

# CURRICULUM VITAE

## Prof. Dr. Sudhakar YEDLA

B.E (Civil Engg), M. Tech (IIT-KGP), Ph.D.(IIT-KGP)  
PDF (AIT-Bangkok), CEEDP (WBI-USA)  
Dip. Int. Env. Law (UNITAR-Switzerland)



RBI (IGIDR)  
Professor

**Professor** of Environmental and Development Policy

## Indira Gandhi Institute of Development Research

(Advanced Research Institute and Deemed University Founded and Funded by the Reserve Bank of India, Government of India)

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IITan

**Visiting Scholar (Professor)** – on Sabbatical

Center for Natural Resources Development and Protection  
John A. Reif, Jr. Dept. of Civil and Environmental Engineering  
#434, Calton Hall, **New Jersey Institute of Technology**  
323, Dr Martin Luther King Jr. Blvd, Newark 07102, NJ, **USA**  
Email: [yedla@njit.edu](mailto:yedla@njit.edu) Call: +1 [\(973\)596-5624](tel:9735965624) (o); +1(862)4527595 (M)

One of the youngest to become full  
Professor among all 20 NITs in India

(Former) **Professor** of Environmental Engineering and Management  
Department of Civil Engineering, National Institute of Technology (NIT)  
(Under the Union Ministry of Human Resources and Development, Government of India)  
Warangal 506004, Andhra Pradesh, India

**Working at a level of full Professor since September 2007 at the following places -**

- Brain pool Professor, Department of Civil and Environmental Engineering, University of Ulsan, **South Korea**; (Sept'07-Aug'08)
- Professor, Department of Civil Engineering, National Institute of Technology (NIT), Warangal, India; (Sept'08-Feb'10)
- NIES Fellow (Professor equivalent), Center for Global Environmental Research, National Institute of Environmental Studies (NIES), Tsukuba, **Japan**; (2010-11)
- Indira Gandhi Institute of Development Research, Mumbai, India (present)

## **Expert in**

Inter-disciplinary research in the area of Urban Environment and Sustainability

Policy Research

## **Professionally Interested in**

Teaching, Research and Academic and General Administration

## **Honorary/ Guest Positions**

Ministry of Human Resources Development (**MHRD**), Government of India nominated **Member of the Court of Central University of Jharkhand**, Ranchi, India (**Member, Board of Governors**)

**Guest Faculty** at Indian Institute of Forest Management, (IIFM), Bhopal, India since Mar'07

## **Important Positions/Responsibilities Held**

- ❖ **Independent International Evaluator** for Malé Declaration on Control and Prevention of Air Pollution and Its Likely Trans-boundary Effects for South Asia (An inter-governmental agreement Implemented by SACEP), UNEP – RRC.AP (December 2012-April 2013)
- ❖ **Climate Change Advisor**, Knowledge Partnership Program, IPE and Department of International Development (DFID), United Kingdom Since January 2013
- ❖ **Consultant**, Industrialization and Infrastructure Provision, UNDP-MoEF Partnership on Indian preparation for the negotiation for SDGs, **UNDP**, India Office June - August 2014
- ❖ **Consultant for Sustainable Transport**, UNDP-MoEF Partnership on Indian preparation for the negotiation for SDGs, **UNDP**, India Office, July 2013 – February 2014
- ❖ **Panel of Subject Experts** for Selections, Narotam Sekhsaria Foundation, Mumbai, India (2014)
- ❖ **Coordinator**, IGIDR Silver Jubilee Conference on Cities and Sustainability (CCS), Indira Gandhi Institute of Development Research (IGIDR), Mumbai, India 29-30<sup>th</sup> October 2013
- ❖ **Expert** for the review of the Working Group II contribution to the Fifth Assessment Report (AR5), Intergovernmental Panel on Climate Change (**IPCC**), 2013
- ❖ **Review** of Corporate Social Responsibility Report-2011 of the Global Networking Equipment Corporate Giant – CISCO Systems Inc., San Jose, CA, USA

- ❖ **Sustainability Expert** for Bloomberg, the global financial data and media Corporate Giant, New York, USA
- ❖ Indian Government (MHRD) seconded **Visiting Professor**, Urban Environmental Management (UEM), School of Environment, Resources and Development (SERD), **Asian Institute of Technology** (AIT), Thailand (AIT is an intergovernmental and International Institution of Higher Education)
- ❖ **Senator** at National Institute of Technology (NIT), Warangal, Andhra Pradesh, India (September 2008 till February 2010, responsible for academic and developmental planning of the Institute)
- ❖ **Professor In-Charge** for the Module of Environment under the project “Roles of Agriculture” a multi-national research initiative of the United Nations Food and Agriculture Organization (UN-FAO), Italy during 2001-2003, responsible for coordination and planning research module.
- ❖ **Project Director** for the Asian Regional Project on Energy, Environment and Climate (ARRPEEC – Phase III) Program, Swedish International Development Cooperation Agency (Sida), Nov 2002 – Oct 2007
- ❖ **Journal Editor** (Guest Editor for Special Issues relating to Urban Environmental Management) for International Journal of Environment and Pollution (IJEP), Inderscience Publishers, Switzerland since 2002
- ❖ International **Consultant** to **UNEP; UNDP; UNU; the World Bank; IGES; UN-ESCAP; GEF; UN-FAO; MoUD-Government of India**

## Education

- ☀ Bachelor of Engineering (**B.E.**) in Civil Engineering, Andhra University, Waltair, Andhra Pradesh, India (1993)
- ☀ Master of Technology (**M.Tech.**) in Aqua Engg, Indian Institute of Technology (**IIT**), Kharagpur, India (December 1995)
- ☀ **Ph.D.** in Civil and Environmental Engineering, Indian Institute of Technology (**IIT**), Kharagpur, India (May 1999)
- ☀ Post-doctoral degree (**PDF**) in Environmental and Energy Management from Asian Institute of Technology (**AIT**) Thailand (2001)
- ☀ Diploma (with Distinguished Honours) in International Environmental Law (**DIEL**), **United Nations** Institute for Training and Research (UNITAR), Switzerland (September 2006)
- ☀ Certification program on Environmental Economics and Development Policy (**EEDP**) from the World Bank Institute, Washington D.C., **USA** (2002)

## Other Academic Trainings

- ☀ Training (workshop) on Integrated Solid Waste Management based on 3R Principles, Organized by IETC-DTIE of United Nations Environment Program (UNEP), UNEP-ROAP and UNESCAP, 5-8<sup>th</sup> October 2009, Osaka, Japan
- ☀ Management-insights for Faculty Members, A week long training Programme Sponsored by National Institute of Technology (NIT) Warangal and Offered by Administrative Staff College of India (ASCI), Hyderabad, 8-12 Dec 2008.
- ☀ Training (Workshop) for the Asian-Pacific Region on the Implementation of Multilateral Agreements Related to Biological Diversity, Organized by United Nations Institute for Training and Research (UNITAR) in Co-operation with Kushiro International Wetland Centre, Kushiro, Japan, 15-21 March 2003.
- ☀ International Human Development Workshop (IHDW-Fellowship), International Human Dimensions Programme on Global Environmental Change (IHDP), Bonn, Germany, 2000

### Holds the Distinction of

A trained professional majoring in all domains of Environmental Management  
viz. Environmental Engineering, Environmental Economics, Environmental  
Law, and Policy

## Employment History

Total Experience of 20 years  
and 16 years of Post-PhD

Worked in India (NIT-W, IGIDR),  
Japan, South Korea, and Thailand

- Present Position: **Visiting Scholar (Professor)**, Centre for Natural Resources Development and Protection, **New Jersey Institute of Technology** (NJIT), Newark, **USA** – on Sabbatical from IGIDR
- Present Position: **Professor** of Environmental Policy, Indira Gandhi Institute of Development Research (IGIDR), Mumbai 400 065, INDIA (Graduate and Under-grad Teaching, Policy Research; Ph.D and Master's student guidance; Capacity Building; and Institute Administration)
- October 2008 – February'10: **Professor**, Department of Civil Engineering, National Institute of Technology (NIT), Warangal, Andhra Pradesh (Graduate and Under-grad Teaching, Ph.D and Master's student guidance; Capacity Building; and Institute and Departmental Administration)
- April 2006 – Sept 2008: **Associate Professor** of Urban Environmental Management and Policy, Indira Gandhi Institute of Development Research (IGIDR), Mumbai 400 065, INDIA (Graduate and Under-grad Teaching, Policy Research; Ph.D and Master's student guidance; Capacity Building; and Institute Administration)
- May 2004 – Nov 2005: **Policy Researcher**, Urban Environmental Management group, Institute for Global Environmental Strategies (IGES), Japan (An institute funded by the Ministry of Environment, Government of Japan) –a regular and full time position equivalent to Associate Professor (Development of Strategic Research Plan for Urban Environmental Management Group; conducting independent policy research on the issues of Urban Environmental Management; Conduct training programmes for policy makers; Organize international conferences and workshops; Facilitate international environmental initiatives such as Kitakyushu Initiatives; Preparation for the regional events such as Ministerial Conference on Environment and Development of UNESCAP)
- Sept 2001 - April 2006: **Assistant Professor** of Urban Environmental Management and Policy, Indira Gandhi Institute of Development Research, Mumbai 400 065, INDIA (Graduate and Under-grad Teaching, Policy Research; Ph.D and Master's student guidance; Capacity Building; and Institute Administration)
- May 1999 - August 2001: **Visiting (Regular) Faculty Member** at the Indira Gandhi Institute of Development Research (IGIDR), Mumbai 400065, INDIA – a full time and regular position (Graduate and Under-grad Teaching, Policy Research and Ph.D and Master's student guidance)
- January 1996 - May 1999: **Senior Research Fellow** (Ph.D.) at the Department of Civil Engineering, Indian Institute of Technology (IIT), Kharagpur, INDIA
- July 1994 – December 1995: **Junior Research Fellow** (M.Tech) at the Department of Ag. & Food Engineering, Indian Institute of Technology (IIT), Kharagpur, INDIA

## **Short Contract/Consultancy/Fellowship/Deputation Based Appointments**

<b>Visiting Fellow</b>	(Equivalent to Professor) Korean Institute of International Economic Policy (KIEP), Government of Korea, Seoul, South Korea (May-June 2014) (to conduct research on “Korea-India Comprehensive Economic Partnership Agreement (CEPA) – Analysis of Industrial Competitiveness and Environmental Implications”)
<b>Consultant</b> (Sustainability Of Industrialization and provision of infrastructure)	UNDP-MoEF Partnership on SDGs, <b>UNDP</b> , India Office June-August 2014
<b>Environmental Economist</b> (International Expert)	Supporting Implementation of Bangladesh Climate Change Strategy and Action Plan, AFC Consultants International and SSIL – An ADB Initiative (August 2013 – October 2014)
<b>Consultant</b> (Sustainable Transport)	UNDP-MoEF Partnership on SDGs, <b>UNDP</b> , India Office July 2013 – February 2014
<b>Resource Person/Expert</b>	UK - DFID funded project “the Knowledge Partnership Programme (KPP) - managed by IPE Global in association with Action Aid India and GRM International – Since July 2013
<b>Visiting Professor</b>	Urban Environmental Management, School of Environment, Resources and Development (SERD), Asian Institute of Technology ( <b>AIT</b> ), Pathumthani, Thailand during September – December 2012 (Nominated and Deputed by the Government of India and responsible for teaching and guiding graduate students at AIT)
<b>International Consultant</b>	United Nations Environment Program (UNEP) – Regional Resources Center for Asia and Pacific (RRC.AP), Outreach Building, Asian Institute of Technology, Klong Luang, Pathumthani 12120, Thailand (December 2012 – January 2013) (Responsible for Assessing the “Implementation of Male Declaration on Control and Prevention of Air Pollution and Its Likely Trans-boundary Effects for South Asia”
<b>NIES Fellow</b>	(Equivalent to Professor), Center for Global Environmental Research (CGER), National Institute for Environmental Studies (NIES), Tsukuba, Japan during Oct-Nov 2010 (Responsible for conducting research on Energy and Carbon Intensity of Urban Centers in India and Japan)
<b>Brain Korea Visiting Professor</b>	Center for Clean Technology and Resource Recycling, University of Ulsan, South Korea during December 2009 – Collaborative Research on Identification of Strategies for the Establishment of Eco-industrial Parks in the Developing Countries of Asia
<b>Brain Pool Professor</b>	Department of Civil and Environmental Engineering, University of Ulsan, South Korea (Teaching, Research and Ph.D and Master’s student guidance) during October 2007 – September 2008

- Consultant** (IGES, Japan) Urban Environmental Management group, Institute for Global Environmental Strategies (IGES), Japan (An institute funded by the Ministry of Environment, Government of Japan) during December 2003 - April 2005 - Responsible for synthesizing third phase research of UE group and contribute towards the development of Strategic Research Plan for the Fourth Phase of IGES Research Mandate. Facilitate international environmental initiatives such as Kitakyushu Initiatives; Preparation for the regional events such as Ministerial Conference on Environment and Development (MCED) of UNESCAP
- International Consultant** United Nations Economic and Social Commission for Asian and the Pacific (**UN-ESCAP**), Bangkok during February 2008 – April 2008 - Responsible for a “Scoping Paper for the Development of Eco-City Development Award for Asia and the Pacific”
- GEF Consultant** United Nations Development Program (**UNDP**) India Office during Feb 2006 – October 2007 -Responsible for the incremental cost analysis for a project “Cleaner Mobility in Urban Areas” and development of full project proposal for the Global Environment Facility (GEF) ; Integration of GEF components in the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) components of Government of India
- Foreign Guest Professor** Under the prestigious BRAIN KOREA 21 Programme of South Korea, Department of Civil and Environmental Engineering, University of Ulsan, Mugeo 2-Dong, Nam-gu, Ulsan 680-749, **Korea** during January 2007 -Taught Advanced Environmental Management and Introductory Environmental Economics for Under-graduate and Graduate students
- Guest Faculty** Indian Institute of Forest Management, (**IIFM**), Bhopal, India during March 2007, March 2009, February 2011; March 2012; and March 2013 Sessions - Taught Environmental Economics; Environmental Finance and Environmental and Natural Resources Modeling Courses to MBA students

