1. Name of Staff: Hina Zia (Ms)

2. Current Employer: Professor and Head, Department of Architecture, Jamia Millia Islamia, New Delhi

Indian Institute of Technology Roorkee Urban & Rural Planning

Indian Institute of Technology Roorkee Infrastructure Planning

3. Date of Birth: 21.12.1976 Nationality: Indian

4. Education:

Aligarh Muslim University



B.Arch in1999 M.U.R.P in 2002 Ph.D. in 2007

5. Membership in Professional Associations:

Registered with Council of Architecture India

Member, Institute of Town Planners India

Member of the Guidelines Development Group for Healthy Housing, WHO (2011-2015)

Member, Multi-stakeholder Advisory Committee, 10YFP Programme on Sustainable Buildings & Construction (2015-16)

Architectural Studies

Partner, 10YFP Programme on Sustainable Buildings & Construction (2019-current)

Member, Expert Appraisal Committee, Environmental Clearance-Infrastructure-II, Ministry of Environment, Forests and Climate Change (2015-16)

Trained on World Bank's Climate City Planner (at their headquarters in Washington DC)

6. Countries of Work Experience: Bhutan, Switzerland, Thailand, Indonesia

7. Languages

Language skills Grade skill 1-5 (1 = basic, 5 = excellent, * = mother tongue)			
Language	Speaking	Reading	Writing
English	5	5	5
Hindi	5	5	5
Urdu*	5	5	1

Positions held in University Administration

Dean, Faculty of Architecture & Ekistics, Aug 2021 to current Chairperson, Internal Complaints Committee, JMI, Dec 2020 to current Head Department of Architecture JMI Sep 2020 to Aug 2021 Dean Faculty of Architecture & Ekistics from August 2017 to Aug 2020 Member Academic Council of JMI Member University Court JMI Member Finance Committee JMI, 2019-2020 Member Executive Council JMI, 2019-2020

8. Work undertaken

Work undertaken as Associate Director-Technical Development, GBCI: 2016-2017

I used my extensive industry experience and technical expertise to work within a dynamic, high performing cross functional team to deliver the launch and successful uptake of a global performance-based program focusing on healthy, livable, safe and smart cities.

Key responsibilities:

- Assist in developing, reviewing, and refining the new USGBC/GBCI program on cities
- Pilot testing the system in different countries in Asia-Pacific and supporting the global team elsewhere
- Assist in conceiving and developing later improvements to the certification review process based on personal knowledge and vision and feedback from the pilots
- Liaise with USGBC Education team, GBCI Credentialing team, and other internal and external groups as needed for creating an eco-system around the requirements of this new rating system
- Educate the marketplace by effectively communicating technical requirements through written, verbal, and in-person meetings with project teams
- Assist in developing, testing, refining a city engagement plan and facilitating planning charrettes wherever required
- Assist in developing Monitoring and verification protocol for different requirements of pre-certification/certification
- Perform onsite compliance verification/assessment if required for the Cities focused program
- Assist in conceiving and launch of city challenges and associated work to get maximum participation
- Participate, and lead when appropriate, USGBC trade shows and customer events where integrated city solutions are a key element or value proposition
- Work closely with marketing and business functions to develop effective sales tools for response to customer (e.g., city governments, developers) and related inquiries
- Identify and manage expertise needs and opportunities in different departments (e.g., Technical Development, Certification Review) as required by GBCI Management for running the program
- Assist with mentoring other team members

Work undertaken as Associate Director/Fellow at TERI (2007-2016) Healthy Housing related work

2010 - 2015

I worked on WHO's (World Health Organisation) efforts in bringing a health perspective and practical guidance to the improvements in the built environment to be enacted in response to

climate change, including mitigation and adaptation measures such as in energy efficiency. This established the need for development of healthy housing guidelines work which started in 2011. I represent the Asian perspective and am part of the Guidelines Development Group on Healthy Housing. The housing and health guidelines would support policy makers with scientific evidence and recommendations for healthy housing conditions. This should fill an important gap in defining healthy housing, to complement the existing labels and indices on green housing. Some of the activities were shortlisting of criteria to be selected for the guidelines, writing position papers on the shortlisted topics, framing of PECO and PICO questions as per the standard methodology, review of systematic reviews and contributing specifically to evidence on Heat Stress and Cold Stress, several face-to-face and online meetings.

