiated with the achievements and performance of the students. As the world emerges from the pandemic, and the academic world settles into this new paradigm shift, we at SPAV have developed a well accepted and suitable e-infrastructure to bring the students and the faculties closer to interact and foster the overall growth of the students both academically and psychologically. Online Workshops, Workshops and Conferences were conducted at SPAV at national as well as international. National and international collaborative research and consultancy projects that happened during the semester definitely build the image and identity of SPA in the local, national and international academic market. If anything, this pandemic has taught us how important it is to plan our work in a resilient manner. Our focus as planners as well as humans should now be on the redevelopment of the world in a resilient, inclusive and sustainable manner.

It is my pleasure to get this opportunity to guide the Department of Planning for a second time as the Head of the Department. Even though it is a challenge to grow at a similar pace as the pre-pandemic times, we at SPAV have successfully overcome the hurdle and have succeeded in establishing new avenues of institutional growth. The Department of Planning took the task of organizing theory subjects and planning studios based special lectures, webinars and panel discussions on the prime topics relating to how to move forward planning during pandemic and after pandemic situation becomes a challenge. It was a rewarding experience for the faculty and students. He pandemic has posed in front of the faculty and students a question which we as planners approach aspects related to architecture, engineering, socio-economic and economic aspects into the planning studio and thesis work become a daunting task in collecting data and information to prepare plans without visiting field and fully rely on the secondary data without compromising the quality of learning. As we step out of the pandemic era, and the world looks forward to achieving the normality yet again, the role of planners becomes indispensable. Planners should consider not only focused on sustainability but also on social inclusivity and the rebuilding of the society must happen in a resilient manner. When it comes to the overall development of our students, we take the utmost care to instil within them the ideas of social equity, environmental preservation, sustainability and inclusivity.

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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Functioning of College Activities
During the Pandemic

ONLINE CLASS
All the classes were conducted via digital streaming platforms (google meet and google classrooms), with presentations and videos made by faculty members.

GATE WORK
The eligible students were allotted with a Gate co-ordinator each, and Students were asked to contact their respective Gate co-ordinators to proceed with their work and was accessed eventually.

INTERNAL ASSESSMENT
The three internal assessments were made via various digital platforms, in particular Google classroom, and students were asked to submit their allotted works within a stipulated time for the final marking.

STUDIO JURY EXAMINATION
The students had to submit their completed works along with a report of their semester studio projects and thesis. Following this, they had a viva via digital platforms (Google Meet) after a series of discussions with the internal faculties through the same medium.

ONLINE THEORY EXAMS
The mid-semester and the end semester examinations were also conducted online. The question papers were sent to the official email id’s of students and they have to write and submit the scanned copy of the answer sheets within the stipulated time to the respective link.

ADMISSIONS 2021 - 2022
The total student intake of the Department of Planning, during the academic year of 2021 - 2022 was 38 students for the B.PLAN course and 25 students each for the various M.PLAN courses.

Strength of the Department

STUDENTS (213 nos.)

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<td>31 I - Year</td>
<td>41 MURP</td>
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<td>22 II - Year</td>
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<td>25 III - Year</td>
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<td>22 IV - Year</td>
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FACULTY

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<tr>
<td>01 Professor</td>
<td>02 Associate Professors</td>
<td>07 Assistant Professors</td>
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Training & Placement

The Training and Placement Cell of SPAV since its origin in the 2014 has continuously been working for the improvement of the employability and placements of our students. This was the first time it faced a road-block because of the Covid pandemic which made the employment scenario much more difficult than ever. In spite of this, our students managed to earn themselves jobs and positions all across the nation.

Many of our graduates have chosen to go for higher studies and a few have started their journey towards Administrative services to serve the nation. Few notable companies/institutions where our students are working/have worked include:

1. National Institute of Rural Development & Panchayat Raj (NIRDPR), Hyderabad
2. Rurban Mission (SPMRM)
3. Andhra Pradesh Industrial Infrastructure Corporation (APIC)
4. Town and Country Planning Organisation (TCPO)
5. E-GIS
6. GIS based masterplan Hubli Dharwad
7. IBI GROUP
8. GMR India
9. Infrastructure Leasing & Financial Services Limited (IL & FS)

Practical Training

The practical training could also not stay untouched by the impact of the Covid pandemic scenario and the students overcame the hurdle of this online-only medium and learnt at par with the previous batches which did it offline. The department advised the internship batch students to register for online courses through available E-platforms viz., SWAYAM, NPTEL, MOOC, EdX, Coursera, Harvard Online Learning etc., in order to fulfill the requirements of internship/practical training, as per the Academic ordinances. In this connection, the potential online courses were identified and recommended batch-wise for B.Plan second & third years, and M.Plan first years (MURP, MTIP & MEMP), based on the recommendations of the Faculty Board, Dept. of Planning. The students have registered for the online courses and successfully completed the same by the end of August 2021.

Recommended Courses for Bachelor of Planning (B.Plan - UG Programme)
2. Rethinking the City: New Approaches to Global and Local Urban Challenges
3. Urban upgrading for inclusion, sustainability and resilience in a time of global pandemic
4. Solid Waste Management
5. GIS Data Acquisition and Mapping
6. Spatial Analysis and Satellite Imagery in GIS
7. Geospatial and Environmental Analysis
(Recommended No. of Courses : 12)

Recommended Courses for Master of Planning (M.Plan - Urban and Regional Planning)
1. GIS, Mapping, and Spatial Analysis Specialization
2. Reclaiming the Street for Livable Urban Spaces
4. (Re)Imagining Port Cities: Understanding Space, Society and Culture
5. Planning for Climate Change in African Cities
6. Building Inclusive Cities: Tackling Urban Inequality and Segregation
7. Global Housing Design
(Recommended No. of Courses : 25)

Recommended Courses for Master of Planning (M.Plan - Environmental Planning and Management)
1. Ecodesign for Cities and Suburbs
2. Nature Based Metropolitan Solutions
3. Sustainable Urban Environments
4. Environmental Protection and Sustainability
6. Co-Creating Sustainable Cities
7. Greening the Economy: Sustainable Cities
8. Climate Change Mitigation in Developing Countries
(Recommended No. of Courses : 19)

Recommended Courses for Master of Planning (M.Plan - Transportation and Infrastructure Planning)
1. Intro to Traffic Flow Modeling and Intelligent Transport Systems
2. Sustainable Urban Freight Transport: A Global Perspective
3. Smart Cities, Management of Smart Urban Infrastructures
4. Urban Transit for Livable Cities
5. Sustainable Urban Development
6. Road Traffic Safety in Automotive Engineering
(Recommended No. of Courses : 13)
3Re-ICS 2021
(World Environment Day-2021)

(DATED: 05-06-2021)
Expert Speakers: Dr. Prof. Minakshi Jain, Director, SPAV
Mr. Shankar Arumugham, Head Strategic consultant and valuation advisory, JLL India
Mr. Murale LS, Chief consultant and Head, Transport Planning Section, L&T Chennai
Co-ordinated by: Dr. Prof. Abdul Razak Mohamed, Head DOP, SPAV
This year’s environment day workshop was on the theme of Re-imagining, Re-creating, and Re-storing urban spaces majorly on infrastructural aspects.

Art of Mind Control through Yoga and Meditation
(International Yoga Day-2021)

(DATED: 21-06-2021)
Guest Speaker: Shri Vilasa Vighraha Dasa, ISKCON
International Yoga Day was celebrated online with a session on the ‘art of mind control with Yoga and meditation’. The participants were familiarised with various types of yoga forms and other basics of yoga. The speaker gave his thoughts on how Yoga and meditation can help in calming and controlling one’s own mind. The inspiring session ended with a quote of Buddha, “Every human being is the author of his own health or disease.”

Railway Station Redevelopment and role of planners

(DATED: 05-05-2021)
Guest Speaker: Mr. P S Uttarwar (Additional Commissioner [planning], Delhi Development Authority & Senior Expert, Indian Railway Stations Development Corporation)
Co-ordinated by: Asst. Prof. Jayesh Bhagwat
The nation is going through the stage of redeveloping the railway stations. The lecture emphasized on the need of preparing planners, engineers, and architects for the same. The presentation guided the students through the various ongoing models, mechanisms used.

Sectoral Analysis in Master Plan Preparation Process

(DATED: 05-05-2021)
Guest Speaker: Dr. Poonam Prakash, Professor of Physical Planning, SPAV Delhi
Co-ordinated by: Asst. Prof. Ekta
The esteemed guest introduced the students to the importance of sectoral approach during the master plan preparation process. Students were enlightened about the several aspects of a sectoral analysis in the planning process. The planning students discussed with Dr. Poonam Prakash about their understanding on the subject and with her invaluable expertise, she inspired the students to be better planners.

International Women’s Day Celebration

(DATED: 08-03-2021)
Guest Speakers: Dr. B. Keerthi-President, Vysavya Mahila Mandal Dr. Padmaja, Principal, Siddhartha Women College Ms. Leena, Faculty of Delhi Public School, Vijayawada
To observe the International Women’s Day 2020, School of Planning and Architecture, Vijayawada celebrated the day throughout the first week of March, 2020. There were various competitions held in this week, namely poster design, slogan writing and essay writing competition.

Governance Practice of Local Govt. in India: Reality and Challenges

(DATED: 11-05-2021)
Guest Speaker: Prof. Dr. Tathagata Chatterji, Professor, Urban Management and Governance, Xavier University, Bhubaneswar
Co-ordinated by: Dr. Prof. Abdul Razak Mohamed, Head DOP, SPAV
The challenges faced by the urban governance structure of the present day India was discussed. The Students interacted with Dr. Tathagata Chatterji and gained clarity on various concepts related to urban and local governance. The expert gave his insights on the functioning of ULBs and their roles in local governance structure.
Online Special Lecture on Planning for Safer NMT Infrastructure

(DATED: 17-05-2021)
Guest Speaker: Prof. Dr. Geetam Tiwari, Dept. of Civil Engineering, IIT Delhi
Co-ordinated by Asst. Prof. Naina Gupta

The students were able to understand and learn about the importance of planning for a safer Non-motorized transport (NMT). The expertise of Prof. Dr. Geetam Tiwari on various planning interventions in providing a safer and quality environment for the vulnerable road users, gave useful insights to the students.

Institutional Framework in transport sector in India

(DATED: 31-05-2021)
Guest Speaker: Prof. Dr. Sanjay Gupta, Professor of Transport Planning, SPA-Delhi
Co-ordinated by: Asst. Prof. Ekta

The students were able to understand the governance structure in transportation and were also gained insights on the various issues and limitations in the governance structure of transport agencies. The lecture clarified on the need of a unified transit authority for the better functioning of the transport system with examples.