## **Fellowships (Eleven – Nine International)**

- ❖ International Fellowship, Visiting Fellowship Program of Korean Institute of International Economic Policy (KIEP), **Government of Korea** (May-June 2014)
- ❖ International Fellowship, **Global Carbon** Project (GCP), International Office in **Japan** – An International Urban and Carbon Management Initiative by Earth Systems Science Partnership (ESSP), October-November 2010
- ❖ Invited Fellow under **BRAIN KOREA** Programme of Government of Korea, University of Ulsan, South Korea, December 2009
- ❖ Winner of JWRF (**Japan** Waste Research Foundation) Invitation Fellowship Program for Research in Japan 2007-08, JAPAN
- ❖ Winner of Fellowship from **Brain Pool Korea** Program (2007-08) KOREA
- ❖ **Brain Korea** (BK-21) Guest Foreign Professor, Department of Civil and Environmental Engineering, University of Ulsan, Ulsan, Korea, January-February 2007
- ❖ Fellowship of **Swedish** International Development Cooperation Agency (Sida) at the School of Environment, Resources and Development (SERD), Asian Institute of Technology (AIT), Thailand (May-July 2002)
- ❖ Fellowship of **Swedish** International Development Cooperation Agency (Sida) at the School of Environment, Resources and Development (SERD), Asian Institute of Technology (AIT), Thailand (January – May 2001)
- ❖ Fellowship, IHDW, International Human Dimensions Programme on Global Environmental Change (IHDP), Bonn, **Germany**, 2000
- ❖ Institute scholarship from the Indian Institute of Technology (IIT), Kharagpur, West Bengal, India for graduate studies (Ph.D.) as per the regulations of **MHRD**, Govt. of India (1996-99)
- ❖ **MHRD**, Govt. of India scholarship for qualifying in GATE (Graduate Aptitude Test for Engineers) for a period of 18 months (graduate studies - M.Tech.) (1994-95)



## Honours and Academic Recognition

- ☀ Book review panel member, Sage Publishers, New Delhi
- ☀ **Editorial Board Member**, “Current World Environment”, an international journal published by CWE Journals published by Enviro Research Publishers
- ☀ **Member, Scientific Board** of Civil & Environmental Engineers, International Institute of Engineers (IIEng)
- ☀ Ministry of Human Resources Development (**MHRD**), Government of India nominated Member of the Court of Central University of Jharkhand, Ranchi, India (**Member, Board of Governors**)
- ☀ **Panel of Subject Experts** for Selections, Narotam Sekhsaria Foundation, Mumbai, India (2014)
- ☀ Member, World’s **WHO IS WHO** published by Morquis, USA
- ☀ **Expert for the review** of the Working Group II contribution to the Fifth Assessment Report (AR5), Intergovernmental Panel on Climate Change (**IPCC**) – 2012-13
- ☀ **Expert** for the review of Corporate Social Responsibility Report-2011 of the Global Networking Equipment Corporate Giant – CISCO Systems Inc., San Jose, CA, USA, 2012
- ☀ **Sustainability Expert** for Bloomberg, the global financial data and media Corporate Giant, New York, USA, 2011
- ☀ Nominated and Deputed by the Ministry of Human Resources Development, Government of India to the Asian Institute of Technology (AIT), Thailand to teach and guide graduate students of AIT during August-December 2012 Semester
- ☀ Panel Expert and Advisor, Union Public Service Commission (UPSC), Government of India
- ☀ Invited Expert and Key Note Speaker, First Asia and Pacific Mayor’s Forum on Sustainable Urban Infrastructure Development, Ulsan City, South Korea, 21-23 April 2008, Organized by UN-ESCAP and the City of Ulsan.
- ☀ Rapporteur for the session on “Action Plan for Future Activities”, Kitakyushu Network Meeting of UN-ESCAP, Kitakyushu, Japan, 2-4 August, 2004 - a preparatory meeting for the United Nations Ministerial Conference on Environment and Development (UN-MCED) held in South Korea during March 2005
- ☀ **Editorial Board Member**, “The Open Transportation Journal” published by Bentham Open Since 2009
- ☀ Presidential Key Note Lecture at the Annual Meeting of Korean Society of Environmental Engineering, University of Ulsan, Ulsan, South Korea, May 2008.
- ☀ Winner of Fellowship for Best Paper from Global Environment Facility (GEF) of the

An International Reviewer and Evaluator for Development Initiatives; Intergovernmental Treaties; and Research

World Bank for the participation in the “International Workshop on Evaluating Climate Change and Development”, Alexandria, Egypt, 10-13 May 2008, organized by the Global Environment Facility (GEF) of the World Bank

- ☀ Series of Invited Lectures/Talks at various Universities and Institutions of South Korea (2007-2008) under their prestigious BrainPool & Brain Korea Initiatives of Govt of S. Korea
- ☀ International Peer Reviewer for the Netherlands Foundation for WOTRO Science for Science for Global Development (WOTRO), Netherlands
- ☀ Associate, LEAD (Leadership in Environment and Development), COHORT-13, India – a UK based international NGO
- ☀ Paper titled “Multi-criteria Approach for the Selection of Alternative Options for Delhi Transport System”, published in Transport Research, Part A – Policy and Practice, Elsevier publisher, Vol. 37 (8), pp: 717 – 729 (2003) was rated 4<sup>th</sup> most downloaded article from Elsevier’s TOP 25
- ☀ Paper titled “Environmentally Sustainable Urban Transportation – Comparative Analysis of Local Emission Mitigation Strategies vis-à-vis GHG Mitigation Strategies”, published in Transport Policy, Elsevier, Vol. 12, No. 3, pp: 245-254 (2005) was rated 9<sup>th</sup> most downloaded article from Elsevier’s TOP 25
- ☀ Fast track Young Scientist Research Grant from the Department of Science and Technology (DST), Government of India (2001)

## International Invitations (Sixty Four)

- ❖ Invited as International examiner for a Master Thesis of Erasmus Mundus European Master's in Law and Economics (EMLE) Program – Thesis titled “Building a Global Market: Linking the European Emissions Trading Scheme with the California Emissions Trading Scheme” by Sönne Johannes Schumacher
- ❖ Invited to deliver an expert lecture on “Economic Development and Infrastructure in India at the Times of Global Negotiations for SDGs” at Hanguk University of Foreign Studies, Seoul Republic of Korea, 28<sup>th</sup> May 2014
- ❖ Invited to deliver an expert lecture on “Economic Development and Societal Transformation - Why are the Issues in Asian Cities Unique?” at Korean Institute for International Economic Policy (KIEP), Seoul, Republic of Korea, 30<sup>th</sup> May 2014
- ❖ Invited to deliver an expert lecture on “Economic Development and Sustainability - Means to Integrate Sustainability into Economic Development” at The Graduate School of International Studies (GSIS), Sogang University, Seoul, Korean Republic, 3<sup>rd</sup> June 2014
- ❖ Delivered a Fellowship lecture on “India - Korea CEPA: Analysis of Industrial Competitiveness and Environmental Implications” at Korean Institute for International Economic Policy (KIEP), Seoul, Republic of Korea, 5<sup>th</sup> June 2014
- ❖ Invited as Climate Change Expert, the Technical Working Group Meeting on Climate Change, Resource Scarcity and Food Security, Knowledge Partnership Program (KPP), IPE and DFID ,UK, at **DFID-British High Commission**, New Delhi, 18<sup>th</sup> January 2013.
- ❖ Invited Expert, 9<sup>th</sup> Refresher Training Programme, Malé Declaration on Control and Prevention of Air Pollution and Its Likely Trans-boundary Effects for South Asia – **UNEP-RRC.AP, Bangkok**, CPCB, India, Delhi 10-12 December 2012
- ❖ Invited Speaker at the UNU-WIDER International Conference on Climate Change and Sustainable Development, Helsinki, **Finland** 28-29<sup>th</sup> September 2012
- ❖ Invited International Expert for the Review of SCR (Social Corporate Responsibility) Report 2011, **CISCO Systems** Inc., 170, West Tasman, CA 95134 **USA**
- ❖ Invited International Expert, International Workshop on Water-Energy-Carbon Nexus in Mega Cities, Organized by Global Carbon Project (GCP) – **National Institute of Environmental Studies (NIES) Japan**, Tokyo Garden Palace, Tokyo, Japan, 1-3 March 2012
- ❖ Invited lecture on “Landfill Design Aspects” at the International Corporate “**HMR Environmental Consultants** – Sultanate of Oman”, **Dubai**, UAE 26-27 Mar'12
- ❖ Invited lecture at Bloomberg data Services (India) Ltd., on “Managing Waste in Developing Countries – Philosophies to Problem Solving” on 1<sup>st</sup> Dec 2011,

**Widely Invited by International Development Agencies  
Institutions/ Organizations / Universities**

**Bloomberg Inc., USA, India Office, Mumbai, India**

- ❖ Invited lecture at Bloomberg data Services (India) Ltd., on “E-waste Management in India – Issues, Challenges and Policy Responses” on 1<sup>st</sup> Dec 2011, **Bloomberg Inc., USA, India Office, Mumbai, India**
- ❖ Invited Expert, Annual Meeting of Solid Waste Experts from Asia and the Pacific Islands (SWAPI), **Daegu, South Korea** 19<sup>th</sup> Oct 2011
- ❖ Open NIES Talk on “Urban Energy and Carbon Intensity in India and Its Determinants – A Household Level Analysis”, at the **National Institute for Environmental Studies (NIES), Tsukuba, Japan**, 29<sup>th</sup> November 2010.
- ❖ Invited Expert, the 7th NIES Workshop on E-waste held at the **National Institute for Environmental Studies (NIES), Tsukuba, Japan** during 18-20<sup>th</sup> October 2010 and made an expert presentation on *E-Waste Management in India – Issues, Challenges and Policy Response* (18<sup>th</sup> October 2010)
- ❖ Invited for the International Conference on Urbanization and Global Environmental Change: *Opportunities and Challenges for Sustainability in an Urbanizing World*, to be held on the campus of **Arizona State University, Tempe, Arizona USA**, October 15-17, 2010. Organized by The Urbanization and Global Environmental Change (UGEC) project of the International Human Dimensions Programme (IHDP). To make a presentation on "Co-Benefit as an Approach to Align Climate Change Concerns with the National Development Objectives: Solid Waste Management"
- ❖ Invited at the 2nd UNITAR-Yale Global Conference on Environmental Governance and Democracy: Strengthening Institutions to Address Climate Change and Advance a Green Economy, 2nd Conference on Environmental Governance and Democracy at **Yale University in New Haven, Connecticut, USA**, September 17-19, 2010 to make a panel presentation on 'Mainstreaming Climate Change and Greening Concerns into the National Development Objectives: Issues of Governance at Different Levels'.
- ❖ Invited expert at the Regional Workshop on “Waste Management in the Sohar Industrial Port”, organized by Sohar Environmental Unit, Ministry of Environment and Climate Affairs, **Sultanate of Oman**, Crown Plaza Sohar, 20<sup>th</sup> September 2010 and spoke on “*Design Aspects of Landfill-Environmental considerations*”
- ❖ Panel Coordinator, “Panel on Harmonized Emission Standards in India – What can be learned from Europe Experience”, Diesel Emission Conference (DEC-2010), Organized by **Integer Research, London** (8-9 Sept 2010), Leela Kempesi, Gurgaon, New Delhi, India
- ❖ Invited as a Regional Expert on Solid Waste management to Participate in the Regional Training Workshop on “Integrated Solid Waste Management based on 3R Principles, IETC-DTIE of United Nations Environment Program (UNEP), **UNEP-ROAP and UNESCAP**, 5-8<sup>th</sup> October 2009, **Osaka, Japan**

- ❖ Invited to present the award winning paper on “Climate Change Mitigation Initiatives in Urban Transportation – Strategies to Promote Non-Motorized Modes of Transportation” at the “International Workshop on Evaluating Climate Change and Development”, **Alexandria, Egypt**, 10-13 May 2008, organized by the **Global Environment Facility, World Bank**
- ❖ Invited to present the Key Note Speech at the “Symposium on Technical Development for Climate Change Counter Plan” Lotte Hotel, **Ulsan City**, 1-2<sup>nd</sup> May 2008 and delivered a Key Note Speech on “Integrating Strategies for Local and Global Environmental Issues” on 2<sup>nd</sup> May 2008
- ❖ Invited to present the Key Note Speech at the “**Korean Society of Environmental Engineers’** Annual Seminar” Ulsan City, 1-2 May 2008 and delivering a Key Note Speech on “Economics for Environmental Management” on 1<sup>st</sup> May 2008
- ❖ Invited Expert, First Asia and Pacific Mayor’s Forum on Sustainable Urban Infrastructure Development, Ulsan City, **South Korea**, 21-23 April 2008, Organized by **UNESCAP** and the City of Ulsan. Delivered an expert lecture on “Sustainable Urban Infrastructure Development – Integrating Strategies for Local and Global Issues” on 21<sup>st</sup> April 2008
- ❖ Invited Special Lecture on “Economics of Waste Management” at **Chongwon National University, Chongwon, South Korea**, 31<sup>st</sup> March 2008
- ❖ Invited Guest Speaker, at KAIST Golden Triangle Research Collaboration meeting and gave a lecture on “Environmental Engineers and Sustainable Development”, **Ulsan, South Korea**, 22<sup>nd</sup> February 2008.
- ❖ Invited lecture on “Response Strategies for Climate Change Mitigation – A Developing Country Perspective” as a part of the *Environmental Technology Seminar* series under the prestigious **BRAIN KOREA 21 programme of Korean Government** (at the University of Ulsan, South Korea, 7<sup>th</sup> December 2007)
- ❖ Invited on a special **Japan Waste Research Foundation (JWRF)** Fellowship to participate in the 3<sup>rd</sup> Expert Meeting on Solid Waste Management in Asia and Pacific Islands and Present a paper on “Co-Benefit as an Approach to Align Climate Change Concerns with the National Development Objectives: Solid Waste Management”, **Okayama, JAPAN**, 7-9 November 2007.
- ❖ Invited expert, Joint Seminar on Climate Change: The Urban Transportation Challenge, Organized by the Municipal Corporation of Kolkata and the Centre for Social Markets (CSM), Wednesday, 8<sup>th</sup> August 2007, The Conclave, Kolkata, India (Funded by **Heinrich Böll Foundation, Germany**)
- ❖ Series of Invited Lectures at the Department of Civil Engineering, **University of Ulsan, Korea** (January-February 2007)
  - Environmental Management through the Times of Economic Development;
  - Economic Development and the Environment;
  - Air Pollution Control and solid waste Management - A Management Approach;

