



 **BNCA**  
 MAHARSHI KARVE STREE SHIKSHAN SAMSTHA'S  
**DR. BHANUBEN NANAVATI**  
**COLLEGE OF ARCHITECTURE**  
**FOR WOMEN**  
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## UNITED NATIONS ACADEMIC IMPACT PROGRAM – 2017

### SYMPOSIUM ON EMERGENCY MANAGEMENT THROUGH PLANNING AND DESIGN

16<sup>TH</sup> SEPTEMBER 2017 DR. BHANUBEN NANAVATI COLLEGE OF ARCHITECTURE FOR WOMEN,  
 PUNE.



## **UNITED NATIONS ACADEMIC IMPACT PROGRAM – 2017**

### **At Dr.Bhanuben Nanavati College of Architecture for Women**

The United Nations Academic Impact (UNAI) is an initiative that aligns institutions of higher education with the United Nations in actively supporting and contributing to the realisation of UN goals and mandates including the promotion and protection of human rights, access to education, sustainability and conflict resolution. Since 2010 UNAI has created a vibrant and diverse network of students, academics, scientists, researchers, think tanks, institutions of higher education, continuing education and educational associations. There are over 1000 member institutions in more than 120 countries that reach millions of people in the education and research sectors around the world. Since its inception some thirty international networks of universities and other institutes of higher education and research have endorsed UNAI and encouraged their members to join, representing a global diversity of regions and a thematic wealth of disciplines.

The work of these institutions is vital to achieving the Sustainable Development Goals as they serve as incubators of new ideas, inventions and solutions to the many global challenges we face. United Nations Academic Impact provides the integral link to these stakeholders to ensure that the international community harnesses the energy and innovation of young people and the research community in service to humanity.

Dr.B.N.College of Architecture for Women is a designated Global Hub for Addressing Poverty through Education. As a part of institutes UNAI Program, we are organizing a symposium on Emergency Management through planning and Design for Pune city which is extension to hubs ongoing activity of Emergency Shelter Design Workshops. The purpose of this Symposium is to provide a platform to Administration, Bureaucrats, Politicians, NGO's, and Academic Institutes to express their Views/opinions on Risks and the challenges the city is facing. The Symposium shall also try to evolve through the discussion, the ways to overcome these challenges and the responsibility and the accountability of the local government. The aim of the Symposium is to understand the risks, the built environment of the city faces, from various perspectives of planning and design.

## Symposium on

### Emergency Management through Planning and Design.

#### Concept Note:

Indian cities will keep on attracting populations. Almost 60% of Indian population lives in urban areas and very few cities are planned cities. Cities grow organically than a planned effort. The built environment of the cities is result of an immediate need, more than a conscious requirement. Hence the vulnerability to disasters increases manifold in urban areas. The study of the journey of cities from villages to metropolitan cities over decades is interesting and dynamic. The growth of built environment is mainly attributed to economic development of city – increasing industrial and commercial sector. The results of which are, the cities grow by need based approach, then proactively planned approach and the outcome of which is development deficit cities.

*The Hyogo Framework for Action 2005-2015 (United Nations,2005) urges that disaster risk should be addressed in urban planning ,along with other technical matters. Amongst other requirements it calls on governments to mainstream disaster risk considerations into planning procedures for major infrastructure projects.*

*The Sendai Framework further adds Evidence indicates that exposure of persons and assets in all countries has increased faster than vulnerability has decreased, thus generating new risks and a steady rise in disaster related losses, with a significant economic, social, health, cultural and environmental impact in the short, medium and long term, especially at the local and community levels.*

The cities face the challenges of rapid urbanisation, poor urban planning high density population, expanding informal settlements and inadequate infrastructure. The disaster risk aggravates due to environmental degradation, disproportional increase of solid waste, untreated waste water, excessive extracting of ground water without recharging, destruction of existing (natural) hazard protection systems such as drainage channels, wetlands, flood plains, fresh air corridors and vegetation.

Pune is the eighth largest metropolis in India and second largest in the Maharashtra state. In last ten years Pune city has seen a steep rise in development due to IT sector and other industrial sectors, but the infrastructure fails to fulfill the increasing demands of the city. The City is in phase of major

transformation with the Smart City Movement. To understand the issues of Emergency Management of the City especially for its built environment through Planning and design of the city, BNCA has arranged a Symposium on **‘Emergency Management through Planning and Design for Pune City’** on 16<sup>th</sup> September 2017 at Dr.B.N.College of Architecture for Women.