Climate Change related projects (city, neighbourhood and building scale)

Year	:	2008- current
Location	: 1	nultiple
Client	: 1	nultiple

I have had the opportunity to use my urban/rural planning skillsets and worked on several climate change related projects (national/international and macro/micro scales)–both on mitigation and adaptation, monitoring reporting and verification, GHG reporting at national level and at an organisational level. Some of the key projects include the following:

- Worked on Asian Cities Climate Change Resilience Network -"Risk assessment and Review of Regulations, Policies, Institutions to Mainstream Climate Resilience into Urban Development processes" as building and water/wasterwater management expert. The work received a lot of acclaim for its implementable recommendations. The work focused on Gorakhpur and Guwahati cities. I also got the opportunity to integrate some of energy efficiency and water/waster management recommendations in the Guwahati building byelaws.
- Currently, working on the International Climate Initiative in Asia assist Indonesia, the Philippines, Thailand and VietNam to develop NAMAs for the building sector, as part of the UNEP's initiative as a Team Leader from TERI. The project attempts to assist the countries in recognising the significant mitigation potential of the building sector, identify and recommend actions for development into NAMAs, provide MRV tools and an overall framework to support NAMA development by the countries (including assisting countries for international climate funding, if required).
- Completed work on Enabling Activities for Preparation of India's Second National Communication to the UNFCCC - NATCOM - Phase II, as part of the country's commitment to develop GHG inventory as per the UNFCCC methodology. My work focused on data Collation, Analysis and Conversion to Greenhouse gas emission primarily for residential and commercial sectors, keeping in view all the data related constraints, conflicts of consumption data, non-coverage of consumption by private diesel gensets, etc.
- *Worked on CDM projects for Buildings*-Development of Baseline Methodology and Project Design Document for the energy efficient building projects, Survey for baseline establishment, Interviews, Analysis, modeling of base and proposed model, preparation of PDD.

- Carbon Footprint Assessment studies: Key input provider on methodology, analysis and recommendations for carbon footprint assessment studies. This included studies for TERI headquarters in New Delhi and an MNC in Bangalore in 2009.
- Environmental Status Report and estimation of Carbon footprint for Pune City- Apart from the conventional environmental status reporting, this project opened the opportunity to also work on estimating the carbon footprint for the city. The key challenges included defining the boundary conditions for various sectors and data related aspects.

Name of Assignment / job or project	:	GRIHA and its variants
Year	:	2007 - 2016
Location	:	India

I am one of the key technical members actively involved in the development/modification of several criteria (specifically related to site, water and waste management) of GRIHA and its variants (GRIHA for large development (applicable for 50 hectares and above); SVAGRIHA, GRIHA for existing schools) depending on the building typology/scale and changing needs of the construction sector in Indian context.

The rating system being a performance-based system depends heavily on monitoring and verification requirements built within the system to check the compliance levels. I have developed the mechanisms for relevant technical criteria.

Further, through engagement in GRIHA consultancy projects (experience of more than 35 projects-many of them being large neighbourhood scale projects), I get the opportunity to verify the success/pitfalls of the recommended processes and get inputs for the next scheduled modifications

Name of Assignment / job or project	:	Study and preparation of Environmental Building Regulations and Guidelines (EBRG) for Hyderabad Metropolitan Area
Year	:	2007 - 2010
Location Client	:	Hyderabad (India) Hyderabad Metropolitan Development
		Authority (HMDA)

The broad vision behind the EBRG project undertaken by TERI for Hyderabad Urban Development Authority (HUDA) was to assess the present and future environmental issues in the building industry, specifically with respect to urban development in the Hyderabad Development Area and propose guidelines for environmental sustainable building design, construction and operation to promote and integrate sustainable practices and provide an affordable and higher quality environment for the residents. The guidelines catered to both building and neighbourhood scale. As a Project Investigator, my main task was development of the environmental guidelines on energy, water, waste management and other environmental issues with support of my team and project partners; develop innovative incentives to promote these guidelines based on successful models of implementation in other countries and states; direct development of a web tool in which all relevant information has been uploaded to help stakeholders to integrate environmental aspects into their building design; training various stakeholder groups; engagement with HMDA to implement the guidelines; development of a 50 page educational booklets in English, Hindi and Telegu (each) as part of dissemination and outreach.

:	UNEP Sustainable Buildings and
	Construction Initiative
:	2008 - 2010
:	India
:	UNEP
	: : :

The project focused on setting up "SUN: Sustainable UN "network, and charting a path to net zero buildings in India and setting up SUN: Sustainable UN network. In the absence of data inventory on built-up space in the country across urban and rural sectors, I conceptualised and led the team to estimate the same based on data available and estimated GHG saving potential through enabling sustainable construction in India and co-authored the report on above.

Name of Assignment / job or project	:	Enabling design and development of
		Green buildings, campuses and townships
		through design review, efficiency
		enhancement studies, techno-economic
		feasibility, capacity building
Year	:	2008 - current
Location	:	India
Client	:	Govt, Corporate & Institutional Clients

As a team leader/team member, my responsibilities and tasks include developing client interaction to communicate benefits of green buildings/habitat, formulation of project proposal, formalization of contract document, project coordination, review and evaluation of the concept design, recommendations on master plan, energy efficiency, integration of renewable energy systems, materials of construction, water efficiency and waste management ; Review of tenders, facilitation for documentation, interaction with client, project reporting, providing technical assistance in project implementation, monitoring and evaluation, site visits, presentations, technical discussions, etc.

