

## Balakrishnan R. Balachandran

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B.R. Balachandran is an architect and planner with over 25 years experience in urban planning and design. He is currently engaged in doctoral research at the Department of Urban and Regional Planning, University of Illinois at Urbana Champaign, USA. In 2007, he set up Alchemy Urban Systems Private Limited, an urban planning consulting firm with his partner Ms. Sowmya Balachandran. Before that he worked for a decade with Environmental Planning Collaborative (EPC), Ahmedabad.

Under his leadership, Alchemy Urban Systems engaged in a variety of projects ranging from city level sanitation planning (Raipur) to planning for post-flood reconstruction in Bihar and a regional development strategy for the conservation areas around Ellora caves. Alchemy also prepared development plans (Twin City Master Plan for Anand & Nadiad in Gujarat) and carried out studies (land use analysis for Bus Rapid Transit System at Pimpri Chinchwad).

Mr. Balachandran is known for his contributions in the field of disaster mitigation and post disaster reconstruction. As Executive Director, EPC he led a team of urban planners who prepared the Development Plan and Town Planning Schemes (land pooling schemes) for reconstruction and future growth of the city of Bhuj after the earthquake of 2001. He was the land use and physical planning expert in an international team commissioned by the World Bank to prepare a Post Disaster Housing Reconstruction Handbook. At the University of Illinois, his research focuses on the resettlement of communities affected by disasters.

Mr. Balachandran, along with his partner Sowmya and others developed the business model for an affordable housing company in Ahmedabad and continues to advise other housing entrepreneurs. He has also provided consulting services on international projects in Mexico, Cuba, Palestine (Gaza), Sri Lanka, Nepal, Bangladesh, Mauritius and Indonesia.

Alchemy Urban Systems Private Limited currently takes up only selected projects as Mr. Balachandran and his partner Sowmya are both engaged in doctoral research. Most recently Mr. Balachandran has been involved in providing advisory services in the areas of Affordable Housing Policy, Sustainable Urban Sanitation, Sustainable Urban Land Management and Smart Cities Development. He works in the interface between land management and other development imperatives such as economic development, transportation, sanitation, disaster mitigation and heritage conservation. Currently he is involved in the developing watershed-based sustainable sanitation strategies in the town of Taxco in Mexico and Havana in Cuba.

- Education :** PhD in Regional Planning, ongoing (2016-2021),  
University of Illinois at Urbana Champaign  
**Post Graduate Diploma in Planning (Housing),**  
Centre for Environmental Planning & Technology, Ahmedabad, India,  
February, 1995 (now CEPT University)  
**Bachelor of Architecture (B.Arch.),** University of Kerala, June 1990

## 2. Languages Proficiency

	<b>Speak</b>	<b>Read</b>	<b>Write</b>
<b>English</b>	Excellent	Excellent	Excellent
<b>Malayalam</b>	Excellent	Excellent	Excellent
<b>Hindi</b>	Excellent	Excellent	Excellent
<b>Gujarati</b>	Good	Good	
<b>Tamil</b>	Minimal		

## 6. Membership of Professional Societies

Registered Architect, Council of Architecture  
Associate Member, Institute of Town Planners, India

7. **Countries of Work Experience:** India, Mexico, Cuba, Bhutan, Bangladesh, Palestine, Sri Lanka, Nepal, Indonesia, Mauritius

## 8. Employment Record

i)	<b>Period of employment</b> <b>Employer</b> <b>Position held</b> <b>Description of duties</b>	December 01, 2006 onwards Alchemy Urban Systems Private Limited Director Strategic planning, business development, management of all ongoing projects. Team leader of specific projects related to disaster mitigation, urban governance and urban planning.
ii)	<b>Period of employment</b> <b>Employer</b> <b>Position held</b> <b>Description of duties</b>	January 01, 2014 to December 31, 2015 CEPT University, Ahmedabad Director, Professional Regulations Mission Provide leadership to CEPT University's initiatives for engaging with legislative and policy formulation processes in the context of professions related to the planning, design and management of human settlements
iii)	<b>Period of employment</b> <b>Employer</b> <b>Position held</b> <b>Description of duties</b>	July 2009 to March 2013 DBS Affordable Home Strategy Limited Promoter-Director Strategic planning, concept development, collaborations and corporate governance
iv)	<b>Period of employment</b> <b>Employer</b>  <b>Position held</b> <b>Description of duties</b>	January to October 2012 Faculty of Planning and Public Policy, CEPT University, Ahmedabad Adjunct Professor Participation in academic activities including teaching, thesis guidance and research
v)	<b>Period of employment</b> <b>Employer</b>  <b>Position held</b> <b>Description of duties</b>	April 2001 till November 2006 Environmental Planning Collaborative, Ahmedabad Executive Director Strategic planning, business development, supervision of all the ongoing projects. Team leader of specific projects related to disaster mitigation, post-disaster recovery, urban governance, urban planning and urban design.
vi)	<b>Period of employment</b> <b>Employer</b>  <b>Position held</b> <b>Description of duties</b>	April 1999 till March 2001 Environmental Planning Collaborative, Ahmedabad Project Coordinator, Business Promotion and Development Liaising with the client organizations on projects. Manage specific projects related to urban planning and design.
vii)	<b>Period of employment</b>	April 1997 till March 1999