## **Themes**

- Integration of Emergency Management in planning for Pune Region
- Preparedness and mitigation measures for Pune city
- Perception of risk and emergencies
- Design of Emergency shelters
- Disaster Safety: Builders Perspective.
- Mitigation measures: Case study of Malin
- Resilience Planning

## **Speakers**

- Mr.Kiran Gitte, CEO PMRDA
- Mr.Rajendra Jagtap, CEO Smart cities Pune
- Mrs Medha Kulkarni
- Col Supnekar, Director, Disaster Management Cell, Yashada
- Mr.Shantilal Mutha, Shantilal Mutha Foundation
- Dr.Shibu Mani, Tata Institute of social sciences, Mumbai.
- Parag Mankikar, Director, Neeti Solutions.
- Swati Panhale, GIS expert
- Mohan Sakalkar, Director, CEPL
- R.B.Chafelkar, Director, RBCH
- Jayashree Deshpande, IIA
- Dr. Mangesh Kashyap



## UNITED NATIONS ACADEMIC IMPACT PROGRAM Sept 2017



## SYMPOSIUM ON EMERGENCY MANAGEMENT THROUGH PLANNING AND DESIGN

In continuation with  
**EMERGENCY SHELTER DESIGN WORKSHOP SERIES**

**BNCA**  
MAHARSHI KARVE STREET SHIKSHAN SAMSTHA'S  
DR. BHANUBEN NANAVATI  
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Pune is the eighth largest metropolis in India and second largest in the Maharashtra state. The cities face the challenges of rapid urbanisation, poor urban planning high density population, expanding informal settlements and inadequate infrastructure. In last ten years Pune city has seen a steep rise in development due to IT sector and other industrial sectors, but the infrastructure fails to fulfil the increasing demands of the city. The City is in phase of major transformation with the Smart City Movement. To understand the issues of Emergency Management of our City especially for its built environment through Planning and design of the city, BNCA has arranged a Symposium of all the stakeholders.

### Themes

- Integration Of Emergency Management In Planning Of Pune Metropolitan Region.
- Integration Of Emergency Management In Smart Cities.
- Risk Profile Of Pune Region
- Emergency Management Capacities For Pune City
- Disaster Safety : Developers Perspective
- Perception Of Risk And Emergencies
- Impact Of Disaster On Existing Population And Structures
- Disaster Safety : Case Study Of Malin
- Disaster Safety Audit For Existing Scenario Of Pune
- Disaster Safety Bye Laws And Codes.
- Application Of GIS In Disaster Management.



### Speakers

- Mr.Kiran Gite, CEO PMRDA.
- Prof Medha Kulkarni, MLA
- Mr.Rajendra Jagtap, CEO Smart Cities Pune.
- Mr.Prashant Waghmare, CE PMC.
- Mr.Ganesh Sonune, Disaster Management Officer PMC.
- Col Supnekar, Director, Disaster Management Cell, Yashada
- Mr. Ranjit Naiknavare, Naiknavare group.
- Mr.Virendra Borade , Fire and Security Association of India
- Dr.Shibu Mani, Tata Institute of Social Sciences, Mumbai.
- Dr.Parag Mankikar, Director, Neeti Solutions.
- Mrs.Swati Panhale, GIS Expert
- Mr.Mohan Sakalkar, Director, CEPL
- Mr.R.B.Chaphalkar, Partner Chaphalkar Schemes
- Mrs.Jayashree Deshpande, IIA
- Dr.Vasudha Gokhale, Research Cell Head, BNCA
- Mr.Sanjay Deshpande, Sanjeevani developers

**Prof. Sujata Kodag**  
Convener

**Prof. Asmita Joshi**  
Director UNAI Hub, BNCA

**Dr.Anurag Kashyap**  
Principal, BNCA

**DEMOLA**  
BUDAPEST



SEPTEMBER – 16 SATURDAY 2017  
9.AM TO 4.00 PM

Conference Room I Ground Floor I BNCA  
MAHARSHI KARVE STREET SHIKSHAN SAMSTHA CAMPUS  
Contact for Registration: 9881134313

The program started formally after the guest arrived, Dr. Anurag Kashyap welcomed the participants and guests and invited Dr. Rajendra Jagtap, Mr. Kharwadker and Mr. Ganesh Sonune to inaugurate the symposium formally.