Economic Aspects of Public Transport

(DATED: 25-05-2021)
Guest Speaker: Prof. Dr. Sanjay Gupta, Professor of Transport Planning, SPA-Delhi
Co-ordinated by: Asst. Prof. Ekta

Online Workshop on Sustainable City Planning and Management

(DATED: 31-05-2021)
Guest Speaker: Mr. Imran Basha S, City Co-ordinator, UN-HABITAT; Ms. Mansi Sachdev, Senior Urban planner, UN-HABITAT
Co-ordinated by: Asst. Prof. Rajeev

Exploring the untapped Blue Economy Potential for India ICZM

(DATED: 21-05-2021)
Guest Speaker: Ms. Anuja Shukla Environmental specialist (World Bank) Co-ordinated by: Asst. Prof. Rajeev

Online Special Lecture on Challenges in Academic Writing

(DATED: 28-05-2021)
Guest Speaker: Dr. Prema Rajagopalan, Professor at Department of Humanities and Social Sciences, IIT Madras
Co-ordinated by: Prof. Dr. Abdul Razak Mohamed, Head, Dept. of Planning, SPA-Vijayawada

Legal Connotations of Professional Practice of Env. Planning in India

(DATED: 11-06-2021)

During this insightful guest lecture on ‘Legal connotations of professional practice of environmental planning in India’, the students got a rare opportunity to interact directly with a legal and professional working for environmental protection through which they got to learn about the importance of stakeholder participation and role of advocacy in environmental planning.
The aim of the learning process in this particular studio is to inculcate in the students an understanding of the symbology and concepts involved in creating maps. It aims to teach map making and its importance to the students, which then enables them to improve their skills and helps them to learn its applications in planning.

**FOCUS**
- Understanding various Types of Maps
- Elements and Concepts of Maps
- Physical features around the place, specifically the Contours

The studio aims to develop an understanding and detailed knowledge on master plan making process, studying different planning concepts and techniques aiming in particular at improving and developing the physical, social and natural environment of people in synergy, promoting balanced socio-economic growth and sustainable development.

**AREA OF STUDY**
- Different Cities based on the Studio exercise
- Visakhapatnam & Vijayawada, Andhra Pradesh
- Tanuku, Andhra Pradesh

The students were required to understand the various properties of the city, like population density, development, city planning, rivers or the reason for the settlement and physical features like contours after studying five cities of their choice. The outcome of the study was presented via hand drafted maps exploring the urban form determinants and other characteristics of the chosen cities.

**OUTCOME**
- Transportation planning methodology
- Road Safety Improvement
- Designing of the various elements of transportation network

The students were required to identify the transportation related problems at national and city level and conduct the surveys related to Transport Planning in the areas they live. The end product required the students to give design proposals on Pedestrianization and Road safety improvement Plan, City Square Development and Smart and Sustainable Parking Management Strategies.

**STUDIO COORDINATORS**
- Ar. Jivantika Satyarthi
- Mr. Bhagwat Jayeshkumar
- Ms. Naina Gupta
- Ms. Ekta
- Dr. Abdul Razak Mohamed

**B.PLAN**

**PLANNING EVEN SEMESTER STUDIO ‘20-21**
MURP - SEMESTER II
Development Plan 2041 - Vijayawada, AP

The studio was carried out with the intention of understanding the challenges involved in developing a masterplan for Vijayawada city (VMC) jurisdiction in order to evolve a rational comprehensive development plan for the future of the concerned settlement, with equitable distribution of resources and a concern for ecology.

• Multi-sectoral plan document and associated maps
• Environment sustainability
• Spatial growth and ecological concern

MTIP - SEMESTER II
STUDIO TOPIC
Appraisal of Public Transportation: A Case Study of Vijayawada, AP

The studio focuses on inculcating the students a detailed understanding of the various surveys and the process of data collection and analysis that a transport planner is required to carry out in order to understand the best practices, concepts and methods in PT network planning, TOD, Mode choice modelling, Benchmarking, connectivity and accessibility.

• Background Study
• Financial & Physical SLB’s
• PT Demand Modelling & Fleet estimation
• Measures to enhance NMT & improve bus stop accessibility

MEPM - SEMESTER II
Environmental Management Plan - Vijayawada, AP

The studio aims at introducing environmental baseline studies and detailed assessment of environmental status and impacts at an urban level by analysing the generic sectors and the detailed sectors to understand the environmental potential and impacts of the city to develop an environmental management plan for the study area.

• Environmental management and development
• Identification and analysis of environmental concerns

AREA OF STUDY
Vijayawada
Andhra Pradesh

An appraisal of public transport system of Vijayawada was performed which analysed the basic background, physical and financial performance, user demand, fleet requirement, accessibility, and NMT facilities. This was concluded with suggestions and proposals to improve the accessibility & NMT facilities.

Outcome

Formulation of a holistic cross-sectoral Development plan that envisions Vijayawada as a Sustainable and Resilient city that anticipates and plans for the growing population by designing infrastructure to improve the natural and built environments and optimizing the resources and systems for greater efficiency & Provision of Opportunities.

STUDIO COORDINATORS
Dr. Ayon Tarafdar
Mr. Valliappan AL
Ms. Naina Gupta
Dr. Prasanth Varathan
Mr. Rajeev R
Dr. Adinarayanane R

M.PLAN

The entire semester has been dealt with online classes for all the batches due to the existing pandemic scenario. Progressive internal assessments were carried out throughout the semester and the final examination completed in January, including written, viva-voce and jury exams through online mode.
## Key Aspects of Study

### Maps - Significance and Types

### Location of Study

**Different Cities**  
*(based on the studio exercise)*

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<th>Survey Performed / Methodology</th>
<th>Proposal and Outcome</th>
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<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, etc. This exercise helped the students to build their map reading, preparation and interpretation skills. An exercise on symbology, helped the students to understand the symbols used on maps by different organisations and their meaning. The studio focuses on the understanding of various types of maps and the physical properties that they represent. The key intent is to understand any region, and for the ability to understand what every symbol on the map means. The process also focused on making the students understand the physical features around the place to analyse the resources and assets of the place.</td>
<td>The class was divided into 5 groups to prepare base maps of five cities: 2 developed and 3 developing, and understand the various properties of the city, like population density, development, city planning, rivers or the reason for the settlement. With the base maps prepared, the students consequently updated their base map as the studio progresses by referencing it with the secondary sources periodically. The next assignment was to understand the plan and section of 8 different types of the contours. Due to the pandemic scenario the study is carried out in online mode relying more on the secondary sources. The observation of various cities on google earth and developing the concepts used in the planning of those cities.</td>
<td>The outcome of the study was presented via hand drafted thematic maps exploring the urban form determinants and other characteristics of the chosen cities exploring the spatial variability of specific distributions or themes such as population density, etc. Also, a basic understanding of how contours represent certain landforms. Students were required to individually select a city and theme of their choice and prepare thematic maps based on the census data and google earth and other secondary sources following various methods of representation. Towards the conclusion, the students were made aware of map preparation and interpretation at various scales, elements and symbology and contour interpretation.</td>
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**RADIAL PLANNING**  
**DELHI**

**AMSTERDAM**

**PERTH**

**CUL - DE-SAC**

**GRID IRON PLAN**

**PEDESTRIAN**

**RECREATIONAL**

**RIVERFRONT DEVELOPMENT**

**RIBBON DEVELOPMENT**

*Green Parks and High rised buildings along the swan river*  
*Every Neighbourhood has a park in the centre with river flowing through the city.*
**Transport Planning Studio**

**Year II, Semester IV**

Mr. Bhagwati Jayeshkumar  
Ms. Naina Gupta

**Key Aspects of Study**  
Transportation Network and Road Safety Improvement  
Location of Study  
Visakhapatnam & Vijayawada

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<th>Need for Study / Methodology</th>
<th>Analytical Process</th>
<th>Proposal and Outcomes</th>
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| The studio is based on the objective 'To inculcate knowledge related to traffic and transport planning in real traffic and transport problems'. Mobility has grown dramatically over the recent past, and all activities depend on travel and transportation. Thus it is important to develop an understanding of the existing traffic & transport related issues at the same time learn to conduct different survey methods & techniques used to arrive at various interventions & recommendations that decrease and relieve the transport issues that people face right from traffic, over congestion near CBD areas, noise pollution, Pedestrian & road safety etc. Therefore, it is important that these interventions impart on the society as a whole system with respect to the benefits & downsides that entail every proposal. The students of the class were given three Assignments  
a) Individual Work  
Assignment No. 1: Identify the problems of cities.  
b) At National Level  
Assignment No. 2: Identify the problems of cities.  
c) At City Level  
Assignment No. 3: Identify the problems of the sub-city, analyse them and formulate proposals. This assignment No.3 has been presented by the students in this Jury. Here students were divided into groups of five or six to work on sub city level.  
| 1) PEDESTRIANIZATION & ROAD SAFETY IMPROVEMENT PLAN. MVP Colony, Visakhapatnam City, Andhra Pradesh  
The study was aimed at studying & analysing the existing pedestrian and school safety infrastructure at the neighbourhood in MVP colony initially developed by the Visakhapatnam Urban Development Authority.  
2) SMART & SUSTAINABLE PARKING MANAGEMENT FOR BESENT ROAD, Besant Road, Vijayawada City, Andhra Pradesh  
The study was done to review the existing scenarios or problems i.e., unauthorized parking, lack of walking spaces, congestion and discrete vending zones, and the main focus was to study the parking Behaviour of the commuters in the area, parking facilities provided and the quality of the facilities, existing provisions, and the supply – demand gap happenings.  
3) ROAD IMPROVEMENT PLAN FOR NARSIPATNAM Narsipatnam, Andhra Pradesh  
The study provides an overview of how the road improvement plan can be implemented by conducting respective surveys to minimize accidents within the town.  
4) SQUARE DEVELOPMENT OF BENZ CIRCLE, VIJAYAWADA, Benz Circle, Vijayawada City, Andhra Pradesh  
The study aims at the development of the Benz circle junction for the free flow of vehicular traffic along with reducing the delays and providing design improvements.  
| The comprehensive spatial and policy level interventions recommended for the site area ranges from interconnected and densified pedestrian networks to improve the school safety. The design recommendation & interventions ensures the walkability & comfort of the pedestrians that is brought about as the qualitative measure of the city that inspires walking & school trips with universal accessibility, assured safety & security. After the analysis of the collected data the innovative parking proposals have been given on the basis of different parking policies and this will help to move from a chaotic parking system to a sustainable organized parking system that will be effective in long-run to solve the parking issues in Besant Road. The critical zones were classified based on the parameters for improvement. The proposals like traffic calming measures, road safety measures, road infrastructure improvement, reducing the encroachment levels, measures to reduce traffic congestion and minimizing accident-prone areas were proposed for the critical zones to improve. The expected outcome of this study is to improve the roads of Narsipatnam town so that the above-listed problems could be reduced. This study shows all the survey results and analysis done along with the possible solutions proposed with their cost estimates for the problems regarding the traffic flow, major delays and design.  