- Economics for Environmental Management - An Introduction to Environmental Economics;
  - Cost-Benefit Analysis as a Tool for Environmental Management;
  - Climate Change and Mitigation Strategies
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- ❖ Invited to participate in Better Air Quality (BAQ - 2006) Conference organized by **CAI-Asia and ADB, Yogyakarta, Indonesia**, 13-15 December 2006 and present a research paper.
  - ❖ Invited Expert, Project formulation Workshop for Asian Climate Change Research Programme (ACCRoP), Funded by **Swedish International Development Cooperation Agency**, 27-28 October 2005, Asian Institute of Technology, **Thailand**.
  - ❖ Panel Member, on “How to Bring the Global Concerns into Urban Context”, Organized by the Urban Environmental Management group of IGES, JAPAN at the International Open Science Meeting of **International Human Dimensions Program (IHDP), Bonn, Germany** 10-13 October 2005.
  - ❖ Open AIT lecture on “*The Delhi Decision – Is it a sustainable pathway for better air quality management in the other developing countries in Asia*“, 26<sup>th</sup> January 2004, **Asian Institute of Technology (AIT) Thailand**.
  - ❖ Invited Speaker, “Better Air Quality in Asia and Pacific Rim Cities (BAQ) 2004”, an international workshop organized by the CIA Asia, ADB, Agra, India, 6-8 Dec., 2004
  - ❖ Invited as a National Expert to attend the Annual review workshop on “Strategies to promote energy efficient technologies in urban transportation” under Asian Regional Research Project for Energy Environment and Climate (ARRPEEC -III), **Asian Institute of Technology (AIT), Bangkok, Thailand**, 11-12 November, 2004
  - ❖ Invited by **UNESCAP to represent Institute for Global Environmental Strategies (IGES), Japan** at the “Workshop-cum-study visit Community-based and Decentralized Solid Waste Management” UNESCAP, 13-17 September 2004, Dhaka, Bangladesh
  - ❖ Invited to participate in the third Kitakyushu Initiative Network Meeting of **UNESCAP**, 2-4 August 2004, **Kitakyushu, Japan**
  - ❖ Invited to attend the sixth Thematic Seminar on International Cooperation for Local Initiatives, **IGES, Kitakyushu, Japan**, 2<sup>nd</sup> July 2004
  - ❖ Invited to attend the fifth Thematic Seminar on Public Participation for Urban Environmental Management, **IGES, Kitakyushu, Japan**, 20-21 January 2003
  - ❖ Invited speaker at the Better Air Quality (BAQ 2003) workshop, 17-19 December 2003, Manila, Philippines, (Sponsored by **ADB, Philippines**) and presented a paper “Transportation Trends, Alternatives and Policy Issues in Indian Cities”

- ❖ Invited to attend the International Conference on “Roles of Agriculture”, Organized by **United Nations Food and Agriculture Organization (FAO)**, 20-22 October 2003, **Rome, Italy**
- ❖ Invited to attend the Annual review workshop on “Strategies to promote energy efficient technologies in urban transportation” under Asian Regional Research Project for Energy Environment and Climate (ARRPEEC -III), **Asian Institute of Technology (AIT), Bangkok, Thailand**, 24-26 September, 2003
- ❖ Invited to attend the “Fourth Training Workshop on International Environmental Law – Biodiversity,” Kushiro, Japan, 15-21<sup>st</sup> March 2003 (**Sponsored by United Nations Institute of Training and Research – UNITAR**)
- ❖ Invited Speaker at the BAQ 2002, an international workshop on Better Air Quality in Asia and Pacific Rim Cities held in **Hong Kong** supported by the Asian Development Bank (ADB)
- ❖ Invited to attend the Methodology Workshop on “Strategies to promote energy efficient technologies in urban transportation” under Asian Regional Research Project for Energy Environment and Climate (ARRPEEC -II), held at **Asian Institute of Technology (AIT), Bangkok, Thailand**, 7-8 October, 2002
- ❖ Invited to participate in the Inception workshop of Role of Agriculture (ROA) project funded by **Food and Agriculture Organization of United Nations (FAO)**, IGIDR, Mumbai, India, 21-22 September 2002.
- ❖ Invited to attend the World Bank Institute’s course on Environmental Economics and Development Policy 2002 (EEDP V), **Washington D.C. United States**, 15-26 July, 2002
- ❖ Invited to attend the Third Annual Review Workshop on Asian Regional Research Project for Energy Environment and Climate (ARRPEEC -II), **Asian Institute of Technology (AIT), Bangkok, Thailand**, 25-27 March, 2002
- ❖ Invited to attend the Training and Research Workshop organized by IUCN, - Asian Region Office and **South Asian Network for Development and Research (SANDEE)**, AIT, Thailand, 7-12<sup>th</sup> March 2002 and delivered a talk on " Economic Valuation of Pesticide Pollution in India – A Policy Analysis for the Development of Eco-Friendly Agriculture Practice".
- ❖ Invited Speaker at the "International Conference on Advances in Civil Engineering (ACE 2002)" held at IIT, Kharagpur, India during January 3-5, 2002 and presented a paper titled "Sustainability Approach to Waste Management - A Case of Modified Design for Landfills".
- ❖ Invited Open AIT lecture on “Application of Analytic Hierarchy Process for the Selection of Alternative Options for Urban Transportation in India – Analysis of Group Aggregation Methodology Adopted in AHP”, May 22, 2001, Asian Institute of Technology, Thailand
- ❖ Invited to attend the Second Annual Review Workshop on Asian Regional Research Project for Energy Environment and Climate (ARRPEEC -II), **Asian Institute of Technology (AIT), Bangkok, Thailand**, 19-21 February, 2001

- ❖ Invited to participate in the First Indian Research Forum on “Green House Gas Pollution Prevention – Climate Change Supplement” - A Programme of the **USAID**, organized by Louis Berger, Inc. and IGIDR at IGIDR, Mumbai, India on 22/01/01
- ❖ Invited to participate and present a paper titled "Policies and Strategies for Better Management of Municipal Solid Waste in Indian Cities at the **International Human Development Programme workshop on Climate Change, IHDP-Bonn**, September 10-19, 2000, Bonn, **Germany**.
- ❖ Invited to participate and present a paper “Purpose Built Landfill System for the Control of Methane Emissions from Municipal Solid Waste” at The Second International Methane Mitigation Conference, **Novosibirsk, Russia**, June 18-23, 2000.
- ❖ Resource person, Environmental Economics Training Programme under **the World Bank’s** Environmental Management Capacity Building Project, IGIDR, Mumbai, July 13-16, 2000.
- ❖ Invited to participate in the International Youth Forum on Lifelong Integrated Education – “Think together: Future for us, Humanity and the Earth”, Nomura center for Lifelong Integrated Education, **Tokyo, Japan**, 17-19 August 1999.



## **National Invitations (Sixty One)**

- ❖ Invited as a Coordinator for a Panel Discussion on The importance of developing alternative fuel and technology solutions in India at the 5<sup>th</sup> Integer Emissions Summit India 2015, 25-26 March, Piccadily Hotel, New Delhi
- ❖ Invited as an expert for the International Seminar on “Sustainable Solid Waste Management for Cities: Opportunities in SAARC Countries”, 25-27 March 2015, Nagpur, jointly organized by NEERI and Imperial College London.
- ❖ Invited expert for a two day National Seminar on Industrial Ecology – Inter-disciplinary Perspectives and Opportunities, 20-21 March 2015, Organized by GMR Institute of Technology, Rajam and Department of Science and Technology, Government of India.
- ❖ Series of invited guest lectures for the Environmental Management group at **Indian Institute of Forest Management (IIFM), Bhopal**, India, 26-27 January and 25-26 Feb 2015
- ❖ Invitation as an Expert Speaker to lecture on Environmental accounting of Transport and Solid Waste Management Sector at a one week refresher training program for Statistical Personnel of DES, U. P. on Environment Statistics and Natural Resource Accounting, 23-27 February 2015, Indian Institute of Forest Management (IIFM) Bhopal
- ❖ Invited as an Environmental Economist Expert to deliver a series of lectures at a Workshop on Environmental Economics organized by the Department of Economics, University of Mumbai, 10-12 February 2015.
- ❖ Invited speaker at a Two - day International Seminar on “Natural Resource and National Accounts in South Asia”, 5-6 February 2015, Institute for Social and Economic Change, Bangalore, India and gave a “lecture on Inclusive Valuation of Solid Waste Management services in India”
- ❖ Chair Person, Session on Economics of Climate Change, at a Two - day International Seminar on “Natural Resource and National Accounts in South Asia”, 5-6 February 2015, Institute for Social and Economic Change, Bangalore, India
- ❖ Invited expert on the panel “Environment and Climate Change” at the Young Social Innovators Conclave organized by Indian Youth Fund, Hindustan Times and Narottam Seksaria Foundation, Mumbai. India, 10<sup>th</sup> October 2014
- ❖ Invited for the Mumbai dialogue on green architecture "Building sense: Beyond the green façade of sustainable habitat" organized by Center for Science and Environment, Studio-X Mumbai Fort, Mumbai, 11<sup>th</sup> October, 2014.
- ❖ External thesis examiner for Master's thesis submitted by Mr. Vikar Verma, IIT Bombay, 27<sup>th</sup> August 2014.
- ❖ **Invited expert** at the Consultation Workshop on the 3<sup>rd</sup> Regional Plan of Mumbai Metropolitan Region (MMR) for year 2014-2034, MMRDA, BKC Mumbai, 28<sup>th</sup> March 2014.

- ❖ External Theses Examiner for the Post-graduate programme in Environmental Engineering, Department of Civil Engineering, National Institute of Technology (NIT), Warangal, AP, India (July 2014)
- ❖ Invited as a Key note speaker for the UGC sponsored Seminar on “Frontiers in the Field of Science, Technology and Sustainability”, organized by Government of Maharashtra’s Elphinstone College, Mumbai, 14-15<sup>th</sup> February 2014.
- ❖ Key Note Speaker at the UGC sponsored Seminar on “Environmental Management: New Paradigm for Water, Sanitation and Sustainability” organized by the School of Engineering, Cochin University of Science and Technology (CUSAT), 23<sup>rd</sup> January 2014 and delivered a key note speech on “Economics for Environmental Management”
- ❖ Invited and Key Note Speaker at the UGC Sponsored State Level Seminar on Sustainable Infrastructure Development in India, Department of Economics, P.N. Doshi Women’s College, Mumbai, India, 11-12<sup>th</sup> October 2013 and delivered a keynote speech on “Urban Transportation Infrastructure: Integrating Strategies for Sustainable Transportation”
- ❖ Invited Speaker at the Maharashtra Water Forum organized by EI Water, Hotel Orchid, Santacruz East, Mumbai, India, 25<sup>th</sup> September 2013 and delivered a keynote speech on “Basic Services in Urban Centers – Present Trends and the Way Forward”
- ❖ Invited Lecture at an International Seminar on “Sustainable Development – Indo-Canadian Perspective”, **SNDT Women University**, Juhu Campus, Mumbai, India, 19-20 March 2013
- ❖ Chairperson for the Technical Session IV at an International Seminar on “Sustainable Development: An Indo-Canadian Perspective”, **SNDT Women University**, Juhu Campus, Mumbai, India, 19-20 March 2013
- ❖ Six Invited Lectures on Modeling in Ecological and Economics (MEE) for MBA Graduate Students at **IIFM Bhopal**, 4-6 March 2013.
- ❖ Invited Speaker for Environmental training program on “EIA studies and EMP of contaminated sites for industrial sector”, sponsored by Central Pollution Control Board (CPCB), **CSIR Central Salt & Marine Chemicals Research Institute**, Bhavanagar, Gujarat, India, 13<sup>th</sup> February 2013
- ❖ Invited Expert Speaker at the AICTE Sponsored Staff Development Programme on Green Construction: Environmental Compulsion of the Day , 14-18 May 2012, **Shree Vidhya Niketan Engineering College**, Tirupathi, India – Lectured on “Greening Commercial Buildings: Initiatives in India and the Bottlenecks”
- ❖ Invited lectures on Ecology and Economy Models at **Indian Institute of Forest Management (IIFM), Bhopal**, 6-7<sup>th</sup> March 2012

 Widely Invited by National Development Agencies  
 Institutions/ Organizations / Universities

- ❖ Resource Person, Faculty Refresher Course on Advanced Economics, Sponsored by the **Reserve Bank of India (RBI)**, IGIDR, Mumbai, 24<sup>th</sup> November 2011 – Delivered a lecture on “Contemporary Issues in providing Environmental Services”
- ❖ Series of invited guest lectures for the Environmental Management group at **Indian Institute of Forest Management (IIFM), Bhopal**, India, 26-27 Feb 2011
- ❖ Invited Expert Speaker for the session on “Finance for Agriculture and Forestry – CDM Project” at the *Continuing Professional Development Programme on Clean Development Mechanism (CDM) and Carbon Finance for Agriculture and Forestry and Land use Project*, organized by **the Engineering Staff College of India (ESCI)**, 25-27<sup>th</sup> August 2010, ESCI, Hyderabad, India
- ❖ PhD thesis examiner for **Pondicherry university** (2012)
- ❖ Invited for the 23<sup>rd</sup> Research and Development Advisory Committee (RDAC) meeting of the **Ministry of Rural Development** and made a presentation (of the proposed project) on Development of Low Cost Filter for the Removal of Pesticides in the Rural and Pesticide Effected Area”, 16<sup>th</sup> June 2010, MoRD, Paryavaran Bhawan, Delhi
- ❖ Invited Guest (on President’s Invitation) Lecture on Environmental Protection – Changing Trends and the Present Day Needs at **GITAM University**, Visakhapatnam, India, on 15<sup>th</sup> July 2009.
- ❖ Chairman, Session on “Green Building, Energy Saving and Carbon Markets”, International Conference on Green Growth, Organized by **ICFAI Business School and Andhra Pradesh Forest Academy**, 17-18 December 2008, Hyderabad, India
- ❖ Panel Member, Panel discussion on “India’s Environmental Challenges”, held at IBS, Hyderabad on 18<sup>th</sup> December 2008, Jointly organized by **ICFAI Business School and Andhra Pradesh Forest Academy**
- ❖ Chairman, Session on Urbanization, Migration and Health, Students Colloquium on Development Research (SCODER), IGIDR, 28-29<sup>th</sup> September 2007.
- ❖ Invited Speaker at the “Urban Transportation and Climate Change in Indian Cities: Experiences from Delhi and Mumbai”, at the Joint Seminar on Climate Change: The Urban Transportation Challenge, Municipal Corporation of Kolkata and the **Centre for Social Markets CSM**), 8<sup>th</sup> August 2007, The Conclave, Kolkata, India (Funded by **Heinrich Böll Foundation, Germany**)
- ❖ Invited to participate in the Round-table on “Cities on River: Preparing for Climate Change”, Floatel, Kolkata, 8<sup>th</sup> August 2007, Kolkata, India, Organized by the INTACH and the **Centre for Social Markets (CSM)**, (attended by Mr. Murad Qureshi, Member of London Assembly)
- ❖ Invited to participate in the “LEAD Consultation on the Status of Local Environmental Governance in India and Strategies for Future Action”, 15-16<sup>th</sup> March 2007, India Habitat Center, New Delhi (Organized jointly by **LEAD International and British Government** (Foreign Office))
- ❖ Resource person for sessions on “Financing Environmental Projects and Environmental

Reporting and Verification”, Training Programme for Non-ISS Statistical Personnel on “Natural Resources Accounting Techniques” **Indian Institute of Forest Management (IIFM), Bhopal**, 12-16 February 2007

