

Sujata Karve

B.Arch, M.Plan, Ph.D

IGBC AP, LEED GA

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Expertise :

- Architect and planner
- Environmental behavior research.
- Green building design and certification
- Environmental Planning
- Sustainable planning and design
- Land use analysis
- Space Syntax Analysis

Educational Qualifications

B.Arch (1996) , M.M.College of Architecture , University of Pune	First Class, stood second in the order of merit in the university.
M.Plan with specialization in Housing (1998) School of Planning and Architecture, New Delhi,	First class with distinction
Ph. D (2018) Savitribai Phule Pune University	

Professional Qualifications

IGBC AP (Indian Green Building Council Accredited Professional)
GRIHA Trainer and Evaluator (Green Rating for Integrated Habitat Assessment)
LEED GA (USGBC)

Employment Record

Asst. Professor and Head of Department (B.Arch) Dr. B.N. college of Architecture, Pune.	2002-2012
Head of Department – M.Arch (Environmental Architecture) Dr. B.N. college of Architecture, Pune	2012-till date
Centre head and coordinator for M.Arch (General Architecture) YCMOU	

Teaching Experience – 20 years

Visiting faculty at MMCA, Pune	1 year
Lecturer at MMCA, Pune	3 years
Associate Professor at BNCA Pune	17 years

Academic/Administrative Activities

Recognized P.G Teacher, University of Pune- 2007-2011 and 2011- 2016

Member, Board of Studies for Architecture (SPPU) – 2018 – 2022

Member, Board of Studies for Architecture (SPPU) – 2023 – 2027

Member, IQAC, BNCA

Coordinator Syllabus Review Committee for M. Arch (Environmental Architecture)

Subject convener for the subject of Architectural Project I & Dissertation and Architectural Project II

Coordinator for the subject of Climatology , First year

Member – Local Inspection Committee – Savitribai Phule Pune University

Member – BVG Skill University Syllabus Committee

Resource Person/ Seminars/Workshops

Invited as Speaker at the Conference on Sustainable Design titled “Sustainable Architecture – Concept to Execution” held in Bangalore, 2013

Invited as a speaker in the 8th Kirloskar Vasundhara International Film Festival, 2014 on the theme 5 R’s – Reduce, Reuse, Recycle, Recover and Refuse

Invited as speaker for a 2-day workshop on “Research in Architecture – Methods and Practices” 2015

Invited as speaker for a 5-day Teachers Training Program organized by COA-TRC on “Visual Research Methods in Architecture” 2021

Invited as speaker for a 5-day Doctoral Research Orientation Program (DROP) titled “Statistics in Architectural Research” organized by Board of Studies in Architecture, SPPU, August 2021

Invited as speaker for the conference “Rural Architecture and Regional Planning” organized by PRCA in February 2022

Research Experience

Doctoral Committee Member at:

1. BNCA Research Centre, Pune
2. SRM University, Chennai
3. Dayanand Sagar University, Bangalore
4. Manipal School of Architecture and Planning, Manipal

Reviewer for the IC2UHI2019 International Conference

Reviewer for the EDRA2022 International Conference

Scientific Committee Member – Sustainable Development Conference 2021

Scientific Committee Member – Sustainable Development Conference 2022

Reviewer for the IC2UHI2023 International Conference

Research Projects Sponsored by Savitribai Phule Pune University:

1. Post Occupancy Evaluation of Buildings for Internal Comfort and Energy Usage.
 2. Urban Climate Map for the City of Pune
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Research Projects – Council of Architecture:

Urban Renewal Schemes in Core Cities: Is the Current Model of Cluster Redevelopment a Best Fit in Core Areas?

