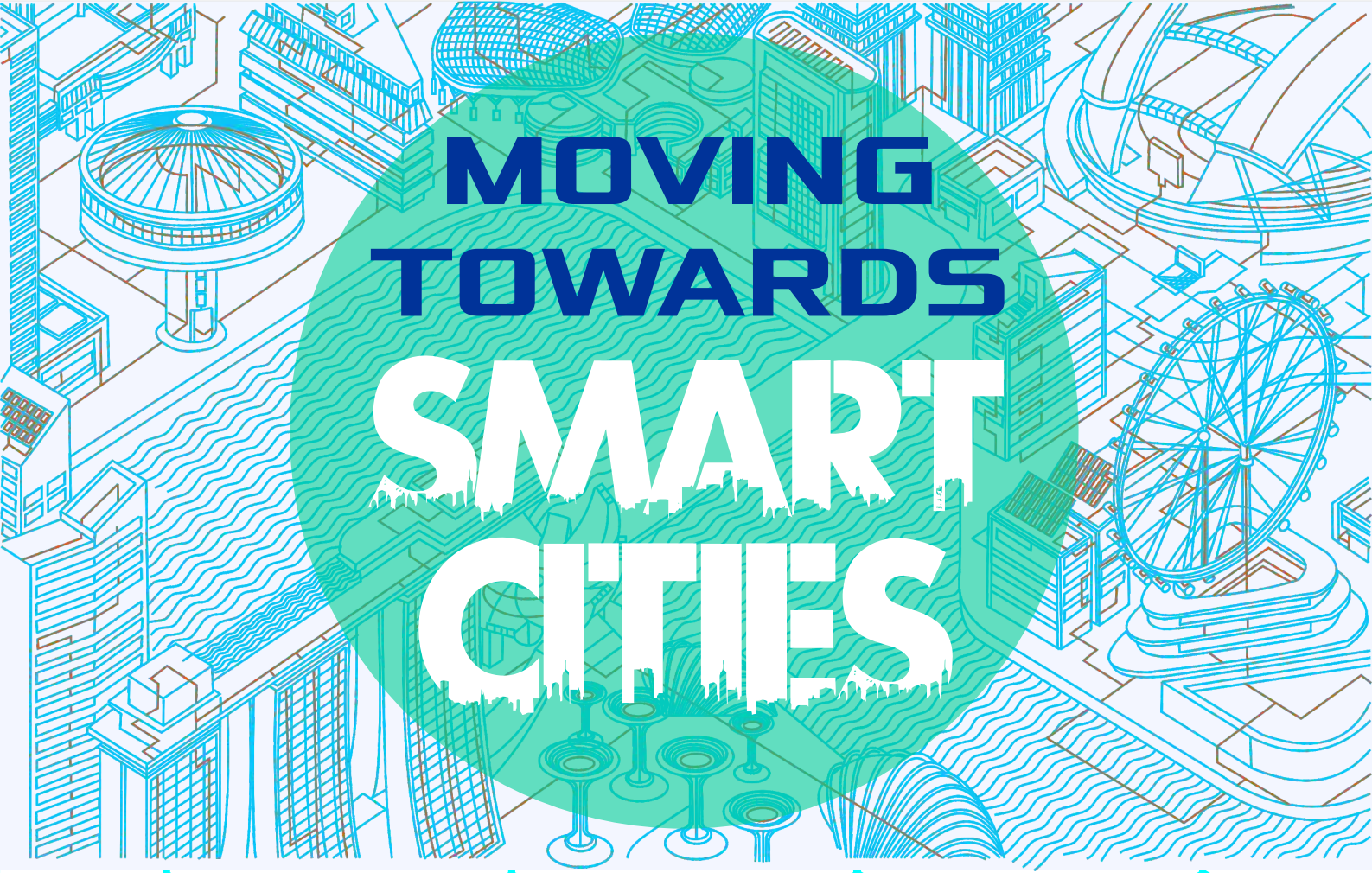


# NOSPlan

Annual Magazine 2015



## MOVING TOWARDS SMART CITIES



abhyudaya

XVII Annual  
NOSPlan  
Convention



College of Engineering, Pune

# SMARTNESS IS BEING SMART

*Peeping out through the metallic window sill,  
I wondered if my City will be the same!  
Will it be the same when it is one among the hundred?  
Will it be the same when it becomes Smart?  
Will it be the same when it is destined not to be the same?  
If not! What will be the change?  
Countless number of questions appalled my tiny head,  
Seeking answers for the hard-to-answer questions!*

*Does it grow beautiful gardens?  
Or does have the tallest skyscrapers?  
Will it have millions of me?  
Or will have very few of them?  
Can nodes teleport me to infinite miles away in seconds?  
Or lets me live a hundred with thousand smiles?  
Will it be a City for All and be Safe?  
Or will just be unimaginably Smart?*

*How Smart do I need to be,  
To drink water and run my little home?  
Will I be Smart enough to handle sophisticated techno  
devices?  
Or will I be trained?  
My head is unable to conclude what happens!  
Nevertheless, the time does soon.  
But, I will take my step.  
I will try to be Smart!*

*It is not just a named Smart City,  
But a home to millions of many my alike.*

**Adithya Bandari  
SPA, Vijayawada**

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Who's Who?

*“By designing cities in a way that values everyone's experience, we can make cities that help us all get stronger, more resilient, more connected, more active and more free. We just have to decide who our cities are for. And we have to believe that they can change.”*

~ Charles Montgomery

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Location: Bandra Worli Sea Link  
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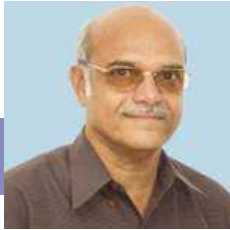


# Communiqué

*“Smart habitation is an integrated area of villages and a city working in harmony and where the rural and urban divide has reduced to a thin line.”*

**~ Dr. A. P. J. Abdul Kalam**





**Prof. Dr. D. S. Meshram**  
**President, Institute of Town Planners, India**

It gives me immense pleasure to note that College of Engineering, Pune is hosting the XVII Annual NOSPlan Convention during 21<sup>st</sup> – 24<sup>th</sup> December, 2015 on the main theme 'Moving toward Smart Cities' which will provide a platform to discuss and deliberate on the various issues towards Planning and Development of Smart Cities. I take no hesitation to mention that 'The Smart City' scheme – the Government of India's initiative would strengthen the city planning process and development in order to ensure improved quality of life for all, by improving the city infrastructure, creating conducive environment of competitiveness, effective inclusive governance, and generation of employment through wider application of digital technologies in cities and towns. However, the planner's community needs to endeavour to make the planning process also smart.

In fact, Institute of Town Planners, India in its 18<sup>th</sup> National Town and Country Planners Seminar held at Trivandrum, during the 17<sup>th</sup> - 23<sup>rd</sup> November, 1989; recommended to establish National Association of Planning Students for providing a forum for exchange of ideas and thoughts, amongst the planning students of institutions recognized by ITPI. Today, it is heartening to note that over 1,000 delegates from leading Schools of Planning, IITs, NITs, and various institutions / colleges would be participating in this event.

I send my best wishes for the success of the XVII Annual NOSPlan Convention.

A handwritten signature in black ink, appearing to read 'D. S. Meshram'.

**Prof. Dr. D. S. Meshram**



## **Dr. B. B. Ahuja** **Officiating Director, COEP**

Smarter as we grow to build “Smart Cities” for our country, a new vision is being chalked that envisages Digital India of the morrow, that aims to promote adoption of smart solutions for efficient use of available assets, resources and infrastructure.

Concept of “Sustainable and Smart Cities” is relatively new and hence different people have different expectations. Each city can be smart in its own way, but what is required is good governance and accountability. It is going beyond just conceiving our towns and cities to include attractive buildings, vibrant public spaces and bustling shopping centres, that transcend deteriorating residential/commercial structures, poor transportation, shrinking water resources, depletion of energy, degradation of environment and infrastructural conditions in various parts of our country.

Youth, I verily believe are the resource and hope of our future; as we encourage our young student planners to undertake pivotal roles in developing towns and cities, such that they are usable and accessible to common man, while improving their living conditions, planning cities those are People-friendly, Disaster-resilient and Crime-free'.

Over 800 delegates from different schools of planning are participating in the XVII edition of NOSPlan, hosted by College of Engineering Pune which is spread over 4-days. This Convention is a platform designed by students to introduce, exchange and innovate the necessary insights and solutions among themselves, related bodies and planning professionals to a smarter and better living. The Convention will focus on “Moving toward Smart Cities” to promote inter-disciplinary exchange of thoughts and ideas on a variety of related topics, ranging from assured water and electricity supply, sanitation and solid waste management, efficient urban mobility and public transport, robust IT connectivity, e-governance and citizen participation to safety and security of citizens.

Through this event I hope to see culmination of thoughts and ideas that introduce to develop technological solutions having social concern for a meaningful living of our citizens.

May this NOSPlan Convention be an enriching and momentous one ushering prospect and potential directions for our teaming and budding planners.

I wish the gathering a grand success in its endeavours.

**Dr. B. B. Ahuja**



**Dr. S. L. Patil**  
**Dean Student Affairs, COEP**

It gives me immense pride that students of B. Tech Planning have taken the lead in organizing the XVII Annual NOSPlan Convention 2015 at College of Engineering, Pune. Looking at the student's enthusiasm, sincere efforts and management skills displayed by the student members of core organizing team, I am confident that the NOSPlan 2015 Convention will be a grand success.

The theme of the convention is identified as "Moving towards Smart Cities" which aptly matches with the vision of India. "Smart cities" signifies the use of technology during the process of planning, development and management.

I hope that the students and participants from various institutes will enjoy learning beyond the formal classroom during this convention through various academic sessions, extracurricular and co-curricular activities.

I hope that all the students enjoy these 4 days at COEP. I am certain that this convention will definitely leave behind memories and knowledge to cherish for your lifetime.

**Dr. S.L. Patil**





**Dr. S.S. Bhosale**  
**Head, Department of Civil Engineering, COEP**

It is a moment of immense privilege that the XVII Annual NOSPlan Convention is being held by the Planning section of Department of Civil Engineering, College of Engineering Pune. The B.Tech Planning course offered in COEP is the only planning course in Savitribai Phule Pune University. The course being new in COEP, it is an appreciable achievement of the students to take up this initiative. The students of B.Tech Planning have taken enormous efforts to make the event a huge success.

NOSPlan Convention is a one of a kind event of the planning students, by the planning students, for the planning students. It is a wonderful platform for the students to showcase their talents and widen their exposure to the planning profession. Smart cities are the hot topic of today, and hence the theme of 'MOVING TOWARDS SMART CITIES' has been chosen and it would be very interesting to see student's ideas about it.

I wish the planning students all the very best for their future endeavours and I commend their efforts to make NOSPlan bigger and better than ever. I hope all the delegates enjoy their time in Pune and wish them all the very best for the competitions. I expect that they will enjoy their visit to Pune and will carry sweet memories of the convention with them.

**Dr. S.S. Bhosale**



**Dr. Pratap Raval**  
**NOSPlan Convention Faculty Advisor**

It is a great pleasure indeed and I am very happy that the XVII Annual NOSPlan Convention is organised in College of Engineering Pune, one of the leading institutes in India since its inception in 1854. This is a golden moment in the history of COEP that the first batch of B.Tech Planning is passing out in this academic year 2015-16 and the Masters course of Town and Country Planning is celebrating 50 years of establishment. It is a matter of pride for COEP to host the XVII Annual NOSPlan Convention.

I am very proud that my students have taken up the challenge of organizing the convention. COEP has a long tradition of producing the finest engineers and planners who are capable of taking all types of professional challenges. In India across all cities, infrastructure systems are coming under increasing pressure due to urbanization, globalization and climate change. The scale of the challenge calls for a new approach to urban planning based on intelligence and smartness. The theme of the convention "Moving towards Smart Cities" will help all students understand smartness in urban planning and deliberation will give more insight into smart cities.

I hope that the three day stay at the COEP campus will be filled with fun and enjoyment, and the students will mesmerize the convention. I wish success for the events.

**Dr. Pratap Raval**



**Shubham Aggarwal**  
**President, NOSPlan**

NOSPlan witnessed major changes and the fastest growth in the last three years. Progress is clearly reflected by the increase in number of member institutes from 6 to 18, introduction of NEWSPlan (official newsletter), new and improved website, annual magazine, regular National Council Meetings, grand conventions one after another, the rising voice of planners over various issues and concerns to draw attention of MoUD, TCPO, Delhi Govt. and various other concerned authorities and departments and a lot more.

NOSPlan is the only student organisation for planning in the country and we take pride in working on behalf of planners who trust us in making planning a better profession and ultimately Earth a better place to live. This is possible only because of the contribution and hard work of our members and planners across the country.

Further, I would like to share some invaluable lessons which I learnt after serving for 3 years in the Executive Council which I believe will help me throughout my life. I hope you will be able to relate to them at some point in life.

Experience with Rules – Rules are meant to increase efficiency and productivity. They can be altered to incorporate exceptions so as to obtain better results. You just need to prepare yourself to be that exception and provide a reason good enough to change the rules. After bringing a change, be ready to answer a number of questions as change is not readily accepted by society.

Team and Team work – Team is all that you have while working in an organisation and team work makes results certain. A good team provides you freedom to work and experiment. A good discussion within a team reduces the chances of a decision going wrong, but if you believe in your team and vice versa never be afraid of taking a bold decision, at the most it will be wrong but you will have your team with you to rectify the mistake.

Leadership and Learning - You need not be at the top to influence a decision. Being at the top is an added advantage but it comes with additional responsibilities. If you wish to change something in a system or the system itself then have patience, be in the system, understand it, reach the top and change it. While trying to do this, you will come across numerous thought provoking incidences and situations which will change your perspective and will teach you various lessons. This will help in gaining a better insight into the situation and enable you to take a better decision.

I recently came across a quote and surprisingly found it apt to describe my learning experience, “Leadership cannot really be taught. It can only be learned” – Harold S. Geneen

The thought of a 3 year long journey full of experiences, questions, controversies, and confusions coming to an end never crossed my mind but its realization is painful. It has been an absolute pleasure to get to know and serve the planning community, so thank you again for trusting, supporting and helping me and giving me this opportunity. I'm excited for the incoming board and know that with your ongoing support, they will take NOSPlan to new heights and deliver the success our organisation deserves.

As you know, we can do this. But only together.

Happy New Year!

*Shubham Aggarwal*

**Shubham Aggarwal**



## Akshay Patil National Web Manager, NOSPlan

First of all, I would like to thank all the member colleges for showing their trust in me and giving me the opportunity to work as an Executive Council member. I feel really honoured to be a part of NOSPlan.