- ❖ Lectured on “Environmental Finance” for PFM graduate students at the **Indian Institute of Forest Management (IIFM), Bhopal**, February 2007
- ❖ Invited to deliver a talk on “Air Quality Modeling: Case Studies of Delhi and Mumbai”, Seminar on Valuation and Accounting of Urban Air Pollution in India, Environmental Economics Workshop, **Institute of Economic Growth, New Delhi**, India, 30<sup>th</sup> Nov 2006
- ❖ Invited as a GEF-Consultant for Project Proponent, GEF Empowered Committee meeting at the **Ministry of Environment and Forests, Government of India**, 6<sup>th</sup> September 2006.
- ❖ Invited as a GEF-Consultant/Expert, Workshop on Cleaner Mobility in Urban Areas in India, **UNDP/Ministry of Urban Development, Government of India**, New Delhi, 26<sup>th</sup> Aug, 2006.
- ❖ External examiner for student presentations at *Center for Environmental Science and Engineering, Indian Institute of Technology (IIT), Bombay, India* (2006).
- ❖ Invited to participate in the National review workshop on “Roles of Agriculture” IGIDR, Mumbai, India, 6-7 October 2003 (sponsored by **FAO of UN**)
- ❖ Invited to participate as a representative of “National Research Institute” for the Sida project at National Dissemination Seminar on, “Asian Regional Research Project on Energy, Environment and Climate (ARRPEEC)”, **Central Electricity Authority (CEA), New Delhi**, 5<sup>th</sup> May 2003.
- ❖ Invited Speaker, “Environmental Economics Training Programme for Indian Economic Services/Indian Statistical Services Offices”, Sponsored by the World Bank, 6<sup>th</sup> February 2003, **Gokhale Institute of Politics and Economics**, Pune, India.
- ❖ Invited to speak on “GHG mitigation from MSW” in the Group Monitoring Workshop of Department of Science and Technology’s “Fast Track Scheme”, **Department of Science and Technology, Government of India**, January, 2003, Nagpur, India.
- ❖ Invited Talk on “Pesticide Removal Using Indigenous Wood Charcoal” at **Birla Institute of Technology and Science (BITS), Pilani**, India on 30 August 2001.
- ❖ Invited Speaker, Workshop on Advanced Waste Minimization and Management Technologies, Department of Civil Engineering, **Indian Institute of Technology (IIT), Kharagpur**, November 2000.
- ❖ Invited to participate in the Brainstorming session which is a part of training programme on Environmental Economics for top level executives from corporate sector under the World Bank Environmental Management Capacity Building Technical Assistance Project (EMCaB) implemented by **MoEF, Govt. of India**, 29 June, 2000, IGIDR, Mumbai, India.
- ❖ Invited to participate and present a paper entitled “Feasibility of Landfill Technology for Management of MSW: A Case Study of Mumbai” in the workshop on “Municipal Solid Wastes:

Technology and Management” NDC & **West Bengal Pollution Control Board**, 15<sup>th</sup> November 1999 at Calcutta, India.

- ❖ Invited to participate in Technical Advisory Committee meeting held for Rural Pollution and Health Impacts at IGIDR, Mumbai, India, 15<sup>th</sup> November 1999.
- ❖ Invited to participate in the “Consultative Symposium on Environmental Governance for Sustainable Development” Indira Gandhi Institute of Development Research (**IGIDR**), Mumbai, India, June 11<sup>th</sup> 1999, Mumbai, India.
- ❖ Invited to give a lecture on *Bio-methanation: An Alternative Energy Source – Appropriate Choice for the Next Millennium*, at Indira Gandhi Institute of Development Research (**IGIDR**), Mumbai, India on 3<sup>rd</sup> March 1999.
- ❖ Invited to participate and present a technical paper at the National seminar on Environmental Protection: Recent trends in wastewater treatment, 19 - 20th January 1998, EPTRI, Hyderabad, India
- ❖ Invited to participate and present a technical paper at a National seminar on Environmental Conservation and Management (ECOMAN), March 1996, **GITAM, Visakhapatnam**, India
- ❖ Invited to participate in National seminar on Conservation and Development in Tropics, March 1995, **BHU, Varanasi**, India, and present a technical paper
- ❖ Invited to participate and present a technical paper at National seminar on Environment, Biodiversity and Conservation, August 1995 at **Rani Durgavathi University**, Jabalpur, India

## Conferences Attended

- ❖ Total Attended : Eighty Eight (88)
- ❖ International : Fifty Four (54)
- ❖ National : Thirty Four (34)

**Note:** Detailed list is given at the end

## Conferences/Workshops Organized

- ❖ Total : Nine (9)
- ❖ International : Five (7)
- ❖ National : Two (2)

## Publication Record

❖ Papers in Refereed International Journal	34
❖ Books Published by International and National Publishers	5
❖ Chapters in Published Book	10
❖ Papers in Reputed Working/Discussion Papers	6
❖ International Reports	16
❖ Papers in <u>Refereed</u> International Conference Proceedings	28
❖ Papers in Refereed National Journals	2
❖ Papers in National Conference Proceedings	9
❖ Dissertations	6
<b>Total</b>	<b>116</b>

**Note:** Detailed list is enclosed at the end

Published in all Major and Reputed Journals  
in the Field of Environmental Engineering,  
Policy and Sustainable Development

## Research Projects and External Funding Obtained

❖ Academic/Industrial Research Projects Funded by External Agencies/Government of India	10
❖ Industrial Consultancy Works/Research	4
❖ Developmental Consultancy/Research	2
❖ Capacity Building/Training Programmes	2
❖ Workshops/Conferences	7

**Note:** Detailed list is enclosed at the end

**Total** | **25**

Total Funding Amount is Rs.164.4 lakhs (365,333USD) and Funding Agencies include The World Bank; UNDP; UNEP; UN-FAO; UN-ESCAP; UNU; IGES, Japan; Tata-AIG; GEF; Sida; AIT, Thailand; British High Commission; DST-Government of India; IGIDR etc.

## Editorial and Review Works

- Member Editorial Advisory Board for Handbook of Research on Climate Change on Health and Env Sustainability being Edited by Soumyananda Dinda, IGI Global Publishers, USA
- Member Editorial Board of “Current World Environment”, an international journal published by CWE Journals published by Enviro Research Publishers
- Member Editorial Board, “The Open Transportation Journal” published by Bentham Science Publishers
- Editor Special Issue on “Environmental Implications of Urban Transportation in Asia”, International J. of Environment and Pollution, Inderscience Publishers, Switzerland (2007)
- Editor Special Issue on “Issues in Urban Environmental Management”, International J. of Environment and Pollution, Inderscience Publishers, Switzerland, (2003)
- Editor Annual Report 1998-99, Indira Gandhi Institute of Development Research, Mumbai, India

**Peer Reviewer for more than 30  
International Journals from Major**

**Reviewer for all major Journals in  
the Area of Environment**

Energy Policy; Journal of Air and Waste Management Association, USA; International Journal of Environment and Pollution; Journal of Environmental Management; International Review of Environmental Strategies; Transportation Research, Part A – Policy and Practice; Transportation Policy; International journal “Ecological Economics”; World Review of Entrepreneurship, Management and Sustainable Development; International Journal “Cities”; International Journal of Global Environmental Issues; IIMB Management Review; Computer, Environment and Urban Systems; International Journal of Sustainable Transportation; Energy Policy; Omega; The International Journal of Management Science; International Journal of Environment and Waste Management (IJEWM); Waste Management; Waste Management and Research; The Open Transportation Journal, Bentham Science Publishers; Journal of Material Cycle and Waste Management; Journal of Industrial Ecology; Environment, Development and Sustainability; Journal of Public Health and Epidemiology; Journal of Social Science and Environmental Management; Sustainability Science; International Journal of Environment and Waste Management etc.

**Recognized as a Regional Expert in the Area of Solid Waste  
Management; Landfill Design; and Climate Change Mitigation**

**BOOK Reviewer:** SAGE; SPRINGER

## **Administration, Policy Advice, Institution Building and Research Coordination Experience**

- ❖ Member, District Level **Consent Committee** (CEO and CF) of Andhra Pradesh Pollution Control Board (**APPCB**), Warangal Regional Office (2009-10)
- ❖ **Advisor** for the Warangal Municipal Corporation (Municipal Commissioner) on Environmental Management, particularly Municipal Solid Waste Management (Developed an initiated decentralized waste management plan which is being implemented) (2009-10)
- ❖ Participated in the implementation of the Korean Policy Decision to convert Ulsan Industrial Parks into energy conserving Eco-Industrial Parks (EIP) (2007-08)

## **University & Academic Administration**

- ☀ Ministry of Human Resources Development (**MHRD**), Government of India nominated Member of the Court of Central University of Jharkhand, Ranchi, India (**Member, Board of Governors**)
- ☀ Member, **IGIDR Planning Board**, Indira Gandhi Institute of Development Research (IGIDR), Mumbai, India since January 1<sup>st</sup> 2014
- ☀ Member, **Executive Committee**, Indira Gandhi Institute of Development Research (IGIDR), Mumbai, India since January 1<sup>st</sup> 2014
- ☀ Member, **Academic Programme Restructuring Committee**, Indira Gandhi Institute of Development Research (IGIDR), Mumbai, India
- ☀ **Senator**, National Institute of Technology (NIT) Warangal, INDIA (Oct'2008-February 2010) participated in Institutional Planning on Academic Matters of NIT Warangal
- ☀ Member of the **Academic Council**, Department of Civil Engineering, National Institute of Technology (NIT) Warangal, INDIA (Oct'2008-Feb 2010)
- ☀ Member, **Academic Council**, Indira Gandhi Institute of Development Research (IGIDR), Mumbai) - since 5<sup>th</sup> December 2005
- ☀ Member, **IGIDR Silver Jubilee** Conferences Organizing **Core Group**, Indira Gandhi Institute of Development Research (IGIDR), Mumbai, India, 2012-13
- ☀ **Advisor** (Vice-President), Civil Engineering Association, National Institute of Technology (NIT), Warangal, AP, INDIA (August 2009-Feb 2010)
- ☀ Member of the **Departmental (General) Council**, Department of Civil Engineering, National Institute of Technology (NIT) Warangal, INDIA (Oct'2008-Feb 2010)



- ☀ **Professor In-charge**, Institute Quiz Committee, National Institute of Technology (NIT) Warangal
- ☀ **Departmental Graduate Thesis Coordinator**, Department of Civil Engineering, National Institute of Technology (NIT), Warangal, AP, INDIA (August 2009-Feb 2010) - responsible for the research work of all graduate students of the Department
- ☀ Departmental **Seminar Coordinator**, Department of Civil Engineering, National Institute of Technology (NIT), Warangal, AP, INDIA (August 2009-Dec 2009) - responsible for seminars of all graduate (final year) students of the Department
- ☀ **Coordinator**, Graduate (PhD) application scrutiny, Department of Civil Engineering, National Institute of Technology (NIT), Warangal, AP, INDIA
- ☀ Member, **Organizing Committee**, International Conference on Economic Instruments for Water Resources Management held on 9<sup>th</sup> January 2009, IGIDR, Mumbai, India
- ☀ IGIDR Institute **Library Committee** Member (since January 2011)
- ☀ Post-doctoral Fellow **Selection Committee** Member at IGIDR (since January 2011)
- ☀ Institute **Seminar Coordination Committee** Member (IGIDR) (2000, 2001, 2011-14)
- ☀ **Computer Committee** (IT), IGIDR (2001; 2002; 2003; 2006 and 2007)
- ☀ Graduate **Admissions Committee**, IGIDR (2006 and 2007)
- ☀ Entrance Exam Panel/**Selection Panel**, IGIDR (2000, 2001, 2002, 2006, 2010, 2011, 2013)
- ☀ Faculty Coordinator, Students' Newsletter, IGIDR (Since 2006)
- ☀ Institute **Transportation Committee** (2001, 2002, 2003)

### **Institution Building / Academic Innovations**

- ❖ Introduced a new initiative titled “Brown Bag Seminar Series (BBSS)”, the National Institute of Technology (NIT), Warangal, India as a part of its Civil Engineering Association’s activities. It is a platform for the faculty, research staff and the students to present their research work and seek valuable feedback from fellow members. In the absence of such a platform for the past 50 years, it was a great success at NIT Warangal.
- ❖ As a Departmental Seminar Coordinator I had introduced a new methodology of conducting and evaluating “Seminar” class at National Institute of Technology (NIT), Warangal, India and it has received an outstanding rating from all students at NIT Warangal, India

## Research & Project Coordination

- Coordinator, Silver Jubilee Conference on Cities and Sustainability, 29-30<sup>th</sup> October 2013, Indira Gandhi Institute of Development Research (IGIDR), Mumbai, India
- Chosen as Coordinator for the Center for Energy and Environment, a Project Proposed under a scheme of the Ministry of Human Resources Development (MHRD), Government of India (with a proposed budget of about Rs. 100 Million) - 2009
- Co-author for incremental cost analysis and the preparation for the development of a full scale GEF project proposal on *Cleaner Mobility in Urban Areas*, for the Ministry of Urban Development, Govt. of India and UNDP (2006-07)
- Project Director, Swedish International Development Coop. Agency (Sida) funded research initiative on "Asian Regional Research Program on Energy, Environment and Climate (ARRPEEC), IGIDR (2002-06)
- Organizing Member, "Transformation and Reforms for Sustainability – Local Solutions for Global Change Urban Environment" A Special Session by the Urban Environmental Management group of IGES, JAPAN at the International Open Science Meeting of International Human Dimensions Program (IHDP), Bonn, Germany 10-13 October 2005.
- Module In-charge, Module on *Environment*, Food and Agriculture Organization of the United Nations (FAO) Project "Socio-Economic Analysis and Policy Implications of the Roles of Agriculture in Developing Countries" – 'Role of Agriculture' in short, IGIDR (2002-03)
- Coordinator, Brainstorming/Inceptions Workshop on "Policies for the promotion of energy efficient and environmentally friendly technologies in urban transportation sector in India, 19<sup>th</sup> November, 2003, IGIDR, Mumbai, India
- Organizing Committee Member, Symposium on Energy, Environment and Sustainable Development, IGIDR, 6 – 7 July 2003.
- Team Leader for a industry consultancy project on *Socio-Economic Impact Assessment and Development of Relocation & Rehabilitation Plan for a Bauxite Mining and Alumina Refinery Unit at Lanjigarh*, Orissa, India funded by Tata AIG Risk Management Services Ltd., India (2001-02)
- Team Leader, Evolution of Environment in Mumbai, A Commission paper from Institute of Global Environmental Strategies (IGES), Japan (2002)
- Team Leader, A research project "Green House Gas (GHG) Emissions from Municipal Solid Waste (MSW): Estimation and Selection of Economically Feasible Abatement Methodology" funded by Department of Science and Technology (DST), Government of India under the scheme of "Fast track proposal for Young Scientists 2000-2001"
- Program Coordinator (Leader), EETCPN Environmental Economics Training Program for the Private Corporate Sector under The World Bank's EERC Project (June/July, 2000)

- Program Coordinator (Leader), Environmental Economics Training Programme under the sponsorship of the World Bank's Environmental Management Capacity Building Project, held at IGDR, Mumbai (July 13-16, 2000)
- Organizing Committee Member for the session "Energy Policy Issues and Power Sector Reforms" and "Environmental Management: Local and Global issues" in the "International Symposium on Development Policies for the Next Millennium" being held at IGDR in July'2000.