I have initiated and executed more than 35 projects for government, corporate and institutional clients including IITs and IIMs.

Name of Assignment / job or project	: Guidelines for Planning & Development of
	Human Settlements in Urban and Rural Areas of
	Bhutan
Year	:2012 - 2013
Location	: Bhutan
Client	: Ministry of Works and Human Settlement, Royal
	Government of Bhutan

Starting with writing the techno-financial proposal based on the ToR to several rounds of negotiation to contract formulation and finalisation, I spearheaded this work with support from my team to Develop framework of guidelines for human settlement in both urban and rural areas by mainstreaming environment, climate change and poverty along with implementation mechanism and capacity building of concerned officials.

The work involved extensive review of existing laws/standards/codes in Bhutan and international best practices, interviews with various government/non-government institutions, quick physical survey/secondary data collection, development of guidelines for human settlements (covered sections on environmental planning, site and sub-division design, energy and energy systems,

street lighting, water and wastewater systems, Sustainable urban drainage systems, solid waste management, risk mitigation/adaptation and climate change, building materials and construction technologies and implementation mechanisms), client interaction, presentations, training material preparation, training programs

Name of Assignment / job or project	:	Overview of the Indian Building Sector
Year	:	2011 - 2012
Location	:	India
Client	:	AfD
The project covered an overview of the I	Indian 1	Building Sector, analysis of its energy saving

potential and pre-identification of large scale Energy Efficiency Programs.

Name of Assignment / job or project	:	An Exploration of Sustainability in the
Provision of Basic Urban Services in Indian	Cities	
Year	:	2007 - 2009
Location	:	India
Client	:	Mrs Rohini and Mr. Nandan Nilekani
The study looked of 6 sectors restor calld		management there an attacking heritaling a manual

The study looked at 6 sectors- water, solid waste management, transportation, buildings, power and governance. Key outputs of the study were: a list of sustainability parameters to make each sector sustainable along with indicators to measure sustainability in the water, solid waste management, transport, buildings and power sectors; Technical, policy, institutional, legal, organizational, data and capacity related interventions necessary to improve provision of services in Indian cities; Recognition of power and buildings sectors as basic urban services and the role of Urban Local Bodies in their planning and management; Separate recommendations for small and medium towns and cities in transition; Planning for services for peri-urban areas falling outside municipal limits and Alternative service delivery models for slums and the role of informal market operators in urban service provision. I was the co-lead focusing on the Building sector .

Name of Assignment / job or project	:	UNEP's	Sustainable	Social	Housing
Initiative in India and Bangladesh					
Year	:	2013-2014	1		
Location	:	India			
Client	:	UNEP			

The Sustainable Social Housing Initiative (SUSHI) was implemented in India and Bangladesh for the period 2013-14. This phase aimed at testing and adapting to the local context, a methodology and rationale for including resource efficient and climate friendly solutions in low-cost(social)housing projects.

As a team lead from TERI, my key tasks included providing expertise on the local Indian housing and building scenario, promote advocacy for the project at governmental and non-governmental level, contribute to enhanced capacity of stakeholders, identified a suitable pilot project (in consultation with Federal/State/local governments), recommendations on key changes in the project in line with sustainability principles in local socio-economic context, integrated with the tenders, revised costing, monitoring protocol for adoption in later stages (more pilots) and several awareness and training workshops and stakeholder consultations.

Name of Assignment / job or project	:	Smart Cities Proposal-Dharamshala
Year	:	2015
Location	:	India
Client	:	State Government Himachal Pradesh

The key objectives was assisting the city of Dharamshala (Himachal Pradesh) to prepare a Smart City plan under the Smart Cities Challenge designed by the Ministry of Urban Development under the 'Smart Cities Mission'. The Mission aims to improve quality of life, and efficiency and productivity of cities through provision of basic infrastructure and services and smart solutions. I primarily advised and developed the section on buildings part.

Name of Assignment / job or project	:	TA-Promotional Programme on new energy
		efficient residential housing in India-an
		NHB and KfW Bank initiative
Year	:	2009-2015
Location	:	India
Client	:	KfW and NHB
Starting in the year 2012 the promotions	1 progra	m is surrantly being run in northership with

Starting in the year 2012, the promotional program is currently being run in partnership with consortia comprising of adelphi and EDS. As a team leader my key activities include client/stakeholders' interaction, conduction of technical feasibility study on energy saving potential in the housing sector, customisation of the assessment tool (in association with the Fraunhofer Institute of Building Physics, Germany), meetings with developers, identifying potential projects for participation in the program, certification of the select projects if they fulfil the eligibility criteria of participation, training programs for architects, consultants and auditors on the program and use of assessment tool, development of measuring, monitoring and verification protocol, audits of select projects, organising and leading several focused group discussions with Financial Institutions, continuous support to NHB, preparation of quarterly reports for submission to KfW, website support, roundtables, conferences, presentations at various forums, reporting, coordination, etc.