We are really proud to be hosting the Annual Convention at our college this year. Hosting the convention in our college was my dream after attending the XV Annual NOSPlan Convention that was held in Mysore, but the dream got bigger after attending SAMAVESH XVI Annual NOSPlan Convention in SPA, Bhopal. We guarantee you all that this convention will be a wonderful one and hope that everybody enjoys themselves to the fullest.

This year major changes have been made in redesigning the website, also an attempt was made to make it more streamlined. It gives me immense pleasure to inform you all that two new member colleges have joined us this year. A much needed awakening was done at the grass-root level and new initiatives were taken to make the organisation stronger and better.

I cherish every moment of my involvement with my fellow planners from all over the country, and won't ever forget this experience of working in NOSPlan.

**Akshay Patil**



## Anusha Mishra PR Manager, NOSPlan

My tenure as a part of the NOSPlan Secretariat has been a tumultuous yet exciting period. I became part of the team only in the month of April and it came as a huge surprise to me. Previously, I had been working with some of the council members and knew that we were facing a lack of manpower but being raised to the post of PR manager and Event Coordinator was a great and rather surprising honour. Initially, I was a little worried due to the undefined nature of my role and the manner of my selection but I soon realized what a brilliant chance it was to be surrounded by my peers whose passion and dedication to this field is praiseworthy. I gained knowledge and respect for planning as a field as well as about how to work in an organisation and help run it. My term helped me discover a number of valuable learnings which I shall use throughout my life. I was able to interact with my fellow UC, EC and AB members who helped me gain many new insights into the planning stream as well as gave me a new take on life. Although I was unable to interact with everyone I desired, I made a number of valuable friendships and gained many memories which I shall treasure forever. Even memories such as being forced to wait for hours at DMRC or getting lost on the Delhi roads while trying to find the correct building are ones I'll never forget as they are accompanied by memories of accomplishment. I'd like to thank NOSPlan for providing me with an opportunity to work for it wholeheartedly and for giving me the opportunity to contribute, albeit just a little, to the field of Planning.

**Anusha Mishra**





## **Nandita Suman** **Chief Editor, NOSPlan**

It is with much joy and anticipation that we are celebrating XVII Annual NOSPlan Convention with this inaugural issue focusing on Smart Cities in India. On behalf of Editorial Team, I would like to extend a very warm welcome to the readership of NOSPlan organisation.

NEWSPlan and Annual NOSPlan Magazine is dedicated to the Urban and Regional Planning field and its concerns. We welcome contributions that can demonstrate broad vision, upcoming issues, alternative solutions, etc. to meet the challenges of present and future generations. It has been a tremendous working year for the Editorial Board. We came up with new strategies, designs and concepts. Over the past two years, the Board has undergone major changes from its formation to further experiments. On a positive note, there has been a steady increase of articles received for publication indicating a growing interest among students to publish their work. The continuous experiments in these initial years of the Board will lead to a remarkable achievement in later stages. Hence, we encourage new ideas and innovative ways to work with.

I take this opportunity to thank our authors, Associate Editors and anonymous reviewers, all of whom have volunteered to contribute to the success of all the publications. I am also grateful to all Executive Council and Advisory Board members for their continuous involvement and support.

And a special thanks to College of Engineering, Pune for hosting the XVII Annual NOSPlan Convention and making all this possible.

We hope to be able to bring about gradual changes in the near future for a successful progress of all the publications. I would also like to express my gratitude to those who have supported me during my tenure.

Thank you. We hope you enjoy reading!

**Nandita Suman**



## Akanksha Narode Convention Officer, NOSPlan

When I first joined Planning at COEP I wasn't sure whether I belonged there or not. As we moved from first year to second, my doubt about the same became even stronger. And I was having serious thoughts about leaving the course and taking up something much less complicated and much more renowned. It was in my second year that I first attended a NOSPlan convention, where I realised the latent potential of my branch. NOSPlan means much more to me, or rather to any COEP planner than any other planning student as it provided us the much needed platform to communicate and interact with other planners pan India. Since then and till now my journey with NOSPlan has been memorable.

The first thought that I had in my mind when I got elected as the Convention Officer for XVII Annual NOSPlan Convention was, 'Oh God! I'll have to write a message for this year's magazine. What am I going to do about that?' Writing a message for the Annual NOSPlan Magazine was a much bigger task for me than organising the entire event! But here I am, giving it a try.

As an Officer, I realised that power would not work in your favour if one doesn't know how to use it properly. This post has its own charm as it is the only post where one has to make tough decisions keeping friendships aside; where one realises that what truly define a person are the choices that he makes during his lifetime. The entire journey of this convention right from getting elected as the Convention Officer till now has been very exciting, adventurous, tiring and emotional for me.

We as a team have worked tirelessly to present in front of you a decent, organised, creative, and more than anything, a memorable convention which would allow you to carry a tiny part of Pune back to your hometowns. I hope you all enjoy this Convention and take back happy memories just like we have before!

**Akanksha Narode**



## Vipul Kumar Advisor, NOSPlan

My NOSPlan journey started during the first year of graduation and since then it is moving on. From participating in NOSPlan as a member student, then becoming an active member by holding the post of National Treasurer (2014-2015) and now as Advisory Board Member, the entire journey of 5 years with NOSPlan is very hard for me to describe in these few lines. The current Chief Editor asked me to write a message for this magazine and I asked her, "How much can I write"? She replied 4-5 lines. I said, "Ok, I will try". And see 5 lines are already over.

I am pleased that COEP will be holding the XVII NOSPlan Convention for the first time. The theme for the convention, 'Smart City' has rightly been chosen keeping in mind the present policies of the Government, the rapid urbanization pattern and the challenges that the whole world is facing of climate change. Cities which are called the "engines of the growth of a country" are facing a lot of problems such as, mushrooming of slums with inhabitable, insanitary conditions, waste disposal, drainage systems, increasing traffic congestion, gender discrimination, exponential growth of buildings as the cost of decreasing green cover, forest areas.....and so on.

I am sure that the four-day NOSPlan Convention with brainstorming sessions through various activities, formal and informal events will try to focus on all these issues and come up with viable solutions acceptable to all the sections of the society and will sensitize most of us about the cities we are living in. Besides the knowledge part, I am damn sure you won't forget about the memories you will be taking with you, within your hearts and souls. I wish COEP all the best and let this convention also become a grand success.



## Imran Basha Soudagar. A. K Advisor, NOSPlan

Vipul Kumar

Dear Friends,

First of all, I would like to congratulate College of Engineering Pune council members, faculty, administration and other active members for putting their best efforts and bringing out their first and successful XVII Annual NOSPlan Convention.

In my eight years of association with NOSPlan organisation, I have personally seen many transformations and progress, during which we have learnt many new things and have had to tackle many issues that have come in the way, with the support of active members. I am sure that this convention will give you good experiences and some new insights into planning approaches and other things that you haven't experienced before attending this convention. To provoke you I would like to say that, other than this annual convention there is no other platform where future planners meet, showcase their works and discuss about issues and future perspectives of planning profession. Until and unless you are passionate and proud about the planning stream, you won't be able to shine and carry forward planning as your ultimate profession.

I would like to congratulate all the members who have contributed to the organisation and are still contributing. I once again suggest and advice all old, current and new members to be associated with NOSPlan even in the future for making it a much better planning students' organisation. I thank each and everyone who has kept faith in me and my abilities as an Advisor to NOSPlan Organisation and I shall promise you that I will not let your faith down.

Finally I advice everyone enjoy your convention, learn new things, make new friends, and carry back new experiences. All the best!!

Regards,

Imran Basha Soudagar.A.K





## Anugrah Nagaich Advisor, NOSPlan

Dear Planners,

Patrick Geddes, one of the earliest planning practitioners to have worked on the Indian cities about a century ago, famously quoted once that '... a city is more than a place in space, it is a drama in time'. And planning this dynamism associated with a city and its urban systems quite effectively and efficiently is certainly not an easy job. This assertion gets even more emphasized in the contemporary times, where the current urban centres are striving hard to manage or equilibrate a fine balance between their current and future demand addressing systems and mechanisms.

If harnessed in the right way, our urban centres could not only serve as a booster for India's development thereby contributing significantly in the nation's GDP, but can also assist in directing the nation towards the target of sustainability. And this has also become imperative in view of the recent Smart Cities Mission, which presents immense potential for utilizing the tremendous urban resources of the nation. Hence the roles and responsibilities bestowed upon the planners for shaping up these edifices of modern India by chalking an optimal way out for urban development becomes extremely important.

Having attended several of the past conventions, I firmly believe that the XVII Annual NOSPlan Convention would also enrich all the fellow members of our fraternity by providing us a common platform of discussion for tackling these future challenges efficiently. The effective knowledge thus assimilated within our community by the sharing of our experiences and learnings from each other through this convention will surely result in an increased understanding and acumen to identify, approach and resolve the urban challenges proactively. This magazine is a wonderful manifestation of the lively spirit of the convention and reflects the vigour and capabilities of our planning fraternity captured in its true essence by the Editorial Board members, who truly deserve a sincere appreciation. I would like to congratulate as well as thank the members of the host institute, i.e., College of Engineering Pune, for putting their utmost efforts forward while making this convention a success. I would also like to acknowledge here the continuous endeavours put in by the Advisory Board members, current and past Executive Board members and all the members of NOSPlan, who strive valiantly their level best for developing this NOSPlan community brick by brick. I hope that you all will enjoy and learn as much as possible in this convention, and would actively contribute towards making 'our' community grow by leaps and bounds.

I would like to conclude here with a very popular and relevant phrase from a superhit movie franchise: 'May the Force be with you'. All the very best!

A handwritten signature in dark ink, reading 'Anugrah Nagaich'. The signature is stylized with a cursive script.

**Anugrah Nagaich**



## Satwik Mudgal

### Ex - President, Ex - Advisor, NOSPlan

My dear friends,

It brings me immense pleasure and satisfaction seeing NOSPlan grow in all these years. It is a privilege to be able to communicate to you through the NOSPlan magazine that we started a few years ago. Thanks to all of you for your countless efforts, energy and most importantly the passion that drives you to invest in our student organisation. As always, I would sincerely urge you to continue being a part of this momentum and this era of change. The world is changing and the Global South is thriving today! We need to set examples for the world on how well we can design our urban spaces. Take pride in the degree that's helping you become an urban planner in the century of urbanization. A degree that helps you build one of the best basements for your professional careers ahead. The world is your canvas! There is no domain that stays unrelated to Urban Planning and Development today. Planning is no more limited to master plans. I believe cities are living organisms that are difficult to rule by a document. Urban planning is not merely transport, housing or infrastructure planning. The world looks up to those who can find innovative and yet technologically and financially viable solutions to age-old problems through a business-like perspective. Identify a passion, a dream that helps you lose some more sleep and trust me it would take you places. Just stay put and see the magic unveil.

I have been a part of NOSPlan since 2009 and by my experience I feel if you sincerely invest your time and energy in a student organisation, it not only benefits the organisation at large, it also helps you grow as a professional, as a leader and most importantly as an individual. You learn numerous skills that are otherwise never taught in a classroom, but are equally or at times even more important in real-life. So take the lead, invest your time and aim for social good. If you're already in a leading position, then the onus is even higher. You've got to rear the next leaders for us. "Invest!" Invest in knowledge, invest in people, invest in relationships, invest in society, invest in organizations and you would have automatically invested in yourself. Learn from the past, don't get buried in it – move on! Act in the present, don't crib! And prepare for the future! In fact, I wish we prepare an international future for NOSPlan. Who's up for it? Who's ready to invest? Find out an interested group of people and make it happen! It's not impossible.

Alone you or I can't do anything, but together we can begin a revolution. We all know we need a strong placement cell, an unparalleled data management system, marketable skill-sets and a rhetorical list that can go on and on. We all know it but now is the time to invest! At NOSPlan, the senior batches have been investing and I wish that we keep investing and growing at a pace that has never been seen before. Don't get bogged down by a few free riders here and there. They would always exist, but you my dear friend would grow. Join us not to merely reap the benefits, but for contributing to the community, we all belong to.

Cheers!

A handwritten signature in black ink, appearing to read 'Satwik'.

**Satwik Mudgal**

## MEMBER COLLEGES



AMITY  
UNIVERSITY  
MANESAR



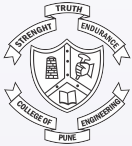
AMITY  
UNIVERSITY  
NOIDA



APIED  
VALLABH VIDHYANAGAR



COE  
TRIVANDRUM



COE  
PUNE



GEC  
TRICHUR



GNDU,  
AMRITSAR



IIT  
KHARAGPUR



IIT  
ROORKEE



JNAFAU  
HYDERABAD



MANIT  
BHOPAL



MANIPAL  
UNIVERSITY  
JAIPUR



SCOET  
SURAT



SPA  
DELHI



SPA  
VIJAYWADA



SPA  
BHOPAL



SVNIT  
SURAT



VNIT  
NAGPUR

## We Welcome our New Members!



### SARVAJANIK COLLEGE OF ENGINEERING AND TECHNOLOGY (SCOET), SURAT

The Sarvajnik College of Engineering and Technology was established in the year 1995, in the city of Surat, Gujarat. Under the mission Reach initiated by Dr. A.P.J. Abdul Kalam, for his vision India Vision 2020, the college was selected by the Department of Science and Technology, India to set up an environmental based project, Technology Information Forecasting and Assessment Council, Centre of Relevance & Excellence.



### MANIPAL UNIVERSITY, JAIPUR

The Manipal University, Jaipur, established in the year 2011, is one of the first schools offering undergraduate program in planning in the region. The program is highly innovative and job oriented in multi-dimensional as well as multi-disciplinary professions.



# LOGO DESIGN COMPETITION

## About the theme - MOVING TOWARDS SMART CITIES

The main goal of Smart Cities is to provide state-of-the-art infrastructural facilities that make use of efficient technologies and smart solutions for transportation, water supply, sanitation, utility services and health care that attracts both domestic as well as international investments. Also, introducing user friendly e-processes for obtaining approvals will enable transparency in processes thereby making it easy to run commercial activities and create citizen-centric services to make citizens feel safe, happy and at ease.

Acknowledging the dire need of the hour, the theme for the XVIIth Annual NOSPlan Convention to be held at College of Engineering Pune has been selected as 'Moving toward Smart Cities.'



अभ्युदय  
XVII Annual  
NOSPlan  
Convention

अभ्युदय

अभ्युदय' is a Sanskrit word which means moving towards betterment for happiness and prosperity. Likewise, the smart cities promise to be sustainable, energy efficient, high-tech, healthy and impactful in governance to bring happiness and prosperity to the people. Our lives today are governed by smart phones. Just like smart phones connect millions together providing a smart solution to our problems, a smart city should be able to connect its people actively to the city to enhance quality and performance of urban lives using digital and communication technology. The Wi-Fi signal in the logo represents this strong connectivity and a fairly transparent system of governance. The concept of Smart Cities is new to India and the various "smart" aspects are still coming up. The logo shows the idea of a smart city budding in the mind of a person. The final green circle depicts the measures to be taken to ensure that the upcoming cities are sustainable and eco-friendly.