#### **Dr. ANURAG KASHYAP**

*(Principal, B.N. College of Architecture for Women)*

Dr. Kashyap after welcoming the guests and participants introduced the event, deliberating the need of Disaster Management and cascading effects of hazards converting to disasters over time. **He stated that Education institutes can be a technical resource for capacity building of various departments and projects. So a Capacity Building Forum is in pipeline where students and institute's participation in urban planning will play an important role.**



#### **PROF. ASMITA JOSHI**

*(Director of the UNAI hub at BNCA)*

Prof. Asmita introduced the United Nations Academic Impact Program and presented BNCA's other events under this programs. She informed that BNCA is a designated Global Hub for Addressing Poverty through Education since 2012. **As a part the initiative we are organizing a symposium on Emergency Management through planning and Design for Pune city which is an extension to the ongoing activity of Emergency Shelter Design Workshops.** The purpose of this Symposium is to provide a platform to Administration, Bureaucrats, Politicians, NGO's, and Academic Institutes to express their Views/opinions on Risks and the challenges the city is facing. The Symposium shall also try to evolve through the discussion, the ways to overcome these challenges and the responsibility and the accountability of the local government. **The aim of the Symposium is to understand the risks, the built environment of the city faces, from various perspectives of planning and design.**



## OPENING NOTE BY PROF. SUJATA KODAG

Good Morning, I Once Again take this opportunity to welcome you all. We are part of proud family of Maharshi Anna Karve and carry forward his legacy of imparting knowledge and education.



Today we share this platform of symposium on Emergency Management through planning and Design.

Indian cities will keep on attracting populations. Almost 60% of Indian population lives in urban areas and very few cities are planned cities. Cities grow organically than a planned effort. The built environment of the cities is result of an immediate need, more than a conscious requirement. Hence the vulnerability to disasters increases manifold in urban areas. The study of the journey of cities from villages to metropolitan cities over decades is interesting and dynamic. The growth of built environment is mainly attributed to economic development of city – increasing industrial and commercial sector. The results of which are, the cities grow by need based approach, then proactively planned approach and the outcome of which is development deficit cities.

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*The Sendai Framework further adds Evidence indicates that exposure of persons and assets in all countries has increased faster than vulnerability has decreased, thus generating new risks and a steady rise in disaster related losses, with a significant economic, social, health, cultural and environmental impact in the short, medium and long term, especially at the local and community levels.*

*The symposium will provide an opportunity to understand opinions of various stakeholders*