[Diagram of Design Consideration for Improvement Plan]

[Diagram of Designated Space for On-Street Vending Activities]

[Diagram of Types of Vending Activities]
**Key Aspects of Study**

**Sustainable development & Balanced Socio-Economic Growth**

**Location of Study**

Tanukku, AP

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### Need for Study

The studio aims at preparing Master Plan focusing on sustainable development evolving development vision and road map for balanced socio-economic growth of Tanukku municipality by regulating future spatial development to be envisaged for the horizon year, 2041.

Tanukku is a town and a 1st grade municipality in the West Godavari district of the Indian state of Andhra Pradesh, situated in the Godavari Delta region.

One of the main objectives is to achieve inclusive and sustainable development of municipality and its influence area i.e., Area of Interest. The demand assessments, land management and proposals of each sector of the master plan will be planned for the horizon year, 2041.

Review of previous/regulated plans and determine the Area of Interest (AOI) of the Master Plan. Base Map assessment and base map preparation for the AOI.

Promoting desirable patterns of land use to prevent wasteful development and minimize the cost of public infrastructure and utilities and other social services.

Demand Assessment for the plan year based on the current scenario and identify the key growth drives of the municipality. Define strategies for promoting the proposals for the development of the AOI.

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### Survey Performed / Methodology

The studio took part in 4 stages:

1. Study of various master plans of different cities.
2. Comparison between various masterplans with respect to different sectors.
3. Study of various city concepts like low carbon city, green city etc.
4. Preparation of the master plan based on the literature study.

- Literature review
- Data representation
- Analysis
- Proposals

Due to the pandemic situation, none of the surveys were conducted on site and all the data were gathered from secondary sources. Some of the students visited the office of the offices and gathered some secondary data.

**Project Context**

Tanukku is First Grade Municipality in West Godavari district of Andhra Pradesh with population of 77,962 as per census 2011 and an administrative capital of Tanukku Mandal. Eluru Municipal Corporation is the District headquarters located at a distance of 70 km and 155 km from the State Capital Amaravati. It is located at 16.75°N 81.7°E latitude and longitude and has an average elevation of 13 m above the MSL.

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### Proposal and Outcomes

Analysis was carried out based on different sectors and proposals were given to the same..

Preparation of Master Plan 2041, to achieve inclusive and sustainable development

Prepare a master plan considering the visions and objectives established through the stakeholders to achieve the regulated and planned development in the area.

Adopt environmentally sustainable approaches and financially sustainable approaches;

Appropriate land management approaches for selected projects

Promote land use and transport integration strategies and concepts such as TOD, NMT and Walkable Neighborhoods.

Frame Development Control Regulations for the Master Plan area considering the development potentials and land market.

The final set of proposals were grouped under eight sectors land use, trade industry and commerce, housing, transport, infrastructure, tourism, urban design and environment.

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**Flow accumulation and Stream Density:**

- **AOI Boundary**
- **Elevation, Boundaries**
- **Stream Density**
  - VALUE
    - > 21,400 High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High

**Ground Water Potential Zone:**

- **AOI Boundary**
- **Elevation, Boundaries**
- **Ground Potential Zone**
  - VALUE
    - > 21,400 High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High
    - > 21,000 Very High

Prone to waterlogging and over-flow of drains.
Development Plan of Vijayawada, 2041

**Need for Study**

Vijayawada as a city doesn’t have any Masterplan document on the whole, in order to regulate and guide the growth of the city. The city doesn’t have enough potential to attract people in search of employment and the growth has been unregulated resulting in a chaotic development.

The direction of expansion due to growth in Vijayawada needs to be channelized in order to benefit the city and its residence by providing various incentives through this exercise helps in the enhancement of its image, and further translates into economic upliftment.

**Survey Performed / Methodology**

Critical review and analysis for the selection of study area.

Forming the Overview of the project and with preliminary Observation and Findings, Formulation of Overall Vision of the masterplan project and objectives to achieve them.

Then the Development plan formulating process was subdivided into 7 sectors namely, Land use, Economy, Physical Infrastructure, Social Infrastructure, Housing.

The seven sectors with the preliminary sectoral analysis, they formed a set of sectoral objectives, which were in line with the overall objectives of the vision statement. Then the data that were necessary were collected and analysed for identification of issues and achieving the sectoral objectives.

Two Sets of proposals were formed based on the key issues and findings. A set of Inter- sectoral proposals and another set of Individual sectoral proposals along with strategies and recommendations for improving liveability and resilience index were also formed.

The Development plan of Vijayawada 2041 was formed by the integration of all the proposals and recommendations to achieve the overall objectives.

**Analysis and Proposal**

Sectoral analysis includes Land Use, Economy, Physical Infrastructure, Social Infrastructure, Housing. Most of the sectoral analysis included gap analysis, Service coverage analysis, Need assessment, Thrust sector analysis, Swastb analysis, etc. and for the city level various Liveability and resilience indicators were identified and ward level and city level performance was assessed.

Amalgamating the various issues identified after analysis lead to the formulation of 10 development concepts, namely: Decentralized provision of services, Economic proliferation, Socially Livable Space, Networked Urban functions, Ecological balanced development, and inducing a city identity.

These development concepts further lead to 8 cornerstone proposals i.e., City Eco Park, City Bypass, City and Sub-city Commercial Centre, Riverfront re-development, Transit Oriented Development (TOD) Corridors [Bus rapid transit system (BRTS)], City Freight and Logistics hub, IT Park/Corridor, New Residential areas and 19 sectoral proposals.

The Urban Development Plan incorporates several innovations for the development of the Vijayawada city. Along with the planned development of new regions, one of the main focus has been to encourage the rehabilitation of existing areas. The Urban Development Plan envisages vision and policy guidelines for the perspective period up to 2041.
Appraisal of Public Transportation: Vijayawada

M.PLAN (TTP)
YEAR I - SEMESTER II
Ms. Naina Gupta
Dr. Prasanth Varadan

Name of the Studio
Transport Planning Studio

Location of Study
Vijayawada, AP

Need for study
The public transportation systems are accepted widely to be the sustainable way of transportation and the bus systems are the cheapest option in the arsenal. It provides low-cost transportation for all sections of the society. Due to its flexibility, it has larger advantage over other systems of mass transit. It can provide cleaner environmental conditions, faster travel speeds, good mobility, and economic growth. Buses being one among the sustainable transport solutions for the cities, to attract more people towards buses, a well-organized and well-distributed bus network is imperative.

Due to the pandemic situation, the city of Vijayawada was selected for the studio exercise, considering the availability of data. The city of Vijayawada is a flourishing town in the banks of river Krishna in the state of Andhra Pradesh. With a population of above 10 lakhs, it is the second-largest city in the state. It is well connected with road, rail, water and air transport. However, the vehicular registration data from 2016 shows that 74% of the vehicles registered are two-wheeler, while buses are mere 2%. The observed mode share for buses in the city was 31.5% as per CMP 2017, while two-wheelers comprised of 52%. This may lead to congestions in the city roads, slowing down the journey speeds and raising the time spent on road. Also, the increasing dependency on personal vehicles generates environmental-related issues. In order to promote and improve the bus transportation system, the appraisal of the existing bus transport system is necessary.

Survey Performed / Methodology
Extensive study of literature was conducted in the primary stage to understand the best practices, concepts and methods in PT network planning, TOD, Mode choice modelling, Benchmarking, connectivity and accessibility.

In the second stage, the basic study on socio-demographic profile of the city as well as the public transport system was conducted together with the study of road network, land use and bus routes.

Simultaneously, a benchmarking methodology was finalized and LOS for existing scenario was assessed to identify the gaps and set targets for the future.

The road network, network attributes, bus stops, bus routes, bus schedule, and 30 TAZs were constructed in Visum software. After generating PT trips using MS Excel, PT trip distribution and assignment was performed using Visum.

Together with this, the mode choice modelling was conducted using the finalized ‘multinomial logit model’ method with the data from a small online HH survey of 85 samples.

Finally, the studio exercise was concluded with a few proposals and suggestions such as improvement in fleet size and service frequency, bus stop accessibility, NMT integration in road network, bus terminal layout improvement, road cross section improvement, speed controlling measure, PBS system, and design considerations for IPT integration.

Analysis and Proposal

Proposed PBS influence area & Docking stations
The studio exercise is aimed to integrate the potential and extent of environmental concerns within the urban planning dogma to synchronise the environmental and spatial processes to develop a sustainable environmental planning model for Vijayawada City.

Considering the existing pandemic scenario and the limitations of access to primary data, the scope of the study was restricted. Thus the Studio exercise aims to develop an ENVIRONMENTAL PLAN FOR VIJAYAWADA CITY, which will address specific issues concerning the urban environment, unlike a generic Master Plan.

The vision is to formulate a comprehensive cross-sectoral plan that envisions Vijayawada's long-term viability based on its human, biological, and geographic diversity, in order to boost the city's adaptive potential by fostering a balanced growth of the economic and environmental sectors, as well as adequate infrastructure.

An extensive literature study has been carried out at the initial stage primarily focusing on the various concepts, theories and practices of sustainable environmental planning with tools and techniques to critically analyze the generic sectors involved. Master plans of various cities have also been studied both at national and international level to understand the whats and hows of environmental planning.
An Integrated Assessment of Flood Vulnerability -
A case of Pathanamthitta district, Kerala State, India

### Premise
Flood is one of the serious, common, and dangerous natural disasters that many countries are facing. Flooding greatly depend upon the precipitation levels. It is said that globally, by the end of the 21st century, the monsoon precipitation is likely to intensify due to the increase in the atmospheric moisture content. The projections also suggest that many countries will come under the high hazard in the coming future. This extreme climatic event has the potential to cause serious impact on human health, security, livelihood and poverty. When such events hit developed countries, the human loss could be minimised as they have better warning systems and technology to reduce its risk. But in developing countries, as they lack in many aspects of flood risk management, the impact of floods could have more harmful effects than that of developed countries. India which is vulnerable to many disasters, has around 12 per cent of its land prone to floods and river erosions. And even the precipitation trend seen in the country over the past years shows an alarming need for flood risk studies and management. The above flood issues are not exempted especially in Pathanamthitta district of Kerala state, India. Lack of preparedness to flooding situations can be seen in the study area. Lack of flood management measures in the flood vulnerable areas leading to devastating loss and extreme panic.

The aim of the study is to establish a flood vulnerability index through vulnerability assessment and the trend followed in the study area and to minimise the intensity of such events and reduce its adverse effect through various coping strategies in the study area. The research study addresses the flood risk of the Pathanamthitta district through certain objectives framed to reach the destination outcome.