**Abhyudaya**  
Divya Holani  
SPA Bhopal



**Robin Singh**  
AmityNoida



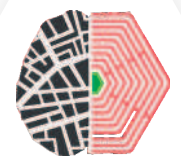
**Prabodh**  
Amruta Mahalkar



**Navotthan**  
Shivam Mittal  
SPA Bhopal



**Utthan**  
Shruti & Lahari  
MANIT Bhopal



**Navsrijan**  
Vinay G



**Apurwa Kahalkar  
& Sagar Morge**



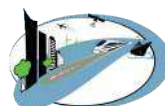
**Lalit Khobragade**  
VNIT Nagpur



**Transform**  
Pulkit & Suraj  
SPA Bhopal



**Asjad**  
SPA Bhopal



**Dhaval Kataria**  
SPA Vijayawada



**Rama Ritesh**  
MANIT Bhopal



**Ajit Singh**  
Amity Noida



# Smart Cities

## SMARTER CITIZENS – THE WAY FORWARD FOR A SMART CITY

In India, the idea of Smart Cities is rooted in the creation of four Smart pillars for comprehensive development- **Institutional, Physical, Social and Economic** infrastructure. Six main initiatives under Smart City are: **1. Smart Governance, 2. Smart Infrastructure, 3. Smart Living, 4. Smart Mobility, 5. Smart Economy, 6. Smart Environment.** Along with these, one of the most important missing initiatives is **Smarter Citizens.**

The major issue with the people of India is the **3Ds** (Destroy, Deplete & Degrade), we don't realize the importance of existing facilities, resources, environment, etc. Rather, we **Destroy** the existing facilities, **Deplete** the resources, **Degrade** the environment and then we start cribbing saying that we are facing problems with regard to facilities, resources, environment and start showing concerns to improvise and start finding new alternate solutions and strategies to solve the above issues. Public mind-set change through smart inclusive growth practice will enhance quality of life of the people by adopting smart and sustainable technology and a better functioning smart city. One of the most important solutions for transforming into Smart City is the change of mind-set of the people, who will be the end users; until and unless they don't feel the ownership and understand the importance of planning and development works undertaken, smart solutions won't be working with efficiency. The loss in revenue/efficiency of any smart proposal/project will be directly imposed on the public through higher taxes for new projects, high user and service charges, discomfort to public through low efficiency smart infrastructure and degrading quality of life. The success of a Smart City not only depends on planning and implementation of smart solutions, but also on the depth and effectiveness of targeted initiatives and on the public, how well they use, conserve and maintain the smart infrastructure that will be planned and developed to make their city smart and liveable.

**Imran Basha Soudagar. A. K**

Advisor, NOSPlan

## THE EVOLUTION OF THE 'SMART CITY' TECHNOLOGY

The 21<sup>st</sup> century marks beginning of the 'Information Age'. To be equipped with information is the new definition of being 'smart'. From smart phones to smart cities, smart is the new cool. Everyone, from a juvenile to a political leader yearns to be associated with a smart asset. But has one ever wondered how this concept popularized to such a huge magnitude that it gulped the entire mankind?

The concept of the 'Internet of Things' was first coined by Kevin Ashton which means the network of physical objects embedded with electronics, software, sensors, and network connectivity, which enables these objects to collect and exchange data where the huge data collected through this network is used for the betterment of the society and environment. Collectively, it gave rise to the popular application known as the 'Smart City'.

The commercialization of this application first began in 2005, when US President Bill Clinton, through his organization challenged Cisco to make cities more sustainable through their technical knowledge. Cisco then spent five years to research on this topic and worked on cities of San Francisco, Amsterdam and Seoul as pilot projects. Cisco then started working in association with municipal authorities on smart cities. In 2008, IBM too launched its 'Smart Cities' program through its 'Smarter Planet' initiative. Soon, other IT companies like Microsoft and Schneider Electric started using information technology as a tool to make cities more sustainable and smarter. And then as we moved through the timeline, the concept reached India when Prime Minister Narendra Modi, presented it as a challenge. It involves 100 cities competing to achieve a set of benchmarks of 'smartness' through use of technology. Thus, now we reach to the present, thriving to be the smartest.

**Mithali Jadhav**  
COEP



## A SMART MOVE FOR A SMARTER INDIA

Ever since it was mentioned by Prime Minister Narendra Modi, 'Smart Cities' has emerged as a buzzword and has ensued numerous discussions, articles, competitions, conferences and consultations thereafter. The challenge for the government and people now is to transform cities to smart cities; not just going by the mainstream definition that entails use of technology, but involvement of smart planning practices and sustainable approaches of implementation.

An innovative and indigenous model that is stemmed from local needs and suits area-specific requirements should be embraced by cities rather than one merely aping prototypes of the West. Ideas of foreign origin can definitely be studied and referred to, but they ought to be modified and implemented city-wise as each city has its own essence and domain to smarten up. It is not the execution of just one department but the synchronization of many that can yield an ideal and successful smart city model. Cities should possess a competitive spirit and better themselves by realizing their complete potential along with advocating the best approaches. Although variation is bound to be there, they must ensure not to lose their essence during this process of makeover.

Technologies that can be used by people of all ages alike must be used to ensure everyone is a part of this key process that is imperative to both individual development as well as for the progress of the community. This process is likely to create a ripple effect, as employment opportunities will be generated, thereby adding to the local economy and ultimately amounting to development of the nation. In the end, how we construct our future depends on how smartly we pool resources to design, manage and operate our beloved cities. So let's march ahead together and contribute in the making of smart cities, a smarter India!

**Sejal Mathur**  
COEP

### “Smart Mechanics”

*The world rushing to act smart,*

*The panacea to divert our start;*

*Enthralling bonanza to ensure optimization,*

*With effective inclusion of immense globalization*

*Smart mechanics triggers the debate to eliminate crude privatization,*

*With the transfer of waste to wealth improvization,*

*The universal desire to achieve handful of sustainable ethics,*

*To revolutionize across cities get coupled with the mammoth of smart critics.*

*The giant obsession to inculcate equity,*

*Provokes one and all to enforce better communality;*

*The slogan to proclaim the best fits of Indian stature,*

*Is the only premier to stage the Indian cities smart nature?*

*To drive wedge between economics and politics,*

*Socialism protrudes its essence with liberal prerequisites.*

*Smart allied powers surge to transfer corruption, waste and distortions,*

*To intertwine the sane fabric of inevitable public and skill synchronization*

**Srishti Bhaduria**  
MANIT, Bhopal

## THE CHANGING PLANNING SYSTEM IN INDIA

We all agree with the fact that, a city is a dynamic system. New problems and issues emerge in this dynamic system along time. We are facing an issue of urban sprawl, which can be solved with the advancement in technology, by the means of vertical development or technically, increasing the FAR. Presently, our issues are still changing and everyday a new issue is about to come across a planner's desk.

Our shifts in lifestyle, working pattern, technology, etc. are responsible for influencing the functioning of the city. Therefore, the conventional way of land use planning or preparing a master plan might not be effective for the upcoming challenges. The theories like Central Place Theory (1933), Concentric Zone Theory (1920), Sector Model (1939), etc. are not applicable to the present day situation. For instance, do we still have a concept of Central Business District (CBD)? According to a definition, a CBD is a focal point of a city, the commercial, office, retail, and cultural center of the city and usually is the center point for transportation networks. The changing lifestyle or working pattern or the advancement in technology has changed our relationship with the heart of the city or CBD. Therefore, the concept of CBD doesn't exist anymore. Even if it does, it is not as same as it was.

Similarly, all the theories, concepts and methods of urban planning are needed to be revised. As we enter into the world of smart cities, the conventional techniques of land use planning should be avoided. The need of the hour is to evolve new methods of planning. Smart City framework is not sufficient for answering the future challenges. To begin with, identification of the challenges must be given a priority. Over the years, our planning system has been relying upon the American and European experiences. Now the situation is going to change, as India is amongst one of the countries to come up with the Smart City concept, much before the developed nations. Hence, the planners in India should tackle the problems and provide smart solutions to these problems as per the Indian context.

**Dhawal Kataria**  
SPA, Vijayawada

### चले हम Smart City की ओर...

आजकल दुनिया में आया है एक नया Trend

आजकल दुनिया में आया है एक नया Trend

Smart Smart बोले आजकल हर कोई नया Friend . . . . .

पहले हमें लगा की Smart है हमारा ये नया phone

पहले हमें लगा की Smart है हमारा ये नया phone

पर कोई ये न जाने की Smart City है हमारे चारों ओर . . .

दुनिया तो चलना चाहे Smart City की ओर

दुनिया तो चलना चाहे Smart City की ओर

पर क्या कोई जाने इस Smart City की खोज???

Metro Mall Apartments है Smart City की शान

Metro Mall Apartments है Smart City की शान

लेकिन असल में Smart लोग हैं इस Smart City की जान .

रशिका चौरसिया, अमिती युनिवर्सिटी, मानेसर

## A PLACE IN THE SMART CITY

The word 'heritage' is used in relation to the natural world, referring to mountains and rivers, to buildings and monuments, the arts, and to social customs and traditions. India has always had a distinctive image in heritage tourism for strong associations with palaces and royal retreats, religious places, yoga, Ayurveda and meditation. There are 27 World Heritage Sites and 3667 ASI protected monuments in India. Tourism contributes to about 96% of the total income of artisan's household in Kerala and 90% in Rajasthan.

**Every place has a story to it.** This line probably describes the life of an urban planner. While doing an assignment last semester we studied about the 'Nizamuddin Auliya Dargah'. A heritage monument situated in the middle of a bustling neighbourhood of Nizamuddin that dates back to the 1400's. After many renovations it stands today as what was made in the 1562 renovations. The Dargah is a place of pilgrimage, not only for the Muslim community, but also to every other nationality that has been in distress and found peace at the Sufi Saints Dargah. People come to visit from far off places. Most of its regular visitors are people who have seen their lives change after praying to the Saint and still come here to find peace and thank him for their lives. The 'Nizamuddin Baoli' constructed during the same time and treated as a holy source of water is getting destroyed. During the restoration work of Aga Khan Trust for Culture (AKTC) the water from the baoli was changed and decontaminated and the houses that were a threat to the baoli were evacuated. However today after 5 years of this drive, we still see people living in those houses.

So now the question that remains is what can a smart city bring to keep such monuments socially and physically intact while bringing in the sustainable factors? The government has gone ahead with the mega project of developing 12 heritage cities across the country. Called **HRIDAY Scheme or National Heritage Development and Augmentation Yojana**, it focuses on development of civic infrastructure development projects around a dozen heritage cities -- Ajmer, Amaravati, Amritsar, Badami, Dwarka, Gaya, Kanchipuram, Mathura, Puri, Varanasi, Velankanni and Warangal. But, all this is for the major heritage cities. What about areas like the Nizamuddin Dargah which stands, but not as a heritage city? India is full of such monuments gifted by our rich history and many of them need as much attention as these cities do, if not more. So what does the smart city have to offer to such establishments? A smart city is not smart for its technology or its modern aspects. It is smart if it can integrate the old with new without compromising any one. After all it is all for us, the citizens.

**Anushree Bhattacharya**

**Amity University, Noida**

## INDIA'S CLIMATE ACTION PLAN... DID WE MISS SOMETHING?

India's urban population as per 2011 Census is 377 million. By 2026 it is projected that 38 percent of Indians will live in cities and total urban population will rise to 534 million ("Population projections 2026", 2006). Cities are referred to as the "engines of growth". Despite having only about 30% of the total population, nearly 62-63 percent of India's GDP comes from urban areas. Besides this, the cities are also major contributors of greenhouse gas emissions. On the other hand, there are cities that have been national and international leaders in reducing carbon pollution.

The world climate summit in Paris, which was the 21st Conference of Parties (COP-21) to the UNFCCC, marks a major milestone in the efforts of the global community to combat climate change. India on October 1st submitted their 'Climate Action Plan' often referred to as INDCs (Intended Nationally Determined Contribution). India mentioned about reducing its emission intensity of its GDP, achieving cumulative power non-fossil fuel based energy, increasing carbon sink by creating additional forest cover and other various strategies. But there is no talk about integration of "Smart Cities" campaign into a plan for low carbon development of cities.

Smart Cities initiative by Government of India has the tools for reducing green house gas emissions such as creating walkable localities— reduce congestion, air pollution and resource depletion, Preserving and developing open spaces, reduce the urban heat effects in areas and generally promote eco-balance, energy management using renewable sources of energy, energy efficient and green buildings, recycling and reduction of C&DWaste. These tools are not new, they have been there for several years and have been talked about much but the challenge lies in how to turn them into reality. For instance, Bus Rapid Transit (BRT) system is a relatively simple way to reduce emissions and create a number of other benefits for city residents, but it requires strong collaboration. There is the technical question of how to integrate the system with existing infrastructure, the financial question of how to raise capital, the economic question of how to engage with local businesses, and the behavioural challenge of changing deep-seated cultural preferences for car ownership. None of the solutions to climate change come from a single actor and that is why cities are powerful forums for creating coalitions that address climate change.

The word "SMART" is a function of time. Something "DUMB" today, was probably "SMART" during the time it was set up. So barely using word SMART doesn't make things SMART, the onus lies greatly on the Representatives of Government (Mayors and Commissioners) who need to be smarted, trained to design new projects and tap into local resources. A great part of the responsibilities lies on us also, the end users; we need to change our lifestyles.

**Vipul Kumar**  
**Advisor, NOSPlan**



## POLLUTING MOTHER INDIA: CLIMATE CHANGE & POLICY PERSPECTIVE

India- the country where people live their life following their culture, traditions, heritage and values.

**Mark Twain: "India is, the cradle of the human race, the birthplace of human speech, the mother of history, the grandmother of legend, and the great grandmother of tradition."**

Despite all this, India through the years has been trying to become a developed country which is a distant dream even today. Everywhere in the country the wails of women, children, even animals is heard, these are because of numerous reasons. But in India the crucial problem lies with administration, the politics.

Our green India has changed into one of the most polluting countries in the world. Kanpur, Noida, Faridabad, Delhi and many more are cities where people are trying to breathe fresh oxygen. India is a great country where people with great talents, skill, power and intellect live in India but these assets have never properly been used in our country. There can be many powerful leaders around the world who are Indians but what use is that, when their Motherland is getting cursed by the environment.

Policies to protect environment in India-

- Environment Protection Act, 1986
- National Conservation Strategy and Policy Statement on Environment and Development, 1992
- Policy Statement for the Abatement, 1992
- National Environmental Policy, 2006

The so called 'National Environmental Policy' is just a policy of drawbacks. There should be an inclusive approach, as environmental protection mechanism to be effective, needs to be inclusive of all factors that impact environment directly or indirectly. Being planners, it is our duty to bring back the true face of Mother India, for climate change there should be a strategic, value based approach. It can never be attained until proper planning framework is designed. There should always be a proper planning cycle. Through the planning cycle we understand various atrocities in the development processes around our cities, most importantly they help us answer the most important of questions:

What is happening?