## SESSION PLAN FOR SYMPOSIUM

	<b>SESSION I</b>		
1	10.00 - 10.20 am	MR. KIRAN GITTE	INTERGRATION OF DISASTER SAFETY MEASURES IN PMRDA
2	10.20 - 10.40 am	MR. RAJENDRA JAGTAP	INTERGRATION OF DISASTER SAFETY MEASURES IN SMART CITIES
3	10.40- 11.00 am	MR. GANESH SONUNE	DISASTER MANAGEMENT CAPACITIES WITH PMC
4	11.00 - 11.20 am	MRS. MEDHA KULKARNI	POLITICIANS VIEW ON DISASTER SAFETY OF PUNE CITY
	11.20 - 11.40 am	DR. VASUDHA GOKHALE	Q & A SESSION WITH PANEL
	<b>11.40 - 12.00 pm</b>	<b>TEA BREAK</b>	
	<b>SESSION II</b>		
5	12.00 - 12.20 pm	MR.PRASHANT WAGHMARE	BUILDING BYELAWS AND DISASTER SAFETY.
6	12.20 - 12.40 pm	MR. R.B. CHAPHALKAR	IMPACTS OF DISASTERS ON EXISTING BUILT ENVIRONMENT OF PUNE.
7	12.40 - 1.00 pm	MS.JAYSHREE DESHPANDE	IIA'S PERSPECTIVE ON DISASTER SAFETY OF PUNE.
8	1.00 - 1.20 pm	MR. YOGENDRA BORADE	CAPACITIES WITH FSAL.
	1.20 - 1.40 pm	DR.MANGESH KASHYAP	DEVELOPMENT AND ENVIRONMENTAL SUSTAINABILITY
	<b>1.40 - 2.20 pm</b>	<b>LUNCH BREAK</b>	
	<b>SESSION III</b>		
9	2.20- 2.40 pm	DR.PARAG MANKEEKAR	CHALLENGES OF IMPLEMENTING DISASTER PREPAREDNESS.
10	2.40 - 3.00 pm	DR. SHIBU MANI	PERCEPTION OF RISK.
11	3.00 - 3.20 pm	MR.MOHAN SAKHALKAR	DISASTER MANAGEMENT - A CASE STUDY OF MALIN.
12	3.20 - 3.40 pm	COL.SUPANEKAR	RISK PROFILE OF PUNE.
13	3.40 -4.00 pm	MR.SANJAY DESHPANDE	DEVELOPERS PERSPECTIVE ON DISASTER SAFETY OF PUNE.
	<b>4.00 - 4.10 pm</b>	<b>TEA BREAK</b>	
	<b>SESSION IV</b>		
14	4.10 - 4.30 pm	MRS. SWATI PANHALE	GIS IN DISASTER MANAGEMENT.
15	4.30 - 4.50 pm	DR .VASUDHA GOKHALE	Q & A SESSION WITH PANEL AND SUMMING UP
	4.50 - 5.00 pm	PROF.SUJATA KODAG	THANK YOU NOTE.



**Dr. RAJENDRA JAGTAP***(CEO, Pune Smart Cities Pvt Ltd., Pune)*

Rajendra Jagtap , CEO PSCDCL said that in order to manage the disasters which may come in future , it was important to have preparedness through proper planning rather than reacting to it .

Giving information about the various smart initiatives been undertaken for natural as well as man made disasters like Floods , Fire , Pollution , Climate Change , he said that setting up cells ,

integrating departments , technology , preparing volunteers in case of emergency and sharing of data are some of things being undertaken which will help mitigate disasters.

**MR.GANESH SONUNE***(Disaster Management Officer, Pune Municipal Corporation)*

(Did not speak as he had to accompany Mr Rajendra Jagtap to another Meeting)

**MR.KIRAN GITTE***(CEO, Pune Metropolitan Region Development Authority, Pune)*

Kiran Geete , CEO PMRDA said that nature has gifted us with a lot of resources and we should use them instead of adding something and destroying them.

While urban planning it is important to agree that city is not a homogenous economy. We should plan for all strata of the society . Any project that comes up should not only be self sufficient from the infrastructure point of view but also service point of view. PMRDA is formulating plan on these lines. Citing

the example of traffic situation in Pune he said that every year 1.5 to 2 lakh people come to Pune. According to a recent report 65% of the growth is happening in PMRDA region . The



PMRDA region which covers 7300 Sq km is only next to NCR and Bangalore Mysore development authority . The two ring roads (inner and outer) have been planned and a steering committee has been set up to suggest exit and entry points for smooth flow. Also to make the ring roads work , density of population is important and we plan to have 20 townships along these . Also 3 metro lines and more BRTS the traffic situation in Pune will better managed in next 3-5 years.

Mr Gitte spoke about the vision of PMRDA. Its developmental scale and vision. He spoke about the increasing demand extending the city limits to metropolitan region, requirement of housing and increased population density. He also mentioned the need of affordable housing and urban poor issues. He invited the suggestions and recommendations from educational institute on Disaster Risk Reduction. He also answered to the questions from the audience regarding the development of Pune.

**MRS.MEDHA KULKARNI** *(MLA, Pune)*

(Madam could not make to Symposium)

**MR.PRASHANT VAGHMARE** *(Chief Engineer, Pune Municipal Corporation)*

(Did not make it to Symposium)

**MR.R.B.CHAPHALKAR**

*(Director, Chaphalkar Homes Pvt Ltd.)*

Mr Chapalkar spoke about the issues in the vision of development of Pune city as regards to the Built Environment. He also spoke about good practices in construction with disaster risk perspective. One example, which he quoted, was of the stilt parking of all the buildings in Pune city, which is not very appropriate for the earthquake resilience.