## **Professional Memberships**

- ❖ Associate Member, India International Center (IIC), New Delhi
- ❖ Member of Editorial Board, "Current World Environment", an international journal published by CWE Journals published by Enviro Research Publishers
- ❖ International Associate Member, Japan Society on Water Environment, Tokyo, Japan, 2014
- ❖ Member, Scientific Board of Civil & Environmental Engineers, International Institute of Engineers (IIEng)
- ❖ Member of Technical Committee of Conference, International Academy of Arts, Science and Technology (IAAST) since February 2014
- ❖ Member, Global Development Network (GDN), USA
- ❖ Member, Solid Waste Management Experts in Asia and the Pacific Island (SWAPI), Japan
- ❖ Member, American Society of Civil Engineering (ASCE), USA
- ❖ Member, Korean Society of Environmental Engineers, Seoul, South Korea
- ❖ Member, The Institution of Engineers (India) (MIE) – Civil Engineering
- ❖ Member, Administrative Staff College of India (Association), (ASCI), Hyderabad, India
- ❖ Associate, Leadership in Environment and Development (LEAD), New Delhi, India
- ❖ Member, International Environmental Law Research Centre, Châtelaine-Geneva Switzerland
- ❖ Member, Clean Air Initiative (CAI-ASIA), Manila, Philippines
- ❖ Member, South Asian Network For Development and Environmental Economics (SANDEE), The World Bank, Washington, D.C., USA

- ❖ Member, International Solid Waste Association (ISWA), Denmark
- ❖ Member, International Society for Ecological Economics, (ISEE) U.S.A.
- ❖ Student member of Indian Association of Environmental Management, NEERI, Nagpur, (97-98)
- ❖ Member of Delhi University Botanical Society (DUBS), Delhi, INDIA (1995-96)
- ❖ Member, Society for Prevention of Ecological and Environmental Degradation, Visakhapatnam, INDIA (1990-93)
- ❖ Member, "Civil Engineering Society" Indian Institute of Technology, Kharagpur, INDIA (1996-99)

## **International Work Experience**

- Worked at Korean Institute for International Economic Policy (KIEP), Seoul Republic of Korea, as a Visiting Fellow (May – June 2014)
- Worked at Asian Institute of Technology (AIT), Thailand as a Visiting Professor in Urban Environmental Management, School of Environment, Resources and Development (SERD), Thailand (September –December 2012)
- Worked at the National Institute for Environmental Studies (NIES), Tsukuba, Ibaraki, Japan (October-November 2010)
- Associated for work with HMR International Environmental Consultants, Sultanate of Oman since September 2010
- Worked at the Department of Civil and Environmental Engineering, University of Ulsan, Korea, October 2007 – Sept 2008
- Worked at the Department of Civil and Environmental Engineering, University of Ulsan, Korea, January 2007
- Worked at Urban Environmental Division, Institute for Global Environmental Strategies, Japan, 2004-05
- Worked as Consultant at Urban Environmental Division – Kitakyushu Office, Institute for Global Environmental Strategies (IGES), Kitakyushu, Japan (2003-04)
- Worked as Post-doctoral research fellow at School of Environment, Resources and Development, Asian Institute of Technology (AIT), Bangkok, Thailand (May – July 2002).
- Worked as Post-doctoral research fellow at School of Environment, Resources and Development, Asian Institute of Technology (AIT), Bangkok, Thailand (Jan – June 2001).
- Extensively traveled to many countries on professional assignments

## Teaching and Research Guidance

Taught the Under-graduate and Graduate Students in Engineering Streams at

- ☀ Urban Environmental Management, School of Environment, Resources and Development (SERD), Asian Institute of Technology (AIT), Thailand
- ☀ Department of Civil Engineering, Indian Institute of Technology (IIT), Kharagpur (as part of Teaching Assistantship)
- ☀ Department of Civil Engineering, National Institute of Technology (NIT), Warangal as a Full Professor of Environmental Engineering and Management
- ☀ Department of Civil and Environmental Engineering, University of Ulsan, Ulsan, South Korea as a Professor of Environmental Policy

Taught the Under-graduate and Graduate Students in Development Studies and Economics at

- ☀ Indira Gandhi Institute of Development Research (IGIDR), Mumbai as a Regular Faculty
- ☀ Indian Institute of Forest Management (IIFM), Bhopal as a Guest Faculty

Taught for the last 15 years at AIT-Thailand; IIT; NIT-Warangal; University of Ulsan-South Korea; IGIDR-Mumbai; IIFM-Bhopal

### Courses Taught for Engineering Students

- ❖ Environmental Science (Compulsory for First year students of all Engg branches) 2008-09, 2009-10; Environmental Engineering (Compulsory for III Year B.Tech Students), 2009-10; Environmental Impact Assessment, 2008-09, 2009-10; Design and Practice of Water and Wastewater Systems, 1997, 1998; Environmental Engineering Laboratory, 1996, 1997, 1998, 1999; 2009, 2009, 2010; Estimation and Costing - Theory and practice, 1996; Engineering Drawing, 1996, 1997; Engineering Mechanics, 1997, 1998; Environmental Science and Technology for Decision Makers, 2012

All along I have been rated 'excellent' by students for my substantive teaching. Students at NIT Warangal have rated me outstanding for my teaching in the field of environmental subjects such as Environmental Studies, EIA, Environmental Engineering and "Seminar – Oral Communication"; and the students at IGIDR for the courses in Environmental Economics and Environmental Management

Courses Taught for Development Studies Graduates

- ❖ Tools for Advanced Environmental Management, 2003; Economics for Environmental Management and Multi-criteria Analysis, 2006; Environmental Technology and Management, 2002; Environmental Economics, 2002, 2003, 2006 and 2007; Environmental Finance, 2007; Environmental Management and Introductory Environmental Economics, 2007; Energy and Environment, 2002, 2003, 2006, 2007, 2008, 2010, 2011, 2013, 2014, 2015; Advanced course in Energy Environment (Energy and Environment II) (2011, 2012); Ecology and Economic Modeling, 2009; 2011, 2012; Advance Topics in Environmental Economics and Policy (2015).

**Research Supervision**

Degree	Total	Completed	Ongoing
Doctoral (PhD)	2	1	1
Master (M.Tech, M.S)	7	4	3
Undergraduate	4	4	0
<b>Total</b>	<b>13</b>	<b>9</b>	<b>4</b>

Note: Details are given at the end

**Thesis (Graduation, Post-Graduation and PhD) Evaluation as External Examiner**

- Theses of European Masters in Law and Economics under Erasmus Mundus Program
- Indian Institute of Technology (IIT), Delhi, India
- Indian Institute of Technology (IIT), Bombay, India
- Pondicherry University, Puduchery, India
- National Institute of Technology (NIT), Warangal, India

**Core Competencies**

- Environmental Engineering
- Environmental Economics
- Environmental Decision Making

**Application Thrusts**

- Low Cost Water Treatment
- Climate Change Mitigation
- Smart/Sustainable Cities
- Sustainable Mobility and Air Pollution
- Sustainable Waste Management
- Provision of Services to Urban Poor
- International Trade and Impacts on Environment
- National development plan and Sustainability
- Sustainable Development Goals

## Research Works Carried Out and Ongoing Works

More than 19 years of scientific and policy oriented research experience in Environmental Engineering and Management, Climate Change Mitigation Strategies, and Socio-Economic Impacts of Environmental Policies. Research was conducted at premier institutions like Global Environmental Strategies (IGES), Japan; National Institute for Environmental Studies (NIES), Tsukuba, Japan; University of Ulsan, South Korea; United Nations Institute for Training and Research (UNITAR), Switzerland; Asian Institute of Technology (AIT), Thailand; Indian Institute of Technology (IIT), Kharagpur; National Institute of Technology (NIT) Warangal, India; Indian Institute of Forest Management (IIFM), Bhopal and Indira Gandhi Institute of Development Research (IGIDR), Mumbai, India. Research methods employed during the last 15 years of research includes –

- Laboratory scale experimentation (Water and wastewater treatment methods with special emphasis for Physico-chemical methods of treatment)
- Air quality modeling
- Multi-criteria Analysis using tools like Analytic Hierarchy Process (decision making);
- Optimization techniques;
- Economic Analysis

## Research and Professional Details

### Specialization

- Environmental Management (Solid Waste Management; Air Pollution Control)
- Environment (Climate Change) and (Sustainable) Development
- Environmental Impacts of Urban Development Initiatives
- Economics Principles for Environmental Management (Environmental Economics)
- Environmental Engineering (Water and Wastewater Treatment)

### Research Areas and Professional Interests

- Removal of micro-pollutants from water using low cost adsorbents
- Sustainable Mobility – Air Pollution, GHG Mitigation, NMT and Equitable Service Provision
- Economics of Climate Change and International Negotiations
- Sustainable Waste Management
- Urban Environmental Management and Sustainable Development
- Strategies for Smart/Sustainable Cities
- Academic Administration

## Personal Information

- Date of Birth : 25<sup>th</sup> August 1971
- Age : 43 Years
- Gender : Male
- Nationality : Indian
- Marital Status : Married

## References

- a) Prof. S. Mahendra Dev  
Director, IGIDR  
Member, National Statistics Commission, Government of India  
Former Chairman, The Commission for Agriculture Costs and Prices (CACP),  
Government of India  
Former Director, Center for Economic and Social Sciences, Hyderabad

Contact Address: Indira Gandhi Institute of Development Research (IGIDR)  
Gen. A.K. Vaidya Marg, Goregaon East, Mumbai 400065  
Email: [director@igidr.ac.in](mailto:director@igidr.ac.in)  
Tel: 022-28415501

- b) Prof. Dilip Nachane  
Member, Economic Advisory Council to the Prime Minister, Government of India  
Former Director, Indira Gandhi Institute of Development Research (IGIDR), Mumbai

Contact Address: IGIDR, Gen. A.K. Vaidya Marg, Goregaon East, Mumbai 400065  
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Tel: 022-28416534



## **ANNEXURES**

### **Detailed List of Publications**

#### Published in International Peer Reviewed Journals

- Sudhakar Yedla and Sandhya Garg, "Two Decades of Climate Change Negotiations – Carbon Budget Allocation Approach to Re-shaping Strategies", International Journal of East Asian Economic Integration, Vol.18, No.3, pp: 277-299, 2014
- Sudhakar Yedla, "India - Korea CEPA: Analysis of Industrial Competitiveness and Environmental Implications", KIEP Fellowship Paper Series – 2014, KIEP, South Korea, June 2014.
- Sudhakar Yedla, "Dynamics of Development Process – Why are the Issues Unique in the Developing Cities of Asia?", Column in Emerics, KIEP, South Korea, 29<sup>th</sup> May 2014 ([http://www.emerics.org/isa/column\\_interview/column.do?action=detail&brdctsno=139752](http://www.emerics.org/isa/column_interview/column.do?action=detail&brdctsno=139752)).
- Sudhakar Yedla, "E-waste Management in India: A Review of Issues, Challenges and Policy Responses", Article under "A Glance at the World", Waste Management, Vol. 33, pp-491-492 Elsevier (2013)
- Sudhakar Yedla, "How Rio+20 Became Rio-20", "An Extraordinary and Plenipotentiary Diplomatist Plus" – an international magazine, Vol. IV, Issue 7, pp: 38-39, July 2012.
- Sudhakar Yedla, "Replication of Urban Innovations - Prioritization of Strategies for the Replication of Dhaka's Community-based Decentralized Composting Model", Waste Management Research, Vol. 30, No.1, pp:20-31 (2012) - Top ranked International Journal by International Society for Solid Waste Management (ISWA), USA, Sage Publisher
- Sudhakar Yedla, and Ram M. Shrestha, "Application of Analytic Hierarchy Process to the Prioritization of Transport Options – Comparative Analysis of Group Aggregation Methods" World Review for Science, Technology and Sust. Development (WRSTSD), Vol. 9, No. 1, pp: 15-33 (2012).
- Sudhakar Yedla, "Human Expectations Rise as the Global Leader Descend over Durban" – An article on COP 17, "An Extraordinary and Plenipotentiary Diplomatist Plus" – an international magazine, Vol. III, Issue no. 11, pp-48-49, December 2011.
- Sudhakar Yedla, Tran Chau Nhi, Hung- Suck Park, (2010) "Eco-industrial networking for sustainable development in Asia—A review of issues and development strategies", Journal of Korean Society of Industrial Ecology (accepted).
- Krishna Chaitanya T., Sudhakar Yedla, "Adsorption of Hexa-valent Chromium Using Treated Wood Charcoal – Elucidation of Rate-limiting Process", Environmental Technology, UK, Vol. 31 No (14) pp:1495-1505, 2010

- Sudhakar, Yedla and Anil Kr. Dikshit, "Competitive Sorption of Pesticides onto Treated Wood Charcoal and the Effect of Organic and Inorganic Parameters on Adsorption Capacity" Journal of Environmental Engineering, ASCE, Vol. 136, No.10, pp. 1096-1104, 2010 – TOP ranked Journal
- Sudhakar Yedla and Park, Hung-Suck, "Co-benefits as an approach to align climate change concerns with the national development objectives: Solid waste management", Journal of Material Cycles and Waste Management (JMCWM), Vol. 11, No.2, 2009 (Elsevier)
- Sudhakar, Yedla and Anil Kr. Dikshit, "Removal Of Endosulfan From Water Using Wood Charcoal- Adsorption And Desorption, Journal of Environmental Engineering, ASCE, Vol. 134, No.2, pp: 102-109 (2008) – TOP ranked Journal
- Shrestha, R.M., Islam, N., Kim Oanh, N.T., Adhikari, S., Yedla, S., Jiang, K., Tuan, U.S.N.D., Abrenica, J., "Strategies for the Promotion of Cleaner and Energy Efficient Technologies in the Urban Transport System in Selected Asian Cities", International Journal of Environment and Pollution Vol. 30, No.1, pp: 45-58 (2007)
- Sudhakar Yedla and Shobhakar Dhakal, "Transportation and Environment in Developing Countries", International Journal Environment and Pollution, Vol. 30, No.1, pp: 1-7 (2007)
- Sudhakar Yedla, "Dynamics of Environmental Problems in Mumbai", Journal of Cleaner Technologies and Environmental Policy, Springer Verlag, Vol. 8, No.3, pp: 182-7 (2006).
- Sudhakar Yedla, "Modified Landfill Design for Sustainable Waste Management", International Journal of Global Energy Issues, Elsevier, Vol. 23, No. 1, pp: 93-105 (2005)
- Imura, H., Sudhakar Yedla, Memon, M.M., Shirakawa, H., "Urban Environmental Issues and Trends in Asia: An Overview", International Review of Environmental Strategies, IGES, Japan, Vol. 5, No.2, pp: 357-382 (2005)
- Sudhakar Yedla, Ram M. Shrestha and Gabriel Anandrajah, "Environmentally Sustainable Urban Transportation – Comparative Analysis of Local Emission Mitigation Strategies vis-à-vis GHG Mitigation Strategies", Transport Policy, Elsevier, Vol. 12, No. 3, pp: 245-254 (2005)
- Yedla, S., and Parikh, J.K., "Sustainable Urban Transportation: Impacts of CO2 Mitigation Strategies on Local Pollutants", Fuel and Energy Abstracts, Vol. 45, No. 5, 360-361 (2004)
- Sudhakar, Yedla, "Development of Techno-Economic Integrated Models: LFSGR and Aerobic Composting for Municipal Waste Management", Environment and Development Economics, Cambridge University Press, Vol. 8, No. 4, pp. 655-677 (2003)
- Sudhakar Yedla, and Sarika Kansal, "Economic Insight to MSW Management in Mumbai", International Journal of Environment and Pollution, Vol. 19, No. 5, pp: 516-527 (2003)
- Sudhakar Yedla, and Ram M. Shrestha, "Multi-criteria Approach for the Selection of Alternative Options for Delhi Transport System", Transport Research, Part A – Policy and Practice, Elsevier publisher, Vol. 37 (8), pp: 717 – 729 (2003)