What matters most?

What can we do about it?

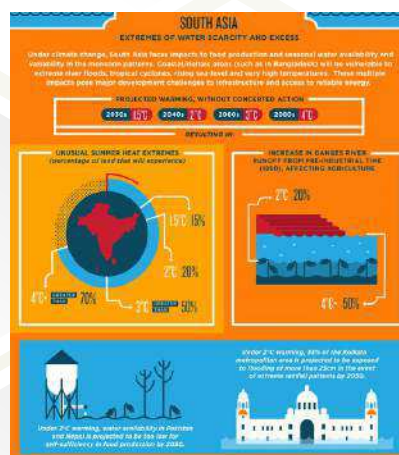
Are we doing it?

**Think wisely, do the proper justice to our mother nature...  
JAI HIND!**

**G.Sujith Sourab**  
SPA, Bhopal

## ARE WE TURNING DOWN THE HEAT IN CITIES?

Most of the climate sensitive Indian cities are growing as concrete jungles at the cost of local bio diversity, water bodies and forests. It's a prerequisite to become climate smart. A World Bank Report- "Turn Down the Heat: Climate Extremes, Regional Impacts and the Case for Resilience" outlined that urban planners in India need to adopt measures to counteract the heat-island effect due to temperature increase from 2° to 4° without any delay which could lead to rebuilding the cities. The ACCCRN (Asian Cities Climate Change Resilience Network) programme, a nine-year initiative (2008-2017), adopted the Urban Climate Resilience Planning Framework (UCRPF) which links the spatial, physical and economic connections of direct climate impacts on the urban systems. The programme ascertains that methodologies adopted in core cities can be replicated or developed as toolkits in other cities to prepare their own resilience strategies.



While seven cities may not be representative enough in a country with more than 7,000 cities and towns spread across varied geographical and climatic zones, the ACCCRN experience does bring out a number of issues and questions that need to be addressed for upscaling urban climate resilience in Indian cities. The governance systems and institutional mechanisms have to be designed, updated and channeled towards the goal of resilient cities to replicate UCRPF framework for long term sustainability and complete success of this initiative. The cognizance of the task accounts for a separate cell to be constituted in the local bodies since climate resilience would have implications on various sectors like urban development, resource management and disaster management. City planners strongly recommended policies at all levels should be made and the resilience strategies should be approved by the local bodies for full-fledged implementation. In the next two years, at least 100 cities should be worked upon with this framework as a replication.

**Almas Siddiqui**  
SVNIT, Surat

*"The smallest patch of green to arrest the monotony of asphalt & concrete is as important to the value of real estate as streets, and convenient shopping."*

~James Felt

## INTELLIGENT CITIES OF THE FUTURE

Remember the futuristic cities from the Hollywood blockbusters 'Minority Report' or 'Judge Dredd'? Well these cities no longer lie only in the domain of fiction, and numerous efforts are currently underway for reshaping our existing urban landscape into the ones shown in these movies. On similar lines, the advancements in the domains of Information and Communication Technologies (ICTs), Remote Sensing and Geographic Information Systems (GIS) now provide us an interesting opportunity of transforming our existing urban centres. Cybernetics, which is essentially the ability to synthesize and stimulate intelligent systems, holds the key for providing us the means for improving planning, decision making and problem solving process; and in some cases, automating them. Within its framework, dynamic real time modelling of different key performance indicators for a city (say traffic volume) will occur continuously whereby subsystems (say transportation) can run diverse 'what if's' analyses and can feed the results to a central processor which compares all subsystem results and passes either positive or negative feedback to the overall integrated subsystems (like infrastructure). The desired results of the one subsystem will thus be in a relation with all other subsystems affected, making the overall urban system efficient and effective.

An analogy drawn with the natural world will help us understand this concept of intelligent cities in an easier way. Having taken billions of years to optimize and equilibrate, almost all the natural systems offer a superior model for advancing the artificially created man-made systems. Hence the Intelligent City will, in many aspects, function very much like a living organism while continuously monitoring its various component subsystems and responding accordingly to potential or actual changes of state in order to maintain and restore the equilibrium between its various subsystems. For example, the moment it detects the conditions favouring the natural or artificial disasters, the Intelligent City will automatically respond accordingly, heightening our disaster-preparedness. The Intelligent City will intend to incorporate all the elements of disaster management: Preparedness, Response, Recovery and Mitigation; into its overall planning and operational matrix. Also, the Intelligent City will keep assimilating the knowledge of hazard mitigation for improving its overall functionality by virtue of its feedback processes built within its framework. The city will keep learning continuously from its previous mistakes and subsequent learnings or improvements will occur simultaneously in the city's urban systems. Hence it will continue to evolve just like a living organism while continuously learning and adapting itself towards the surroundings.

In the words of Aristotle, '*A city should be built to give its inhabitants security and happiness.*' Currently, the vulnerability with respect to cities exists because of the absence of an efficient and effective communication and control system in place, creating a permanent condition of asymmetry which leads the society open to disasters. If we view the Intelligent City like a thriving living organism experiencing countless actions and reactions, we can see that unless these actions and reactions are intelligently managed and coordinated with each other, the system would only experience chaos and crisis- which every city of the world is facing today in one way or the other. However, as the advancements in the technologies like ICTs, Remote Sensing and GIS are increasingly adapted for interconnecting all municipal subsystems, it can serve as the city's nervous system defining a system of equilibrium for the city. It can subsequently be designed and programmed to work towards maintaining this equilibrium constantly thereby making the city really 'intelligent', just like its human citizens.

**Anugrah Nagaich**  
Advisor, NOSPlan

## #SMARTCITY

Nowadays, there is a lot of buzz all over the nation about the term "Smart City". We see it trending on every social networking site from Whatsapp to Twitter, but we are least concerned about the things which are done for our welfare, which raises a question that do we know the term smart city and if yes, then how well?

Hearing and listening are two different terms. We hear a lot of things but we are not concerned about it and when we listen we concentrate towards what we hear very deeply. Same goes with the case of smart cities. In a survey, it has been found that less than 30% of the national population is well aware of the term 'Smart City', while the rest 70% are still unaware of that. It is because Indians are being taunted every time when these corrupt policy makers of the nation glow a hope in the people and shatter them with a scam. But the concept of Smart City had gone so broad that it will change the perception of Indian people in the upcoming years.

We as common people judge these things in no time and make perceptions about it before properly understanding it clearly. Making a smart city should not be the first objective of the government, making people smart and aware of this should be the first task. Because after all smart cities are for people, people are not for smart cities.

**Mayank Singh**  
Amity University, Manesar



## CHALLENGES TO SMART CITIES

The union government has announced the 'Smart Cities Mission' this year, for which 98 cities across the country are selected. Initially it was to make completely new cities out of scratch, 'greenfield development' but was later changed to start projects in the existing cities which is quite challenging as elaborated ahead. The project has been started with good intentions and new ways of implementation of the mission by SPVs (Special Purpose Vehicle), etc. is introduced. But the fundamental complexities with the institutional structure concerned with land and infrastructure remain the same.

The multiplicity of government in matters important to the mission is a challenge. As the mission is now in the form of starting new projects in the existing old cities, knowing the current status of the city becomes very important which was and is still a problem whether for these new projects or whatever else. For example, if we take a 'section' of a typical road in any city, the land, the primary surface may belong to one of these (NHAI, State Highway Authority, State Govt., Development Authorities, Local Bodies, etc.) depending upon kind of road it is, then there is carriageway that is made and maintained by one of these, the street lights, sewers, drainage lines with the Municipal Corporation, water supply with the Municipal Corporations or likes of DJB(Delhi Jal Board), electricity lines with State Electricity Board or Distribution Companies, communication (telephone, broadband, etc.) lines with BSNL/MTNL (excluding numerous private run networks hanging over poles, buildings which also form important part of the communication system of the city). In another view, there are different zone boundaries used by police, municipal corporation, public works dept., T&C P, postal service, power companies, telephone, railways, etc. All the things constituting infrastructure mentioned are managed by separate entities but it is these things that are together responsible for the proper functioning of a single entity, the city.

For properly planning the future projects, it is important to collect and map information on a single platform, but all the concerned records lie with numerous departments and govt. bodies which creates a challenge for these projects. Similar problems are faced at local level, state and centre. For example, at the centre we have separate ministries of Transport, Urban Development, Railways, etc. which by and large aim to a common goal but face similar problem. Japan shows us the way as Japan has a single Ministry of Land, Infrastructure, Transport and Tourism. Similar institutional arrangements can be made on lower levels so that proper planning and management is possible to create efficient and 'smart' cities.

Therefore, it is clear that proper institutional reforms have to be done before expecting the intended results of these projects and realizing the dream of 'smart cities'.

Vinay Natsu, SPA, New Delhi

## अभ्युदय पर उभयसंकट

एक सड़क जाती है  
मेरे गाँव से, तेरे शहर की ओर  
इसने नींव को इमारत बनते देखा है, और बूढ़े पीपल को दहलीज़ बनते भी  
झोंपड़ियों को पक्का होते देखा है, और बाघों को कमीज़ बनते भी  
किसानों को, हल छोड़कर कलम पकड़ते देखा है  
कभी मौत का चोगा ओढ़कर, ज़िंदगी से झगड़ते भी देखा है  
इस सड़क का दायरा भी व्योम की भाँति है  
विभिन्न दृष्टिकोणों, पशोपेशों, वाद-विवादों से अवगत, विचारों की क्रांति है

घाट-घाट के जल-वायु की झप्पि से  
इसके अस्तित्व में भी शांति-अशांति है  
कहते हैं, शहर Smart होने वाला है  
शायद इसीलिए, गाँव के मन में पनप रही  
ईर्ष्या की कोई ज्वाला है  
कहते हैं, वहाँ स्वचालित तरतीबों का दौर है  
कहने को तो, पर्यावरण की सुरक्षा पर भी ज़ोर है  
पर दिख रहा है, कैसे गाड़ियों की बाढ़ में  
साईकिलों का जलमग्न सा छोर है  
कशमकश सा है  
उत्थान की चाल में, डाह का क्या बल?  
मृगनैनी से, अतिशोभित से, अतिलोभित करते प्रस्तावों का क्या हल?  
बिन-ब्याही, सुसज्जित सी दुल्हन की तरह  
अपने शिखंडियों की चादर ओढ़े मोर के जैसे  
शंका के पयोदों से, क्षणस्थायी प्रमोदों से घिरे  
विस्मित भूत व चिंतित भविष्य के सोर के जैसे  
पारिस्थितिकी तंत्रों की लुप्त होने की क्षमता पर  
प्रौद्योगिकीकरण के युग में मायने बदलती ममता पर  
आश्चर्यजनक वास्तु-विशेषज्ञता की क्रीड़ाओं पर  
अल्पपोषितों की सतत उबारू पीड़ाओं पर  
कलम तो घिसती रहेगी, चलती रहेगी सिर-कटे सिपाही सी  
समाधान खोजती, मरुस्थल में छाया ढूँढते सही सी  
किंतु यह भी तो एक तमाशबीन है, आपके Smart City की इस  
अतिशयोक्ति की  
इसको तो अभिलाषा है, उन प्रचंड अनुशंसाओं से मुक्ति की  
और यह, कि प्रगति का अभ्युदय नहीं है  
केवल नगरों की बढ़ती ऊँचाईओं में  
कहीं खो न जाए गाँवों का आरोचन  
इन काली होती पर्छाईओं में..

रिया गुप्ता, एस. पी. ए., दिल्ली

*"A smart city has to be a learning city."*

~ Josep Piqué

## HOUSING FOR ALL - ASSET OR LIABILITY?

*"Dreaming after all is a form of planning".* One of the main ideas in the Smart City concept is housing for all, but the question arises "Is housing for all necessary"? According to me, housing for all is for sure an asset. As said by Zaha Hadid: *"Education, housing and hospitals are the most important things for society".*

Providing houses to all families is definitely a smart move. By providing housing, it does not mean giving shelter to everyone but also giving the basic amenities that are necessary for their well-being. For example, by providing sewerage lines, water supply lines, electricity lines and many more. Due to lack of sanitation facilities, unclean water, there are many people who are prone to many diseases like typhoid, jaundice, etc. If we will provide them all these facilities, they will surely live in a healthier environment and will be fit.

Another question that comes in our mind is "Is housing for all sustainable"? *"We look at the same stars and see many different things."* This indicates that everyone can have a different perspective. But according to me, the answer to this question is also yes, housing for all can surely be sustainable. While talking about sustainability, we can say that if we use locally available material, material that is cheap, and after that adopt some basic design strategies, then the work becomes more eco-friendly and economical. For example, we could consider ventilation; if there is proper ventilation in buildings, it can definitely reduce the electricity supply consumption of the buildings. Hence this becomes more environment friendly.

Housing will not only save people from diseases but also will help them to grow. The sense of social development would be felt among them, they would be encouraged to earn, since they will feel equal in the society, and hence this will reduce the chances of theft, robbery, and many more crimes. They will surely feel the sense of social justice.

*"These few things can change the thinking of the society and hence give them a reason to be called as smart".*

**Yamini Gupta**

**Amity University, Noida**

## MOVING TOWARDS SMART PUBLIC TRANSPORTATION

Why isn't public transport being utilized by everyone?

- 1) **Congestion:** The overcrowding of passengers is one of the main problems in the Indian public transport systems. The number of passengers that board the vehicle is much more than what the vehicle is meant to carry. According to the statistics of the Mumbai Metro, over 4500 passengers are packed into the vehicle during peak hours, against the carrying capacity of 1700.
- 2) **Comfort:** When the vehicle arrives, we need to race others and push through a humongous crowd. And even if we manage to get inside, we almost always, do not get a seat!

Here are ways by which, I believe personally, we can overcome these problems

**a) Double decker buses:** As the word suggests, these buses carry double the passengers than a normal one. In Indian context, with the country having second largest population in the world, we surely need to increase the carrying capacity of the buses. In addition to the large volume that they carry, it would also increase the revenue obtained per bus as it would carry greater number of passengers for the same amount of trips.

These buses stand out and hence encourage public advertisements too!

**b) Automated doors:** In this concept that I have thought of, the doors would open when one swipes a card against a swiping machine, allowing only 1 person to enter at a time. The passenger would be billed automatically on the distance traveled. The required sum of money would be cut off from their account which would be linked with the card.

This is an implementable idea as the number of passengers would be small. Moreover, the automated doors will prevent the passengers hanging out of the doors, thereby improving their safety. The automated bill generation would decrease manual efforts as well.