**MRS.JAYASHREE DESHPANDE**

*(Chairperson, Indian Institute of Architects, Pune Chapter)*

Ms Deshpande referred to the Hyogo and Sendai framework and the Disaster Management plan for Pune city prepared by Pune Municipal Corporation. According to her, the code and building byelaws should adhere to disaster risk for taking developmental decisions.

**MR.VIRENDRA BORADE**

*(Fire and Safety Association of India, Pune)*

Mr Borade spoke about the mission of NAFS. The innovative work in fire safety by NAFS to reach populations by associating with various government and non government organizations. NAFS has state of art facility for fire safety equipments and technology.

**DR.PARAG MANKEEKAR**

*(Director Neeti Solutions Pvt Ltd.)*

Dr Mankeekar spoke about the systems, which fail in disaster management adding to vulnerability. How as a society we fail to anticipate risks, and the local governance fall short of taking adequate steps towards achieving resilience and further adding risks. He quoted wonderful examples of the study they have carried out, for example at any point in a commercial building parking there is high amount of fuel in the cars, so the probability of fire is very high, yet the fire fighting system is not in place or cannot be operated by anybody in the building. Many such examples he quoted by which preventive actions can be taken, but the overall lethargy of the society is high in anticipating and preventing disasters.



## DR.SHIBU MANI

*(Professor tata institute of social sciences, mumbai)*

Dr Shibu Mani spoke about the perception of risk. How people, government and other stakeholders perceive risk. He quoted the example of perception of risk of earthquake in Japan and in India. The movement of tectonic plates clashing is over, in India and now the plates are converging, hence the earthquakes in India will strike at shallow depth, while in Japan it will be in deeper depth, hence Indian Himalayan pleatue is more vulnera ble to the probability of earthquake then Japan. Our perception of risk of earthquake is opposite. He explained the perception by many other examples, but the basic understanding is if we do not perceive risk correctly, we will never be able to plan interventions appropriately.



## DR.MANGESH KASHYAP

*(Director Society For Environmental Research And Management)*

Dr. Mangesh Kashyap raised a question to participants, related to the current burning issue, whether metro is required for the city, most of the participants replied negatively. He spoke about the cost benefit analysis of having a metro in a city like Pune, where the mindset of the people is to drive own vehicles



without depending upon public transport system for a reason, the diagonally opposite ends of the city can be travelled in an hour's time, and secondly the growth of the city is sprawling in all directions and not unidirectional like Mumbai. Dr. Mangesh Kashyap raised few fundamental questions, like what type of development, people want, the administration wants, and what actually happens. Dr. Kashyap spoke about the Ecological and Environmental repercussions of visionless development.

## DR.MOHAN SAKHALKAR

*(RCC & Structural Consultant & Project Management Consultant.)*

Mr Sakhalkar presented case study of Malin. He described the journey of permanent rehabilitation of the village Malin, right from the selection site to selection design, materials and technology. The village planning process, participatory rural appraisals and the interactions with consultants, governance and beneficiaries.



### **COL.V.N. SUPANEKAR**

*(Director & Professor, Center For Disaster Management, YASHADA, Pune)*

Col Supnekar spoke on the disaster scenario of Pune, he explained the risk profile and recommended the need of urban risk assessment for Pune city from various perspectives like disaster management consultant, urban planner and institutional perspective. According to him the urban vulnerability is enormous due to population density, building density and violation of building byelaws, which exposes the built environment to high risk. Slums, mixed landuse and transportation are other major urban issues of Pune. He also added the natural and the manmade hazards which make the city vulnerable to disaster risks.



### **MR.SANJAY DESHPANDE**

*(Director, Sanjeevani Developers, Pune, CSR Head, CREDAI, Pune)*

Mr Sanjay Deshpande gave the developers perspective to looking at disaster risk. According to him any city should be branded disaster free city, to attract investors in real estate, and actual work on making the city disaster free. He also feels that developer and builder community should be participated actively in urban planning processes. According





to him, real estate is business and profit component is very important for any developer. Any disaster scenario in the city can impact the real estate business. A participant raised a question how developers, develop townships and schemes in periurban areas, which does not have amenities like road, water and sewage lines, to answer this he replied it is not wrong to do so and moreover its administrations responsibility to provide amenities till site.