### Objectives
1. To study and understand the impacts of previously occurred floods in the study area (Pathanamthitta district, Kerala).
2. To identify the control parameters which decides the flood risk, and vulnerability in the system, through an integrated approach.
3. To explore the vulnerability and hazard indicators to demarcate the vulnerable zones of the study area.
4. To develop a risk map through spatial analysis using Analytic Hierarchy Process (AHP) to prioritise the vulnerability indicators.
5. To develop a flood plain zoning map and recommend sustainable strategies through spatial and policy intervention to minimise the adverse impact of flood in the study area.

### Methodology
The IPCC guidelines have been applied to assess the hazard and vulnerability of the district for further risk assessment of the study area. The statistical technique i.e., Analytical Hierarchy Process (AHP) has been employed, which is a multi-criteria decision-making approach for ranking and giving weightages to the hazard and vulnerability parameters. Further, the GIS software has been employed for the spatial mapping of precipitation levels, elevation, slope, land use land cover (LULC), normalized difference moisture index (NDMI), flood inundation levels, buffer analysis and mapping of other non-spatial data variables to generate flood hazard and flood vulnerability. By employing GIS, through overlay analysis the risk map is generated which shows the high, moderate and low risk zones of the study region.

### Analysis and Proposal
After calculating the AHP index/weightages for selected hazard and vulnerability parameters, overlay analysis was carried out to estimate the hazard, sensitivity and adaptive capacity based on the weightages arrived through AHP. Then the vulnerability formula (vulnerability = sensitivity - adaptive capacity) was applied to estimate the vulnerability and finally the risk formula [risk = Hazard * Vulnerability] was applied to estimate the risk index.

The factors leading to hazard in a region are mainly natural factors. There is a limitation in intervening in these factors and thus reducing the risk of a region. Unlike hazard, vulnerability of the region can be reduced. Reducing vulnerability will help to decrease the possible loss caused by the flood. By identifying the factors which are leading to vulnerability and adopting various mitigation and adaptation measures can help in reducing the vulnerability. The villages which are having high values of both hazard factors and vulnerability factors are classified as high-risk zones. Some of the villages which are having high values of hazard factors does not include in the high-risk zone because of their less vulnerability values. This means that even though topographically they are highly prone to floods, their socio-economic and infrastructure factors does not increase the impact of floods on these regions compared to many other regions in the district.

1. Structural Measures
   - Provision of Embankments/Banks, Flood Walls, Flood Leveses
   - Provision flood emergency infrastructure

2. Structural Measures
   - Provision of Sustainable Urban Drainage Systems (SUDDS)

3. Flood Plain Zoning
   - The entire study area is divided into different flood zones according to their risk to floods and, provisions and restriction of activities for each zone are provided along with zoning.

4. Other Recommendations
   - Bye-laws for Buildings in Flood prone Areas
   - Wetlands: Conservation and Restoration
   - Provision of flood education & flood insurance
   - Provision of emergency plans for flood prone areas

### Planning Tools and Techniques
1. Indicator Based Approach
2. 2. AHP Risk Assessment Approach
3. Multi-Criteria Decision Analysis (MCDA) approach
4. Analytic Hierarchy Process (AHP) - Statistical Technique
5. Overlay Analysis using ArcGIS

[Maps showing Hazard, Vulnerability, Risk Index of district to floods and Flood Plain Zoning Map of Pathanamthitta]
Planning in the context of Urban Heat Vulnerability: A Case of North East District, Delhi

Abstract

India is known to be susceptible to heat conditions. However, urban areas experience acute heat stress which attribute to the synergistic effect of urban heat islands (UHI) arose from locked built character and severe heat wave (HW) occurrence. This study identifies the heat vulnerable areas in North East District of Delhi, based on a series of parameters under ‘exposure, sensitivity and adaptive capacity’.

A joint study by IMD and IITM (Indian Institute of Tropical Meteorology) 2017 has revealed that Delhi’s heat index has increased by 0.6°C per decade in summers and 0.5°C during monsoon. Delhi’s summers and monsoons have experienced temperature rise i.e. summer and monsoon are hotter by 3.6°C and 3.3°C on the heat index compared to the 1950s. North-East district of Delhi was chosen as the research area based on its challenged socio-economic condition and erratic built pattern.

Population density, Relative humidity (RH), Ambient temperature, Urban Heat Island Index (UHI) corresponds to exposure parameters whereas NDBI, NDWI, NDMI, and Albino indices were analyzed under sensitivity parameter. Adapted indicators from secondary sources were assessed to understand adaptive capacity of the district. The indicators were derived from Remote Sensing sources and analyzed using established algorithms. The parameters were normalized and overlaid using spatial analysis tool of GIS to arrive at heat vulnerability mapping of the entire district with varying levels of heat vulnerability. Further, the entire area of the neighborhood scale has been analyzed based on physical, climatic, and perception indicators to device policy and framework guided mitigate measures.

Research Framework

The research framework revolves around the parameters of vulnerability assessment defined by IPCC. The final heat vulnerability map of the district is further analyzed at neighborhood scale with respect to its built characteristic, micro-climatic aspects added with perception-based survey to generate recommendations.

Outcome

Overlay analysis of Thermal load map and ranking map of SoVI produced the heat vulnerability map of the district. It was observed that 53% of urban areas falls under high vulnerable zone i.e. 1620671 residents are living in high vulnerable conditions.

Further Babarpur town was selected for neighborhood analysis as the whole town attributed to high vulnerable characteristic. Six neighborhoods were identified and analyzed based on their plot size and found to have similar characteristics.

These selected three neighborhoods were assessed based on physical character such as mass-void ratio, availability of per capita green. Further micro-climatic-indicator such as Sky view in Urban, Roof radiation and Radiation of Urban canyon were simulated using Ithimo software. A primary survey was also carried out to understand the perception of residents based on a set of question linked to heat resilience.

Results reveal that the neighborhoods have inhabitant standards of physical character and consist very acute sky view percentage along with high roof and urban canyon radiation.

Analysis and Proposal

A four step process has been adopted to generate heat vulnerability gradient for the district and gross root analysis of the vulnerable zone. It starts with the mapping of indicators under the parameters defined by IPCC. The second step uses weighted index method to rank these indicators based on logic adopted from best practices and national average trends. This was done to normalize the all indicators having differential units.

Further overlay analysis of indicators under exposure, sensitivity, and adaptive capacity was performed using Geo-spatial technique. Overlay analysis of exposure and sensitivity produces Thermal load map of the district where as socio-economic indicators derived from census produces Social vulnerability Index of the district.

The outcome of overlay analysis was used to generate final heat vulnerability map of the district using spatial calculator of GIS based on algorithm provided by IPCC i.e. Vulnerability = [Exposure + Sensitivity/Adaptive Capacity]

Recommendation focuses to device policy-based strategies. Simulation existing built structure and its relation with sky view percentage revealed that built pattern having wider eye sight plane can potentially improve dynamic potential in heat pockets to lower down the temperature. The other recommendation includes high albino materials, enforcement of thermal insulation and green roofs by local authorities.

Preparedness framework accounts three phases i.e. pre-heat wave, during the heat wave and post heat wave responsibility of local authority and other institutional mechanism.

Triad technique of planning namely protective, defensive and offensive measures has been recommended. Protective measures address the driving character of land use, defensive measure addresses the redevelopment and retrofitting measures to combat heat vulnerability whereas defensive measure will enforce building bye-laws and enforcement of heat action framework.
Urban Sprawl and its impacts on Land use/ Land Cover dynamics of Vijayawada, Andhra Pradesh.

Abstract

Urban areas and cities are expanding and becoming more compact due to population growth and migration. Physical land use change has been observed today especially leading to loss of precious land. Urban sprawl consists of fragmented suburban communities and construction of commercial strips, typically defined by low-density, separate land uses, discontinuity, and vehicle supremacy, requiring excessive transport. The negative environmental, social and economic impacts of urban sprawl urge the land management community to find sustainable solutions for this phenomenon. Keeping the aforesaid knowledge in mind, Vijayawada city has been chosen for further detailed investigation. Multiple Linear Regression, System Dynamics, Cellular Automation and Artificial neural network (ANN) are employed as Top-down tools and as Bottom-up tools such as GIS for supervised classification and Normalized Difference Built-Up Index (NDBI) analysis have been carried out using GIS to understand the impact of sprawl on land cover and growth direction. Statistical tools like Pearson’s chi-square test and Shannon’s entropy applied in this study to understand the Urban Growth and its future tendency. Population sub-system model has been developed by employing System Dynamics-Stella software and forecasted the demand and supply of infrastructure requirement. Using GIS-MOLUSCE which works with Cellular Automation and ANN future growth direction and land cover have been forecasted for the projected year 2040. Based on the findings, the study concludes with comprehensive planning framework and evolve a set of planning guidelines to counter adverse impacts of sprawl and navigating towards sustainable development of Vijayawada City.

Analysis and Proposal

1. Understood the impacts of Urban Sprawl over land cover dynamics

Urban growth
Degree of freedom: It is increasing with the time. Higher overall freedom indicates lack of equal weightage and lack of consistency in planning with the entire city in consideration. Higher degree of freedom for a zone is an indication of unstable development within the zone with the change of time.
Degree of Sprawl: It is increasing with the time. This shows the future tendency to sprawl.
Degree goodness of urban growth: It is negative. It indicates the current study region is non-sustainable development.

2. Potential direction of the Urban sprawl of the study area

NDBI analysis
The direction of growth is SW towards Amarawathi towards the new capital city of Andhra Pradesh and then SE. This is due to migration of secretariat employees to the new capital city and also due to the demand for the real estate because of the announcement of the new capital city Amarawathi. The reason for the expansion of the city is due to higher prices of land and housing in the city and also land use conversion policies evolved due to high demand of housing considering the population growth and land availability in the outskirts of the city limits.

3. Control parameters that decides the functions of the study area

Multiple Linear Regression and Correlation
The control parameters which decides the functions of the city w.r.t. growth are Building permissions, school enrolments, Land price, Employment opportunities and Transportation in the decreasing order. Building permissions is the highly influencing parameter for the urban growth as this shows the demand for the housing as the population of the city grows. Land price is also the major influencing parameter as the demand for housing in the core area of the city increases the land price also drastically increases this is the reason for the most of the city dwellers to get settled in the suburban areas of the city considering the low land prices this in turn impacts the land use conversions from agriculture and barren land uses to residential, commercial and various infrastructure facilities.
School enrolments show the number of students enrolled into the school this is the direct influencing parameters as the sub urban and rural area students shifts or commute to the urban areas for better education system.

Employment opportunities and transportation have direct proportion relationship in an urbanizing city conditions as the employment opportunities increases the demand for transportation also increases.

4. System Dynamics
Population sub-system model has been developed by employing System Dynamics-Stella software to forecast population for the projected year, 2041 and the same has been validated. Based on the projected population and URPDF guidelines, the Physical and Social infrastructure have been quantified and in turn, demand and supply gap identified for the projected year.