**Gaurav Patharkar**

**COEP**

## SMART GOVERNANCE

The smart city project treats every city as a living laboratory. With the ever increasing population, we will see an increase in the migration of people from the rural areas to the cities. Hence, smart governance solutions are required to cater to the needs of the people that enable transparency, accountability, efficiency and better decision making based on citizen feedback for smart cities, smart states and a smart country.

Smart governance should involve creative usage and provision of smart information systems and smart solutions for effective utility of accessible assets, resources and infrastructure. The key factors for "Smart Governance" are operation and its maintenance comprising of servicing, inspecting, cleaning, preserving and adjusting infrastructure and asset management.

Smart Governance would enable an improvement in services such as bill payment, tax payments, registering complaints, introducing an online voting system, proper voting education, e-governance system, e-democracy portal and e-consultations for a smart city.

The current need is to have a centralized metropolitan governing structure which is accountable to the citizens. If the government does not have the incentives and resources then the trappings of a smart city such as digital sensors, cyber highways, computerized management and smart cards system will remain the same just like CDPs which are regularly prepared but rarely implement.

Apart from this, our country faces a glaring difference between the capabilities of the local government and its functions. For ULB's, that are expected to play a big role in the growth of smart cities, fund raising through the market could be an operative medium to sustain the big urban projects. There is a dire need for improving transparency in account and stock and it should reveal the material facts regarding management, revenue generation administrations, financials, operations and risk factors etc. and only then smart governance is possible.

**Aditya Kushwaha, MANIT, Bhopal**

**College of Engineering Pune**



## SUSTAINABLE TECHNIQUES FOR SMART CITY ENVIRONMENT

Although, there is no universally accepted definition for a “Smart City”, some definitional boundaries are required to guide cities in the mission.

In Hyderabad, there is no balance between energy consumption and energy production. This is due to increasing urban population. The United Nations estimates the growth of urban population from 3.6 billion in 2011 to 6.3 billion by 2050. To be on a conservation end for the future generations, it is high time, to start using sustainable energy. For me, ‘smart’ means ‘sustainable’.

Ideally, a smart city creates an enduring way of life by practicing the following techniques.

- Practicing small scale/private farming plots or through larger scale agriculture (e.g. Farm Scrappers) around Hyderabad suburbs, reducing the distance food has to travel from field to fork can be a solution to reduce pollution and increasing urban forests.
- Renewable energy sources such as roof top solar panels, or bio gas created from sewage. Changes in the permission grant procedures can be a way for fruitful results.
- Various methods to reduce the need for air conditioning, such as increasing green spaces, lightening surface colours, natural ventilation system.
- Optimal building density to make public transport viable but avoiding the creation of urban heat island incorporating walkway urbanism.
- Developing the satellite towns around the outer ring road of the Municipal Corporation while encouraging software companies to establish work and living spaces will reduce the urban sprawl.

**Bhuvaneshwari Peddi**  
JNAFAU, Hyderabad

## MY VISHAKHAPATNAM OF TOMORROW “SUSTAINABLE VISHAKHAPATNAM 2020”

- S** – Smart and self – sufficient state
- U** – Ultimately unique and unbeatable
- S** – Strenuous and succession of social strengths
- T** – Transformation from traditional to trendy
- A** – Accessible and approachable amenities
- I** – Innovative ignition of ideologies towards sustenance with
- N** – No negative notion and nucleus of all neighbouring states; from
- A** – Archaic attributes to auxiliary accomplishments
- B** – Backing of trade and commerce and burgeoning political buzz
- L** – Livable and lifeblood for indian economy
- E** – Elastic and equipped with efficient + economic ethnicity
- V** – Vivid, viable and vigilant towards attaining vision and vows to Vishakapatnam
- I** – Incredible and interminable identity of elite powers
- S** – Satisfying every individual's aspirations
- H** – Hero of year 2020
- A** – Amenable approach towards raising GDP and GNP
- K** – Knock down all discrimination spreading equity
- H** – Harbour public interests, happiness and collaborative arena
- A** – Allegiance to India and amalgamation of administrative powers
- P** – Pursual of feasible transportation management system
- A** – Accessible rail, road and air connectivity
- T** – Terminator of political prejudices
- N** – Nest of fiscal and monetary gains
- A** – Adorned with prospective foresight
- M** – Monarch of all master states of India

**Srishti Bhadauria**  
MANIT, Bhopal

## MIGRATION IN CITIES: ANY SMART MOVES?

Migration is movement. People move, and it is quite natural to move from a less worthy place to a more worthy place; worthy in their own terms! With the recent introduction of smartness concept in every sphere of life, does it makes sense if this migration is supported by smart decisions? In this article, a point of view has been made about smartness in movement.

Crunching through numbers, it is widely speculated that about two-thirds of the worlds' population would be living in cities by 2050. And in India alone, about 530 million people would be living in urban areas by 2030, as compared to 390 million in 2008. Further some researchers have quantified that natural increase amount to 60% of urbanisation in India over a period of time. Now it is clear how much influx is being attended by the growing cities! Numbers apart. What could be the plausible explanations to such

high movement rates? Jobs? Better quality of living? Better wages? The list could go on, but it's time to see if these really are the contributing factors. In cities of present day, better quality of living is arguably a false statement, so as is the case of jobs (if it weren't so, there won't be too many slums engulfing the cities!). Wages might be another explanation, well if wages are high so is the cost of living in the urban centres. So what exactly motivates migrants?

The answer may not be quantified, but it must be understood that sometimes some things just happen. Societal factors, is what tends to change such decisions mostly. With introduction of smart cities in India, it is to be seen whether these decisions tend to become more objective than being subjective, or whether government succeeds in directing migration to intended places, or whether people would really make a smart move!

**Pulkit Singal**  
SPA, Bhopal

We got a chance to interview Mr. R. Srinivas, Town and Country Planner, currently Head of the Metropolitan & Union Territories Division at Town and Country Planning Organization, Ministry of Urban Development about the centre's Smart City Mission. Here are the answers to the questions we all have:



**Mr. R. Srinivas**  
*Town and Country Planner*

## Tête-à-Tête

**There's a lot of debate going about what smart cities actually are; we'd like to know what your definition of smart cities is.**

There is no universally accepted definition, however, in my view, a Smart City can be defined as a city which is very efficiently governed, backed by a robust infrastructure whereby the use of Information Technology enables *efficiency, transparency and accessibility in all aspects of service delivery*

**What, as per you, would be the parameters for successful implementation of Smart Cities Mission in India?**

**The successful implementation of Smart Cities Mission shall depend on how the proposals on *Area Based Strategy: Retrofitting, Redevelopment and Greenfield and pan city initiatives* are implemented so as to ensure that the cities achieve global standards in terms of universal access to basic services without compromising the interests of urban poor. Similarly, they shall be judged on the basis of introducing e-governance so as to achieve *paperless, contactless and cashless way of working* and extend the benefit of same to all the citizens.**

**How and why would you say that SCM is better in comparison to JNNURM in terms of project objectives, strategy and on-ground implementation?**

Yes, Smart Cities Mission in a way is better than JNNURM, because for the first time in the history of implementation of centrally sponsored urban development programmes, emphasis is being given to area based strategy. I would say this may be the beginning of Local Area Plan which has so far not taken off. I think by adopting **area based strategy**, the planners can not only ascertain intra-city disparities in terms of access to basic facilities on ground but also come out with innovative ideas to overcome the problems within the Mission period. Furthermore, this is the first time the concept of city challenge competition is being held.

**Do you think the Smart Cities Mission is all-inclusive?**

Yes, the mission indeed will be all inclusive as the cities will have to come up with the pan-city initiatives, however, it is too early to say the same as the mission will be operationalized shortly, once the II Stage city challenge is over and the impact can only be felt once the mission period gets completed.

**How do you plan to make those cities smart that don't meet the basic service level benchmarks?**

Amongst the 98 identified cities, most of them will indeed have to work hard to attain the service level benchmark if they wish to be considered competitive at the global level. This will depend on how cities propose area based strategy. The cities will have to assure quick decision making process and effective inter-departmental coordination. The Urban Local Body will have to act professionally especially if they introduce e-governance completely for the ease of the citizens. Further, periodic monitoring is a must for assessing the progress of attaining the benchmark in service delivery.

**How does the Smart Cities Mission incorporate to enable creation of skilled labour to operate smart technology?**

I feel, without the involvement of professionals, especially the domain specialists, the objectives of the Smart Cities Mission will not be fulfilled. The effort of establishing of *Special Purpose Vehicle* is a step towards having team of dedicated professionals with diverse backgrounds.

**What can be the role of academic institutions (like SPAs, NITs, IITs) and organizations (like NOSPlan) in the making of smart cities?**

The academic institutions can always play an important role. In the erstwhile JNNURM, institutions like CEPT University played a very important role in giving advice and handholding from planning point of view. Similarly, the academic institutions can always handhold the city authorities in not only understanding the concept of area based strategy but also develop sense of appreciation for the Smart Cities Mission. Further, they can also act as pressure group (since they are autonomous) to advice the city authorities whether they are moving in the right direction towards achieving the objectives of the mission.

**How would the different schemes like 'SCM', 'AMRUT' and 'Housing for all' converge?**

Yes, the beneficiary cities of these programmes have to ensure that whatever grants they get from out of the central funds they must expend to achieve the goal of inclusive and sustainable city. Further, it has to ensure that none of the programmes should be implemented on stand-alone basis.

**Many people are of the opinion that 'smart cities' is an empty hype; what is your take on it?**

Well the critics have every right to criticize in our democratic set up. However, the SCM has in fact given the opportunity for *out of box thinking* whereby the cities must come up with innovative solutions that will facilitate them to become smart. Innovations like decentralized waste (zero) management, use of solar and new energy sources, reduction in the use of personal vehicles especially fossil fuels, transit oriented development, last mile connectivity and seamless public transport in metropolitan regions are to be adopted.

**Would you like to give a message for the planners of tomorrow?**

Yes, the prospective planners have got much more exposure to IT and hence can always excel in the field, however, they must appreciate the dynamics of urban planning and keep abreast with the emerging issues/policies so that once they complete their course, they can become thorough professionals and realize their potential in the job market.

**I wish all success to NOSPlan 2015 !**

**Mr. R. Srinivas**  
*Town and Country Planner*





# Reader's Retreat

## ETHICAL DILEMMAS IN PLANNING PRACTICES AND ROLE OF PLANNING EDUCATION IN INDIA

Curriculum in higher education usually shies away from explicitly talking about values. Planning education is not greatly different from this except that for planning to be recognized as a profession it is required to adopt a code of conduct. In the profession of planning, a highly political activity, decisions invariably entail ethical decisions. However, there is very little discussion on the everyday planning practice in general and ethical issues in planning practice in particular in the planning literature in India. Sensitization of students towards ethical dilemmas has become critical as increasing urbanization and large agglomerations require complex decision making for development. With many actors intervening in planning decisions, practices today face many pressures particularly in the context of privatization and real estate interests influencing decisions related with land use, development controls, etc.

### Role of Professional Body

The institute has a lot of responsibility in ensuring competence and integrity of the profession. The code of conduct of the institute should include examples of ethical issues and guidance notes on behaviour and provide a support system where planners can discuss the experience of practice in a more systematic manner for the profession to increase its legitimacy. There is a very little discussion on ethical issues considering the professional practice because there is limited understanding or discussion on what would be an ethical practice since planning as a profession still remains unregulated. Uptil now, planning being a public sector activity, such lack of regulation was being, to an extent, addressed by the service conduct rules in the government sector. The privatization of planning practice makes it more important for the institution to take steps in developing more specific ways of dealing with ethical issues.

### Ethics and Planning Education in India

In planning education in India so far, discussions of ethics is almost non-existent. Considering that planning is a value based activity this becomes particularly problematic and can leave

students more confused about the right and wrong in planning. At most, students are informed about code of conduct in India. In India with about fourteen planning schools, a course on professional practice is part of all of these planning schools. In almost all the cases professional ethics is mentioned as one of the words in the unit on “organization, scope and scale of charges”. This basically covers code of conduct in about one or two hours.

All India Technical Council of Education which regulates technical education India has put on their website a model curriculum for undergraduate and post graduate programme in Planning (AICTE, 2008 and AICTE, 2012). While the post graduate programme continues with the older practices of treating it as information about code of conduct; at undergraduate level, the professional practice module remains very similar to the postgraduate module with one subject on Human Values in Planning. Introduction of this subject was a fall out of a requirement by the Ministry of Human Resource Development to introduce value education at all levels including higher education. Most of the engineering colleges introduced this subject. Model curriculum thus introduces this subject, which provides basis for taking moral decisions. This is a positive step but however understanding theory of moral decisions and developing an ability to apply the same in everyday practices requires greater interface than simply a subject. The revised syllabus of the undergraduate planning programme introduces two subjects on planning practices and introduces a complete unit on professional ethics and on reflective practice.

**Poonam Prakash**

Associate Professor, SPA Delhi



## CITY BRANDING- A TECHNIQUE TO FOSTER GROWTH

Walk around the streets of a neighbourhood and you'll find big posters showcasing not your favourite clothes, shoes or electronics brands, but cities. Within the 'Incredible India' we have Bangalore as the 'Silicon Valley of India', Jaipur- 'The Pink City', Gurgaon-'The Millennium City' and many more. The main idea behind city branding is that we give an image of the city to people so that it turns from a location to a destination.

The process of branding a city or place is called as geo-branding, place branding. Cities around the world are branding themselves just like other commodities as they compete to be the best. *"A strong place brand helps a place compete in the global marketplace"* says Chris Fair (President, Resonance, Marketing Firm), "A business or a potential resident or a visitor can go anywhere they want today, so articulating differentiating and unique characteristics is important to attracting investment, people and capital to your place". Cities these days contend with each other to have sustainable development and provide its citizens a decent quality of life: in terms of good economic opportunities and environment. This way they brand themselves to attract investments and people to enjoy these services.

Within few years, the city adds value to itself with the efficiency and efficacy to maintain the brand name, which results in royalties in terms of good economic growth of the city, increased per capita income and increase in funds for municipalities for future development. City branding should not be perceived simply as branding or marketing, it is the art of creating an image of the city in people's mind so that they are attracted towards it; the unique character of the city is what makes it different from the rest of the world. These days the movement of people is very fluid and hence it is important to articulate what the city has best in it and how it is different from its other competitors, therefore making it more eye-catching with respect to other cities. Earlier, marketing techniques were used to promote cities worldwide. Place branding is a new trend, only half a decade old, where the image of the city was considered as a pre-requisite for future investments, export of products and enhancing tourism. Place branding should not be confused with marketing, as it is more inclusive and displays city's ideals, accomplishments and aspirations apart from just concentrating on the markets to be served.

Well marketed place branding strategies strengthen communities' sense of place; it creates a line between the communities, business and visitors. Most of the time, a city focuses on building capacities and enhancing growth of various sectors and city branding helps in enhancing the pace. Traditionally the character of the city was mainly defined by its geography and the industry supported by it, that is mainly the physical traits. However, today culture, people, innovation, ideas generated and experiences given by that place contribute towards its image. Thus, branding the city may change its face, if adopted in a right way.