### **MRS.SWATI PANHALE**

*(GIS Expert)*

Mrs Swati Panhale gave a presentation on how to use GIS software for mapping Hazards, Vulnerabilities and Capacities. She explained the importance of GIS in disaster management. She also showed GIS maps of old city. According to her it is a risky job to map the environmental degradation of Pune like cutting of hills and encroachment on hills tops by eminent clients of the city.



### **DR.VASUDHA GOKHALE**

*(Research cell head at BNCA)*

Dr. Vasudha Gokhale summed up the entire session with the key points of each presentation.

Prof. Sujata Kodag gave the Vote of Thanks.



The symposium left a palette of questions open. To summarize, what was said and what needs to be taken, following points are formulated.

1. The administration is definitely trying to integrate a safety measures in their agenda of development. The administration should be supported further for a holistic development so that the approach does not become piece meal approach.
2. The vision for the development of the city should be clear and indigenous. The development of vision plan into implementation plan should be coherent. For example the vision plan of smart cities say the city should be liveable, so what aspects of livable city are taken into implementation of smart city and on what priority.  
(as per the discussion of participants)
3. All the development should be oriented towards the vision plan.
4. The city, administration and citizens must be fully aware of the disaster risk scenario of the city. Any developmental projects should be evaluated from the correct perspective of disaster management. For example Population and Building Density should be based on the risk profile of the area, else people and property are most vulnerable to Disaster Risk.
5. The integration of Urban Planning and Disaster Management should be a conscious effort, based on top priority things to do and not afterthought.
6. Transportation is an Urban Planning- Land use issue. (People do not travel on road as they enjoy ride. They have to go somewhere for some reason.)
7. Technological interventions should be brought in, right from conceptual stage and the manifestation should be indigenous.
8. People Participation, Local Stakeholder's view should be integrated as a part of the system for development.

9. Environmental Sustainability should not be, disregarded at the cost of development. We cannot redeem the environmental damage and citizens will pay for it for generations.
10. Environmental inventory should be mapped for current state with latest technology available and any further development should not deteriorate the existing state of environmental inventory further. Interventions to rejuvenate the environmental inventory in an appropriate perspective and integrity is need of the hour.
11. Lastly ‘ Development for whom’ ‘in What way’ and at the ‘cost of what’ should be addressed in the Vision Document.







## News coverage

## BNCA hosts symposium on 'Emergency Mgmt Through Planning and Design'

**ST CORRESPONDENT**  
reporters@sakaaltimes.com

**Pune:** Dr Bhanuben Nanavati College Of Architecture (BNCA) for Women had organised a symposium on 'Emergency Management Through Planning and Design'.

This was organised in continuation of 'Emergency Design Shelter Workshop Series' by BNCA under United Nations Academic Impact Program (UNAI)- 2017.

The symposium was addressed by Rajendra Jagtap, Chief Executive Officer (CEO) of Pune Smart City Development Corporation Ltd. Kiran Gitte, CEO and Metropolitan Commissioner of Pune Metropolitan Regional Development Authority, Shibu Mai from Tata Institute of Social Sciences, Swati Panhale, Geographic Information System expert RB

### RING ROADS

"The two ring roads (inner and outer) have been planned and a steering committee has been set up to suggest exit and entry points for smooth flow. Also, to make the ring roads work, the density of population is important and we plan to have townships along with these developments," said Kiran Gitte, CEO and Metropolitan Commissioner of Pune Metropolitan Regional Development Authority.

from Neeti Solutions, Sanjay Deshpande from Sanjeevani Developers, Mangesh Kashyap, an Ecologist, and Virendra Borade from Fire and Security Association of India were also present. Jagtap gave information

"Setting up cells, integrating departments, technology, preparing volunteers in case of emergency and sharing of data are some of the things that will help mitigate disasters."

Gitte said that while urban planning, it is important to agree that a city is not a homogeneous economy. "We should plan for all strata of the society. Any project that comes up should not only be self sufficient from the infrastructure point of view, but also service point of view. PM-RDA is formulating a plan on these lines," Gitte said.