Prior to the Technical Assistance, I was the team lead for technical pre-feasibility study for undertaking such a programme followed by the need for development of an assessment tool and some pilots prior to the formal launch of the Promotional Progarmme.

Name of Assignment / job or project	:	Energy	and	Resources	Efficiency	in
Building Codes in West Africa						
Year	:	2015-ong	going			
Location	:	Nigeria				
Client	:	UN-Hab	itat			
Positions held	:	Team Le	ader			

This program is being run in coordination with the National consultants to identify the key trends of the sector, gaps and barriers for greening of the sector, market penetration of key technologies/materials, etc., to arrive at the proposed changes in the Building Code with a focus to integrate energy and resource efficiency measures and renewable energy technologies into existing building codes/regulations in Nigeria and suggest measures for implementation. The work also includes study of best practices internationally and support/review of building codes for RE integration for the other two countries of Senegal and Cameroon. I am the team lead for the Nigeria work.

Name of Assignment / job or project	:	Nepal Scoping Study for Climate Resilient
Housing		
Year	:	2013-2014
Client	:	International Finance Corporation

The brief objectives and scope of work of this assignment include: 1. A detailed feasibility study assessing the market potential for low-cost climate resilient housing in Nepal in the context of middle and low-income households involving: - Evaluate the market potential low-cost climate resilient housing market assessment (with the help of a quantitative household survey) - Conducting qualitative interviews with all key relevant stakeholders in the housing and housing finance sector 2. Develop a feasible climate resilient housing and financing model and identify implementation partners - Based on the information gained from the market assessment, propose a feasible business model for private sector developers and financiers to consider venturing into the market of climate resilient low-cost housing (by way of financial projections) - Identify 2-3 potential companies for a follow up pilot project based on the business plan designed

Name of Assignment / job or project : Asian Cities Climate Change Resilience Network -"Risk assessment and Review of Regulations, Policies, Institutions to Mainstream Climate Resilience into Urban Development processes"

	1	1
Year		: 2013-2015
Client		: Rockefeller Foundation
A		

As a sector expert my key tasks was assessment of policy and legislation at various levels specifically related to urban planning, housing, waste management. Development of implementable guidelines and specific inputs on mainstreaming of resilience options with respect to housing, commercial buildings, decentralised water and waste management, stakeholder consultation, report preparation and policy briefs..

Name of Assignment / job or project	:	Climate Development Research Review
Year	:	2011
Client	:	DFID and PwC

It provides an expert summary of the best research on key aspects of climate and development worldwide in a readable and informative format. This publication was targeted at policy advisers who would want to use and disseminate to colleagues, as essential background reading to support their decision making

Name of Assignment / job or project	:	Transition to a green economy
Year	:	2011-2012
Client	:	German Federal Environmental Agency

India has experienced high rates of economic growth in the post reform era. However, a major weakness in India's growth story was that it has not been sufficiently inclusive for many groups. The concept of green economy emphasizes on improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities (UNEP 2011). This report attempted to undertake an in-depth assessment of key issues in the major sectors of India

to lay out a roadmap for green economy in India. I led the work on buildings and construction sector.

Name of Assignment / job or project	:	Directions Innovation and Strategies for
Sustainable Development in Goa (DISHA)		
Year	:	2010-2012
Client	:	FUNDACAO CALOUSTE GULBENKIAN
ΕΟΙΙΝΟΛΤΙΟΝ		

FOUNDATION

The concept of the study derives from prior work at TERI at the national level (GREEN India -DISHA). This project attempted to work out directions for sustainable development in Goa through the construction of baseline and alternative scenarios. Major objectives of the study were:-

1) To assess the current state of environment and human development in Goa.

2) To assess the likely implications for environmental and human development, under different growth scenarios over the next two decades. Focus on key economic sectors such as Construction, Mining, Tourism, Infrastructure etc.

3) To develop strategies to avert the likely negative implications for the state's environmental resources, without compromising on the overall objective of improved human development

I led the work on construction sector including aspects of urban planning and interlinkage with other sectors. The work involved critical understanding of the land dynamics peculiar to Goa given the context of prevalent status of Draft RGP at the start of the project; extensive primary and secondary data collection, analysis, understanding of key trends, interaction with key government/non-government stakeholders, and engagement with stakeholders on key recommendations at workshops /focused group discussions, report writing, advocacy and communication.

Name of Assignment / job or project	:	Study on Low Carbon Development in India
and China		
Year	:	2013-2015
Client	:	Shakti Foundation

This project seeks to understand learning on options, barriers and success stories on implementability of policies and programmes promoting low carbon development in China and India. Parallel studies were conducted for India and China. The Energy and Resources Institute (TERI), New Delhi along with guidance from the National Development and Reforms Commission (NDRC), China undertook a collaborative project on low carbon development. The intended outcome of the collaborative project on low carbon development for China and India was to support policy development by facilitating south-south cooperation, creating relevant knowledge and building capacities.