5. QGIS-MOLUSCE
This analysis shows that the conversions of agriculture and barren lands to Residential and built has drastically increased in the year 2015 which is during the announcement of new capital city Amarawath. This analysis also shows that the larger areas of agriculture lands in rural areas are being converted to urban land which is not sustainable for the city development. This also gives the tendency of further conversions of land use from rural agriculture to urban lands in the future. To develop comprehensive planning framework and evolve a set of recommendations for sustainable development of Vijayawada, Spatial land cover model for year 2041 is predicted using QGIS-MOLUSCE with the help of cellular automation and artificial neural network.

Outcome

The conclusion is that only by means of a planning policy scheme to support sustainable development could Vijayawada meet the environmental, social and economic requirements of sustainable land use / land cover and achieve a perfect balance among them. This can also be done by extending the VMC boundary or by making Vijayawada as Mother Metropolitan city.

The modelling results are directly useful to planners and policy makers by comparing different dynamic consequences brought by various policies and decisions. It is useful in answering questions such as “What if” and is of significance to achieve the goal of sustainable land use / land cover. Further research can be done in detail to understand the possible combination of tools to study the urban growth dynamics.
The following infographic illustrates the diversity of thesis topics selected by the bachelor’s and master’s of Planning Department, School of Planning and Architecture, Vijayawada, During the academic year 2020 - 2021.

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 2021.
Faculty Achievements & Publications

• Dr Abdul Razak Mohamed (2021) One of the Editors. Proceeding of the RLCF 2021 released during the Inauguration of the International Conference (ONLINE) RLCF21 organized by dept of planning School of Planning and Architecture Vijayawada during Jan 2021.

• Prashiksha, B. Mohamed Abdul Razak (2021) Co Author the paper “Conservation of Wetland is Essential for Ecotourism Development – Experience From Deeper Beel Lake, Guwahati, India.”, presented during the International Conference (ONLINE) RLCF21 organized by dept of planning School of Planning and Architecture Vijayawada during Feb 2021.


• Mohamed Abdul Razak (2021) published “Connectivity of Roads is the measure of spatial access to infrastructure facilities in city peripheral areas – case of Chennai India, International Workshop on “Revisiting Peripheral Geographies: Strategies for resilient urban Development in the Global South”, Workshop on India Scheduled 25th Feb 2021, the Extended Abstract International workshop Feb –April 2021 Royal Academy of Engineering, University of Reading, and Hindustan University, Chennai.

• Dr Abdul Razak Mohamed (2021) Extended Abstract published on book “Planning Jakarta in the Post Suburban Era” edited by Deden Rukmana – deden.rukmana@aaum.edu and Sonia Rottman – s.rottman@uq.edu.au during February 15.

• Dr Abdul Razak Mohamed (2021) Invited article published entitled “Government Readies Blueprint to develop Suburban in to Smart Cities reported by Mr. Samdani, Times of India Daily News Paper, Edition-Vijayawada–03-03-2021

• Dr Abdul Razak Mohamed (2021) Invited article published entitled “State Needs Comprehensive Development Plans for Coasts” reported by Mr. Siva, Times of India Daily News paper, Edition-Vijayawada–28-2-2021


• Dr Abdul Razak Mohamed (2021) Special Lecture (online) on “Urban and Regional Planning Challenges and participation of local Community” as a part of the Subject Socio-Economic Basis for Planning, for the Masters in Urban and Regional Planning 2nd semester, Xavier’s University, Bhubaneswar, 10 January.

• Dr Abdul Razak Mohamed (2021) Co Chair - Session on Ecology and Society, RLCF21, International Conference (ONLINE) RLCF21 organized by Dept. of planning School of Planning and Architecture Vijayawada during 10 Jan 2021

• Dr Abdul Razak Mohamed (2021), Organizing Secretary RLCF 21, 10 to 13 Feb 2021, Speech delivered during the Inaugural Address and Vote of Thanks speech (Online), International Conference (ONLINE) RLCF21 organized by dept of planning School of Planning and Architecture Vijayawada during 10 Jan 2021

• Mohamed Abdul Razak (2021) Invited Expert Talk attended the Brainstorming meeting “Way Forward Towards Development of Andhra Pradesh”, meeting organized by the Directorate of Town and Country Planning at Andhra Pradesh Secretariat with Ministry of Urban Development Secretory, held on Dt.11.01.2021

• Dr. Abdul Razak Mohamed (2021) Special Lecture (online) on “Social Factors Influence Spatial Planning” as a part of the Subject Socio-Economic Basis for Planning, for the Masters in Urban and Regional Planning 2nd semester, Xavier’s University, Bhubaneswar, March 2

• Dr Abdul Razak Mohamed (2021) Invited talk during the webinar (online) on the “Sustainability Initiative-Integration and Localization of SDGs in Special reference to Goal 11 Sustainable Cities and Communities – Case study on the Participatory model of Redevelopment of T. Nagar Chennai. Organized by Arity Institute of Liberal Arts, AMITY University, Lucknow Campus. 21 February (Sunday 2.15 to 4.00pm)

• Dr. Abdul Razak Mohamed (2021) 14-02-2021 Webinar attended on “PM program on National Research Foundation allocation during the Budget 2021” Govt. of India on 14th February

• Dr. Abdul Razak Mohamed (2021) Delivered Key Note address “INTEGRATED COASTAL REGION DEVELOPMENT IN ANDHRA PRADESH: PROBLEMS AND PROSPECTS during the Institute of Town Planners India 69 National Town and Country Planning (online). During the Technical Session -IV on “Integrated Coastal Regional Development Plan” scheduled 26-28 Feb 2021 at Vaizahapatnam, AP.

• Dr Abdul Razak Mohamed (2021), Invited Special Lecture (online) delivered on the topic “Research in Spatial Planning is a ‘Way of Thinking’ for the Faculty and Students and Planning” organized by the Dept of Urban Planning, School of Planning and Architecture, Delhi 17 February.

• Dr Abdul Razak Mohamed (2021) Attended Online “South Zone VCs Conference” organized by Association of Indian Universities, hosted by GITAM University, on the subject “Governance and Finance aspects of Higher education Institutions”, 24-25 February.

• Dr Abdul Razak Mohamed (2021) attended webinar on “World Development Report Date for better Lives” - Live Virtual event March 24 , organized by World Bank Group 1818 H Street Washington DC 20433

• Dr Abdul Razak Mohamed (2021) Attended Webinar on “Planning Pandemic Resilient Cities for India: The Road Ahead” on 8th January 2020 1400 hrs to 1615 hrs [IST] organized by Centre for Urban Governance (CUG), Atal Bihari Vajpayee Institute of Good Governance and Policy Analysis (AGGPA), Bhopal.

• Dr Abdul Razak Mohamed (2021) Resource person talk (online) on “Placed
Faculty Achievements & Publications

Based Community Management”, part of Faculty Development Program on “Revitalizing Urbanism and Resilient Architecture” between 22 to 25 March 2021, organized by the Dean School of Planning and Architecture, Hindustan Institute of Technology & Science, Chennai in association with Council of Architecture, New Delhi 22-3-21 Monday 3.15 to 4.15pm

• Tewari Kshitij and Mohamed Abdul Razak [2021] Co Author of the paper “People’s Perception about Weather Changes In Lucknow and How their Knowledge of Global Concerns such as Climate Change affect the Choices of a Sustainable Lifestyle”, Paper presented during the International Conference on Infrastructure Development (ICID) – Theory Practice and Policy Organised by ADANI Institute of Infrastructure Ahmedabad India during April 29-30, 2021. Received Consolation Prize for the best paper in the session “Social Infrastructure and Sustainability”.


• Dr Abdul Razak Mohamed [2021] Invited Speech (online) on “RESHAPING HOUSE AND NEIGHBOURHOODS FOR SUSTAINABLE LIVING – POST PENDAMIC CHALLENGES FOR CITY PLANNING” Online Teacher’s Training Program organized by Council of Architecture, Training and Research Centre, Bhopal – in association with BMS School of Architecture, Yeelahanka (Bangalore) on the theme Pandemic and Future Cities. Presentation on 28-07-2021, Day 3 Session on Pandemic and Post Pandemic Challenges

• Dr. Abdul Razak Mohamed [2021] as Editorial Manager Journal of “Architecture and Culture, Online submission and Peer Review Tracking System, https://www.editormanager.com/archcult/log in.asp?ta=1; Architecture and Culture, em archcult.0.734@nb199883 - Editorial Manager Registration, em@editormanager.com - May 15, 2021 12:37 AM

• Dr Abdul Razak Mohamed [2021] Special Lecture on (online) “Participatory Planning in India Cases form Urban and Regional Planning” for the students of M-Plan Urban Planning at the School of Planning and Architecture, Delhi on 28 April 2021.

• Dr Abdul Razak Mohamed [2021] Organized World Environment Day 2021. (online) conference and also the Moderator of the webinar, on the theme “Urban Spaces Future Prospects” on 05-06-2021.

• Dr Abdul Razak Mohamed [2021] Organized Special Lecture (online) on Urban Governance for the M-Plan Students by the invited Expert Dr Prof. Tatagata Professor Xaviour University-Barneswar on 05-06-2021.

• Dr Abdul Razak Mohamed [2021] Organized Special Lecture (online) on Academic Writings Challenges of the B-Plan and M-Plan students by the Expert Dr Prof Prema Rajagopalan Dept of Humanities and Social Sciences, Indian Institute of Madras, Chennai on 05-06-2021.

• Dr Abdul Razak Mohamed [2021] Instrumental for signing the Memorandum of Understanding (MoU) between Greater Paris Investment Agency (GPIA) and School of Planning and Architecture Vijayawada (28-7-2021).

• Dr Abdul Razak Mohamed [2021] Jury Examiner (online), M-Plan Dissertation IIIrd Semester Masters in Urban and Regional Planning Students, Hindustan University Chennai, 9 January.

• Dr Abdul Razak Mohamed [2021], Ph.D Thesis External Examiner, from Assistant registrar Academic of the Ph.D Scholar, Ms. Solanki Ghosh, the thesis work entitled “Effect of Urban Form & Image on Wal kability – A Case of Kolkata, India” - the Centre for Urban Science & Engineering, Indian Institute of Technology Bombay, Jan 2021.

• Dr Abdul Razak Mohamed [2021] JLL India appointed me as “Social Expert” for Consulting Services to Assess the Feasibility and Assist in the Preparation of Energy Efficient Affordable Housing Projects in Tamil Nadu. Letter received from Mr. Simon Selvaraj MRICS, Senior Director – Strategic Consulting, Head -Government and Infrastructure Solutions, India JLL Chennai Office, June 23 Social Expert Consultancy Service.