Kashyap said that this symposium, as a part UNAI activities by BNCA- UNAI Hub, is a brainstorming session.

"Education institutes can be a technical resource for capacity building of various departments and projects. So, a capacity building forum is on the

## आपत्कालीन परिस्थितीला तोंड देण्याची तयारी हवी

### आपत्कालीन व्यवस्थापन चर्चासत्रात तज्ञांचे माध्य

**पुणे :** वाढत्या शहरीकरणाबरोबर येणारी संकटे आणि आपत्कालीन परिस्थितीबाबत केवळ प्रतिक्रिया न देता पूर्ण तयारीनिशी त्याला तोंड देता आले पाहिजे, असे मत अनेक तज्ञ व व्यावसायिकांनी दिले. महर्षी कर्वे स्त्रीशिक्षण संस्थेच्या डॉ.भानूबेन नानावटी कॉलेज ऑफ आर्किटेक्चर फॉर वूमन (बीएनसीए) मध्ये आयोजित केलेल्या पुणे शहरासाठी आपत्कालीन व्यवस्थापन या चर्चासत्राचे संयुक्त राष्ट्रसंघ शिक्षण परिणाम कार्यक्रम (युनायटेड नेशन्स एज्युकेशन इंपॅक्ट प्रोग्राम) २०१७च्या अंतर्गत या चर्चासत्राचे आयोजन बीएनसीएच्या सभागृहात करण्यात आले होते.

■ यावेळी स्मार्ट सिटीज पुणेचे राजेंद्र जगताप, पुणे महानगर विभागीय विकास प्राधिकरणाचे किरण गित्ते, डॉ.शिबू मणी, आर. बी. चाफळकर, जयश्री देशपांडे, आदी उपस्थित होते.

■ राजेंद्र जगताप म्हणाले की, शहर नियोजनात समाजातल्या सर्व आर्थिक घटकांना न्याय मिळेल अशी यंत्रणा आम्ही स्मार्ट सिटीत समाविष्ट होणार्या पुण्यात उभारत आहोत. मानवनिर्मित संकटांची पूर्वतयारी आधुनिक तंत्रज्ञानाच्या मदतीने करतानाच सरकारी खात्यांशी समन्वय साधावा.



## आपत्कालीन परिस्थितीला तयारीनिशी सज्ज राहून तोंड द्यावे

पुणे, दि. १८ - वाढत्या शहरीकरणाबरोबर येणारी संकटे आणि आपत्कालीन परिस्थितीत उपाययोजनेपेक्षा पूर्ण तयारीनिशी सज्ज राहून तोंड देता आले पाहिजे, असे मत अनेक तज्ज्ञ व व्यावसायिकांनी व्यक्त केले. निमित्त होते, महर्षी कर्वे स्त्रीशिक्षण संस्थेच्या डॉ. भानूबेन नानावटी कॉलेज ऑफ आर्किटेक्चर फॉर वूमेन (बीएनसीए) मध्ये आयोजित 'पुणे शहरासाठी आपत्कालीन व्यवस्थापन' या चर्चासत्राचे.

संयुक्त राष्ट्रसंघ शिक्षण परिणाम कार्यक्रम (युनायटेड नेशन्स एज्युकेशन इंपॅक्ट प्रोग्राम) २०१७च्या अंतर्गत या चर्चासत्राचे आयोजन बीएनसीएच्या सभागृहात करण्यात आले होते. यावेळी स्मार्ट सिटीज पुणेचे राजेंद्र जगताप, पुणे

### 'शहरातील आपत्कालीन व्यवस्थापन'वरील चर्चासत्रात तज्ज्ञांचा सूर

महानगर विभागीय विकास प्राधिकरणाचे (पीएमआरडीए) किरण गिते, टाटा समाजशास्त्र संस्थेचे डॉ. शिबू मणी, आर. बी. चाफळकर, इंडियन इन्स्टिट्यूट ऑफ आर्किटेक्चरच्या जयश्री देशपांडे, नीती सोल्युशन्सचे डॉ. पराग माणकीकर, संजय देशपांडे, पर्यावरणतज्ज्ञ मंगेश कश्यप, एफएसएआयचे वीरेंद्र बोराडे, यशदा संस्थेच्या आपत्कालीन व्यवस्थापन विभागाचे कर्नल सुपनेकर, मोहन साखळकर, भौगोलिक माहिती प्रणालीतज्ज्ञ स्वाती पन्हाळे, संस्थेचे प्राचार्य डॉ. अनुराग कश्यप, शैक्षणिक

विभाग प्रमुख डॉ. शुभदा कमलापूरकर, युएनएआयच्या संचालक प्रा. अस्मिता जोशी, सुजाता कोडग, बीएनसीए संशोधन विभागप्रमुख डॉ. वसुधा गोखले आदी उपस्थित होते.