	<b>Employer</b>	Environmental Planning Collaborative, Ahmedabad
	<b>Position held</b>	Project Manager
	<b>Description of duties</b>	In-charge of the overall management and completion of projects related to urban planning and design.
viii)	<b>Period of employment</b>	April 1996 – March 1997
	<b>Employer</b>	Centre for Environment Education, Ahmedabad
	<b>Position held</b>	Project Officer and Editor, AmdaVadma
	<b>Description of duties</b>	Research for magazine articles on urban affairs, editing of all articles, project management
ix)	<b>Period of employment</b>	March 1995 – October 1995
	<b>Employer</b>	UNNATI Organization for Development Education
	<b>Position held</b>	Project Associate
	<b>Description of duties</b>	Management of a participatory research project on rural local self government and micro level planning establishments of project office in Rajasthan, facilitation of consultations, reporting, planning inputs
x)	<b>Period of employment</b>	October 1991 – March 1992
	<b>Employer</b>	College of Engineering, Thiruvananthapuram (Kerala),
	<b>Position held</b>	Lecturer, Department of Architecture
	<b>Description of duties</b>	In-charge of design studio, lectures on building materials, history of architecture
xi)	<b>Period of employment</b>	June 1990 – May 1993
	<b>Employer</b>	Independent Professional Architectural Practice
	<b>Position held</b>	Architect and sole practitioner
	<b>Description of duties</b>	Design and supervision of architectural projects including residential buildings, interiors and landscape projects

## 9. Illustrative Work Experience

1)	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Integrated Sanitation Planning in Taxco and Havana
	<b>Client</b>	:	Latin America office of Bremen Overseas Research and Development Agency, Germany (BORDA)
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>• Watershed-based Integrated Planning for Sanitation and Basic Needs Services (Municipality Of Taxco, Guerrero, Mexico)</li> <li>• Integrated Scheme for Localized Sanitation Solutions for the Watershed of the Bay of Havana, Cuba <ul style="list-style-type: none"> <li>○ Study of land use and development pattern in the micro-watersheds of Rio San Juan (Taxco) and Bay of Havana</li> <li>○ Assessment of existing situation with respect to water, sanitation and solid waste management</li> <li>○ Development of integrated multi-sector strategies for sustainable solutions for water, sanitation and solid waste management, exploring resource recovery and reuse linkages with other sectors such as agriculture, animal husbandry, industry, tourism, etc.</li> </ul> </li> </ul>

			<ul style="list-style-type: none"> <li>○ Recommendations of institutional and policy interventions</li> </ul>
	<b>Period</b>	:	January to December 2016
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>● Overall guidance and supervision of the project</li> <li>● Interaction with key stakeholders in both cities</li> <li>● Specific inputs on policy and strategy</li> </ul>
<b>2)</b>	<b>Position held</b>	:	Housing Specialist
	<b>Project</b>	:	Preparation of National Human Settlements Strategy for Bhutan
	<b>Client</b>	:	Government of Bhutan (Lead Consultant: CRISIL Risk & Infrastructure Solutions Limited)
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>● Review of all policy documents related to human settlements planning and development in Bhutan</li> <li>● Detailed review of National Human Settlements Policy</li> <li>● Field visits and stakeholder consultations</li> <li>● Development of National Human Settlements Strategy</li> </ul>
	<b>Period</b>	:	December 2015 to June 2016
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>● Review of housing related documents</li> <li>● Field visits and interaction with key stakeholders</li> <li>● Specific inputs on housing policy and strategy</li> </ul>
<b>3)</b>	<b>Position held</b>	:	Team Leader and Housing Specialist
	<b>Project</b>	:	Review of Urban Housing Sector in Madhya Pradesh (MP)
	<b>Client</b>	:	DFID (Lead Consultant: ICF Consulting Services Ltd.)
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>● Assessing the housing scenario in MP: <ul style="list-style-type: none"> <li>○ Urbanization and housing trends</li> <li>○ Policies and programs and national and state level</li> <li>○ Stakeholder analysis</li> </ul> </li> <li>● Recommendations for housing in MP <ul style="list-style-type: none"> <li>○ Institutional interventions</li> <li>○ Policy interventions</li> <li>○ Interventions in related areas such as urban planning</li> </ul> </li> </ul>
	<b>Period</b>	:	September to December 2015
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>● Overall guidance and supervision of the project</li> <li>● Interaction with key stakeholders in MP</li> <li>● Specific inputs on housing policy and strategy</li> </ul>
<b>4)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	City Sanitation Action Plans for 30 Pourashavas in Bangladesh
	<b>Client</b>	:	Asian Development Bank (Lead Consultant: Bremen Overseas Research and Development Agency, Germany – BORDA)
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>● Existing sanitation situation analysis: <ul style="list-style-type: none"> <li>○ Status of entire value chain of sanitation</li> <li>○ Institutional framework</li> </ul> </li> <li>● Sanitation Action Planning <ul style="list-style-type: none"> <li>○ Formulation of strategies and action plans</li> <li>○ Inputs on enabling institutional framework</li> </ul> </li> </ul>
	<b>Period</b>	:	January to August 2015
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>● Overall guidance and supervision of the project</li> <li>● Interaction with key stakeholders in Bangladesh</li> </ul>