• Dr Abdul Razak Mohamed [2021] External Examiner for the End Semester Viva Voice of M. Planning Thesis Phase - II for M. Plan Program (Final Year) on 6th June, 2021 (Sunday) via online. School of Planning, Architecture and Design Excellence, Hindustan Institute of Technology and Science, Chennai

• Dr. Ayon Kumar Tarafdar Organized and moderated the “Panel Discussion on Dynamics and Evolution of City Planning in India” held on 01 March, 2021 where panelists were Prof. Dr. S. Vidyarthi (University of Illinois, Chicago); Prof. Dr. Ashok Kumar (SPA Delhi) and Prof. Dr. Poonam Prakash, (SPA Delhi) at SPA Vijayawada campus, which was attended by 98 participants.

• Dr. Adinarayanan R. Participated in AICTE Training and Learning Program (ATAL) Academy One Week Online, Faculty Development Programme on “Energy and Water Efficiency in Built Environment”, during June 28-July 02 2021, organized by School of Architecture and Planning, Vijayawada, Andhra Pradesh.

• Adinarayanan Ramamurthy, Anusha Roy and Faiz Ahmed Chundell, “Green and Blue Infrastructure [GBI] for Climate Responsive Planning-A Case of Navi Mumbai City, India”. Technical paper presented/published: The 11th International Conference of the International Society for the INTEGRATED DISASTER RISK MANAGEMENT, during 22-24 September 2021 (Virtual mode), organized by Disaster Prevention Research Institute and Kyoto University, Kyoto, JAPAN.


• Lata K., Saha S.K., Adinarayanan Ramamurthy, Chundell F.A. [2021], “Smart Global Megacity: Chennai Sustainable Development Framework”. In: Vinod Kumar T.
Faculty Achievements & Publications


Anusha Roy, Adinarayanane Ramamurthy and Faiz Ahmed Chundeli, “Green and Blue Infrastructure (GBI) for Climate Responsive Planning: A Case of Navi Mumbai City, India”, technical paper under review for Land-use Policy, ISSN: 0266-8377, The International Journal Covering all aspects of Land Use, ELSEVIER Publication.

Tanja Berger, Faiz Ahmed Chundeli, Rama Umesh Pandey, Minakshi Jain, Ayon Kumar Tarafdar, Adinarayanane Ramamurthy, “Low-income residents’ strategies to cope with urban heat - Findings from India and Austria”, technical paper under review for Land-use Policy, ISSN: 0266-8377, The International Journal Covering all aspects of Land Use, Elsevier Publication.

Tanushree Biswas and Adinarayanane Ramamurthy, “Three-Dimensional Rule-Based City Modeling to Regulate the Spatial Dynamics: A Case of Bhubaneswar City, India”- Technical paper presented/published in the RLCP 2020: International Conference during February 10-13, 2021, organized by the Department of Planning, School of Planning and Architecture Vijayawada, Andhra Pradesh, India.


Prajna Prasad Vardhan, was an Organising Committee Member of International Conference on Resilient & Liveable City Planning, RLCP 2020 – SPAV, January 2020.

Prasad Vardhan, attended a certificate Faculty Development Program on Data Analytics from 05-07-2021 to 09-07-2021 at CEE, AICTE ATAL Academy (Online).


Vasavi Yarlagadda, and Prasanth Vardhan, “Low-income residents’ strategies to cope with urban heat - Findings from India and Austria”, technical paper under review for Land-use Policy, ISSN: 0266-8377, The International Journal Covering all aspects of Land Use, Elsevier Publication.
THE MIRAGE
- Animesh Das (MTIP, 1st year)

You came like the relieving rains,
After the harsh sunny days,
Filled the drought-ridden lands with your magical downpour,
Penetrating deep into the earth core.

Breathtaking was your fragrance,
Pushing the heartbeats to the vegetation
Engulfed in you, the time rolled by,
Words can't explain it, ohh my myy!

Being you around,
the lands became lush green again,
Thanking God for sending you,
the way you came...III

They say, good things are followed by sorrow;
Little did the lands knew u
would vanish like the Pharaohs.

Witnessing you was their greatest achievement.
It was the result for their hearty commitment,
Soon you left, leaving back the dangerous Sun to barrage,
Realising that you were nothing more than the confusing mirage...III

Whatever it was, you gave the lands a reason to fight;
To get what they deserve, what they can call right.
Enthusiastic eyes keep searching for you to come back yet again,
And this time stay till eternity, till you choose to abstain...III

MOU BETWEEN GPAI AND SPAV

Memorandum of understanding

Dr Abdul Razak Mohamed, Prof and Head Dept of Planning SPAV.

I am happy to state that with the support for Prof Dr Minashi Jain, the Director School of Planning and Architecture Vijayawada, I am able execute towards signing the Memorandum of Understanding (MoU) between Greater Paris Investment Agency (GPAI) and School of Planning and Architecture Vijayawada (SPAV) during 28-7-2021.

It is appropriate to state that this could happen because of one of the B.Plan student of SPAV Mr. Ravi Kiran Jammalamadaka (working as Intern with GPAI) whose constant interaction with me and build dialogue (online) with the Managing Director Mr. Christophe Scheichhauser.

Established 25 years ago by the Paris Chamber of Commerce and Industry; Greater Paris Investment Agency (GPAI) brings together major groups, professional federations and public bodies involved in the Grand Paris project. GPAI actions aim at promoting the skills and know-how of companies operating in the Greater Paris area.

Mobility operators, energy suppliers, construction firms, real estate companies, banks, consulting firms, digital service suppliers, etc., Grand Paris Makers® mobilize their talents to develop France Capital region as one of the most competitive, sustainable and attractive Global Cities in the world. Greater Paris Investment Agency is dedicated to boosting Greater Paris' attractiveness worldwide.

Together, the Parties enter into this Memorandum of Understanding:

• To work together and exchange knowledge between the SPAV and GPAI in terms of metropolitan affairs in both France and India.

• To work with the professors in publishing an article about the "Attractiveness of public transport and public spaces in Indian cities and how pandemic affected it" for 'Les Cahiers de l'attractivité' magazine published by GPAI.

• To invite professors to participate in international conferences host jointly by GPAI and SPAV in the future for exchange of knowledge related to the topics of expertise.

• Considering the mutual interest in sharing best practices, experiences and experimentation on urban development after the COVID19 pandemic towards sustainable development.
FORESEE THE NEW NORMAL
- Haripriya Kasaran (B.Plan, 2nd year)

The new pandemic due to COVID-19 measured out to be the biggest public health crisis and has heretofore posed complications upon the planning community. Urban planning has risen to eradicate or cope with global predicaments which corresponds to essentially the development of sustainably adaptive cities to the people living within.

The pandemic has given us time to reflect upon how we are going to face existential crisis as the aftermath of uncontrolled urbanism or emerge with different set of priorities into responding to this situation, how do we further work with informal settlements in the cities into providing the services they need; are we going for short term solution or leave long term impacts; finally do we find other ways to work and engage with minimal mobility?

However conventional characteristics of people and the way cities work has changed indefinitely, with this public realm on streets, roads, squares and plazas is the common ground connecting both cities and its citizens. With practices of social distancing, public spaces are to be reinforced with new sets of policies promoting such practices; thus creation of such meaningful public spaces must be the centre of planning.

In conclusion, new sets of development plans are a necessitate which would lift the challenges provoked to services delivery and mobility. Thereby, rebuilding community-based viable cities that resilient to future threats and are both sustainable and liveable cities.

URBAN OPEN SPACES IN POST PANDEMIC ERA
- Kayani Vinod (B.Plan, 3rd year)

A healthy city continually improves physical and social environments and expands community resources so that, it can enable people to mutually support each other in performing all the functions of life. Open spaces are never prioritised in this concrete urban sprawl, and they are frequently overlooked in favour of other goals. Walking, being one of the most preferred exercise, has allowed people to break free from their daily rush by exposing them to fresh air and sunlight.

The Covid-19 pandemic has taken a heavy toll on everybody's daily routines and lifestyles. People, gradually, have go back to pre-pandemic lifestyle. In such a crisis, how relevant will the urban open spaces be, in this process? Depression and anxiety, along with the demand to cope with a virtual living are the prominent backlashes of lockdown. Spending time in nature can help people cope with the negative physical and psychological health effects. The provision of such areas on a local level can help promote the concept of a ‘healthy city’ and encourage people to recognise that coexistence and socialisation, when done responsibly, can help alleviate tension and stress. They can also create healthy recreational spaces that can cater to the leisure requirements of the city. Pedestrianisation of streets, making them more suitable for NMT modes of transport and introducing design guidelines for resilient open spaces can be some of the measures to be adopted in this journey. The pandemic has highlighted the crucial role, these spaces play in our health and habitat.

RETHINKING THE URBAN STRATEGIES
- Vanya Madhur (MURP 1st year)

Globally, the Pandemic has hit the life of people, targeting how cities functioned & making the economy suffer drastically. With social distancing becoming the new normal, arises the bitter reality about public spaces, public transport all being discarded by the citizens. Looking at the situation keenly, we can say its all upside down but at the same time an opportunity to start afresh.

It’s the prime responsibility of urban planners to make cities a safe and healthy place to live. Since pandemic is not going anywhere soon and humans can’t stop rolling their normal life its now come down to living safely with it. Congestion due to migration has always been a major issue. The load on infrastructure keeps on waxing & waning leading to degradation of standard of life in cities. This global issue of covid 19 along with existing issue of migration is giving us the warning to plan decentralization of infrastructure, housing and other facilities. Compact development along with resilient planning could be a way out as it would reduce people’s movement. Self-Sufficient rural areas should be developed. Informal sector should be encouraged and the schemes such as Pradhan Mantri Street Vendors Atmabilbar Nidhi (PM SVANidhi) should be made popular among the less aware people so that they can take benefit of this.

Just like pandemic follows no status similarly our solutions should be for each strata of our society. The earth is self-cleaning itself & we as humans should work in line with it.

STUDENT ILLUSTRATIONS

Concomitance
Existing and growing together

When art and space go hand in hand

Elegant Walker
Life is more interesting when you get a taste of both outdoors and indoors

Illustrations By:
Vishakha Gondhali (MURP, 1st year)
<table>
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<tr>
<th>Auroville - No - Discrimination Matter</th>
<th>LGBT Community &amp; Spatial Planning</th>
<th>Planning May Have the Answer to the How and Why of the Future That Is to Come</th>
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<tr>
<td>- Mayank Biswas (B.Plan, 2nd year)</td>
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The experimental township and ‘The City of Dawn’ Auroville of Villuppuram district, Tamil Nadu, designed by Ar. Roger Vaxation, promotes progressive harmony by moving toward universality. Sri Aurobindo and the Mother have diagnosed the contemporary plight of humanity as an evolutionary crisis of humanity in the early 1930s and the realization of macrocosmic fraternity could lead to the manifestation of human unity. So, the Mother initiated Auroville in 1968 as a community, where humanity is embraced. As an incipient experiment, Auroville laid the foundations in planning to break down barriers of discrimination, allowing people to live together regardless of gender, nationality, caste, race, ethnicity, religion, background, age, creed, wealth, etc. It can inspire India as well as the world to recognize the importance of more cities like it to stem the rising discrimination in the future.