राजेंद्र जगताप म्हणाले, शहर नियोजनात समाजातल्या सर्व आर्थिक घटकांना न्याय मिळेल अशी यंत्रणा आम्ही स्मार्ट सिटीत समाविष्ट होणाऱ्या पुण्यात उभारत आहोत. तसेच नैसर्गिक व मानवनिर्मित संकटांना तोंड देण्याची पूर्वतयारी आधुनिक तंत्रज्ञानाच्या मदतीने करतानाच विविध सरकारी खात्यांशी समन्वय साधत असताना हजारो प्रशिक्षीत स्वयंसेवकही निर्माण करत आहोत.

पू. परिस्थितीवर नियंत्रण ठेवण्यासाठी पीएमआरडीएचे किरण गिते

यांनीही पुणे व परिसर हा देशातील अन्य प्राधिकरणात तिसऱ्या मोठ्या आकाराचा असल्याचे सांगितले. ते म्हणाले, एकूण विकासाच्या ६५ टक्के विकास हा केवळ पीएमआरडीएच्या क्षेत्रात होत आहे. पुणे परिसराला लाभलेले निसर्गाचे वरदान नष्ट न करता त्याचे नियोजन व आपत्ती व्यवस्थापनासाठीही त्याचा उपयोग करून घेता येईल. पुणे शहराकडे दरवर्षी नोकरी व व्यवसायाच्या निमित्त येणाऱ्या दोड ते दोन लाख लोकांना सामावून घेणारे लहान-मोठे असे २० टाऊनशिप्स शहराभोवती उभारण्यात येणाऱ्या दोन रिंग रोडच्या परिसरात बांधण्याची योजना आहे. तसेच येऊ घातलेले तीन मेट्रो रेल्वे, अनेक बीआरटी मार्ग येत्या दोन ते तीन वर्षांमध्ये वाहतुकीचे प्रश्न नियंत्रणात आणायला उपयोगी ठरतील.

### कॉलेज विश्व

## 'आपत्कालीन स्थितीत सज्ज राहा'

वाढत्या शहरीकरणाबरोबर उद्भवणारी संकटे आणि आपत्कालीन परिस्थितीवेळी उपाययोजना करण्यापेक्षा त्यापूर्वीच तयारीनिशी सज्ज राहून आपत्तीला तोंड देता आले पाहिजे," असे मत अनेक तज्ज्ञ व व्यावसायिकांनी व्यक्त केले. निमित्त होते महर्षी कर्वे स्त्रीशिक्षण संस्थेच्या डॉ. भानूबेन नानावटी कॉलेज ऑफ आर्किटेक्चर फॉर वूमेन (बीएनसीए) मध्ये आयोजित केलेल्या 'पुणे शहरासाठी आपत्कालीन व्यवस्थापन' या चर्चासत्राचे. संयुक्त राष्ट्रसंघ शिक्षण परिणाम कार्यक्रम २०१७ अंतर्गत या चर्चासत्राचे आयोजन करण्यात आले होते.

### IN BRIEF

## Talk on disaster management

Pune: MKSSS's Dr Bhanuben Nanavati College Of Architecture For Women, in association with BNCA, organised a seminar on 'Emergency Management through planning and design'. The seminar was held as a part of Emergency Design Shelter workshop series by BNCA and addressed by its Principal Dr Anurag Kashyap, Asmita Joshi, director, UNAI, Sujata Kodag, Dr Shubhada Kamlapurkar, academic head, and Dr Vasudha Gokhale, research cell head, BNCA. The discussion focused on the measures to be taken before natural and manmade disasters. It also highlighted appropriate urban planning and management to provide sustainable habitat.