Name of Assignment / job or project	:	India Low carbon study for buildings
Year	:	2014-ongoing
Client	:	Asian Development Bank
	11 1	

This is part of the broader framework for collaborative study on Low carbon for India and China, with the focus on three key sectors viz., Buildings, Energy and Transport. As part of this study, I am the lead for studying/analysing and writing the Indian story on low carbon approach for building sector. The study also involves use of modelling/scenario development to see the possible trajectories for future keeping in purview the transition happening in the federal government and key trends of the market. The projects gives ample opportunities for face-to-face meetings with the Chines counterparts undertaking the study, learning from each others' experiences on successes and failures which helped in evolving the study on both parts.

Name of Assignment / job or project	:	bigEE			
Year	:	2014-ongoing	5		
Client	:	Wuppertal	Institute	for	Climate,
Environment and Energy					

bigEE stands for- Bridging the Information Gap on Energy Efficiency in Buildings. The aim of the project is to support the diffusion of both energy efficient technologies and policy packages that overcome barriers for implementing these technologies. The main outcome of the project is to develop the web based knowledge platform for energy efficiency in buildings in India, building related technologies, policies focussing on buildings and appliances. I am one of the project advisors and have led the team right from proposal dialogue stages to conceptualisation of the work plan, advising the team on execution of the plan, data collection, report review, etc.

Name of Assignment / job or project	:	Guidelines and benchmarks for green large
		developments
Year	:	2010-11
Client	:	Ministry of New and Renewable Energy

As a Team Leader, I was responsible for overall methodology/approach for development of implementable guidelines and benchmarks specific to Indian conditions addressing the efficiency and sustainability requirements which would eventually pave way for rating system development for large areas (campuses, townships, etc.). Besides the overall vision and team coordination, I also wrote the entire sections on water, wastewater and solid waste (including e-waste and construction waste) management. The book is available on the website of MNRE and GRIHA.

Name of Assignment / job or project	:	Campaign on Solar Water Heating and
		Other Renewable Energy Technologies in
		the Hospitality Sector
Year	:	2010-11
Client	:	Ministry of New and Renewable Energy

The main objective of the project is to promote and accelerate the application of Solar Water Heating and other Renewable Energy Technologies by developing and implementing a nationwide campaign for the hospitality sector covering the hotel and catering industry. The main technology identified for this sector is solar water heating. Other potential renewable energy options are solar photovoltaics, biogas generation, solar thermal concentrators and solar passive architecture / green building design.

Name of Assignment / job or project	:	<i>Teaching experience</i> (prior to joining JMI)
Year	:	2009-2016

Client : HMDA, MoFA (ITEC programs), MNRE, GRIHA Council, MoHUPA (as part of NRC-RAY), HSMI, NBCC, HAREDA, various projects

I have the experience of giving exclusive training on various aspects of green buildings, including policy framework design. I am a trainer for conducting exclusive sessions on water, wastewater and solid waste management for GRIHA (more than 2000 professionals), conducted capacity building activities for implementation of the Rajiv Awas Yojana as part of the National Resource Centre, several programs on sustainability reporting for corporates, training on MRV tool –CCM as part of NAMA development (Indonesia, Thailand and Vietnam), regular trainer for BLISS programs (with national and international participation) etc.

I have also conceptualised and developed a detailed modular course curriculum on 'Green Buildings' as part of the Centre of Excellence for the Ministry of Urban Development, Government of India.

I was also an adjunct faculty at TERI University (2012-2016); I designed a course on Green Buildings for the University and took classes for Masters students (Urban Development and Management) opting for the above course. I also took regular classes on urban design from the perspective of climate resilience for practitioners and urban planners. I guided two Masters students for their dissertation work and was on the Steering Committee of three Ph.D students.

Integrated waste management in a metropolitan city, India

Year : 2002-2007

My Doctoral work on the critical aspect of managing solid waste primarily attempted to have an in-depth study of socio-economic and technical feasibility of managing municipal solid waste in the context of growing urban cities (metropolitan cities). My journey made me to work closely with dump-pickers, waste-pickers, sorters, middle-men and factories and opened a perspective never thought of. The services of the so-called informal waste recycling sector remain largely unrecognised in the public domain. The prevalent practices of accounting and managing municipal solid waste were looked at from the local authority's perspective and drew upon the techno-financial capabilities/shortcomings. The journey led me to several sites of waste-to-energy plants and the repeated story of untimely closure/non-functioning of the plants inspite of the proven evidence of the selected technology, so to say. The study laid bare the several barriers faced by the local utilities and most of it could be resolved to deliver better urban services. The extensive filed studies were combined with the use of system dynamics modelling to arrive at optimum selection of options for the policy makers/city managers to adopt under various set of constraints.

The experience gained helped me in several projects undertaken later during my employment as part of green building consultancy projects, development of guidelines and rating system.