**Malvika Paliwal**  
SPA, Delhi

## INTROSPECTION OF AN URBAN PLANNER

Till 2014, I was not open to the idea of the study of buildings, construction and cities but as I understood it, I definitely had the aptitude of drawing a straight line on an A4 sheet and had a vague idea of complimentary colours. Straight into SPAV, a two hour lecture about a dot on a plane didn't hold any relevance or importance to me mainly, because I was ill-read of the subject and unaware about how it was going to affect me. After doing countless number of sheets without any aim, I felt like I was whiling away my time for no reason. I was too lazy to ask questions, but in retrospect, I'm glad I didn't. Design is like the music on my playlist in so many ways. Fine art, yet subjective. The beauty lies in the difference of each song, each straight line in this case. Many say there are principles that define the science of Urban Planning and it might take me a while to understand it and philosophies I link them to. That is when it will all start to make sense.

It will be very unfortunate if I cannot look back at my four years at design school and not remember the valuable quotes from lectures or workshops that, in the end, will teach me the value of this art. I find myself lucky that I found out about this early enough because now in class, I end up writing the words that have a purpose for more than just exams.

Conversations about this subject with my brother and one of my closest friends from school were probably what acted as the cornerstone. Just like your favourite song playing during that perfect sunset by the sea, it is overwhelming at times. You realise that it is all a part of the oldest story that was ever written; that every human, social and cultural condition continues to influence built form, habitable space and the working of cities.

Planning is a design, a very cohesive term. Good design to me would mean great aesthetics with quotient that is either well defined or exists without a limit. I am not sure whether I would be a planner in practice for the rest of my life but I am certain there will always be moments in my life where I look fixedly at a façade of a great building or the interiors of a tiny café for a moment or two longer than a normal person, perhaps only to be interrupted by the smell of well-made coffee and cheesecake.

**Sai Siri**  
SPA, Vijaywada

*"Capital is to progress of society, what gas is to a car"*  
~ James Truslow Adams

## DUBAI – RAGS TO RICHES

Dubai! First thing that comes to people's mind is this filthy rich city situated on the Arab coast, where everybody can live out their dreams. People drive luxurious sports cars, live in huge mansions and splurge on expensive things. But it wasn't always this way. Talking about its past, it has pretty much no history at all. The entire place used to be a desert with the coast nearby. The people who lived here were tribals who initially led a nomadic lifestyle but settled in villages when they found a more exciting and rewarding job than rearing cattle – pearl diving. Thus they ended up living in villages, settling along the coast. With pearl trading quickly booming, the city ended up establishing itself as a small port in the early 20<sup>th</sup> century. It got situated on the sea route between Iran and India with many ships calling in.

In 1960s they struck oil off the coast which transformed this sleepy little town. With money pouring in, the Sultan then decided to invest all this in building infrastructure as they knew that the so called Black Gold was bound to run out soon. Next came the construction boom. Hundreds and thousands of workers from South Asia wound up in this desert city. The population increased by 300% between 1968 and 1975. The locals thus started on their quest to build one of the most extravagant, over-the-top and magnificent cities in the world – Dubai. The city quickly started growing outward from the two small villages that made up Dubai. The historic core was a dusty, crowded area with traditional Arab houses with windrowers huddled up together to protect from the harsh 45 degree sun. With the growing population, the wealthy left the downtown to find more spacious and larger houses in the suburbs. The South East Asian expatriates who ended up settling there found the historic core very attractive and thus gave it the name 'Little India'. The inhabitants made sure that their culture wasn't forgotten and did this by building temples, restaurants and shops that sold food items from their home country. The government decided it was high time to have a new downtown in the city and away from the ethnic quarter. The highway to Abu Dhabi seemed ideal for this. The World Trade Center which was one of the very first of the many skyscrapers in Dubai came up here. With this, the city started expanding linearly, sandwiched between the coast and the highway running parallel to the coast. With the opening of Burj Khalifa – the tallest building in the world, the 2 km stretch along the Abu Dhabi highway was officially named as the new downtown of the city. The Europeans meanwhile had a greater affinity to the beach than the Indians and Arabs. They began settling along the coast with long stretches of beaches and houses next to them. However the coastline of the city-state was short being only 56 km. The government thus came with a new project of waterfront development in the extreme end of the city.

Plagued with the problem of a short coastline, they then realized that the answer wasn't going to be development on land but on sea instead. This quickly transformed into what became known as the Palm Islands which were 3 sets of islands being shaped like a palm. With over 3 million people living in the city, to

relieve congestion, the city began to build more highways, gigantic interchanges and wider roads and bridges with some stretches having up to 16 lanes. The authorities realized that this couldn't go on much longer and there had to be a way to cap this rapidly growing number of cars in the city. That's when the idea of building a fully automated metro system was born.

It really took a great deal of effort to bring about change in this city. To transform a fishing and pearl diving hamlet into this huge bustling city was no joke. The Sultan came up with this vision of developing it into what it is today and the expatriate workforce turned this vision into reality. With the city

**Ashankh Jaishankar**  
**SPA Delhi**

## PROSPECTS AND OPPORTUNITIES OF PLANNING

India is one of the largest urban systems in the world with more than 30 percent of urban population. It is expected that by 2025, half of India's population will be urbane. The urbanization has created manifold problems such as transportation, poverty, unemployment, unauthorized housing colonies, slums and squatter settlements. The rising population and rapid expansion of cities and towns has created a need for more and more architects, sociologists, and economists with expertise in, or at least basic knowledge of, town planning.

Planning is a rational and regulated development process. Planning is a diversified field which deals with many sectors related to area development. Planning is a multi-stage and complex phenomenon that is put in practice. Planners anticipate how a city will function and how it will look as it develops (or redevelops) in the future. Planners will anticipate the need and implications of different components in an area like population growth and the need of infrastructure. They can go for higher studies once they complete this course so as to improve their academic qualification and the scope of job opportunities. They also have job opportunities in both public and private sector undertakings or else they can practice independently. There is a lot of demand for planners abroad also. There is the option of going in the professional teaching field too.

### Further study

There are some postgraduate courses that further your knowledge of the subject and which, along with additional experience, courses include Urban Planning, Regional Planning, Transport and Traffic Planning, Business Management; MBA, Built Environment, Disaster Management, Housing, Rural Resource Planning and Environmental Planning. The working areas include metropolitan cities as well as small congested towns, cities and also villages.

Students training in urban and regional planning, development and management can find employment in the state town and country planning departments, housing boards, municipal corporations, improvement trusts, urban development authorities, district and rural planning offices, pollution control boards, private consultancy firms and other



## LITTLE THINGS THAT MAKE BIG DIFFERENCES...

such organizations. If you are interested in planning, go for it. Don't worry about job prospects for now. I highly recommend going this route before going off to graduate school because it will give you a good opportunity to learn what planning is before completely devoting yourself to the field (and adding on considerable debt). The best thing you can do in the current state of the economy if you want to be a planner is open yourself up to the country. Urban, suburban, rural. All of these settings can benefit from good planning. You will need to keep up to date with current planning, built environment and wider environmental issues if you want to pursue a career in planning. Try to gain work experience through relevant part-time or temporary jobs, voluntary positions or internships. Many local authorities and private sector employers offer work placements in planning departments, and they may also have opportunities for work shadowing or workplace visits.

Planning posts exist across the public sector including local authority departments (such as regeneration services or planning and development), central/devolved government and major public bodies. There are posts with a variety of employers and consultancies in the private sector, often in specific areas such as planning law, transport or urban regeneration. These positions often require experience.

**Shashikant Nishant Sharma  
& Imran Basha Soudagar. A. K.**

### A RAG FOR ONE, A CANVAS FOR OTHER

*Sitting on a bench in the evening at four,  
I saw faces, I'd never seen before.*

*A small girl playing with stones, I gave her a smile,  
Cautious though not to be perceived as a phile.  
She made some faces and figures using stones on the ground,  
A duck, a cat and a dog more like a hound.*

*And then a young lady came out of nowhere,  
She sat on a bench at a corner somewhere.  
She flipped through a notebook and tore a page,  
And threw it away, may be fallen in rage.*

*Just then that small girl rushed, clutching her skirt's hem,  
And picked that tatter as if she'd found a gem.  
Being a mute witness I was compelled to wonder,  
May be that paper is a mere rag for one and possibly canvas for other.*

*Maybe that 'girlie looking bag', that undersized jeans,  
That loaf of bread and that bland curry made of beans;  
Could have been a prized possession for some,  
And scrumptious meal for other some.*

*That day I contemplated on things I never cared before,  
Sitting on that bench in the evening at four.*

**Ashish Pandey, SVNIT Surat**

"The future of India lies in its villages", this famous statement by Mahatma Gandhi is being challenged by urbanists today who see a shining future for India in its cities. Gandhi's idea to develop the Indian society was based on his understanding of the society and hence based on the village system. Talking about the importance of village, he wrote in 1936, **"I would say if the village perishes, India will perish too. It will be no more India. His one mission in the world will get lost."**

In a major distinction to its credit, the College of Engineering Pune (CoEP) here has been selected, along with the IITs and NITs, by Prime Minister Narendra Modi for the Unnat Bharat Abhiyan- a programme to uplift rural India. Unnat Bharat Abhiyan is inspired by the vision of transformational change in rural development processes by leveraging knowledge institutions to help build the architecture of an Inclusive India. COEP has always shown social responsibility and has worked hard to solve problems existing in our society, which is why it was chosen by the Union Government to be a part of UBA. As part of the initiative, the college has selected 10 villages around Pune, and a team of faculties and student volunteers will strive to develop "viable, practical and novel technological solutions" for making life easier in these places.

COEP is working along with villagers, NGOs and private companies, and organised a meeting with the villagers of 10 hamlets. Villagers discussed various problems and shared details of the help they are seeking. SM Bagul, Principal of Sambhave School in Sambhave village said, "Unemployment is causing various other problems and the number of children going to schools in the village has dropped drastically." While highlighting the educational issues of Ranje village, Manisha Gujar said, "Due to lack of transportation facilities, villagers are facing many problems and hence the children cannot reach schools."

Considering the role of planner, many students from Planning are engaged in surveying, mapping the village assets and preparing the Problem Assessment reports as well as Village Plans. The Village Plans focus on various Basic Infrastructure facilities, Proper allocation of governmental funds, health and hygiene issues, agriculture and employment generating solutions. With regards to surveying and data analysis, Planning Department of COEP and Yashwantrao Chavan Academy of Development Administration (YASHADA) is helping and guiding the students. This activity is boosting the students in exploring their skills on the ground that are actually coming into existence. On other part the Technological solutions are being developed by other Department students with the help of various implementing authorities like industries, firms, organizations, etc. under their Corporate Social Responsibility (CSR) funds. Thus, this is creating a comprehensive approach of development by engaging academic institutions, students, industries, administrative bodies, NGO's and societies. Hope to see more positive outcomes with collective efforts that will enhance the growth of the overall community.

**Sagar Ikade  
COEP**

## PLANNING – "IS IT FOR ME?"

Confusion and apprehension persists for quite a while as a fresh entrant in B. Planning. To curb the most important of these doubts, 'Is planning for me?' I shall attempt to summarize the extent of the course and applications. The course was pretty much started by senior professors in the late 80's in view of the growing need for professionally trained planners who were/are needed for the great urbanization and development challenge in our country. (This is what you will read on the college website and what most lay-persons will tell you.) In reality that is the tip of the ice-berg. Imagine where you are sitting (assuming you are reading this at home/your room etc.) with your car safely parked in a non-congested locality. It is safe. Your apartment has a great view and there is a lovely park a few minutes away where you take your walks. Not further away, there is a local market which caters to all your needs and again, is not crowded and is just big enough to cater your locality. The traffic is low; the busier, noisier streets are further off so life is peaceful in the city. You go off to work preferably by use of an IPT (intermediate public transport) which operates like a shuttle and drops you off to the nearest metro station at a standardized rate. Supposing you run a design firm based in Green Park Extension. The Govt. has set a policy where you can open businesses in residential areas and a variety of other enterprises in an elegant and well-functioning space and streets based on urban design aesthetics supported by government policies. The street is vibrant and active, work isn't such a drag. The rent is controlled and the space provides a creative space and freedom for designers/planners working there to do their best. They don't have to worry about their kids at school as it is right in the neighbourhood. The new government has now mandated that the poorer sections of society will be given flats in Green Park at subsidized rates. The social barriers start coming down as different sections interact in the same spaces.

This is all well and good but some things bother you; there are unsafe streets, the street lights don't work. There are unsafe areas. Some areas don't have access to a good life. The poor are living in slums, the water and electric supply is erratic; the new developments are in conflict with the existing fabric; the heritage buildings are under threat. Half our lives we are stuck in traffic. Older parts of the city need disaster management preparedness - the outskirts of the city need to be reined in. Even all the good concerts are moving to Bangalore because we don't have the proper space! How will technology play out with our daily life? Are malls replacing traditional spaces of recreation? How will the new land bill affect me? What about the new building height restrictions? What about the poor? What about safety and security? Air Pollution? Sanitation? Even larger questions of why is Jharkhand not as developed? What is up with the monopoly Delhi, Mumbai seem to have? Your time as a B. Planning student will be spent answering or at least trying (can't say that for most undergraduate degrees) to finding solutions to all of these and several more problems by way of designing, theorizing, action plans, master plans and in all the entire "urban management" from the financing to the implementation - problems that plague a

person sitting at home; running a business; a kid in school; the blind trying to cross the road to larger, more policy driven solutions and be actively involved in all of these aspects and being a planner, you will be the best person to address these issues with the skill and technical know-how, armed with a sensitized mind to the needs of your country and people. In all, it feels great; feels overwhelming actually once you start thinking about the length and breadth of it all. It can get frustrating sometimes and you may wonder why you hadn't take the easier path in life and gotten an engineering degree, worked in an MNC and put your feet up. But what is better than to think of ways to make peoples' lives better? And in the process, actually making a difference!

**Saneera Dev**  
SPA, New Delhi

## CLOSE ENCOUNTERS OF THE SURVEYING KIND

The second year Transportation Planning studio is an important and inevitable part of a planning student's life and all the surveys we have to do- Origin Destination surveys, traffic volume surveys, Spot and journey speed and many more are unavoidable. Every planning student mentally curses at having to stand in one spot for hours and count cars and cycles and pedestrians. It is an open secret how sincere we are towards the surveys.

Two of my friends, during the traffic volume survey thought of sitting on the median of an arterial road to count all day. Naturally, all passers-by thought they were crazy to be sitting in the middle of the road, writing. Somebody took a photograph of them sitting on the road and posted it on a local Facebook page. Many viewers commented on the crazy pair sitting on the road, and they were countered by my classmates, until we made them realize that they were surveying and doing a good deed for the city. The photograph was trending for quite some time on social media.