Workshops, Seminars organized:

- **Coordinator** for NIASA-COA TTP “Incorporating energy efficiency in the architectural curriculum” held in December 2018.
- **Convener** for the “**National Symposium of Doctoral Studies in Architectural Research**” funded by the BCUD, Savitribai Phule Pune University held in 2013.
- **Organized** a one day seminar on the theme “**Zero Waste – Approach towards Construction Waste**” at the **9th Kirloskar Vasundhara International Film Festival 2015, Pune.**
- **Organised** a one day seminar on the theme 5R’s - Reduce, Reuse, Recycle, Recover and Refuse
- **Organised Green Fest 2013 and 2014** – and exhibition cum lecture series where academicians, entrepreneurs and people come together for a green initiative.
- Organised Seminar on “Climate Change” – 2016
- Organising Kanvinde Lecture Series – from 2009 to 2018

Received the Best Paper Award

For paper “Evaluation of environmental quality of hospitals in Shillong based on daylight and thermal comfort”, International conference on “Sustainable Technologies in Building and Environment”, 2015.-

Conducted a joint studio with the Colombo School of Architecture, M.Arch Students:

Planning studio 2015 – Sustainable Urban design, Colombo , Sri Lanka: it was an attempt to understand a different cultural, socio economic and environmental context. The purpose was to prepare design guidelines for sustainable urban design

Academic Projects at Institutional level

1	Comprehensive Development Plan for Alwar, Rajasthan. Complete study and survey of the town carried out. Specific responsibility was to prepare the demographic data, evolve future requirements of the proposed land use requirements and prepare urban design guidelines specific to the residential sectors and commercial districts.
2	Residential Development Plan for Goa The task was to prepare the future development plan for the state considering the existing housing (residential) requirements and projections for the future. Surveys were undertaken to study the existing stock in quantity and typology. A development plan was prepared for the Government of Goa. The assignment also included the development of a complete residential sector with its cost benefit analysis and the mix of units based on it. The complete project formulation to

	costing was a part of the same. The project also required an Environmental Impact Assessment Study to be carried out for 100 acres area.
3	Environment Assessment and Development of the Bindusara Dam , Beed. The study was carried out to study the ecology and biodiversity of the surrounding region where a proposal of development was to be made. A development plan of the area was prepared to include income generating activities like parks, nature trails etc.
4	A Coast Story – Exploring the possibilities in Alibag The study of Alibaug region was undertaken under the coastal zone management program with an aim to give guidelines for coastal zone management, for sustainable development.
5	Re- Generating the Core : Pune - 2013 The students explored the aspects livability in a small neighborhood in Pune and what would be the effect of the forthcoming proposal of cluster development on this neighborhood with a focus on the environment.
6	Healthcare at it Best The studio of 2013 focused on ‘Hospital Design’. The building typology chosen is inherently energy intensive and requires a continuous stream of energy 365/7. It also is service intensive and achieving efficiency in this aspect was a challenge. Creating user friendly, environmentally sound as well as resource efficient spaces was a challenge.
7	Environmental Management Plan through the perspective of Socio Economic development – Koyna
8	Town Centre in warm humid climate, case of Chennai and Town Centre in composite climate, case of Naya Raipur
9	Retrofitting an existing building for energy efficiency and ECBC compliance – case of Van Bhavan, Pune
10	Vision for the City of Pune as a Tourist Destination, as a Sports City and as a Healthcare City.
11	Research on sustainable communities- guided students for a competition hosted by UN Habitat to Design Sustainable Neighborhoods
12	Jaipur- lessons from the past for climate responsive future development
13	Understanding climate change in Wayanad, Kerala
14	Chennai – CHAIN-Nal (Nature and Infrastructure) – A process of linking natural systems with Urban Infrastructure
15	A Tale of 5 Cities – Nature based Blue- Green Solution to Resilience (Mumbai, Pune, Nagpur, PCMC and Panaji)
16	Heat Island Studies – Case of Pune
17	Vulnerability Assessment of 23 newly inducted villages in PMC

Publications in Journals/National Seminars/Conferences/Symposiums

Journals:

1. Marngar R. and Karve S, (2015), "Evaluation of environmental quality of hospitals in Shillong based on daylight and thermal comfort", *Indian Journal of Science and Technology*, Vol 8(28)
2. Karve S. and Zalte M. (2016); "Analysis of Natural Ventilation in Healthcare Settings", *Journal of Indian Institute of Architects*, Vol 81, Issue 9.
3. Junaiz A., Karve S. and Dhamankar N. (2017), PLEA 2017 Proceedings- Design to Thrive, Vol III, pp 5052-5059.
4. Panse V., Karve S. and Nawale R. (2019), "Understanding Transit Oriented and its effect on Livalibity", Futura Icon Conference, Pune.
5. Indalkar S., Kulkarni P., Karve S., Dhamankar N. (2019)," Evaluating rooftop solar photo voltaic potential of existing residential highrise buildings in Pune", Futura Icon conference, Pune.
6. Kulkarni S., Karve S. and Kulkarni P. (2019), "Assessment of building envelope material for embodied energy to reduce global warming and ozone depletion Potential", *International Journal of Research and Analytical Reviews*.
7. Mankar D., Karve S. (2019), "Feasibility of Low Cooling Technologies in Residential Sector", *7th International Conference on Energy Research and Development, ICERD 2019*, Scopus Indexed
8. Karve S., Nachane R. (2023), "Post Occupancy Evaluation of Indoor Air Quality in Green Rated Commercial Interiors", *Current World Environment*

Conferences:

1. "Interpreting a syllabus for a regional agenda: case study: University of Pune", International Conference on Human Habitat, 2008, Mumbai, India.
 2. "Importance and need of Energy Efficiency in Health Care Facilities – Case study Pune", Institute of Engineers, 2008, Pune, India.
 3. "Vernacular Values in Modern Context: Case Study Hingne Gaothan, Pune , India", National Conference on Vernacular Architecture in India: Relevance for the 21st Century, 2007, Manipal, India
 4. Conference on Environment 2006, "Analytical study of the changing climatic pattern and economic development in the city of Pune, India" Wessex Institute of Technology, UK
 5. Conference on Transport 2006, Wessex Institute of Technology, UK
 6. "Rate of Epidemics in Urban Populations- Case study Pune, Maharashtra, India", International Conference on Healthy Cities- A Perspective on Asian Concerns- 3rd to 5th February 2011, Pune.
 7. Presented at the Regional Research Conference "INNOVATION 2013" BCUD, University of Pune, titled "Post Occupancy Evaluation of Buildings for thermal comfort and energy usage"
 8. Nachane R., Karve S. (2019); "Perception of Designers on the Use of Sustainable Interior Materials and Finishes and Their Awareness about Their Effect on Indoor Air Quality", *Regional Conference on Research in Architecture (in association with MASA)*
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9. Singh I, Karve S. (2021); "Reviewing Fractal Geometry as a Design Aid in Architecture and Township Layouts", *National Students Conference on Research In Architecture*
10. Shah T, Karve S. (2021); "Urban Voids", *National Students Conference on Research In Architecture*
11. Pande V., Karve S. (2021); "To Study the Rebound Phenomena In Slum Rehabilitation Project", *National Students Conference on Research In Architecture*
12. Airani C., Karve S., Kulkarni P. (2021); "Evaluating the Impact of Rooftop Greening Methods on The Urban Microclimate at A Neighborhood Level (Residential)", *National Students Conference on Research in Architecture*
13. Shroff U., Karve. S, Kulkarni P., Dhamankar N.(2021); "Evaluation of Daylight Distribution in a Hospital room with Complex Fenestration System in Hot & Dry Climate", *National Students Conference on Research in Architecture*
14. Fernandes E., Karve S. Kulkarni P. (2021)' "Issues Affecting the Unique Bund Systems in the Khazans of Goa", *National Online Conference on Planning, Design and Management 2021, COEP, Pune*
15. Kamat D., Karve S., Nawle R. (2021); " Impacts of Chakan MIDC, Pune on Surrounding Environs", *National Online Conference on Planning, Design and Management 2021, COEP, Pune*
16. Buddhivant P., Karve S. (2022); "Urban Agriculture: for the people, by the people", *National Online Conference on Planning, Design and Management 2022, COEP, Pune*
17. Khatri N., Karve S. (2022); "A Review of Indian Policy Framework for Circular Economy in Building & Construction Industry", *Transitioning Towards Circular Economy- Opportunities and Challenges*, MET, Mumbai
18. Buddhivant P., Karve S. (2022); "Urban Agriculture: for the people, by the people", *PLEA STGO 2022 – Will Cities Survive*

Courses, Workshops Attended:

- **QIP on "Responding to Thermal Environments"** (2005), at NIASA , Pune.
 - **QIP on "Energy Conservation through Climate Responsive Architecture"** (2001), at NIASA , Pune.
 - **QIP on "Environmental Planning and Architecture" (2006)** at NIASA, Pune.
 - **Design Workshop** for Professionals and Teachers of Architecture by Prof. Shireesh Deshpande, Sinhagad College of Architecture, 2006
 - **Workshop on "Architectural Curriculum Design and Development" (2007)**, at NIASA conducted by BOS – Pune and Kolhapur Universities.
 - **QIP on "Embedding Sustainability in Urban Architecture", (2009)** at NIASA, Pune
 - **Workshop** on Building Technology and Services (2010)
 - **Training Workshop for Teachers** titled " **Certificate IV in Teaching and Assessment" (2010)**, by Prof. Jill Cuthbertson from Southbank Institute of Technology, South Brisbane, Australia.
 - **Training Program on "Green Building Rating System" (2011)**, by IGBC, Pune
 - **International Workshop on "Collaborative Design and Tools for Energy Efficiency with Prefab Technology"** organized by IDCT (Indo-Italian Centre of Excellence), MIT School of Advanced Technology and Politecnico Di Milano, Italy(2012)
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- **International Symposium on “ Knowledge Sharing for Capacity Building for Planning of Sustainable Cities”**, (2014), a joint program of BVIEER-Pune, University of Cologne – Germany, GIZ and German House for Research and Innovation.
- **Workshop on “ Inspection Reforms – Experts Training Program” (2014)**, organized by **Council of Architecture**
- **2nd Built Environment Symposium** titled **“Design to Sustain – Water Management through Habitat Development” 2014**, Mumbai.
- COA TTP on **“SOCIAL SCIENCE APPROACH IN ARCHITECTURE AND URBANISM”**; October 2021

Participation in Competitions as a guide :

The first prize and the commendation prizes won by the students of Environmental Architecture in National Bamboo Design Competition for Students, 2014.

Won the first prize in KVIFF – Damn the Dam by students of Environmental Architecture and Landscape Architecture

International competition – Urban Revitalization of Mass Housing, UN Habitat

IAHH student design competition 2015

Solar Decathlon – an ongoing competition in collaboration with COEP

CEMCON studio design competition, 2015

KVIFF

ECOBUILD

Participated in JATAN

Participated in LIONS Environment Expo

Social Initiatives:

1. **“Changemakers”** - partnered in a venture by SMILE sahelı , conceptualized by Adv. Vandanataı Chavan. This was a competition floated for the citizens of the city as an initiative of participatory democracy.
2. Preparation of the Tourism Development Plan for the city of Pune
3. Environmental Development Plan of 4 villages in the Pune District – Markal, Kadus, Manchar and Kalamb
4. Building Energy Simulation services for GRIHA compliance for Westside County Project, Pune by Darode – Jog Properties.
5. Coordinator for the Unnat Bharat Abhiyan program by the Government of India for BNCA

BNCA Consultancy Cell:

1. Energy and Environmental Audit of School of Fashion Technology, Pune
2. Energy and Environmental Audit of Cummins Engineering College, Pune
3. Energy and Environmental Audit of Siddhivinayak College of Arts and Commerce, Pune
4. Energy and Environmental Audit of Pune Municipal Corporation in collaboration with IGBC Pune Chapter, Pune
5. **Heat Action Plan for Pimpri Chinchwad Municipal Corporation – ongoing (February 2024)**

Memberships:

Council of Architecture (COA), India

ISOCARP - International Society of City and Regional Planners

IAUC – International Association for Urban Climate

EDRA – Environmental Design Research Association

ITPI – Institute of Town Planners India

AESA – Architects, Engineers and Surveyors Association, Pune

Professional Experience

Associate Consultant – Environment, FDG, Pune

Date: 2010 - till date

Responsibilities: Green Building design inputs as well prepare case for certification

Environmental Impact assessment for construction projects

1. Green building certification:

GRIHA: Projects for GSIDC

SCERT, Khandola, Arts college, IT building, Panaji

IGBC New construction – Tech M, Pune

IGBC Green Homes

2. Environmental Clearances for construction projects – part of the team

Languages Proficiency

	English	Hindi	Marathi
Read	Excellent	Excellent	Excellent
Write	Excellent	Excellent	Excellent
Speak	Excellent	Excellent	Excellent