- Sudhakar Yedla, Jyoti K. Parikh, Ram M. Shrestha, "Sustainable Transportation – Impact of CO<sub>2</sub> Mitigation Strategies on Local Pollutants", International Journal of Environment and Pollution, Vol. 19, No. 5, pp: 475-482 (2003)
- Sudhakar Yedla, "Issues in Urban Environmental Management", (editorial note) International Journal of Environment and Pollution, Vol. 19, No. 5, pp: 417-420 (2003)
- Sudhakar Yedla, Jyoti K. Parikh, "Development of Purpose Built Landfill System for the Control of Methane Emissions from Municipal Solid Waste", Waste Management, Elsevier Publishers, Vol. 22, No. 5, pp: 501-506 (2002)
- Sudhakar, Yedla, Mitra, A., Bandyopadhyay, M., "Purification of paper and pulp industrial effluent using aquatic weed *Eichornia crassipes*" Environmental Technology, UK, Vol.23, No.4, pp: 453-465 (2002)
- Sudhakar, Yedla, and Dikshit, A. K., "Development of Fixed Bed Adsorber for Abatement of Endosulfan in Aqueous Media", Environmental Technology, UK, Vol. 23, No. 1, pp: 97-108 (2002)
- Sudhakar, Yedla and Dikshit, A. K., "Removal of endosulfan using aerobic mixed bacterial cultures", International Journal of Environment and Pollution, Vol.15, No.5, pp: 543-552 (2001)
- Sudhakar, Yedla, and Dikshit, A. K., "Removal mechanism of endosulfan on to wood charcoal", Int. Journal of Environment and Pollution", Vol.15, No.5, pp: 528-542 (2001)
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- Sudhakar Yedla, Tran Chau Nhi and Hung-Suck Park, Identification of Locally Appropriate Strategies to Promote Eco-Industrial Parks – Designing a Universal Questionnaire" International Journal of Sustainable Development, Inderscience Publishers
- Sudhakar Yedla, "Sustainable Development Goals – How Ready is our Transportation System to Meet the New Targets?", Journal on Transportation Policy, Elsevier
- Sudhakar Yedla, "Infrastructure Development in India – Are we Poised to meet the Sustainable Development Goals?" Journal of Infrastructure Development, Sage Publishers
- Sudhakar Yedla, "Choosing between global and local mitigation strategies in transport sector – Which way to go?" IGIDR Working Paper WP-2007-09
- Sudhakar Yedla, "Decision Making in Environmental Management - Prioritization of Strategies for the Replication of Dhaka's Community-based Decentralized Composting Model using AHP" – IGIDR Working paper WP-2007-10
- Sudhakar Yedla, and Ram M. Shrestha, "Application of Analytic Hierarchy Process to the Prioritization of Transport Options – Comparative Analysis of Group Aggregation Methods"– IGIDR Working Paper WP-2007-11
- Sudhakar Yedla and Ram M. Shrestha, "Prioritization of Strategies to Overcome Barriers for Cleaner and Energy Efficient Alternatives in Urban Transportation – Multi-criteria Approach" (Revised version at Journal Transport Policy, Elsevier) – IGIDR Working paper WP-2007-12

#### Books/Edited Volumes

- 
- A **single authored BOOK** on "***Urban Transportation and the Environment: Issues, Alternatives and Policy Analysis***" published by **SPRINGER** (ISBN 978-81-322-2312-2 released in June 2015). It is published by Springer with no cost to the authors and with a lifetime royalty.
- Edited **BOOK** on "***Cities and Sustainability – Issues and Strategic Pathways***" published by **SPRINGER** (ISBN 978-81-322-2309-2 released in June 2015) along with Prof. S. Mahendra Dev. It is published by Springer with no cost to the authors.
- *Environmental Implications of Urban Transportation in Asian Cities* - Special Issues of International Journal of Environment and Pollution, Vol. 30, No.1 (2007) Inderscience Publishers, Switzerland – Edited Volume with Dr. Shobhakar Dhakal

- *Abatement of Pesticide Pollution – Removal of Organo-chlorine Pesticide from Water Environment*, Sudhakar Yedla and Anil K. Dikshit, **Narosa** Publishers, India (2004) – with life time royalty
- *Issues in Urban Environmental Management* - Special Issue of International Journal of Environment and Pollution, Inderscience publishers, Switzerland (2003) - Edited Volume

#### Chapters in Books

- Sudhakar Yedla, "Cities and Sustainability – An Overview" in "Cities and Sustainability" Eds. Sudhakar Yedla and S. Mahendra Dev, **Springer**
- Sudhakar Yedla, "Transportation and Its Planning for Sustainability, for India Development Report -2015, **Oxford University Press**, pp: 301-320
- Sudhakar Yedla, "Provision of Civic and Environmental Services in the Urban Centres of India – Present Trends and the Way Forward", In: India Development Report 2012, Ed. S. Mahendra Dev, **Oxford University Press** (2012), pp: 180-199
- Sudhakar Yedla, "Sustainability Approach to Waste Management - A Case of Modified Design for Landfills", "Advances in Civil Engineering (ACE 2002), Allied Publishers, Bandyopadhyay and Kumar (Ed.) Vol. I, pp. 598 (2002).
- Sudhakar Yedla, Transportation Trends, Alternatives and Policy Issues, India Development Report 2004-05, **Oxford University Press**, Eds. Radhakrishna and Parikh (2004)
- Hiroaki Shirkawa and Sudhakar Yedla, "Economic Development, Urbanization and Environment in Asia" Chapter 1 in "Urban Environmental Challenges in Asia", Institute for Global Environmental Strategies, Japan (March 2005)
- Mara Regina Mendes, Mushtaq Ahmed Memon and Sudhakar Yedla, "Challenges and Issues for Urban Environmental Management in Asia", Chapter 2 in "Urban Environmental Challenges in Asia", Institute for Global Environmental Strategies, Japan (March 2005)
- Sudhakar Yedla and Sowjanya Peddi, "Agriculture and Environment", In The Handbook of Agriculture in India, (Ed. Shovan Ray) Oxford University Press, India (2007)
- Sudhakar Yedla, "Non-motorized Modes of Transportation for Sustainable Mobility: Strategies for its Adaptation in Mumbai, India", in Air Pollution Control in the Transportation Sector: Third Phase Research Report of the Urban Environmental Management Project (Chapter 4), Institute for Global Environmental Strategies (IGES), Japan (March 2007).
- Sudhakar Yedla, "Climate Change Mitigation Initiatives in Urban Transportation – Strategies to Promote Non-Motorized Modes of Transportation", Evaluating Climate Change and Development, Published by Global Environment Facility (GEF) Evaluation Office, The World Bank, Washington, D.C. (2010)

Published in International Conference Proceedings – Peer Reviewed

- Sudhakar Yedla, Development of Methodology for E-Waste Estimation – A Material Flow Analysis Based SYE-Model”, Proc. Water and Environment Technology Conference (WET2014) organized by Japan Society on Water Environment, 28-29 June, 2014, TWIns Waseda University, Tokyo, Japan
- Sudhakar Yedla, “ Climate Change Mitigation Initiatives in Urban Transportation – Assessment of Retrofitting Strategies to Promote Non-motorized Modes in Indian Cities”, Proc. UNU-WIDER International Conference on Climate Change and Sustainable Development, UNU-WIDER, Helsinki, Finland, 27-28<sup>th</sup> September 2012.
- Sudhakar Yedla, “Ecological Service of Urban Forestry – A case study of an Indian Metropolitan City”, Proc. Eco-servicers Partnership Conference”, University of Portland, Portland, Oregon State, USA, 30<sup>th</sup> July – 4<sup>th</sup> August 2012
- Sudhakar Yedla, “*Providing water for a Billion – Partnerships and its Limitations* “ Proc. Water and Environmental Technology (WET) International Conference Water Technology Center, University of Tokyo, Japan, 29-30 June 2012
- Sudhakar Yedla, “Retrofitting transport-infrastructure projects for climate benefits- incremental cost analysis of the strategies to promote non-motorized modes”, Prof. 16<sup>th</sup> Hong Kong Society for Transportation Studies (HKSTS) International Conference, 17-20 December, 2011, Hong Kong (Accepted)
- Sudhakar Yedla, “Dynamic of Environmental Problems – Why are the Waste Management Problems Unique in the Developing Cities of Asia?”, Proc. ICON MSW 2011, 2<sup>nd</sup> International Conference on Solid Waste Management, Kolkata, India, 9-11 November 2011
- Sudhakar Yedla, “Carbon off-setting by Retrofitting Transport-Infrastructure Projects – Incremental Cost Analysis of the Strategies to Promote Non-motorized Modes”, Proc. Conference on Carbon in a Changing World, FAO Head quarter, Rome, Italy 24-16 Oct 2011
- Heena Kapoor and Sudhakar Yedla, “Development of Methodology for E-Waste Estimation – A Material Flow Approach” Proc. International Solid Waste Association (ISWA) World Congress 2011, 17-20 October 2011, Daegu, South Korea
- Sudhakar Yedla, “E-Waste Management in India: Issues, Challenges and Policy Responses”, Proc. International Solid Waste Association (ISWA) World Congress 2011, 17-20 October 2011, Daegu, South Korea
- Sudhakar Yedla, “Innovation in MSW Management – Replication Strategies for Developing Cities in Asia”, Proc. International Solid Waste Association (ISWA) World Congress 2011, 17-20 October 2011, Daegu, South Korea
- Sudhakar Yedla, “Sustainable Waste Management in Asian Cities – Modified Landfill Design”, Proc. International Solid Waste Association (ISWA) World Congress 2011, 17-20 October 2011, Daegu, South Korea

- Sudhakar Yedla, 'Mainstreaming Climate Change and Greening Concerns into the National Development Objectives: Issues of Governance at Different Levels', 2nd Yale-UNITAR Conference on Environmental Governance and Democracy - Strengthening Institutions to Address Climate Change and Foster a Green Economy, Yale University, USA 17-19 Sept 2010
- Sudhakar Yedla and Hung-Suck Park, "Eco-Industrial Networking for Sustainable Development in Asia – A Review of Issues and Development Strategies", International Conference organized by the International Society for Industrial Ecology (ISIE), Lisbon, Portugal, 21-24 June 2009.
- Sudhakar Yedla, "Co-Benefit as an Approach to Align Climate Change Concerns with the National Development Objectives: Solid Waste Management", 14th Annual International Sustainable Development Research Conference, New Delhi, India, September 21-23, 2008
- Sudhakar Yedla, "Climate Change Mitigation Initiatives in Urban Transportation – Strategies to Promote Non-Motorized Modes of Transportation", "International Workshop on Evaluating Climate Change and Development", Alexandria, Egypt, 10-13 May 2008, organized by the Global Environment Facility (GEF) of the World Bank
- Sudhakar Yedla and Hung Suck-Park, "Eco- Industrial Networking for Sustainable Development in Asia –Issues and Development Strategies", International Conference on "Green Growth", IBS, Hyderabad, India 17-18<sup>th</sup> December 2008.
- Sudhakar Yedla, "Co-Benefit as an Approach to Align Climate Change Concerns with the National Development Objectives: Solid Waste Management", Proc. 3<sup>rd</sup> Expert Meeting on Solid Waste Management in Asia and Pacific Islands, 7-9 November 2007, Okayama, JAPAN
- Sudhakar Yedla, "Strategies to Promote Non-motorized Modes of Transportation in Mumbai", Better Air Quality Conference (BAQ - 2006), CAI-Asia and ADB, Yogyakarta, Indonesia, 13-15 December 2006.
- Sudhakar Yedla, "Choosing between Global and Local Emission Control Strategies in Urban Transport Sector – Which way to go?", International Open Science Meeting of International Human Dimensions Program (IHDP), Bonn, Germany 10-13 Oct 2005.
- Sudhakar Yedla, "Co-benefits from Urban Transportation Strategies – Comparative Analysis of Local Emission Control Strategies vis-à-vis GHG Mitigation Strategies", Proc. Better Air Quality in Asia and Pacific Rim Cities, Agra, India, December 2004.
- Shrestha, R.M., Islam, N., Kim Oanh, N.T., Adhikari, S., Yedla, S., Jiang, K., Tuan, U.S.N.D., Abrenica, J., Role of Transport Sector in Air Quality in Selected Asian Cities, Proc. Better Air Quality in Asia and Pacific Rim Cities, Agra, India, December 2004.
- Sudhakar Yedla, "Transportation trends, alternatives and policy issues in Indian cities", Proc. Better Air Quality in Asia and Pacific Rim Cities, Philippines, December 2003.
- Sudhakar Yedla, Jyoti Parikh and Ram M. Shrestha, "Sustainable Urban Transport Sector and Possibilities for CO2 Mitigation", Proc. Better Air Quality in Asia and Pacific Rim Cities, Hong Kong, 16-18 Dec. 2002.

- Sudhakar Yedla, "Index Development for Emission Reduction Potential of Various Alternative Transportation Options: Methodology and Application", Proc. Fifth International Conference of the International Society for Ecological Economics, Russian Chapter, Moscow, Russia, September 26-29, 2001.
- Sudhakar, Yedla, "Purpose Built Landfill System for the Control of Methane Emissions from Municipal Solid Waste" Proc. The Second International Methane Mitigation Conference, Novosibirsk, Russia, June 18-23, 2000.
- Sudhakar Yedla, "Environmental Valuation - An Effective Tool for Environmentally Sustainable Development ", Proc. 4th International Conference on Eco-Balance, Tokyo, October 30-November 2, 2000.
- Sudhakar, Yedla and Jyoti K. Parikh, "Valuation of LFSGR for the Management of MSW: A Case Study", Proc. Sixth International Workshop of Environmental Technology Research Network in the Asia-Pacific Region", 25-26 November 1999, Japan.
- Sudhakar Yedla, "Formulation of aquatic weed purification system", International conference on Environmental planning and management, pp. 302-307, March 1996, Nagpur, India.