While surveying you are bound to be questioned on what you are doing. When we told one such man that we would be preparing an area circulation plan he said "What's the point of these surveys? I still won't get water in my house!" When a small child walking with his grandfather asked us we told him we are counting parked vehicles. The kid said very innocently "Wow! That's a really hard job!" we knew he would grow up to be wise.

When taking a break from surveying, there is always the fear of being caught by your professor who's circling the entire city to check on you. The feeling is worse when your classmates post a prank message on your class WhatsApp group that sir is at the spot where you should be surveying and you're dead! Surveying did have its good aspects too! While surveying one time an old man was curious, and when we told him what we were doing he was so impressed that he treated us to chai from a nearby tea stall because we were working so hard!

Surveying may not have been the most fun part of the exercise, but it did have some interesting moments.

**Devashree Ragde**  
COEP



## TOWN PLANNING SCHEMES IN ANAND

Land ownership and land acquisition have always been the biggest dilemma of urbanization especially in the Indian context. The Urban Local Bodies have limited fiscal capacity and along with the issue of land ownership, the local bodies can hardly work upon the development of the urban areas. Town Planning Schemes have been very efficient with respect to the ownership of land. This scheme has a very important component of "land pooling" that allows the owners to share the gain in the land value after various provisions and infrastructure is made. This scheme started in 1915 in the Bombay Town Planning Act. Many small plots are pooled together and infrastructure is provided on some part of these pooled plots. Also the finances are managed by the people in the form of betterment charges for their gains by improved infrastructure. Certain plots are reserved by the local bodies for future developments; they sell or rent these plots to generate finances for the scheme.

We went to Anand, Gujarat in our third year to do our Master Plan study. There, we came across the concept of Town Planning Schemes which were being made by the Urban Local Bodies. These schemes are much more efficient than the state government's schemes, as the bodies making the plans are more related to the space, they are aware about all the situations of the town. To ensure well-planned development and to provide the basic amenities like roads, water, drainage, street lights, etc and facilities like schools, playgrounds, healthcare centres, etc. Also the people are involved in making the schemes more workable as the improvement in infrastructure will benefit them as the land value increases with better facilities. In 1999 amendments were made to the Gujarat Town Planning and Urban Development Act (GTPUDA) which allowed possession of land for construction of roads. Since land values rise with roads, this has helped ensure land owner support, sale of plots to finance the scheme and a tighter time limit in the process.

The people in Anand were quite aware of all the benefits they are getting with the effect of Town Planning Schemes in the city. Ten Town Planning Schemes were made in Anand city, hence the city was organized with wide connecting roads, various facilities, separate industrial estate and many commercial complexes. The ULB had many commercial plots reserved for renting and selling for generating finances for future enterprises. There was a new department formed for preparing TP Schemes by consolidating municipalities of two more cities named AVKUDA- Anand, Vallabh Vidhyanagar, Karamsad Urban Development Authority. Municipalities have made the plans for the city by land pooling, to provide regular shaped plots, to check the growth of the city in a planned way. A maximum of 50% of the land can be deducted for providing service and infrastructure. Housing for socially and economically backward class is also provided in the pooled plots. Advantages of this scheme were that area for development was available without land acquisition, proximity of availability of facilities increases. It was a great experience to understand how Town Planning scheme works on ground.

**-Era Hashia, SPA Delhi**

## HUMANITY NEEDS WATER

*A drop of water is flexible.*

*A drop of water is powerful.*

*A drop of water is in demand.*

*Water is at the core of sustainable development.*

*Water resources, and range of services they provide, underpin poverty decline, economic growth and environmental sustainability.*

*From food and energy security to human and environmental health, water contributes to the improvements in social well-being as well as inclusive growth, affecting the livelihoods of billions.*

*Water is required to generate energy. Energy is required to deliver water.*

*More water is used to manufacture a car than to fill a swimming pool.*

*Thousands of kilometres of pipes make up a city's water infrastructure.*

*Many archaic systems waste more freshwater than they deliver.*

*Climate change negatively impacts fresh water sources. Combined with increased demands for water, this will create huge challenges for water resources management. Water threats have been increasing with climate change and human activities, in the North and South of our planet, from East to West.*

*Technology and smart planning reduce the use of water, and can improve the quality of wastewater. But, with preparedness and planning, fatalities and destruction can be decreased. Need is now for concrete and significant changes to make this happen.*

**Dhanashree Raut  
COEP**

***"In the era of globalization, the local is still relevant — and perhaps more than before."***

***—Montserrat Pareja-Eastaway***

## TEAM WORK - OUR STUDIO EXPERIENCE

It is said, "Teamwork divides the task and multiplies the success." The most important survival skill in planning education is "coordinating in a team". Planning is all about working in teams and coordinating with each other. Ever wondered about working on different topics all alone? Scratching your head all night long trying to get hold of proposals and innovative ideas for different aspects? Don't you get frustrated when your cup of coffee gets cold and you don't get any ideas to put down on sheets? Two heads are better than one. So, it is really important to work in a group. But there are issues related to working in a group too; some misunderstandings or petty disputes.

We all have plans and our own ideas and when these ideas come together it leaves no space for differences and it imparts a feeling to work together as a team to achieve one common goal. This training of team work is imparted to us from the very beginning of our college life here by making us work in group during studios.

This article is about the team work and experiences we shared during our Zonal Plan Preparation in fifth semester. There were three different approaches in studio - namely sustainable approach, market forces and master plan norms. We landed up being a member of the sustainable group along with nine other members. The sustainable group had the highest share of members in its group but this was one such group where misunderstanding and personal clashes never showed up and the work would get completed smoothly without any delay. This was the first such occasion of real team-work. Things changed a lot during that semester and people who used to be 'Eid ka chand' started to show up during reviews and discussions. Everyone shared their ideas and gave inputs to prepare a better proposal. We had one person responsible for collecting the work from everyone and get it printed and pinned up before the faculty came to the class. This way we would show our strength and unity and would always get appreciation from the faculty.

The final jury was nearing. Girls began chatting on what to wear and what not. It was meant to be the best day for girls especially where they could show themselves up in some formal dresses, and the rest of the boys sharing their brotherhood experiences and taunting each other like, 'Naha ke aa jana' (Okay, that doesn't mean boys don't bathe every day). Finally we ended up deciding to wear green which would reflect our group's theme. The final jury was one of the best days for us. We all showed up in green and everyone gave their best for final jury. When the jury members would question any one of us, we would all support each other, after all 'Bhai hai apna'. We could see the smiling faces, celebratory moods on everyone's faces. One of the best things we learnt from this group was that it's not just an individual person's hard work alone, but the positive attitude and enthusiasm among the members can lead to cooperation and unity among members and a good plan can come up in terms of its effectiveness.

**Shreya Mangla and Jwangma Basumatary**  
SPA, Delhi

## देखी है एक ऐसी दुनिया

निकलता हूँ जब देखने हालात-ए-दुनिया,  
दिखती हैं तरफ़ बस दिक्कत-ए-दुनिया,  
बस्ती की गंदगी में रहने वालों की,  
ये दुनिया है रोटी को तरस्ते बेचारे की,  
जातिवाद और भ्रष्टाचारों की,  
ये दुनिया है विकास को रोकते घुस खाने वालों की,  
ये मतलबी मजबूर बेबस सी दुनिया,  
ये दुनिया है टूटी सड़क पे चलने वालों की,  
कुठिया में रहने वालों की,  
बिना बिजली गंदा पानी पीने वालों की,  
ये दुनिया है ट्रैफिक में फंसी प्रदूषण के मारों की,  
घर के सुख को तरसने वालों की,  
ये दुनिया है प्रौद्योगिकी का गलत प्रयोग करने वालों की!!!  
सोचता हूँ बदल दूँ मैं ये दुनिया,  
ये मजबूर तरस्ती असाहयों की,  
ना तर्से कोई रोटी को...ये दुनिया भरी हो रेज़गारों की  
ना हो कोई जातिवाद ना हो भ्रष्टाचारों की,  
एक दुनिया हो बस तरक्की करने वालों की,  
ना हो पानी की किल्लत, ना बिजली की किचकिच,  
ना प्रदूषण से हुए बिमारियों की  
ये दुनिया बस हो साफ-सुत्रे मकानों की,  
प्रौद्योगिकी विकास करने वालों की,  
देखी है एक ऐसी दुनिया,  
जहाँ रहेंगे हर समुदाय के लोग साथ,  
होगी हरीयाली और शांति हर तरफ़ बनेगा एक ऐसा समाज,  
आओ मिलकर बनायेंगे ऐसी दुनिया  
सुख समृद्धी सुकुन से जीने वालों की!!!  
देखो ये दुनिया बदलो ये दुनिया!!!

**उमैर खान, आमिती यून्वर्सिटी.**

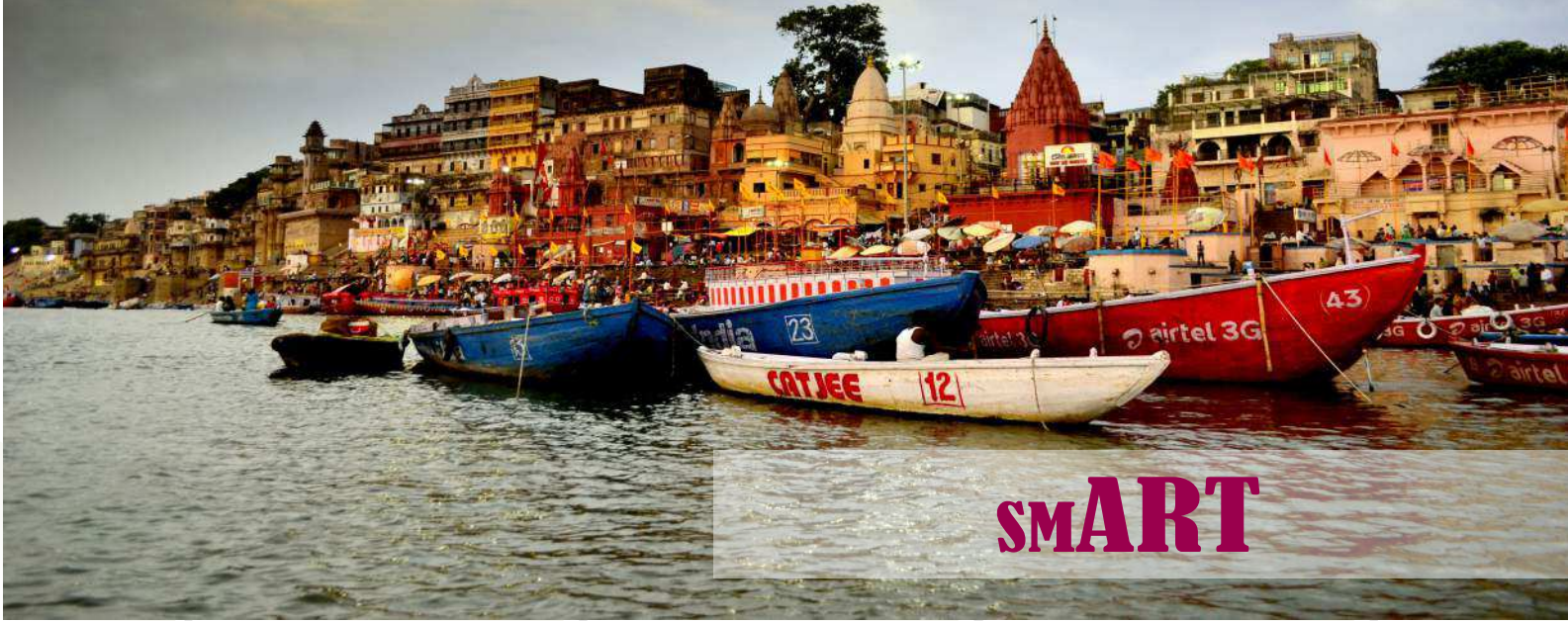
## उड़ान

उड़ चलो कहीं दूर यहाँ से  
जहाँ ख्वाबों की नई सुबह जागे  
सारी कायनात पर हो बस अपना उजाला  
एरदों की सीडीयों से गुजरे कामयाबी की माला  
टूटे सपनों की अब मत छेड़ झन्कार  
विद्वता से अपनी उज्ज्वलित करो ये संसार  
वक्त का वहाँ ना हो पता ना कोई खबर  
सारे जहाँ की इस महफ़िल में हो अपना एक संगमरमर  
दिव्य ज्योती से हो अपना लक्ष्य महान  
जिसे पा कर शैतान भी बन जाये इन्सान  
तो आओ दिल के इन टूकड़ों को फिरसे चलो जोड़े निराशाओं की  
इस तक्त पर एक छोटी सी मुसकुराहट छोड़े

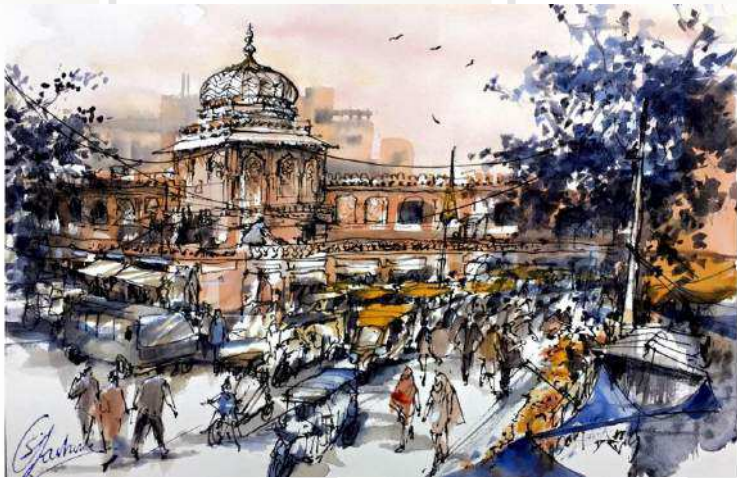
**रविकुमार जावले**  
अभियांत्रिकी महाविद्यालय पुणे



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SMART



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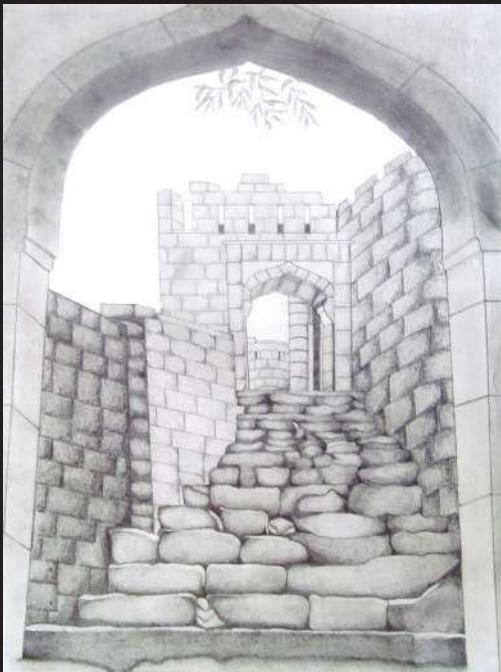