			government and ADB
<b>5)</b>	<b>Position held</b>	:	Urban Planning Expert
	<b>Project</b>	:	Technical Assistance for preparation of Smart City Development Plans for Madhya Pradesh (as part of Madhya Pradesh Urban Infrastructure Investment Programme (MPUIIP))
	<b>Client</b>	:	DFID (Lead Consultant: ICF Consulting Services Ltd.)
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>• Smart City Development Plan for seven cities of MP: <ul style="list-style-type: none"> <li>○ As-is study of Indore city including stakeholder consultations</li> <li>○ Oversight of Smart city Plans for seven cities</li> </ul> </li> </ul>
	<b>Period</b>	:	April-December 2015
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Expert inputs on as-is assessment, area development plans and pan-city interventions</li> <li>• Support to Team Leader in integrating the inputs from other experts in the area development plans</li> </ul>
<b>6)</b>	<b>Position held</b>	:	Urban Planning Expert
	<b>Project</b>	:	Emergency and Early Recovery Response for Gaza Crisis 2014
	<b>Client</b>	:	United Nations Development Programme (UNDP)
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>• Urban Planning Strategy for Gaza Reconstruction: <ul style="list-style-type: none"> <li>○ Review existing systems and practices for urban planning in the Gaza strip</li> <li>○ Analyze urban planning implications of the impact of the conflict with Israel in July-August 2014</li> <li>○ Propose short, medium and long term strategies for planned reconstruction and development</li> </ul> </li> </ul>
	<b>Period</b>	:	January 2015
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Consultations with Program for Assistance to the Palestinian People (PAPP) and other stakeholders</li> <li>• Coordination with Housing Recovery Expert</li> <li>• Preparation of Urban Planning Strategy Report</li> </ul>
<b>7)</b>	<b>Position held</b>	:	Urban Development Specialist
	<b>Project</b>	:	Visakhapatnam Chennai Industrial Corridor
	<b>Client</b>	:	Asian Development Bank
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>• Land Management Strategies including: <ul style="list-style-type: none"> <li>○ Land Pooling Policy for Industrial Development</li> <li>○ Institutional framework for planning, development and management of industrial areas/ investment regions</li> <li>○ Benchmarking of best practices in institutional framework for planning, development and management of industrial areas/ investment regions</li> </ul> </li> <li>• Planning Process in the Corridor <ul style="list-style-type: none"> <li>○ Conceptual Master Plans for specific projects</li> <li>○ Inputs to Regional Perspective Plan and Master Plans</li> </ul> </li> </ul>
	<b>Period</b>	:	January to August 2015
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Development of land management strategy</li> <li>• Expert inputs on the Regional Perspective Plan</li> <li>• Preparation of Conceptual Master Plans</li> </ul>
<b>8)</b>	<b>Position held</b>	:	Urban Development Specialist

	<b>Project</b>	:	Madhya Pradesh Programme Technical Assistance for Affordable Housing and Land Pooling
	<b>Client</b>	:	Department for International Development (DFID), UK Government
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>• Preparation of Affordable Housing Policy for Madhya Pradesh</li> <li>• Preparation of Land Pooling Policy for Madhya Pradesh</li> </ul>
	<b>Period</b>	:	December 2014 to March 2015
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Preparation of draft policies</li> <li>• Consultations with government stakeholders</li> <li>• Drafting of legal amendments as required</li> </ul>
<b>9)</b>	<b>Position held</b>	:	Urban Specialist (Resource Person)
	<b>Project</b>	:	Conceptual Development Plan for Visakhapatnam Chennai Industrial Corridor
	<b>Client</b>	:	Asian Development Bank
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>• Preparation of Conceptual Development Plan for Visakhapatnam Chennai Industrial Corridor</li> <li>• Identification of nodes for industrial development</li> <li>• Selection of industry categories for promotion</li> <li>• Macro infrastructure planning</li> <li>• Strategies for institutional reform</li> </ul>
	<b>Period</b>	:	May to November 2014
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Wrote the chapter on urbanization strategy</li> <li>• Expert inputs on policy formulation for land pooling</li> <li>• Interaction with key stakeholders in government</li> <li>• Inputs on institutional framework for planning and land management</li> </ul>
<b>10)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Odisha: Development of Regulatory Framework for Affordable Housing
	<b>Client</b>	:	DFID (Lead Consultant: CRISIL Risk & Infrastructure Solutions Limited)
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>• Formulating policy/guidelines on Transfer of Development Rights (TDR)</li> <li>• Formulating policy/guidelines on Shelter Funds</li> <li>• To review State Affordable Housing Policy and also review and whet the Bhubaneswar Development Authority Building and Planning Regulations</li> <li>• High Density Corridors – to formulate principles for identification of areas, where extra FAR earned through TDRs can be consumed by the developer</li> </ul>
	<b>Period</b>	:	October to December 2014
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Overall leadership of the project</li> <li>• Expert inputs on policy formulation to support affordable housing</li> <li>• Interaction with key stakeholders in government and housing development</li> </ul>
<b>11)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Master Planning for Indium Lake Forest Township, Bangalore

	<b>Client</b>	:	Indium Properties Private Limited
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>• Preparation of project brief and conceptual master plan</li> <li>• Strategic planning for project structuring and attracting investment partners</li> </ul>
	<b>Period</b>	:	October to December 2014
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Overall leadership of the project</li> <li>• Urban design and strategic inputs</li> </ul>
<b>12)</b>	<b>Position held</b>	:	Advisor
	<b>Project</b>	:	Business Plan for new affordable housing enterprise named "Indium First Homes".
	<b>Client</b>	:	Ecoscapes Private Limited (Indium Group company)
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>• Preparation of affordable housing business plan as a working document</li> <li>• Advisory services on an ongoing basis for operationalization of the business plan</li> </ul>
	<b>Period</b>	:	October 2014 onwards
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Expert inputs on market based affordable housing business model</li> </ul>
<b>13)</b>	<b>Position held</b>	:	Urban and Regional Planning Expert
	<b>Project</b>	:	Uttar Pradesh: Infrastructure and investment strategy for three sub-regional growth centers as part of a larger study called Development Options along the Eastern Dedicated Freight Corridor
	<b>Client</b>	:	World Bank (Lead Consultant: CRISIL Risk & Infrastructure Solutions Limited)
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>• Assessment of the existing infrastructure networks and facilities within each sub-region that supports economic and business activities in each identified cluster</li> <li>• A detailed facility plan for developing infrastructure, industrial estates, and logistics centres to improve and enhance the economic performance of clusters.</li> <li>• A strategy on how to best finance these investments (PPPs, government provision, concessions, etc.)</li> </ul>
	<b>Period</b>	:	January to October 2014
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Strategic planning at regional scale</li> <li>• Spatial integration of inputs from infrastructure planners and other experts</li> <li>• Specific inputs on issues related to land management for urban and industrial development</li> </ul>
<b>14)</b>	<b>Position held</b>	:	Urban Planning Expert
	<b>Project</b>	:	Land Management and Urban Planning Challenges for Industrial and Agro-processing Parks: An Assessment in the Context of Economic Corridors
	<b>Client</b>	:	Asian Development Bank, Manila
	<b>Scope and Role</b>	:	<ul style="list-style-type: none"> <li>• Structuring an urban planning and land management framework in the context of industrial/agro-processing parks as well as the economic corridor</li> <li>• Examine case studies of successes and failures using the land management framework to gain insights and thus improve the framework</li> <li>• Apply the land management framework to identify</li> </ul>