#### Dissertations (Peer reviewed)

- *Design of Multi-storeyed RCC Framed Structure (Computer aided analysis) by Limit State Design (B.E. Civil Engineering thesis) - 1993*
- *Design and Evolution of Purification Process for the Treatment of Pulp & Paper Mill Effluent using Water Hyacinth (Eichornia Crassipes) (M. Tech. Dissertation) – 1995*
- *Abatement of Endosulfan Pollution from Water Environment using Indigenous Wood Charcoal (Ph.D. Dissertation) - 1999*
- *Application of Analytic Hierarchy Process for the Selection of Alternative Options for Urban Transportation in India – Analysis of Group Aggregation Methodology Adopted in AHP (Post-doctoral Dissertation submitted to AIT, Thailand) - 2001*
- *Environmentally Sustainable Urban Transportation – Comparative Analysis of Local Mitigation Strategies vis-à-vis GHG Mitigation Strategies (Post-doctoral Dissertation submitted to AIT, Thailand) – 2002*
- *Climate Change Negotiations beyond Kyoto - Developing Countries' Perspective (Dissertation/Essay for the Diploma in International Environmental Law - United Nations Institute for Training and Research) - 2006*



International Research Project Reports

- Paper on Sustainable Infrastructure and Industrialization and SDG, Submitted to UNDP and the Government of India (GoI), Ministry of Environment and Forests (MoEF) to help in **shaping SDG strategies for India**, October 2014
- Analytical Paper on Sustainable Transportation and SDG – Transportation in India: Sustainability Efforts and Linkage to Sustainable Development Goal”, Submitted to UNDP and the Government of India (GoI), Ministry of Environment and Forests (MoEF) to help in **shaping SDG strategies for India**, February 2014
- Evaluation Report, Malé Declaration on Control and Prevention of Air Pollution and Its Likely Trans-boundary Effects for South Asia, Submitted to UNEP-Regional Resource Center for Asia and Pacific (RRC-AP), January 2013
- Design of Secure Landfill Facility for Bhilai Steel Plant (BSP), Raipur, Submitted to HMR International Environmental Engineering Consultants, Muscat, Sultanate of Oman, Sept’ 2013
- Design of Landfill for the Garraff Filed Area, Iraq, Submitted to HMR International Environmental Engineering Consultants, Muscat, Sultanate of Oman, February 2012
- *Issues and Strategies Required for EIP Implementation in Ulsan, South Korea - Identified Based on Multi-actor Group Questionnaire Survey (2009)* A report submitted to BRAINPOOL Programme, Government of Korea - Prepared by Sudhakar Yedla and Hung-Suck Park, at the Ulsan EIP Center, University of Ulsan.
- *Scoping Paper for the Establishment of a UNESCAP Eco-City Development Award (2008)*, A report submitted to ESD Division of UN-ESCAP, Bangkok – Lead Author: Sudhakar Yedla
- *Non-motorized Modes of Transportation for Sustainable Mobility – Strategies for Its Adaptation in Mumbai (2006)*, UE Project, Institute of Global Environmental Strategies (IGES), Japan – Lead Author: Sudhakar Yedla
- *Cleaner Mobility in Urban Areas of India (2006)*, A full sized GEF-Proposal prepared for UNDP and Ministry of Urban Development, Government of India, Sudhakar Yedla and P. Balachandra
- *Strategies for Promotion of Energy Efficient and Cleaner Technologies in the Urban Transportation System in Selected Asian Countries (2004)*, Indira Gandhi Institute of Development Research, Mumbai, India (under “Asian Regional Research Programme on Energy, Environment and Climate Phase-III funded by Swedish International Development Cooperation Agency) – Lead author: Sudhakar Yedla
- *Socio-Economic Analysis and Policy Implications of the Roles of Agriculture in Developing Countries (2003)* – ‘Role of Agriculture’ in short, funded by Food and Agriculture Organization of the United Nations (FAO) – Lead Author for Environment Module along with Sowjanya Peddi
- *Environmental Evolution of Mumbai (2002)*, Commissioned paper, Institute of Global Environmental Strategies (IGES), Tokyo, Japan – Lead author: Sudhakar Yedla

- “Green House Gas (GHG) Emissions from Municipal Solid Waste (MSW): Estimation and Selection of Economically Feasible Abatement Methodology” funded by Department of Science and Technology (DST), Government of India under the scheme of “Fast track proposal for Young Scientists 2000-2001” – Lead Author: Sudhakar Yedla
- *Environmentally Sustainable Urban Transportation – Comparative Analysis of Local Mitigation Strategies against GHG Mitigation Strategies* (May 2002), Energy Program-Asian Institute of Technology (AIT), Bangkok, Thailand – Author: Sudhakar Yedla
- *Socio-Economic Impact Assessment for the Bauxite Mining and Alumina Refinery Unit in Lanjigarh, Orissa* (May 2002), Report submitted to Tata-AIG Risk Management Services Ltd., Mumbai, India – Lead author: Sudhakar Yedla
- *Application of Analytic Hierarchy Process for the Selection of Alternative Options for Urban Transportation in India – Analysis of Group Aggregation Methodology Adopted in AHP* (May 2001), Energy Program-Asian Institute of Technology (AIT), Bangkok, Thailand – Author: Sudhakar Yedla
- *Analysis of Technical Options for Mitigating Environmental Emissions from The Urban Transport System in Selected Asian Countries – Case study of Delhi and Mumbai* (2002), Indira Gandhi Institute of Development Research, (under “Asian Regional Research Programme on Energy, Environment and Climate Phase-II funded by Sida) – Authors: Sudhakar Yedla, Jyoti K. Parikh and Anajana Das

#### National Journals and Conference Proceedings – including abstracts and Non peer reviewed

- Sudhakar Yedla, “Dynamics of Environmental Problems – Why are the Issues Unique in the Developing Cities of Asia, *Civil Arena*, an official magazine of the Civil Engineering Association (CEA), National Institute of Technology (NIT), Warangal, India, April 2010, pp-29-31.
- Sudhakar Yedla, “Management of Pollution in Pesticides Industry: Integration of Economics with Pollution Prevention”, National Seminar on Industrial Pollution and Control (IPC-2000), BHU, Varanasi, India, 18<sup>th</sup> – 19<sup>th</sup> Feb. 2000.
- Sudhakar, Yedla and Jyoti. K. Parikh, “Feasibility Study of Landfill Technology for the Management of MSW: A Case Study of Mumbai”, ‘workshop on Municipal Solid Waste Management’, West Bengal Pollution Control Board, Calcutta, 15<sup>th</sup> November 1999.
- Sudhakar, Yedla and Dikshit, A.K., "Development of a Fixed Bed Adsorber for the removal of endosulfan from drinking water", National Seminar on Water Resources Management for Sustainable Development, S. V. University, Tirupati, 12-13 March 1999.
- Sudhakar, Yedla and Dikshit, A.K., “Removal of Endosulfan from Aqueous Phase” Journal IAEM, Vol.26, No.1 February 1999.

- Sudhakar Yedla, Dikshit A.K., Banerjee, G., "Pesticide Pollution: Endosulfan in water environment and its removal", National Seminar on Environmental Protection - Recent trends in wastewater treatment, EPTRI, Hyderabad, 19 - 20 January 1998.
- Sudhakar Yedla, "Potentiality of water hyacinth (*Eichornia crassipes*) to remove BOD in continuous flow system" (Abstract), National seminar on Environmental Conservation and Management, (ECOMAN), March 1996, Visakhapatnam, India.
- Sudhakar Yedla, Banerjee G., Dikshit A.K., "The other side of controversial aquaculture", (Abstract), National seminar on Environmental Conservation and Management (ECOMAN), March 1996, Visakhapatnam, India.
- Sudhakar Yedla, "Aquaculture", 'The Botanica', Magazine of Delhi University Botanical Society (DUBS), Vol.45, 1995, New Delhi.
- Sudhakar Yedla, "Aquaculture - Safe guarding for endangered aquatic species" (abstract published), National seminar on Environment, Biodiversity and Conservation, August 1995, Rani Durgavathi University, Jabalpur, India.
- Sudhakar Yedla, "Over exploitation of aquatic resources - Role of aquaculture as a remedy" (abstract published), National seminar on Conservation and Development in Tropics, March 1995, Banaras Hindu University, Varanasi, India.

## **Details of External Research Funding Obtained**

### Industry-or Government sponsored R&D projects

- Issues and Strategies Required for EIP Implementation in Ulsan, South Korea - Identified Based on Multi-actor Group Questionnaire Survey (2009) –Funded by BRAINPOOL Programme, Government of Korea - Sudhakar Yedla and Hung-Suck Park, Ulsan EIP Center, University of Ulsan, South Korea.  
Responsibility : Lead Author
- Book Writing Proposal on “*URBAN TRANSPORTATION AND ITS IMPACT ON THE ENVIRONMENT – Issues, Alternatives and Policy Analysis*”, Funded by IGIDR and Published by Narosa Publishers, India – Funds drawn from research projects funded by Sida.  
Responsibility : Project Leader and Author
- Scoping Paper for the Establishment of a UNESCAP Eco-City Development Award (2008), A consultancy project funded by ESD Division of UN-ESCAP, Bangkok  
Responsibility : Lead Author
- Strategies for promotion of energy efficient and emission reduction technologies in urban transport sector in selected Asian countries – A multinational research project funded by Swedish International Development Cooperation Agency (Sida) under the scheme of Asia Regional Research Programme on Energy, Environment and Climate Change Phase II (ARRPEEC Phase III) – *Work involved Air quality modeling from non-point sources*  
Responsibility : Project Director (leader) (2002-2007)

- *Analysis of technological alternatives for mitigating environmental emissions from the urban transport system in selected Asian countries* – A multinational research project funded by Swedish International Development Cooperation Agency (Sida) under the scheme of *Asia Regional Research Programme on Energy, Environment and Climate Change Phase II (ARRPEEC Phase II)*  
Responsibility : Project Investigator (1998-2001)
- “Socio-Economic Analysis and Policy Implications of the Roles of Agriculture in Developing Countries” – ‘Role of Agriculture’ in short, funded by Food and Agriculture Organization of the United Nations (FAO)  
Responsibility : In-charge for the Module on Environment (leader) (2002-2003)
- “Green House Gas (GHG) Emissions from Municipal Solid Waste (MSW): Estimation and Selection of Economically Feasible Abatement Methodology” funded by Department of Science and Technology (DST), Government of India under the scheme of “Fast track proposal for Young Scientists 2000-2001”  
Responsibility : Principal Investigator (leader) (2001-2003)

#### Capacity Building / Training Programmes

- EETCPN Environmental Economics Training Program for the Private Corporate Sector under The World Bank’s EERC Project  
Responsibility : Program Coordinator (leader) (June/July, 2000)
- Environmental Economics Training Programme under the sponsorship of the World Bank’s Environmental Management Capacity Building Project, held at IGIDR, Mumbai  
Responsibility : Program Coordinator (leader) (July 13-16, 2000)

#### Academic Programmes/Conferences/Workshops

- Coordinator, IGIDR Silver Jubilee Conference on Energy and Environment – “Cities and Sustainability”, 29-30 October 2013, IGIDR, Mumbai
- Organizing Committee Member, International Conference on Economic Instruments for Water Resources Management to be held on 9-10 January 2009 by IGIDR, Mumbai, India
- Organizing Committee Member, “How to Bring the Global Concerns into Urban Context”, Organized by the Urban Environmental Management group of IGES, JAPAN at the International Open Science Meeting of International Human Dimensions Program (IHDP), Bonn, Germany 10-13 October 2005
- Organized a Brainstorming/Inceptions Workshop on “Policies for the promotion of energy efficient and environmentally friendly technologies in urban transportation sector in India, 19<sup>th</sup> November, 2003, IGIDR, Mumbai, India
- Organizing Committee Member, Symposium on Energy, Environment and Sustainable Development, IGIDR, 6 – 7 July 2003.

- Organizing Committee Member, Inception workshop of Role of Agriculture (ROA) project funded by Food and Agriculture Organization of United Nations (FAO), IGIDR, Mumbai, India, 21-22 September 2002.
- Organizing Committee Member for the session “Energy Policy Issues and Power Sector Reforms” and “Environmental Management: Local and Global issues” in the “International Symposium on Development Policies for the Next Millennium” being held at IGIDR in July’00.

Industry-or Government-sponsored consulting assignments

- *Development of Analytical Paper on Sustainable Industrialization and Provision of Infrastructure in India to help Government of India on International negotiations for SDGs, UNDP, India office*  
Responsibility : Lead Consultant (June 2014 – August 2014)
- Evaluation of Malé Declaration on Control and Prevention of Air Pollution and Its Likely Trans-boundary Effects for South Asia (An inter-governmental agreement Implemented by SACEP), UNEP – RRC.AP  
Responsibility : Independent Evaluator (December 2012-April 2013)
- *Development of Analytical Paper on Sustainability of Industrialization and Provision of Infrastructure in India to help Government of India on International negotiations for SDGs, UNDP, India office*  
Responsibility : Lead Consultant (June 2014 – August 2014)
- *Design of a project to conduct Macro-Economic Impacts Assessment of Climate Change for Bangladesh (Mini Stern Report) under the **Asian Development Banks** (ADB) Technical Assistance Project - Strengthening the Implementation of Climate Change Action Plan for Bangladesh.*  
Responsibility : International Consultant (Environmental Economist) August 2013-Oct 2014
- *Development of Analytical Paper on Sustainable Transportation and Sustainable Development Goals (SDGs) in India to help Government of India on International negotiations for SDGs, UNDP, India office*  
Responsibility : Lead Consultant (June 2013 – January 2014)
- *Design and Development of Hazardous Landfill Site for Bhilai Steel Plant, Raipur, India for HMR Environmental Consultants, Dubai and Bhilai Steel Plant (BSP), Raipur, India*  
Responsibility : Team Leader (March 2012 – till date)
- *Design and Development of Garraf Sanitary Landfill in Iraq, for HMR Environmental Engineering Consultants, Sultanate of Oman*  
Responsibility : Team Leader (Dec 2011 – March 2012)
- *Cleaner Mobility in Urban Areas, Incremental cost analysis and Development of full project proposal for GEF, for the Ministry of Urban Development, Govt. of India and UNDP*  
Responsibility : Incremental cost expert/consultant (February 2006 –March 2007)
- *Socio-Economic Impact Assessment and Development of Relocation & Rehabilitation Plan for a Bauxite Mining and Alumina Refinery Unit at Lanjigarh, Orissa, India funded by Tata AIG Risk*

Management Services Ltd., India

Responsibility : Project Coordinator (leader) (2001-2002)

- Evolution of Environment in Mumbai, A Commission paper from Institute of Global Environmental Strategies (IGES), Japan
- Responsibility : Lead Author (leader) (2002)