Universities/Organisations Visited Outside the Country for Academic and Research Purposes: Deliver Talks, Presentations, Training workshops, Stakeholders consultation World Health Organisation, Canava, 12, 15 Oct 2010

World Health Organisation, Geneva, 13-15 Oct 2010

World Health Organisation meeting, Morges, 13-15 July, 2015

Pan American Health Organization, Washington DC, 8-10 April 2013

Jakarta University, Dec 2014

World Bank, April 2016 Tsinghua University, Dec 2017 and Sep 2019 Tokyo University, 17-19 Mar 2010 NTNU, Trondheim, Oct 2011 Asian Development Bank, Manila, 2-3 July 2015 Ministry of Environment of Finland, 10-11 Sep 2015

Participation in Conferences/Seminars/Workshops/Symposia/Panels as Speaker

Titleof Lecture/Conference detailsOrganised byDatesNational/InternationalLocation1Presentationon 'Environmental management in Indian cities'Tokyo UniversityOct 2009InternationalTokyo, Ja2TERI-Rockefeller International WorkshopTERI Rockefellerand RockefellerJan 2013InternationalNew Delh	
'Environmental management in Indian cities' Image: Constraint of the second s	
	pan
on Resilient Cities- Experiences from ACCCRN in Asia and Beyond	i
3 Sustainable Social UNEP and TERI April 2013 International New Delh Housing Initiative in Asia Asia April 2013 International New Delh	
4 Session on "Sustainability concerns in Urban Planning" as part of MDP HUDCO and TERI University 23 rd 2013 Aug 2013 National New Delly	
5 Session on "Role of Built environment in ecosystem management and biodiversity conservation' as part of MDP TERI University 14 th Nov 2013 National New Dell	ıi
6 'Co-benefits of green UN and TERI 9 th Dec International New Delh buildings and Habtat'	ıi
7BLISSTERI University11thMarInternationalTERI20142014University	y
8NRC-RAY workshop at KolkataTERI13-14th MarNationalKolkata	
9NAMA-BaliUNEP17-18th Mar 2014InternationalBali	
10MBSUniversity(IPMBSUniversity17thAprilNationalDwarkauniversity, Dwarka)2014201420142014201420142014	
11Evaluators and TrainersADaRSH24th AprilNationalAhmedabWorkshop Ahmedabad20142014201420142014	ad
12Financing for Energy Efficient HomesNHB and TERI 201425th April, 2014NationalMumbai	
13Evaluators and TrainersADaRSH27thJuneNationalChennaiWorkshop Chennai201420142014201420142014	
14Evaluators and TrainersADaRSH28thMayNationalNoidaWorkshop Noida20142014201420142014	

	Workshop Kolkata		2014		
16	Evaluators and Trainers Workshop Pune	ADaRSH	27th Aug, 2014	National	Pune
17	MECON-PMC's role while doing GRIHA projects	MECON-GRIHA Council	14th Aug, 2014	National	Ghaziabad
18	Session on "Urban Development-Green Buildings, Sustainable Transport and SWM for climate Mitigation' as part of Training of Trainers Program (18- 22 Aug)	National Centre for Good Governance and UNDP	20th Aug, 2014	National	New Delhi
19	NationalSeminaronGreenBuildingMaterials&ConstructionTechnologies	BMTPC	29th Aug, 2014	National	Silver Oak, IHC
20	E & T, Bhubaneshwar	ADaRSH	26th Sep, 2014	National	KIIT Bhubaneshwar
21	Lectures on 'Sustainable habitat and green Buildings' and 'Green Building Rating Systems'	TERI University	15th Oct and 17th Oct	Invited lectures(national)	TERI University
22	Ppt at Second meeting of on "Recharging of Grou during monsoon"		29th Sep, 2014		Delhi Secretariat
23	Lecture on Climate Change Mitigation at HIPA	HIPA	14th Nov. 2014	National	Gurgaon
24	E & T, Hyderabad	ADaRSH	19th Nov, 2014	National	Hyderabad
25	Conferenceon'AffordableHousing-NeedsandRequirements:Strategies and solutions'	India Infrastructure	11th Dec, 2014	National	The Imperial, New Delhi
26	NAMA workshop- Jakarta	UNEP	17th Dec,2014	International	Jakarta, Indonesia
27	NAMA workshop- Bangkok and MRV training	UNEP	25-27 Jan 2015	International	Bangkok, Thailand
28	Evaluators and Trainers Workshop, Goa	ADaRSH	11-Feb-15	National	Goa
29	Evaluators and Trainers Workshop Bangalore	ADaRSH	26-Feb-15	National	Bangalore
30	IGEF meeting	IGEF	12-Feb-15	Bilateral collaboration between Indo- Germany	New Delhi
31	NAREDCO workshop	NAREDCO	17-Mar-15	National	IHC
32	BLISS 2015,Challenges and Issues related to	TU	17-Mar-15	International	New Delhi