			strengths and weaknesses of the states on the East Coast Economic Corridor with focus on Andhra Pradesh and Tamil Nadu
	<b>Period</b>	:	December 2013 to March 2014
<b>15)</b>	<b>Position held</b>	:	Senior Advisor, Urban Development
	<b>Project</b>	:	Sustainable Urban Transport initiatives in Chennai, Pimpri Chinchwad, Rajkot and other cities in India
	<b>Client</b>	:	Institute for Transportation and Development Policy (ITDP), New York
	<b>Scope and Role</b>	:	Mentoring ITDP's urban development team in India and actively participating in ITDP's initiatives in India <ul style="list-style-type: none"> <li>• Chennai: Comprehensive Transportation Plan (urban development component focusing on Transit Oriented Development and land use transport integration)</li> <li>• Pimpri Chinchwad: Strategising for Transit Oriented Development</li> </ul>
	<b>Period</b>	:	May 2012 onwards
<b>16)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Initial Identification and Diagnostic Study: Options Paper on Developments along the Eastern Dedicated Freight Corridor
	<b>Client</b>	:	World Bank (Lead Consultant: CRISIL Risk & Infrastructure Solutions Limited)
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>• Conduct a rapid time series analysis of demographic and economic patterns along the entire length of the EDFC</li> <li>• Identify key policies and programs in industry, finance, commerce, agriculture, energy, urban development, mineral resources and transportation; projects and initiatives in the above areas; information on poverty, migration, education, etc; key stakeholders most likely to impact policies, programs and projects along the EDFC.</li> <li>• Generate insights on development potential along the EDFC</li> </ul>
	<b>Period</b>	:	April to June 2013
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Overall leadership of the project</li> <li>• Specific inputs on issues related to urban and regional development</li> </ul>
<b>17)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Preparatory study: Housing finance for low income group
	<b>Client</b>	:	KfW Bankengruppe (Lead Consultant: CRISIL Risk & Infrastructure Solutions Limited)
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>• Overview of the affordable housing market in India</li> <li>• Analysis of the housing finance market for low &amp; informal income segment</li> <li>• Conceptualization of a funding program by KfW in collaboration with the National Housing Bank</li> </ul>
	<b>Period</b>	:	April to June 2013
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Overall leadership of the project</li> <li>• Specific inputs on issues related to housing finance for the low &amp; informal income market segment</li> </ul>
<b>18)</b>	<b>Position held</b>	:	Senior Advisor
	<b>Project</b>	:	Preparation of Town Planning Schemes for Slum



			Redevelopment, Bhuj
	<b>Client</b>	:	Homes In the City (HIC) – A collaborative initiative of five NGOs in Bhuj led by Sahjeevan and Hunnar Shala Foundation
	<b>Scope</b>	:	A bottom up planning exercise involving slum communities. Adaptation of the successful land pooling mechanism called Town Planning Scheme to achieve legitimization and redevelopment of a group of slums in Bhuj. <ul style="list-style-type: none"> <li>• Preparation of conceptual Town Planning Scheme</li> <li>• Preparation of community-led urban development strategies which are socially, ecologically and economically sustainable</li> </ul>
	<b>Period</b>	:	May 2012 to April 2013
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• To provide overall leadership for the project</li> <li>• Inputs for urban planning and regulatory issues</li> </ul>
<b>19)</b>	<b>Position held</b>	:	Project Director
	<b>Project</b>	:	Preparation of Guidelines for Affordable Housing
	<b>Client</b>	:	Support to National Policies for Urban Poverty Reduction, Ministry of Housing and Poverty Alleviation, Government of India (through GHK Consulting Limited, UK)
	<b>Scope</b>	:	Preparation of guidelines for state governments to actively facilitate affordable housing projects by government, private sector and public private partnerships <ul style="list-style-type: none"> <li>• Streamlining of administrative and project approval procedures</li> <li>• Provision of financial incentives</li> </ul>
	<b>Period</b>	:	May 2011 to July 2012
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• To provide overall leadership for the project</li> <li>• Inputs for urban planning and regulatory issues</li> </ul>
<b>20)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Preparation of Twin City Master Plan for Anand-Nadiad
	<b>Client</b>	:	Gujarat Infrastructure Development Board (GIDB) Lead consultant – Voyants Solutions Ltd
	<b>Scope</b>	:	Preparation of a strategic plan and a statutory development plan for both cities and their immediate influence area <ul style="list-style-type: none"> <li>• Building the rationale for treating the two as Twin Cities</li> <li>• Preparing an integrated development strategy for the twin city region</li> <li>• Translating the overall development approach to statutory development plans for both cities</li> </ul>
	<b>Period</b>	:	June 2010 to July 2012
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• To provide overall leadership for the project</li> <li>• Inputs for strategic planning and land use planning</li> <li>• Inputs for disaster mitigation and housing</li> </ul>
<b>21)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Revision of Vision document and master plans/ development plans for Kolkata Metropolitan Area
	<b>Client</b>	:	Kolkata Metropolitan Development Authority (lead consultant – Bengal Urban Infrastructure Development Ltd)
	<b>Scope</b>	:	Preparation of Vision 2035 for the KMA and revision of following:

			<ul style="list-style-type: none"> <li>• Master Plan for Traffic and Transportation</li> <li>• Development Plan for environment and wetlands</li> <li>• Development Plan for Heritage</li> <li>• Integrated Land Management Strategy</li> </ul>
	<b>Period</b>	:	April 2010 to July 2012
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• To provide overall leadership for the project</li> <li>• Inputs for strategic planning and land use planning</li> </ul>
<b>22)</b>	<b>Position held</b>	:	Project Director
	<b>Project</b>	:	Planning for the Reconstruction of the Kosi Flood Affected Areas in Bihar
	<b>Client</b>	:	UNDP (through Kutch Navnirman Abhiyan and ODR Collaborative)
	<b>Scope</b>	:	<p>Preparation of Regional, District and Settlement Plans to facilitate reconstruction of housing and infrastructure in the Kosi flood affected areas</p> <ul style="list-style-type: none"> <li>• Regional studies on flood vulnerability</li> <li>• District plan for reconstruction and development of Madhepura district</li> <li>• Settlement plans for 3 panchayats in Murligunj block of Madhepura district</li> </ul>
	<b>Period</b>	:	June 2009 – May 2011
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• To provide overall leadership for the project</li> <li>• Inputs for strategic planning and land use planning</li> <li>• Inputs for disaster mitigation</li> </ul>
<b>23)</b>	<b>Position held</b>	:	Land Use and Physical Planning Expert
	<b>Project</b>	:	Preparation of “Safer Homes, Stronger Communities, the Handbook for Reconstructing after Natural Disasters”
	<b>Client</b>	:	The World Bank (through TCG International Inc, Washington DC)
	<b>Scope</b>	:	Preparation of Chapter on Land Use and Physical Planning in the Handbook and related inputs to other chapters
	<b>Period</b>	:	August 2008 to December 2009
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Expert inputs on land use planning, physical planning, development regulations, housing &amp; infrastructure reconstruction</li> </ul>
<b>24)</b>	<b>Position held</b>	:	Project Director
	<b>Project</b>	:	Regional Planning Strategies for World Heritage Site - Ellora
	<b>Client</b>	:	Archaeological Survey of India (Lead consultant – Cultural Resources Conservation Initiative)
	<b>Scope</b>	:	<p>Preparation of regional development strategies of about 500 sq km area around the Ellora caves as part of ‘Site Management Plan’</p> <ul style="list-style-type: none"> <li>• Regional level assessments of infrastructure and tourism development potential of other sites of cultural, heritage and religious significance</li> <li>• Strategize measures for safe guarding water and environment</li> <li>• Prepare a framework for regulating development in the region</li> </ul>
	<b>Period</b>	:	April 2009 to Dec 2011
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• To provide overall leadership for the project</li> </ul>

			<ul style="list-style-type: none"> <li>Inputs for strategic planning and land use planning</li> </ul>
<b>25)</b>	<b>Position held</b>	:	Team Leader (Main Consultant: Consortium for DEWATS Dissemination)
	<b>Project</b>	:	Master Plan for Decentralized Basic Needs Services in Kolhapur
	<b>Client</b>	:	Kolhapur Municipal Corporation
	<b>Scope</b>	:	To analyze the sanitation situation in Kolhapur and propose strategies to integrate decentralized solutions for waste water and solid waste management into the mainstream systems of the city
	<b>Period</b>	:	July 2008 to October 2008
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>To provide overall leadership for the project</li> <li>To carry out GIS based analyses</li> <li>To prepare strategies for integration of decentralized approaches with mainstream systems</li> </ul>
<b>26)</b>	<b>Position held</b>	:	Urban planning expert
	<b>Project</b>	:	Concept Master Plan for National Capitol Complex and Urban and Knowledge Industry Development at Highlands, Mauritius
	<b>Client</b>	:	State Land Development Company Ltd., Mauritius (Main Consultant: CRISIL Infrastructure Advisory)
	<b>Scope</b>	:	To prepare a Concept Master Plan and Design Guidelines
	<b>Period</b>	:	August 2008 to September 2008
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>To review land use allocation, space requirement estimates and development norms</li> <li>To lead the preparation of Concept Master Plan and Design Guidelines</li> </ul>
<b>27)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Project Management Consultancy for Implementation of Gujarat Integrated Township Policy
	<b>Client</b>	:	Gujarat Urban Development Company Ltd. (Main Consultant: CRISIL Infrastructure Advisory)
	<b>Scope</b>	:	To undertake a series of activities to operationalize the Township Policy
	<b>Period</b>	:	October 2007 to September 2008
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>To provide overall leadership for the project</li> <li>To prepare Town planning norms for Townships</li> <li>To prepare a strategy for Master Planning and land management in areas where the Township Policy will be made applicable</li> <li>To lead the preparation of Master Plans in 'Applicable Areas'</li> </ul>
<b>28)</b>	<b>Position held</b>	:	Project Director
	<b>Project</b>	:	Interim Development Plan and Corridor Development Strategy for the Khandagiri Khurda Corridor, Bhubaneswar
	<b>Client</b>	:	Bhubaneswar Development Authority through the Orissa Project Development Company Ltd. (Project Advisor: ILFS-IDC)
	<b>Scope</b>	:	To prepare the Interim Development Plan and Corridor Development Strategy
	<b>Period</b>	:	October 2007 to March 2008