The curriculum, work-life, infrastructural and architectural support, land development, community participation of Auroville is so good that there is no source or manifestation of division among humanity, and hence 3000 people from 58 countries live there. Integrated urban and rural development strategies have been incorporated into the Auroville master plan. So in the face of discrimination, the world must design such cities with futuristic planning, innovative conceptions, and effective law enforcement; these will enable people to participate more actively with their full potential and these participations will truncate the discrimination to the maximum extent possible by making liveable cities for all.

Through the past decades, LGBTQIA+ (lesbian, gay, bisexual, transgender, queer, querying, intersex, asexual, and others) communities have been facing a crucial time and many people hold negative opinions about these communities that prevent them from achieving their full potential in education, health, work sectors. UNDP survey shows that though 68.7% of non-LGBT people show a positive posture towards the LGBT communities, it comes to the equal right it is just 59.9% and positive posture for having an LGBT person in the family is just 42.3%. Due to these disparities in posture, there is a tremendous supply-demand gap to them due to scarcity of resources.

In order to synchronize the system so that the LGBT community can utilize its full potential, planners should strive for inclusive planning that will bring equity and inclusion to all besides enhancing social and economic development. Inclusive planning can get wide acceptability and ensure a greater level of access to all goods and services, resources, and infrastructure without any bias. Some conservative groups may not abide by it but without the prejudice act, the communities will be more productive. Expanding the implementation of inclusive planning and leadership will enable greater success. Besides this, more attention towards the mechanism of self-regulation by urban local bodies is required for preserving the LGBT neighbourhood’s vitality and addressing the pressure of mainstreaming to preserve the LGBT life and providing long-term sustainability.

Rapid urbanization over decades has led to the adoption of progressive urban agendas for living together regardless of caste, race, gender, age, income, religion, etc. To accomplish this, planners must plan the cities so inclusively that the planning will benefit broad constituencies in the future. Inclusive planning can encourage a poetic understanding of concomitance genuine but to get prosperity in this planning, people’s participation is crucial for future progress.

Numerous cities have already adopted the concept of having inclusive cities while the majority of cities are still dealing with discrimination worldwide that need to be resolved by congruous planning cause in the future there will be more branches of people from different backgrounds.

To plan an inclusive city for all, planners need to give priority to the choice, way, and standard of living, needs, and requisites for individuals on an equal basis and providing appropriate infrastructural support to the society so that it will be sustainable and resilient in long run.

Spatial, social, and economical inclusion must be there so that the essential infrastructure will be affordable to all and economic development will be there.

So, the desiderata of all individuals must be taken care of for this planning and planner surely will be able to make a better future where all will live together.

**STUDENT ILLUSTRATIONS**

"In the end, society will be defined not only by what we create, but what we refuse to destroy."
- John Sawhill

"When art and space go hand in hand"

"Our public spaces are as profound as we allow them to be"
- Candy Chang

"As an artificial world, the city should be so in the best sense: made by art, shaped for human purposes."
- Kevin Lynch

Illustrations By Vishakha Gondhal (MURP, 1st year)
The paper titled “Urban Ecological Footprints: Why Cities Cannot Be Sustainable – And Why They Are A Key To Sustainability” by Rees and Wackernagel starts with a brief introduction of how the human ecology was transforming meaning to say that how the Industrial revolution of the later 18th and the early 19th centuries impacted the overall spread of the human settlement.

"The industrial revolution was a transition phase for the manufacturing as well as production processes. It led millions of people to migrate from the suburbs and outskirts to the cities."

The reasons of migration were many, a few people migrated in the search for work whereas other migrated to attain a better quality of life as compared to that in the villages. It might even be said that The Industrial Revolution was then by far the greatest reason for the biggest migration humanity had ever seen.

The major impact of the Industrial Revolution was observed in Europe and the United States. It then led to migrations in Australia, Europe and North America and in some states may even be observed in Asia.

"Three quarters of the populace of the industrialized countries by then had started to live in the cities or towns and it was predicted that about half of humanity would become city-dwellers by the end of the century."

Urbanization is not just an economic or demographic phenomenon but is also in fact a symbol of human ecological transformation. The key to sustainability according to the authors is the understanding of this dramatic shift in human spatial and material relationships.

They go on to say that cities as per analysis were directly linked to global ecological decline and thus by themselves were unsustainable.

The 20th century thus marked the biggest turning point in human history. After the birth of agriculture and the beginning of the possibility of fixed human settlements, the 20th century made it evident that human economic activities were capable of affecting the global biophysical systems and processes.

It not only would prove to be fatal for the geopolitical security but also the global ecological stability. When millions of people migrated towards cities and towns, the population growth of the towns and cities increased exponentially leading to reduction in the availability of per capita consumable resources. Pollution, genetic modification and deforestation were all consequences of increasing economic activities of humans. Vitousek may be cited for exemplifying this; more artificial nitrates is now applied to the world’s croplands than is fixed from the atmosphere by microbial activity and other natural processes combined.

The decreasing fish stocks evident from the fact that fish catches were in decline both the proportions would be steadily increasing. Rees and Wackernagel cite Daily to state that it was high time that the world must start to switchover the assumption of ‘empty world’ to ‘full-world’ economies so as to ensure that we do not miss out on the bigger picture.

Thomas Malthus in the first edition of “An Essay on the Principle as it Affects the Future Improvement of Society with Remarks on the Speculations of Mr. Godwin, M. Condorcet, and Other Writers” proposed a theory which was later known as the Malthusian Theory.

The theory talks about how human population grows in a geometric progression but the growth of production of food was and would always be in an arithmetic progression and hence infinite human hopes for social happiness must be vain.

In short he stated that no matter what the situation, human population growth would always outrun the growth of production. He was something of an early eco- communist person that had viewed poverty as humanity’s inescapable lot but this argument of his leads to the basis of the theory of the Maximum Carrying Capacity of Earth.

The idea of a threshold or a fixed carrying capacity states that there is just a maximum population of any species that this Earth can sustain indefinitely without permanently impairing the productivity of the habitat.

In case of humans, this idea seems to be somewhat flattering in the sense that humans unlike other species are capable of continuously increasing the carrying capacity of Earth by eliminating competing species, through technology or by importing locally scarce resources.

Most economists and planners of then argued against this idea of a fixed carrying capacity of Earth but few argue otherwise too. They state that economy is by far an inextricably embedded sub-system of the ecosystem. No matter how much our technology develops and improves, we humans are ultimately biophysical entities and somehow the technological developments will be nullified by the ill impacts that they bring along with them.

For the world to come to the realization that until and unless each one of us starts to consume sustainably, this world will never be enough.

Minimalism may replace the existing consumerism and materialism in the coming ages as the most preferred lifestyle and if it happens, we might just be able to achieve the dream of a sustainable future.

Urban areas may lead this battle from the front because of a better understanding of sustainability and allied subjects and a much wider experience of the impacts of urbanization on the Quality of Life of the populace inhabiting the modern urban spaces.

The two waves of Covid-19 virus has been adversely affected economically and psychologically. Unemployment rate reaches to 23.5% in April 2020 where it attains 9.7% in FY21 due to ease of lockdown and GDP for FY21-22 expected to be negative growth of 11.8%. Fall of economic growth due to pandemic results in loss of 2 million jobs approximately.

Covid-19 pandemic demonstrate the voids in the health and administrative infrastructure. In addition to rise of unemployment, negative growth rate of GDP, increase in inflation rate due to economic losses resultant of Covid-19 there is another major factor that going to effect the economic growth of India near future is rise in the population growth. Indirectly Covid-19 pandemic effecting the economic growth by influencing the social development.

Pandemic causes to closure of educational institutions, 15.8 crore girls dropped school education and 320 million students affected with lockdown will be resultant in negative impact on the job market and economic growth of the country.

Economic planning should be aligned with the future rise in the population growth in order to achieve sustainable and inclusive growth. With annual growth rate of 1.8% India population grows to 1.36 billion from 1994 while china population grows to 1.42 billion from 1994 with annual growth rate of 0.6%. In order to revive and rise the economic condition and human resources of India, the population explosion should be utilised to benefits economy.

Even though population explosion induces negative impact on economy and natural resources, India can enjoy exploitation in terms of population dividend and stabilisation. UNDP reports that other than population explosion India experiences its population stabilisation in 12 years earlier than expected. In next two decades India will have 62% of population at age group of 15 to 59 and becomes one of the youngest countries in world. 62% of working population will be human resources to country’s economic growth if they are utilised to fullest. In order to make a good advantage of population dividend, they should be rise in literacy rate, increase in health infrastructure and skill education. India spends only US $120 to US $790 per student in 2020 while Norway and USA spends US $ 15,000 and US $12,800 per student in 2015 i.e. we are spending only 6% of their expenditure per student. In India total expenditure on health it increased from 4.5% in 2014 to only 5.4 % in 2020.

One of the ways to revive the economic condition and human resources of India is to increase the health care infrastructure, education and skill development. Safeguarding the population dividend by improving the health and education facilities, Adultemen and youth will be the investments for future economic growth of India. In order to making this population dividend as a night mare it should be turned into opportunity for economic development of country.
PUNARUJTHAN (Resurgence) - NOSPlan Annual Convention 2020 - 2021

NOSPlan Organisation of Students of Planning is a national level organization with students from different institutions participating across the country. An Annual Convention is held every year for the students to participate, compete in various competitions and interact to share their ideas and experiences with one another. The 22nd Annual NOSPlan Convention 2020-21 was hosted by School of Planning and Architecture, Vijayawada virtually through online platforms. Amidst the chaos and the pandemic, the convention was held successfully.

The 3-day convention consisted of webinars, workshops and 21 competitions under various trophy heads: Planning Trophy, National Publication Trophy, Entertainment Trophy and Gaming Trophy. Various prominent and esteemed planning organizations have collaborated with NOSPlan this year, such as: Institute of Town Planners India, National Institute of Urban Affairs, CURE, Planning Tank, Nonurbanism Foundation, Urban Box, and many more. Out of 21, 7 competitions were in cooperation with these esteemed organizations. Nirwana, the current General Secretary of NOSPlan in the Executive Council along with his executive council consisting of students from other institutions was behind the success of the event and physically present in SPA Delhi to receive the award on behalf of Kartikeya Verma (Unit Coordinator), Rithvik Data (Associate Editor) and Nitya Mova (Unit Treasurer). The award was felicitated by Prof. Dr. D.S. Meshram placing SPAV on the top with news published and circulated on various platforms.