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	Building Infrastructure: Risks for Sustainable Settlements				
33	E & T New Delhi	GRIHA Council	18-3-15	National	New Delhi
34	Regional workshop_NAMA project	UNEP	5-7 May 2015	International	Manila
35	Bilateral meeting cum workshop at ADB	ADB	2-3 July 2015	International	Manila
36	Guidelines Development Group meeting on 'Healthy Housing'	WHO	13-15 July 2015	International	Geneva
37	Focal point meeting, NAMA for Buildings sector in South-East Asia	UNEP	27-28 July 2015	International	Jakarta
38	10YFP-MAC meeting	UNEP	Sep-15	International	Helsinki
39	Green Buildings in India: present practices and future prospects	JMI and GIRD	27-Aug-15	National	New Delhi
40	"Sustainable Smart Cities – Waste Reduction and Waste Planning as part of Watertech, Wastetech, Cleantech India 2015,	messefrankfurtindia	29-Sep-15	National	Le Meridian, New Delhi
41	BLISS 2015: Winter School on Sustainability-Ensuring Sustainable Consumption and Production Patterns	TERI University	4-Nov-15	International	TU, New Delhi
42	High level stakeholder dialogue 'Balancing sustainability and rising demand for housing' as part of "Exploring Demand-side Concerns for an Energy Secure India"	NITI aayog	9-Nov-15	National	New Delhi
43	Research Review meeting at HSMI- HUDCO	HSMI-HUDCO	16-Nov-15	National	New Delhi
44	International workshop on 'Promoting Policy and Regulatory Framework for Energy Efficiency and Renewable Energy'	UNEP-TERI	25-Nov-15	International	New Delhi
45	Strategic interventions and impacts: Business case for Green Buildings- Learning from practices	TERI	26-Nov-15	National	New Delhi

46	Session 3: Smart Cities and Green Buildings: Incentivizing the transition as part of Sustainable Energy Leadership Programme, February 8 - 19, 2016	TERI University and UNIDO	Feb 8-19, 2016		New Delhi
47	Review of Building Code to Integrate Energy and Resource Efficiency Measures in Nigeria	UN Habitat	27-28 Jan 2016	International	Abuja, Nigeria
48	DISHA Outreach program (Focus Group Discussion)	TERI	25 Mar 2013	National	Goa
49	WHO meeting On Healthy Housing	WHO	9-11th April- 2013	International	Geneva
50	Brainstorming session on identification of possible areas of cooperation on alternate and emerging housing technologies	BMTPC	12-Jun-13	National	Delhi
51	Training workshop for implementation of human settlement guidelines	Government of Bhutan	14-Apr-13	International	Thimphu
52	"Green buildings", MDP HUDCO lecture for town planners	HUDCO	23rd Aug 2013	International	Delhi
53	GRIHA Evaluators and Trainers Workshop	Adarsh (now known as GRIHA Council)	Several in 2013	National	Multiple locations- Mumbai, Delhi, Goa
54	'Financing Green Building in Africa'- presentation given on 'Energy Efficiency in new Residential housing in India'	UN-Habitat	17 th Sep, 2013	International	Nairobi

55	MDP lecture on Biodiversity conservation and ecosystem management	MDP programme by TERI	29th Nov 2013	National	Delhi
56	Co-benefits of Green Buildings and habitat as part of International Conference on "Urban Development with Climate Co- benefits: Aligning Climate, Environmental and Other Development Goals in Cities"	TERI and United Nations University	9th Dec 2013	International	Delhi
57	Eco Forum Global Annual Conference Guiyang 2016	UNEP, Ecoforum Global and GFHS	8-10 July 2016	International	Anshun, China
58	Greenbuild International Conference & Expo	USGBC	3-7 Oct 2016	International	Los Angeles, USA
59	WorkshoponEnergyDemandReductionintheBuilt Environment	Research Council UK and Department of Science and Technology, GOI	22 April 2016	National	New Delhi
60	Speaker at 10 th GRIHA workshop, Thematic track 14- <i>Water Stress:</i> <i>Perplexing Possibilities</i>	TERI	11-13 th Dec, 2018	International	New Delhi
61	Speaker at Training program for 'Climate Change and Disaster Risk Management'	HIPA	25-29 th June, 2018	National	Gurugram
62	Speaker at Zero Carbon Buildings @Connect Karo 2018	WRI	5th April, 2018	National	New Delhu
63	'Role of buildings in climate change mitigation and adaptation' at 'Climate Change Mitigation, Adaptation and Sustainable Development'	Department of Economics, JMI	14-15th Mar 2018	National	New Delhi
64	'Smart Energy Management for	TERI, New Delhi and UNSW,	13 th Dec, 2018	International	New Delhi