	<b>Role</b>	:	<ul style="list-style-type: none"> <li>To analyze existing land use and development patterns</li> <li>To prepare a comprehensive land use and transportation plan satisfying the statutory requirements as per the Orissa Development Authorities Act.</li> <li>To recommend land management strategies for the development of the corridor</li> </ul>
<b>29)</b>	<b>Position held</b>	:	Urban Planning Expert
	<b>Project</b>	:	Detailed Project Report for Bus Rapid Transit System, Pimpri Chinchwad
	<b>Client</b>	:	Pimpri Chinchwad Municipal Corporation (Main Consultant: CRISIL Infrastructure Advisory)
	<b>Scope</b>	:	To prepare proposals for integration of land use and transportation
	<b>Period</b>	:	October 2007 to March 2008
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>To analyze existing land use and density patterns</li> <li>To prepare a comprehensive mobility plan, integrating land use patterns with all modes of transportation</li> <li>To identify BRT corridors and propose land use changes along the corridor</li> <li>To prepare conceptual designs for the identified BRT corridors</li> </ul>
<b>30)</b>	<b>Position held</b>	:	Urban Planning Expert (Main Consultant: CRISIL Infrastructure Advisory)
	<b>Project</b>	:	Kolkata Urban Basic Services for the Poor (KUSP) Funding Review
	<b>Client</b>	:	DFID
	<b>Scope</b>	:	To review the urban planning component of the KUSP program
	<b>Period</b>	:	April - May 2007
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>To review the Draft Development Plans (DDP) prepared by 40 urban local bodies in the Kolkata Metropolitan Area</li> <li>To assess whether the objectives of KUSP with respect to the urban planning component</li> <li>To recommend mid-course corrections for the preparation and implementation of the DDPs</li> <li>To recommend improvements in methodology for the proposed roll-out of the DDP preparation program to the remaining urban local bodies of West Bengal</li> </ul>
<b>31)</b>	<b>Position held</b>	:	Project Director
	<b>Project</b>	:	Strategic Development Plan for Colachel Municipality, Tamilnadu
	<b>Client</b>	:	USAID through TCGI Inc. Washington DC, USA
	<b>Scope</b>	:	To prepare a Strategic Development for long term recovery and development of Colachel, a Tsunami-impacted coastal town
	<b>Period</b>	:	November 2006 to May 2007
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>To provide overall supervision and guidance</li> <li>To liaise with the USAID, TCGI and the Tamilnadu Government</li> </ul>
<b>32)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Ecopolis – a transit oriented new town development in

			Gandhinagar
	<b>Client</b>	:	Gujarat Urban Development Company Ltd.
	<b>Scope</b>	:	To conceptualize a new town development that would drive new economy investments as well as generate finance for a mass transit project
	<b>Period</b>	:	January 2005 to May 2006
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• To strategise the location of the new town</li> <li>• To develop a project brief</li> <li>• To carry out consultations with potential investors</li> <li>• To prepare a conceptual land use plan</li> <li>• To develop and implementation strategy</li> </ul>
<b>33)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Advisory Services for preparation of City Development Plans
	<b>Client</b>	:	Indo-USAID FIRE(D) Project
	<b>Scope</b>	:	To supervise the preparation of City Development Plans as per JNNURM requirements for Pune and Bhubaneswar and prepare guidelines for CDP preparation.
	<b>Period</b>	:	October 2005 to May 2006
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• To develop the Scope of Work for consultants for the preparation of City Development Plans as per JNNURM requirements for Pune and Bhubaneswar</li> <li>• To facilitate the preparation of the CDPs with technical and methodological inputs as required</li> <li>• To review reports submitted by the consultants</li> <li>• To undertake process documentation of the CDP preparation in both cities and draw lessons</li> <li>• To prepare guidelines for future use by cities in the preparation of CDPs</li> </ul>
<b>34)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Advisory Services for preparation of Local Area Plans in Delhi
	<b>Client</b>	:	Indo-USAID FIRE(D) Project
	<b>Scope</b>	:	To supervise the preparation of five pilot Local Area Plans in Municipal Corporation of Delhi and prepare detailed guidelines
	<b>Period</b>	:	May 2005 to May 2006
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• To develop the Scope of Work for consultants for the preparation of Local Area Plans (LAP)</li> <li>• To facilitate the preparation of the LAPs with technical and methodological inputs as required</li> <li>• To review reports submitted by the consultants</li> <li>• To undertake process documentation of the LAP preparation in all five locations and draw lessons</li> <li>• To prepare detailed guidelines for future use by MCD in the preparation of LAPs</li> </ul>
<b>35)</b>	<b>Position held</b>	:	Post-Tsunami Reconstruction Advisor
	<b>Project</b>	:	Aceh Governance & Development Program funded by USAID
	<b>Client</b>	:	Urban Institute through the Center for Local Government Innovation, Jakarta
	<b>Scope</b>	:	To gave strategic inputs to the reconstruction planning