Planning Trophy (6 events) – SPAV Winners
1. Design It Accessible [in collaboration with NIUA]
   Position – 1st Runners Up
2. CURE for Basti (in collaboration with Centre for Urban Regional Excellence)
   Position – 2nd Runners Up
3. Strength Mapping (in collaboration with Nonurbanism)
   Position – 3rd Runners Up
4. Map It Out (in collaboration with Urban Box)
   Position – Winners and 1st Runner Up
5. Live Debate
   Participation – 1 team
6. Cyburbia Trifecta (Quiz)
   Position – Winners

Gaming Trophy (4 events)
1. Minecraft - Winners
2. Rocket League – 2nd Runners Up
3. Chess
4. Cities Skylines

National Publication Trophy (4 events) – SPAV Winners
1. Showcase Presentation
   Position – Winners
2. Planicature
   Position – 2nd Runners Up
3. Montage
   Position – 2nd Runners Up
4. Article Writing
   1. Entry to finals

Entertainment Trophy (4 events)
1. Renew the Rasas (Dance) - 2 entries from our college got selected for top 6
2. Karke Dikhla (Oriental) - 2 entries from our college got selected for top 6
3. Can we All Wear it (Fashion)
   Position – 2nd Runners Up
4. Taal Anusaar (Singing)

The team of SPAV Vijayawada emerged champions at NOS plan convention.

 opted for a momentary break to take a break from the digital world of planning and architecture, which has been the norm recently.

Artwork

We are celluloids in the realms of time, playing the movie of life

The power of Duality

Optimism lies even in the slightest reflection, it is always our chance to be better, to do better.
Student Activities

Avant Garde Club
Fashion Club
School of Planning & Architecture, Vijayawada
Articulate X Reverse Ekphrasis

Club 29
Dance Club
School of Planning & Architecture, Vijayawada
Dancing through the Decades

Monologue
Drama society
School of Planning & Architecture, Vijayawada
Act your part, there all the honour lies

Tasveer
Photography Club
School of Planning & Architecture, Vijayawada
SAFDIRJUNG’S TOMB

Ritmo
House of Music
School of Planning and Architecture, Vijayawada
Musicology

Club iO
Official Tech Club
School of Planning & Architecture, Vijayawada

Club Aaira
 Literary and Editorial Club
School of Planning & Architecture, Vijayawada
RLCP - 2020
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, 55 per cent of the world’s population live in urban areas.

The urban population has been showing rapid growth since 1950, i.e., 746 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 intensifies high pressure on natural resources and the environment. Urbanization is one of the main causes for the devastation 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 RLC-P 2020 conference, the issues pertaining to resilience and livability shall be deliberated to promote overall sustainable planning and development of cities.

Objective
RLCP’s 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 organizations, 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 wake the conference calls for papers. All selected papers will be published as RLC-P 2020 conference proceedings with ISBN number. Screened high quality paper will be published in Web of Science (Emerging Sources Citation Index) and SCOPUS indexed Journal: (i) International Journal of Housing Markets and Analysis, and (ii) Property Management, by EMERALD Publishing Limited, United Kingdom.

01 Planning Studies
Planning theories and techniques; Remote sensing and GIS applications; Regional studies; Multi-disciplinary approaches to planning; Development and Planning; Heritage and Conservation.

02 City Planning and Design
Changing Demographics; Conceptual Models and Framework for Cities; Urban Performance; City Planning; Housing and Economic Development; Urban Sprawl; City Mobility; Land Use and Transportation; Urban Transformations; Addressing Complexity in Cities; Safe City design; Urban Design.

03 Ecology and Society
Human impact on environment, Transformation of environment; Water Management in the built environment; Green Infrastructure; Urban Ecology; Urban Heat Island (UHI); Urban biodiversity and Ecosystems; Resilience in Ecology.

04 Urban Energy and Resilience
Urban resilience planning; Resilient infrastructure; Renewable Energy; Energy Rating; Energy Conservation; Energy Footprint; Valuation Methods & Techniques; Lifecycle Analysis; Carbon Trading; Energy Auditing; Energy Efficient & Resilient Development; Adaptive Governance for Resilience; Challenge of Urban Resilience; Resilience into Practice; Microclimate.

05 Sustainable Urban Systems
Sustainable Urban Dynamics; Economics Sustainability; Socio-cultural sustainability; Environmental Sustainability; Sustainable waste management; Energy efficient sustainable development; Defining; measuring and aligning; liveable; resilient and healthy cities; Spatial Planning Response to Urban Risks.

06 Liveable City
Frameworks of liveability; Community & Landscape & Planning; Accessibility to Services; Environment & Health; Sustainable Landscape Planning; Economic & Housing Variance; Universal design & Age Friendly Planning.

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300+

Organized by
Department of Planning
School of Planning and Architecture, Vijayawada
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Authors and Paper Details

THEME 01: LIVABLE CITY

1. Sarika Bahadure, Shreyas Sable, Aishwarya Umbare, Manas Vijayan - Public Spaces and their Place-Making in Gungalik City.
4. Ritu Singhkar and Anumata Deshpande Kasture - Analyzing Effectiveness of MNS in Relation to Livability in The Urban Area.

THEME 02: ECOLOGY AND SOCIETY

2. Shilpa Puslakhi and Sarika Bahadure - Assessment Framework for Planning of Urban Green Spaces.
7. Thirumalakaruppan Raj - The Role of the River in the City: Mapping Accessibility to Urban Green Spaces from Public Transport Using GIS. A Case of Nagpur City, India.
10. Divner Bejra and Rishikesh Raut - Addressing the Status Quo of Large Water Bodies in India: A Review of Legal and Governance Frameworks through the Select Cases of Two Lakes, Guwahati, Assam.
15. IP Singh, Bhuvn Chitrak and Minakshi Jain - Developing Cognitive Learning Environments for Children to Address Environmental Issues, Through Nature Travel

Authors and Paper Details

THEME 03: URBAN ENERGY AND RESILIENCE

5. Simeir Gerevens and Govender S. - Mobility in The City of Toomorrow.
15. S K & S. S. - An Iterative Model for Appraisal of Tools and Techniques to Analyze & Map Impacts of Relative Sea-Level Rise

Authors and Paper Details

THEME 04: SUSTAINABLE URBAN SYSTEMS

1. Sudeshna Kumar, Himentri Benegri and Biplab Kanti Sen Gupta - Imagining Transit Policies with Land Use for Sustainable Development along the Eastern Metropolitan City - Shrine of East Kolkata Wasteland.
5. Tanmoy Biswas and Adimshrayanan Ramamurthy - Three-Dimensional Rule-Based City Modelling to Highlight the Spatial Dynamics of a Case of Bhilwara City, India.

Authors and Paper Details

THEME 05: CITY PLANNING AND DESIGN

1. Nikhata Vattikutti and Madhura Rao T - Urban block and streets as major defining elements of sustainable urban neighborhood development in the Greater Visakhapatnam City.
5. Swasti Sharma, Bhavna Shrivastava and Ashwini Kumar - Demographic Transition of Shriram Town Due to Rapid Urbanization.

THEME 06: PLANNING STUDIES

2. Resh Ji Gupta, Sayta N Mandal, P.S.N Reo and Deepak Bajaj - Application of Fund America Planning in the City of Allahabad.
9. Lakshmi Piyanka Yarlagadda and Albert J. Heffernan - Impact of Socio- Economic Characteristics on Travel Behaviour, A Case of Vijayawada City.
15. Muralidhar Pal Singh Dhel, Dr. Kumar Gupta and Jasleen Kaur - Planning and Developing Sustainable Cities in India.
19. Swasti Sharma, Bhavna Shrivastava and Ashwini Kumar - Demographic Transition of Shriram Town Due to Rapid Urbanization.
RLCP - 2020
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10th - 13th
FEBRUARY
2021
(Virtual Mode)

GALLERY

www.rlc2020.spav.in
Editor’s Note

With the paradigm shift in the medium of education that the pandemic brought along with itself, the woes of students as well as the faculties have increased in the past two years. The silver lining is the understanding of resilience being a necessity in the present-day planning perspective that has emerged to the forefront. The world is changing as we speak and at the core of this change are the planners as well as the educators involved in the courses of planning. School of Planning and Architecture has always focused on inculcating within its students an understanding of equity, justice, and social welfare. This semester, we overcome the restrictions of online education with the combined efforts of the institution and the students. This semester’s newsletter is focused on how we at SPAV have overcome the complexities of online education and developed a framework to obtain data online and conduct researches as well as remote analysis of locations.

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<th>Book Suggestions</th>
<th>Innovations</th>
<th>Student Editors Achievements</th>
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<td>1) The End of Nature by Bill McKibben</td>
<td>ECOVATIONS (ENVIRONMENTAL INNOVATIONS) • Ocean Fertilization: Dumping iron dust into the ocean to remove Carbon • Ecotarianism: Instead of Calories, start to count the carbon emissions • Give Up the Jeans: The jeans you so dearly wear are a concern for the environment. So either give up the jeans or recycle the old jeans/donate. • Transumption: Instead of buying, start to lease • Carrotmobbing: Procott instead of boycotting because businesses would do anything for profits.</td>
<td>Khilji Tewari (MEPM 1st Year Student, SPAV) and Dr. Abdul Razak Mohamed (Professor and Head, Dept. of Planning, SPAV) won the consolation prize for their paper titled, “People’s Perception About Weather Changes In Lucknow And How Their Knowledge Of Global Concerns Such As Climate Change Affect The Choices Of A Sustainable Lifestyle” in the session Social Infrastructure and Sustainability during the 1st International Conference on Infrastructure Development (ICID): Theory, Practice and Policy 29-30 April 2021 organized by Adani Institute of Infrastructure</td>
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<td>2) Ecotopia</td>
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<td>4) Saints at the River: A Novel</td>
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<td>5) Environmentalism: a Global History by Ramchandra Guha</td>
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<td>6) Serena by Ron Rash</td>
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<td>7) The Alchemist by Paulo Coelho</td>
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<td>8) Blessed Unrest by Paul Hawken</td>
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<td>9) Environmental Cancer--A Political Disease? by S. Robert Lichter and Stanley Rothman</td>
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<td>10) Slaughterhouse-Five, or, The Children’s Crusade: A Duty-Dance with D-Day Kurt Vonnegut</td>
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<td>11) The Transport Debate [Policy and Politics in the Twenty-First Century] by Jon Shaw and Iain Docherty</td>
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<td>12) Good City Form by Kevin Lynch (1995)</td>
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<td>15) Silent Spring by Rachel Carson (1962)</td>
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Acknowledgement

We, the editorial team, are glad to have taken part in curating the third issue of the newsletter namely the “Planner’s Heptagon” - Volume 02 - Issue 01 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 conundrum of some of the most joyful and difficult times we’ve had. From hosting many big events; to exploring and exploring everything through virtual mode 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 to you the composure 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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