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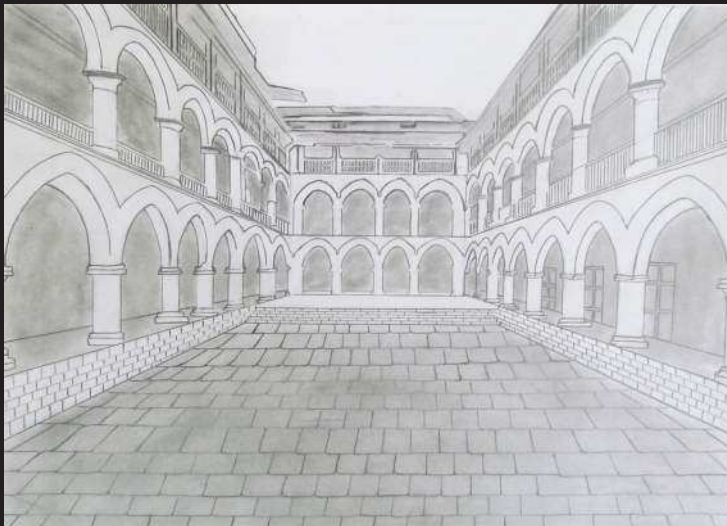
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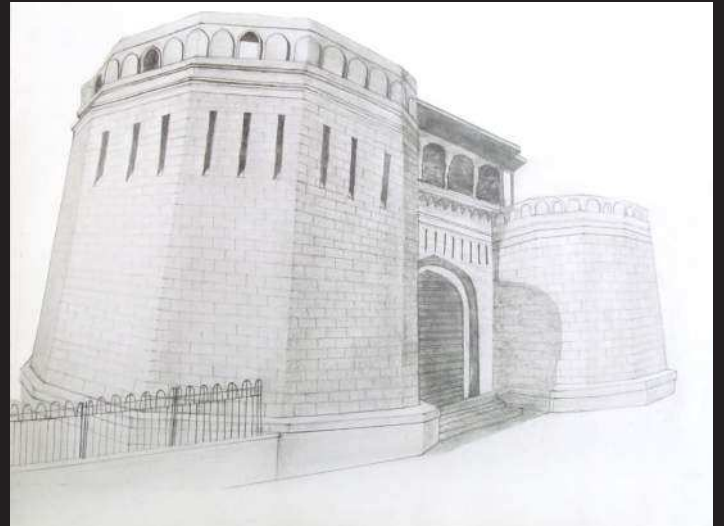
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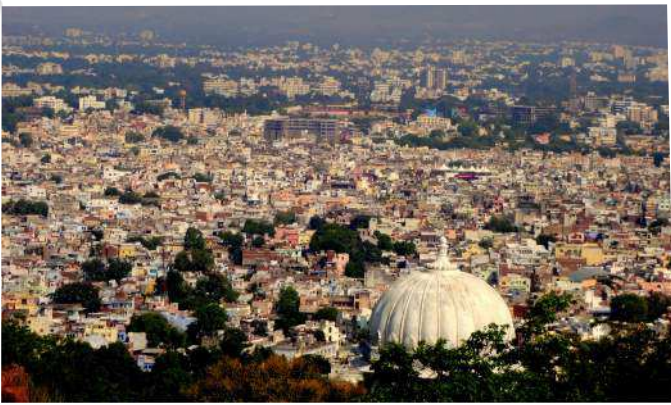




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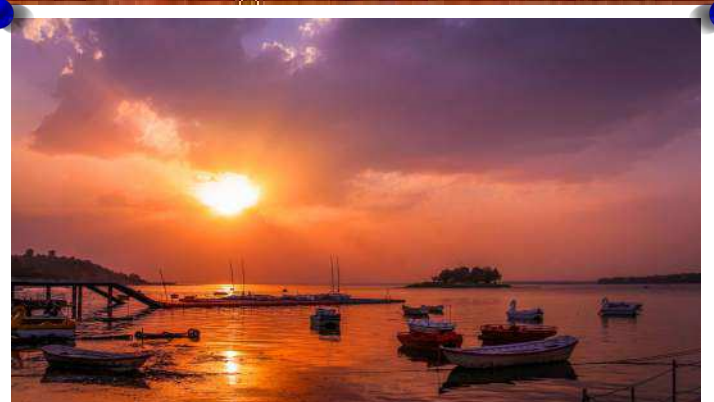
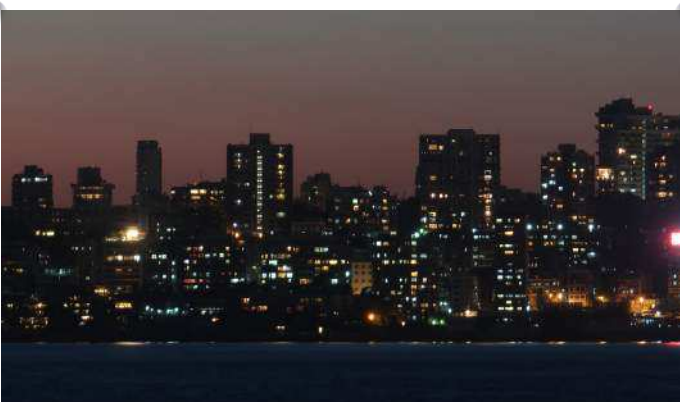


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## College of Engineering, Pune

- Rehabilitation plan for Malin village in Pune district which was destroyed due to a land slide in July, 2014, prepared by **Akshay Chirmade, Swapnil Labde, Omkar Todkar, Komal Handore, Jaysing Jadhav, Rohan Pandit, Akshata Karpe**
- 1<sup>st</sup> place in various competitions Triptic 2014, Cynosure 2014, Metropolis 2014: **Jaysing Jadhav, Aishwarya Borate, Akshata Karpe, Prajakta Sonar**
- 1st place in Abinitio fest 2015: **Akshay Chirmade, Swapnil Labde, Omkar Todkar**
- 2nd place in Metropolis 2014: **Akshay Chirmade, Omkar Todkar, Komal Handore**
- 2nd place in Metropolis 2015: **Akshay Chirmade, Swapnil Labde, Komal Handore**
- **Abhishek Dole** : Published research papers at 20<sup>th</sup> National Indian Building Congress, Delhi and National Conference on Sustainable Built Environment, IIT Roorkee.
- **Sagar Ikade**: 2<sup>nd</sup> prize in Idea Generation competition organized by National Insurance Academy, Pune on Use of Technology and Innovations in promoting governance, Consolation Prize in Essay Competition on Pune- A Smart City organised by International Society of Automation. (Pune chapter)
- Research paper published on 'Metamorphosis and revival of vernacular architecture in Mumbai: Case study of Khotachiwadi' in South Asian Vernacular Architecture Conference, IGRMS, Bhopal (11-13 Dec 2015) – **Sagar Ikade and Jay Baviskar**.
- **Sejal Mathur, Saurabh Papadkar, Rhea Motwani**: Paper published on topic 'Transit Oriented Development and Indian Cities' in Neo International Conference on Habitable Environments LPU Punjab, November 2014
- **Sejal Mathur, Saurabh Papadkar**: Paper published on topic 'Mass Rapid Transit' in International Journal of Research, October 2014



## SPA, Bhopal

- Research paper writing and presentation competition at IIT Roorkee Tech fest Cognizance'15: 1<sup>st</sup> place won by **Madhur Kukreja and Pulkit Singal**
- City Changer Design Competition: 1<sup>st</sup> position won by **Rupsa Chakroborty, Shameer Nizar, Akanksha Jain, Shrabana Das, Irtiga Anjum, Osama Aziz Khan**
- **Pinky Rome**: Published research papers on 'Parking- A perennial problem in Kolkata' and 'Integrated Child Development Scheme- Case Study of Gujarat' in International Journal of Science and Research



## Amity, Manesar

Archotsav 2015 at Sundardeep Group of Institutions, Ghaziabad: 1<sup>st</sup> prize in Interior Design trophy, 2<sup>nd</sup> prize in Innovation in Design Trophy



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Papers published/presented:

- 'Differentiated Roles of Master Plan and City Development Plan' at National Conference on Re-Discovering Cities, Ambala- April 2015
- 'Role of Public Participation in Urban Development' at National Conference on Sustainable Built Environment, IIT Roorkee, April 2015

### Anugrah Nagaich

- Published paper on 'Planning Interventions for Lake Conservation: A Case of Shahpura Lake, Bhopal' in Journal of the Institution of Engineers (India): Series A (127), Springer India with N. Munoth- 2015



## SVNIT, Surat

Papers published and presented

- **Dhruvita D. Zala, Almas Siddiqui & Leena Garg** : "Managing Urban Water System with Smart Technology for Sustained Green Infrastructure" in the National Conference on Smart and Sustainable Cities (SSC)-2015.
- **Dhruvita D. Zala, Almas Siddiqui & Chetan Patel** : "Role of Urban Planner in Disaster Mitigation" in the 3<sup>rd</sup> International Conference on "Gujarat Model of Governance: Lessons & Future Scope" 2015.
- **Upasana Panchal & Chetan Patel**: "Smart Cities: Issues and Challenges in Indian Context" in the National Conference on Smart and Sustainable Cities (SSC)-2015.
- **Upasana Panchal, Sagar Gurnani & Leena Garg**- "An Appraisal to Women-centric Governance Policy at National and Gujarat State Level" in the 3<sup>rd</sup> International Conference on "Gujarat Model of Governance: Lessons & Future Scope" 2015. and Research



## SPA, Delhi

Papers published:

- International Journals of Geomatics and Geosciences, by **Rawat, J. S. Kumar, M, and Biswas, V** on Landuse / Land cover dynamics using Multi Temporal Satellite Imagery – A Case study of Haldwani Town, Nainital, Uttarakhand, India
- Urban Panorama – A Journal of urban governance and management, by **Biswas, V., Tyagi, D.K., and Tyagi, V.** on Estimation of Landuse/ cover change detection by geospatial techniques – A Case Study of Bhowali Himalayan town (India)
- The Geographical Observer by **Biswas, V. and Malik, M** on Geospatial Technology and Sustainable Smart Cities in the context of Indian Cities
- International Journal of New Innovations in Engineering and Technology by **Biswas, V., Kumar, D., and Thakur, S** on Efficiency of ICT in Sustainable Smart City Development
- World Green Building Week Celebration at Rics School of Built Environment, Amity University, September, 2015 : 2<sup>nd</sup> prize won by **Rhythm Grover, Sharaj Sundararaman**



## Amity, Noida

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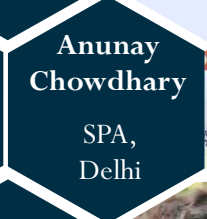
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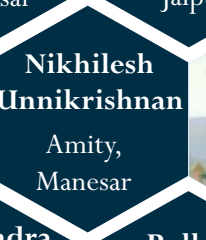
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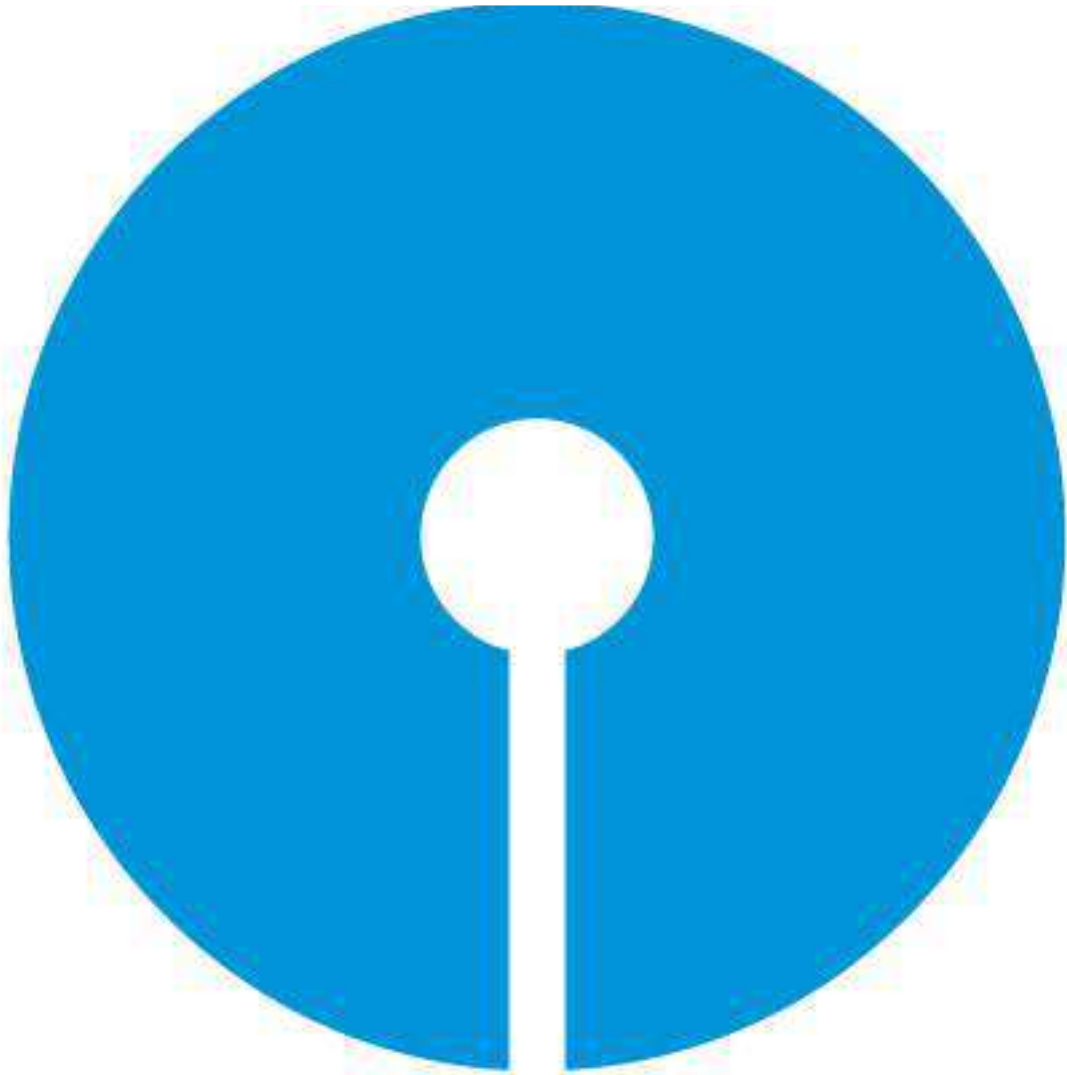






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