			process currently underway in Banda Aceh
	<b>Period</b>	:	May 2005
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>To share the experience of planning the reconstruction of Bhuj (India) to the Mayor of Banda Aceh, other stakeholders in Banda Aceh and to USAID functionaries and consultants in Banda Aceh and Jakarta</li> <li>To assess the reconstruction planning process currently underway in Banda Aceh and give strategic inputs for improving the planning process to make it more strategic, participatory and effective for long-term disaster mitigation</li> </ul>
<b>36)</b>	<b>Position held</b>	:	Urban Planning Specialist
	<b>Project</b>	:	Reformulation of Building Byelaws Framework for Municipal Corporation of Delhi
	<b>Client</b>	:	USAID-FIRE project (EPC worked in partnership with Times Research Foundation)
	<b>Scope</b>	:	To comprehensively redraft the building byelaws with the objectives of simplifying, improving compliance and enhancing safety. The specific tasks include introduction of a system of preparing Local Area Plans and area-specific building byelaws.
	<b>Period</b>	:	January 2005 to May 2006
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>Drafting of Planning Byelaws</li> <li>Preparation of framework for preparing local area plans</li> <li>Supervision of preparation of five pilot local area plans</li> </ul>
<b>37)</b>	<b>Position held</b>	:	Disaster Mitigation Specialist
	<b>Project</b>	:	Regional Conference on Disaster Mitigation and Urban Infrastructure Financing
	<b>Client</b>	:	United States Agency for International Development (employed through The Communities Group International and Planning & Development Collaborative, USA)
	<b>Scope</b>	:	To conduct a regional (South Asia) conference on the integration of disaster mitigation concerns in mainstream urban infrastructure planning and financing, carry out two demonstration projects in Nepal and Sri Lanka respectively and to prepare a resource book on the subject (later extended to include the preparation of disaster mitigation plans for selected cities in India)
	<b>Period</b>	:	November 2002 till December 2004
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>Resource person for the regional conference</li> <li>Disaster mitigation specialist in demonstration projects</li> <li>Author/editor of a Resource Book on the integration of disaster mitigation in mainstream urban infrastructure planning and financing</li> </ul>
<b>38)</b>	<b>Position held</b>	:	Senior Governance Advisor
	<b>Project</b>	:	Good Urban Governance in South Asia
	<b>Client</b>	:	United States Agency for International Development (Lead Consultant: TCG International, Washington DC, USA)
	<b>Scope</b>	:	To document and disseminate case studies in good urban

			governance in three South Asian countries, carry out demonstration projects and to organize a regional conference to share the learning
	<b>Period</b>	:	June 2003 till June 2007
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Technical guidance to local consultants on the entire process</li> <li>• Field level involvement in training, strategic planning and project formulation</li> <li>• Assistance to main contractor in project management</li> </ul>
<b>39)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Urban Core Redevelopment, Dehradun
	<b>Client</b>	:	Mussoorie-Dehradun Development Authority, Uttaranchal, India
	<b>Scope</b>	:	To prepare a detailed proposal for the redevelopment of a street and a pocket of center-city land in Dehradun
	<b>Period</b>	:	November 2003 till November 2006
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Coordination with the officials of the client, Government, semi Government and other agencies.</li> <li>• Overall coordination of the project, Physical Survey, Formulation of Proposals and Urban Design Guidelines.</li> <li>• Institutional framework and implementation strategy</li> </ul>
<b>40)</b>	<b>Position held</b>	:	Project Director
	<b>Project</b>	:	Town Planning Scheme for Bhuj Area Development Authority
	<b>Client</b>	:	Gujarat Urban Development Company
	<b>Scope</b>	:	To prepare the Town Planning Scheme for Walled City of Bhuj as per the provisions of the Gujarat Town Planning and Urban Development Act. The Plan, covering an area of 1 sq.km has been divided into eight T. P. Schemes consists of proposals for land use zoning, road network and infrastructure development
	<b>Period</b>	:	December 2001 till August 2003
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Coordination with the officials of the client, Government, semi Government and other agencies.</li> <li>• Overall coordination of the project, Physical Survey, Formulation of Proposals and Development Regulations.</li> <li>• Institutional framework and implementation strategy</li> </ul>
<b>41)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Draft Development Plan for Bhuj Area Development Authority
	<b>Client</b>	:	Gujarat Urban Development Company
	<b>Scope</b>	:	To prepare the Draft Development Plan for Bhuj city as per the provisions of the Gujarat Town Planning and Urban Development Act. The Plan, covering an area of 56 sq.km including 2 adjoining villages, consists of proposals for land use zoning, road network, infrastructure development and general development control regulations
	<b>Period</b>	:	May 2001 till December 2002
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Coordination with the officials of the client, Government, semi Government and other agencies.</li> <li>• Overall coordination of the project, Physical Survey, Formulation of Proposals and Development Regulations.</li> </ul>

			<ul style="list-style-type: none"> <li>Institutional framework and implementation strategy</li> </ul>
<b>42)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Initiative for Planned and Participatory Reconstruction in Kachchh
	<b>Client</b>	:	United States Agency for International Development (USAID)
	<b>Scope</b>	:	The project involved four components that are expected to support the rehabilitation efforts of various agencies after the January 26, 2001. These are (i) Disaster mapping of four towns in Kachchh, Bhuj, Bhachau, Anjar and Rapar (ii) Information Management support for Kachchh Nav Nirman Abhiyan, a network of 20 NGOs working towards rehabilitation of Kachchh in close coordination with the Government (iii) Preparation of strategic and action plans for two pilot communities (urban and semi-urban) for reconstruction involving intensive consultative process (iv) Preparation of a Post-earthquake recovery planning guide.
	<b>Period</b>	:	February 2001 - February 2002
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>Coordination of information management at the Abhiyan Information Centre and to support planning related activities of Abhiyan for rehabilitation</li> <li>Setting up a GIS based mapping information system to support and monitor rehabilitation efforts in Kachchh</li> <li>Liaising with the Government Agencies and the UNDP for developing an Integrated Information System</li> <li>Leading the initiative for preparation of strategic and action plan in the semi-urban community pilot case</li> <li>Institutional framework and implementation strategy</li> </ul>
<b>43)</b>	<b>Position held</b>	:	Team Leader
	<b>Project</b>	:	Atlas for Post Disaster Reconstruction, Kachchh District
	<b>Client</b>	:	United States Asia Environmental Partnership (USAEP)
	<b>Scope</b>	:	<ul style="list-style-type: none"> <li>To assess and document the damage caused by the earthquake through a set of thematic city maps.</li> <li>To facilitate the reconstruction process by mapping information relevant for rehabilitation and reconstruction.</li> <li>To facilitate the preparation of the Development Plans of all the four towns of Bhuj, Anjar, Bhachau and Rapar.</li> </ul>
	<b>Period</b>	:	May 2001 – August 2001
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>Overall coordination of the project and field Survey</li> <li>Coordination with the officials of the client, Government, semi Government and other agencies.</li> <li>Development management of the project for implementation.</li> </ul>
<b>44)</b>	<b>Position held</b>	:	Project Coordinator
	<b>Project</b>	:	Draft Development Plan for Gandhinagar Urban Development Authority
	<b>Client</b>	:	Gandhinagar Urban Development Authority
	<b>Scope</b>	:	To prepare the Draft Development Plan for Gandhinagar city as per the provisions of Section 9 to 16 of the Gujarat Town Planning and Urban Development Act. The Plan, covering an area of 387 sq.km including Gandhinagar Notified Area and adjoining 39 villages, consists of proposals for land use