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	Sustainable Cities' as	Sydney			
	part of Australia-India				
	Knowledge Exchange				
	Workshop		1		
65	Trainer/Speaker at	HIPA	29 th Jan-	National	Gurugram
	'Urban Risk Reduction		2 nd Feb,		
	and its management'		2018		
66	Speaker at Training	HIPA	20-24 th	National	Gurugram
	program on "Global		Nov, 2017		U
	Warming, Climate		,		
	Change and Disaster				
	Management- Future				
	Perspective"				
67	Speaker at 3-day	GRIHA	20-22 nd	National	New Delhi
07	GRIHA Training	UKIIIA	Dec, 2017	Induorial	New Denn
	*		Dec, 2017		
60	program Vermete e demos en d	MART L.	16 10 th	Internetional	Inima :
68	Keynote address and	MNIT Jaipur	16-18 th	International	Jaipur
	Session Chair at		Mar, 2018		
	International Conference				
	on 'Urban				
	Sustainability: Emerging				
	Trends, Themes,				
60	Concepts and Practices'		10 141	National	T ·
69	Keynote address and	MNIT Jaipur	13-14th	National	Jaipur
	Session Chair at the		Feb 2017		
	National Conference on				
	'Urban Environmental				
	Management in India:				
	Problems and				
	Prospects'; Spoke				
	on"Performance				
	measurement: a				
	dynamic approach to				
	assess livability, health				
	and smartness of cities				
	and communities"				
70.	Lecture on 'CCN 2.0	UNEP and TERI	2nd Nov	International	New Delhi
	training session' at		2017		
	Nationally Appropriate		2017		
	Mitigation Action				
	(NAMA) development				
	for Building sector in				
71	Asia		20.22.1	International	Defficiency Clif
71	Key speaker and	UNEP and BERC	20-22nd	International	Beijing, China
	session chair at	Tsinghua	Dec 2017		
	Workshop on Regional	University			
	Database and Building				
	Energy Use				
72	Key speaker at the	ICLEI	23 Nov	National	Shimla
	'Building Efficiency		2017		
	Accelerator workshop'				
73	Speaker at 9 th GRIHA	TERI	18-19th	International	New Delhi
-	workshop, Thematic		Dec, 2017		
	track Sustainable		, _ 0 _ /		
	Water Management:				

	Affordable solutions				
74	Speaker for a session "Collaborative safety", GreenBuild India	GBCI	3rd Nov, 2017	International	Mumbai
75	LEED v4 Technical workshop	GBCI	4-5th May, 2017	National	New Delhi
76	LEED v4 Technical workshop	GBCI	7-8th July, 2017	National	Mumbai
77	Session on Urban Resilience and Management at 124 th 4- week Orientation Praogramme from 12 Feb-12 Mar 2019	UGC-HRD Centre, JMI	1 st Mar, 2019	National	New Delhi
78	Consultation to address Urban Resilience in the National Urban Policy Framework	National Institute of Urban Affairs	27 th May 2019	National	New Delhi
79	IEA-Tsinghua Joint workshop on 'The Future of Cooling in Emerging Economies'	IEA and Tsinghua University	24 th Sep, 2019	International	Beijing, China
80	Thematic track:Building Demand Reduction in Global South	CSIR-CBRI as part of Indo-UK joint research program on Building Energy Efficiency	13-14 th Dec 2019	International	New Delhi
81	3 rd Urban Economy Forum 2021	Urban Economy Forum and UN- Habitat	4-6 Oct, 2021	International	Toronto, Canada (Online)
82	2 nd online Impact Workshop cum Master Class on Capacity Building Initiative	CSE	11-12 th Aug 2021	International	Online
83	National Online Faculty Development Program (FDP) on Resilience in Architecture and Planning	COA-TRC and Department of Architecture AMU	4 th Sep, 2021	National	Online
84	Session on "Sustainable Cities and Communities" as part of 5 th one month Faculty Induction Programme	UGC-HRD Centre, JMI	31 st Aug, 2021	National	Online
85	Multiple sessions on 'Architectural Resiliency' as part of Training program for officers of various state agencies of Haryana	HIPA	May-Oct, 2021	National	Online

OTHER ACHIEVEMENTS

Academic

- 1st position, Master in Urban and Rural Planning (2002)
- 1st position, Bachelor of Architecture (1999)
- . GATE Scholar – Received monthly scholarship from the Ministry of Human Resource Development, Government of India during the Masters Programme (from 2000 to 2002)
- CSIR Scholarship-Qualified for both CSIR and GATE scholarship during Doctor of Philosophy (from 2002-2007)
- 13th position in State merit –Class 10

Professional

- TERI 'Roll of Honour' for the year 2010-11. The award is presented for excellence in employee performance by the organization
- Award by TERI for 'Excellence in Client Satisfaction' (2012)
- Certified GRIHA Evaluator since 2011
- GBCI Faculty (2016-2018)

Certification

I certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications, and my experience;

I understand that any wilful misstatement or misrepresentation herein may lead to my disqualification or removal from the selected team undertaking the assignment.

Signature of expert

20/10/2021 Date: (Day/Month/Year)