			zoning, road network, infrastructure development and general development control regulations
	<b>Period</b>	:	March 1999 to January 2001
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Coordination with the officials of the client, Government, semi Government and other agencies.</li> <li>• Overall coordination of the project, Physical Survey, Formulation of Proposals and Development Regulations.</li> <li>• Institutional framework and implementation strategy</li> </ul>
<b>45)</b>	<b>Position held</b>	:	Project Manager
	<b>Project</b>	:	Inputs for Revised Draft Development Plan of AUDA
	<b>Client</b>	:	Ahmedabad Urban Development Authority (AUDA)
	<b>Scope</b>	:	Assist Ahmedabad Urban Development Authority with the preparation of its Draft Development Plan for the year 2011. The Plan covered an area of 1200 sq.km. It details proposals for land use zoning, road network, building regulations and infrastructure development.
	<b>Period</b>	:	February 1998-March 1999
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Coordinated with the officials of the development authority</li> <li>• Formulated and restructured the Development Control Regulations</li> <li>• Institutional framework and implementation strategy</li> </ul>
<b>46)</b>	<b>Position held</b>	:	Project Manager
	<b>Project</b>	:	Surat Inner City Revitalization Plan
	<b>Client</b>	:	Surat Municipal Corporation, Surat, USAID (FIRE) project
	<b>Scope</b>	:	Devise a strategy to revitalize the inner city of Surat. The plan addressed issues like traffic congestion, aging infrastructure, inadequate municipal services, loss of heritage, deteriorating environmental quality and the dilapidation of low-income housing stock with the objective of sustaining the inner city's role as the vibrant central business district of Surat.
	<b>Period</b>	:	September 1997-February 1998
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Management of overall project and field office at Surat</li> <li>• Responsible for coordinating with elected representatives, officials and expert consultants.</li> <li>• Planning and design inputs</li> </ul>
<b>47)</b>	<b>Position held</b>	:	Project Manager
	<b>Project</b>	:	Ahmedabad Walled City Revitalization Plan
	<b>Client</b>	:	Ahmedabad Municipal Corporation and Technical Support Services, USA
	<b>Scope</b>	:	Devise a strategy to revitalize the Walled City as the cultural and economic center of Ahmedabad. This comprehensive planning exercise considered the interrelationships between different planning components identified and proposed mutually compatible solutions.
	<b>Period</b>	:	March 1997-August 1997
	<b>Role</b>	:	<ul style="list-style-type: none"> <li>• Coordination with stakeholders and collaborators</li> <li>• Planning and design inputs</li> <li>• Analysis of information and project formulation</li> <li>• Follow up for project implementation</li> </ul>

**Publication - books:**

Title: Safer Homes, Stronger Communities: A Handbook for Reconstructing After Natural Disasters

Authors: Abhas Jha Jennifer Duyne Barenstein Priscilla M. Phelps Daniel Pittet Stephen Sena

Year: 01/01/2010

Publisher: World Bank

Abstract: The Section of the Handbook on landing Reconstruction begins with Chapter 7, Land Use and Physical Planning, which describes why planning of both sites and land use is important, even in the post disaster context. The content of a traditional land use plan is described, as are the challenges that arise in post-disaster planning, which include lack of time, information and capacity. This chapter explores the complex issues associated with the need for access to land and secure tenure in reconstruction and presents recommended solutions. Case studies include one that discusses the planning process in Bhuj City, India, during which a number of residents were moved from the urban core to the periphery, and another that describes the innovative community-driven land adjudication process that took place in Aceh, Indonesia following the 2004 Indian Ocean Tsunami.

Title: Recovering from Earthquakes - Response, Reconstruction and Impact Mitigation in India; Chapter 7: Planning the Reconstruction of Bhuj

Authors: Editors: Shirish Patel, Aromar Revi

Year: 01/01/2010

Publisher: Routledge, India

Abstract: While the book as a whole is a compilation of lessons learned and insights gained from several earthquakes in India, my chapter focuses on the unique example of planned reconstruction in Bhuj, Kutch, Gujarat. The chapter describes the planning and implementation processes, first at city level and then at a detailed level for the walled city area. The paper discusses the inevitable tradeoffs that confront policy makers and decision makers and reflects on how they were addressed in Bhuj.

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**The information provided in this document is true to the best of my knowledge**



**(B.R. Balachandran)**