## Details of Conferences Attended

**Total: 88**

**International: 54**

**National: 34**

### International Conferences Attended (54)

1. Attended the 11<sup>th</sup> International Conference of Nomura Center for Life Long Integrated Education, Tokyo, Japan, 115-19<sup>th</sup> November 2014
2. Attended Water and Environmental Technology (WET) Conference 2014 organized by the Japan Society on Water Environment, at TWIns, Waseda University, Tokyo, Japan, 28-29 June 2014, and presented a paper titled "Development of Methodology for E-Waste Estimation: A Material Flow Analysis Based SYE Waste Model"
3. Invited to deliver an expert lecture on "Economic Development and Infrastructure in India at the Times of Global Negotiations for SDGs" at Hanguk University of Foreign Studies, Seoul **Republic of Korea**, 28<sup>th</sup> May 2014
4. Invited to deliver an expert lecture on "Economic Development and Societal Transformation - Why are the Issues in Asian Cities Unique?" at Korean Institute for International Economic Policy (KIEP), Seoul, **Republic of Korea**, 30<sup>th</sup> May 2014
5. Invited to deliver an expert lecture on "Economic Development and Sustainability - Means to Integrate Sustainability into Economic Development" at The Graduate School of International Studies (GSIS), Sogang University, Seoul, **Republic of Korean**, 3<sup>rd</sup> June 2014
6. Delivered a Fellowship lecture on "India - Korea CEPA: Analysis of Industrial Competitiveness and Environmental Implications" at Korean Institute for International Economic Policy (KIEP), Seoul, **Republic of Korea**, 5<sup>th</sup> June 2014
7. Invited as Climate Change Expert, the Technical Working Group Meeting on Climate Change, Resource Scarcity and Food Security, Knowledge Partnership Program (KPP), IPE and DFID ,UK, at DFID-British High Commission, New Delhi, 18<sup>th</sup> January 2013.
8. Invited Expert, 9<sup>th</sup> Refresher Training Programme, Malé Declaration on Control and Prevention of Air Pollution and Its Likely Trans-boundary Effects for South Asia, CPCB, India, Delhi 10-12 December 2012
9. Participated in the UNU-WIDER International Conference on Climate Change and Sustainable Development, Helsinki, Finland 28-29<sup>th</sup> September 2012 and presented an invited paper
10. Participated in the Water and Environmental Technology (WET) International Conference organized by the Water Technology Center, University of Tokyo, 29-30 June 2012, Institute of Industrial Engineering, Komaba Campus, University of Tokyo, Japan and made a presentation on *Providing water for a Billion – Partnerships and its Limitations*

11. Invited International Expert, International Workshop on Water-Energy-Carbon Nexus in Mega Cities, Organized by Global Carbon Project (GCP) – National Institute of Environmental Studies (NIES) Japan, Tokyo Garden Palace, Tokyo, Japan, 1-3 March 2012
12. Participated in ICON MSW 2011, 2<sup>nd</sup> International Conference on Solid Waste Management, Kolkata, India, and Presented a paper on “Dynamic of Environmental Problems – Why are the Waste Management Problems Unique in the Developing Cities of Asia?” 9-11 November 2011
13. Participated as an Invited Speaker in the International Solid Waste Association (ISWA) World Congress 2011, Daegu, South Korea 17-20 October 2011 and Presented four papers titled
  - Development of Methodology for E-Waste Estimation – A Material Flow Approach”
  - E-Waste Management in India: Issues, Challenges and Policy Responses”
  - Innovation in MSW Management – Replication Strategies for Developing Cities in Asia
  - Sustainable Waste Management in Asian Cities – Modified Landfill Design
14. Participated in the Capacity Building Workshop on Carbon Governance in Asia: Bridging Scales and Disciplines, Organized by UNU-IAS, GCP and APN during 1-3<sup>rd</sup> November 2010 at the Institute of Advanced Studies, United National University, Yokohama, Japan
15. Participated in the 5<sup>th</sup> Workshop on “Improvement of solid waste management and reduction of GHG emission in Asia (SWGGA)” - Feasibility of mitigation action in Asia held at the National Institute for Environmental Studies (NIES), Tsukuba, Japan during 21-23<sup>rd</sup> October 2010 and made a presentation on *GHG Mitigation from Solid Waste Management – PPP Based Decentralized Composting* (21<sup>st</sup> October 2010)
16. Participated in the 7<sup>th</sup> NIES Workshop on E-waste held at the National Institute for Environmental Studies (NIES), Tsukuba, Japan during 18-20<sup>th</sup> October 2010 and made a presentation on *E-Waste Management in India – Issues, Challenges and Policy Response* (18<sup>th</sup> October 2010)
17. Participated in the 5<sup>th</sup> Workshop on “Improvement of solid waste management and reduction of GHG emission in Asia (SWGGA)” - Feasibility of mitigation action in Asia held at the National Institute for Environmental Studies (NIES), Tsukuba, Japan during 21-23<sup>rd</sup> October 2010 and made a country representative presentation on the *State of National GHG Mitigation Efforts Relevant to Waste Sector – Indian Scenario* (22<sup>nd</sup> October 2010)
18. Invited for the International Conference on Urbanization and Global Environmental Change: *Opportunities and Challenges for Sustainability in an Urbanizing World*, to be held on the campus of Arizona State University, Tempe, Arizona USA, October 15-17, 2010, The Urbanization and Global Environmental Change project of the International Human Dimensions Programme (IHDP). Made a presentation on "Co-Benefit as an Approach to Align Climate Change Concerns with the National Development Objectives: Solid Waste Management",
19. Participated in a Regional Workshop on “Waste Management in the Sohar Industrial Port”, organized by Sohar Environmental Unit, Ministry of Environment and Climate Affairs, Sultanate



of Oman, Crown Plaza Sohar, 20<sup>th</sup> September 2010

20. Invited at the 2nd UNITAR-Yale Global Conference on Environmental Governance and Democracy: Strengthening Institutions to Address Climate Change and Advance a Green Economy, 2nd Conference on Environmental Governance and Democracy at Yale University in New Haven, Connecticut, USA, September 17-19, 2010 to make a panel presentation on 'Mainstreaming Climate Change and Greening Concerns into the National Development Objectives: Issues of Governance at Different Levels'.
21. Coordinator for a "Panel on Harmonized Emission Standards in India – What can be learned from Europe Experience", Diesel Emission Conference (DEC-2010), Organized by *Integer Research*, London (8-9<sup>th</sup> September 2010), Leela Kempsi, Gurgaon, New Delhi, India
22. Participated in the Regional Training Workshop on "Integrated Solid Waste Management based on 3R Principles, IETC-DTIE of United Nations Environment Program (UNEP), UNEP-ROAP and UNESCAP, 5-8<sup>th</sup> October 2009, Osaka, Japan
23. Participated in the International Conference on "Green Growth", IBS, Hyderabad, India 17-18<sup>th</sup> December 2008, organized by ICFAI School of Business and Andhra Pradesh Forest Academy, and Presented an Invited Paper titled "Eco- Industrial Networking for Sustainable Development in Asia –Issues and Development Strategies"
24. Participated in the "International Workshop on Evaluating Climate Change and Development", Alexandria, Egypt, 10-13 May 2008, organized by the Global Environment Facility (GEF) of the World Bank and presented the "Award winning" paper on "Climate Change Mitigation Initiatives in Urban Transportation – Strategies to Promote Non-Motorized Modes of Transportation"
25. Participated in "Symposium on Technical Development for Climate Change Counter Plan" Lotte Hotel, Ulsan City, 1-2<sup>nd</sup> May 2008 and delivered a Key Note Speech on "Integrating Strategies for Local and Global Environmental Issues" on 2<sup>nd</sup> May 2008
26. Participated in the "Korean Society of Environmental Engineers' Annual Seminar" Ulsan City, 1-2 May 2008 and delivering a Key Note Speech on "Economics for Environmental Management" on 1<sup>st</sup> May 2008
27. Invited Expert, First Asia and Pacific Mayor's Forum on Sustainable Urban Infrastructure Development, Ulsan City, South Korea, 21-23 April 2008, Organized by UNESCAP and the City of Ulsan.  
  
Expert lecture on "Sustainable Urban Infrastructure Development – Integrating Strategies for Local and Global Issues" on 21<sup>st</sup> April 2008
28. Participated in the 3<sup>rd</sup> Expert Meeting on Solid Waste Management in Asia and Pacific Islands and Presented a paper on "Co-Benefit as an Approach to Align Climate Change Concerns with the National Development Objectives:Solid Waste Management", Okayama, JAPAN, 7-9 Nov'07.
29. Participated in Better Air Quality (BAQ - 2006) Conference organized by CAI-Asia and ADB, Yogyakarta, Indonesia, 13-15 December 2006.

30. Invited Expert, Project formulation Workshop for Asian Climate Change Research Programme (ACCRéP), Funded by Swedish International Development Cooperation Agency, 27-28 October 2005, Asian Institute of Technology, Thailand.
31. Attended and presented a paper at the International Open Science Meeting of International Human Dimensions Program (IHDP), Bonn, Germany 10-13 October 2005.
32. Invited Speaker, "Better Air Quality in Asia and Pacific Rim Cities (BAQ) 2004", an international workshop organized by the CIA Asia, ADB, Agra, India, 6-8 Dec., 2004
33. Attended the Annual review workshop on "Strategies to promote energy efficient technologies in urban transportation" under Asian Regional Research Project for Energy Environment and Climate (ARRPEEC -III), Asian Institute of Technology (AIT), Bangkok, Thailand, 11-12 November, 2004
34. Participated in the "Workshop-cum-study visit Community-based and Decentralized Solid Waste Management" UNESCAP, 13-17 September 2004, Dhaka, Bangladesh
35. Participated in the third Kitakyushu Initiative Network Meeting of UNESCAP, 2-4 August 2004, Kitakyushu, Japan
36. Attended the sixth Thematic Seminar on International Cooperation for Local Initiatives, IGES, Kitakyushu, Japan, 2<sup>nd</sup> July 2004
37. Attended the fifth Thematic Seminar on Public Participation for Urban Environmental Management, IGES, Kitakyushu, Japan, 20-21 January 2003
38. Attended the Better Air Quality (BAQ 2003) workshop, 17-19 December 2003, Manila, Philippines, (Sponsored by ADB, Philippines) and presented a paper "Transportation Trends, Alternatives and Policy Issues in Indian Cities"
39. Attended the International Conference on "Roles of Agriculture", Organized by United Nations Food and Agriculture Organization (FAO), 20-22 October 2003, Rome, Italy
40. Attended the Annual review workshop on "Strategies to promote energy efficient technologies in urban transportation" under Asian Regional Research Project for Energy Environment and Climate (ARRPEEC -III), Asian Institute of Technology (AIT), Bangkok, Thailand, 24-26 September, 2003
41. Attended the "Fourth Training Workshop on International Environmental Law – Biodiversity," Kushiro, Japan, 15-21<sup>st</sup> March 2003 (Sponsored by United Nations Institute of Training and Research – UNITAR)
42. Invited Speaker "Better Air Quality in Asia and Pacific Rim Cities (BAQ) 2002", an international workshop organized by the CIA Asia, ADB and HK Polytechnic University, Hong Kong, 16-18 December, 2002

43. Attended the Methodology Workshop on “Strategies to promote energy efficient technologies in urban transportation” under Asian Regional Research Project for Energy Environment and Climate (ARRPEEC -II), held at Asian Institute of Technology (AIT), Bangkok, Thailand, 7-8 October, 2002
44. Participated in the Inception workshop of Role of Agriculture (ROA) project funded by Food and Agriculture Organization of United Nations (FAO), IGIDR, Mumbai, India, 21-22 September 2002.
45. Attended the World Bank Institute’s course on Environmental Economics and Development Policy 2002 (EEDP V), Washington D.C. United States, 15-26 July, 2002
46. Attended the Third Annual Review Workshop on Asian Regional Research Project for Energy Environment and Climate, Asian Institute of Technology, Bangkok, Thailand, 25-27 March, 2002
47. Attended the Training and Research Workshop organized by IUCN, - Asian Region Office and South Asian Network for Development and Research (SANDEE), AIT, Thailand, 7-12<sup>th</sup> March 2002 and delivered a talk on "Economic Valuation of Pesticide Pollution in India – A Policy Analysis for the Development of Eco-Friendly Agriculture Practice".
48. Attended the "International Conference on Advances in Civil Engineering (ACE 2002)" held at IIT, Kharagpur, India during January 3-5, 2002 and presented a paper titled "Sustainability Approach to Waste Management - A Case of Modified Design for Landfills".
49. Open AIT lecture on “Application of Analytic Hierarchy Process for the Selection of Alternative Options for Urban Transportation in India – Analysis of Group Aggregation Methodology Adopted in AHP”, May 22, 2001, Asian Institute of Technology, Thailand
50. Attended the Second Annual Review Workshop on Asian Regional Research Project for Energy Environment and Climate (ARRPEEC -II), Asian Institute of Technology (AIT), Bangkok, Thailand, 19-21 February, 2001
51. Participated in the First Indian Research Forum on “Green House Gas Pollution Prevention – Climate Change Supplement” - A Programme of the USAID, organized by Louis Berger, Inc. and IGIDR at Indira Gandhi Institute of Development Research, Mumbai, India on 22/01/01
52. Participated and presented a paper titled "Policies and Strategies for Better Management of Municipal Solid Waste in Indian Cities at the International Human Development Programme workshop on Climate Change, IHDP-Bonn, September 10-19, 2000, Bonn, Germany.
53. Participated and presented a paper “Purpose Built Landfill System for the Control of Methane Emissions from Municipal Solid Waste” at The Second International Methane Mitigation Conference, Novosibirsk, Russia, June 18-23, 2000.
54. Participated in the International Youth Forum on Lifelong Integrated Education – “Think together: Future for us, Humanity and the Earth”, Nomura center for Lifelong Integrated Education, Tokyo, Japan, 17-19 August 1999.

**National (34)**

55. Participated in National seminar on Conservation and Development in Tropics, March 1995, BHU, Varanasi, India, and presented a paper
56. Participated in National seminar on Environment, Biodiversity and Conservation, August 1995 at Rani Durgavathi University, Jabalpur, India and presented a paper
57. Participated in National seminar on Environmental Conservation and Management (ECOMAN), March 1996, Visakhapatnam, India and presented a paper
58. Participated in National seminar on Environmental Protection: Recent trends in wastewater treatment, 19 - 20th January 1998, EPTRI, Hyderabad, India and presented a paper
59. *Bio-methanation: An Alternative Energy Source – Appropriate Choice for the Next Millennium*, presented at Indira Gandhi Institute of Development Research, Mumbai, India on 3<sup>rd</sup> March 1999.
60. Attended the “Consultative Symposium on Environmental Governance for Sustainable Development” being held by Indira Gandhi Institute of Development Research (IGIDR), Mumbai, India on June 11<sup>th</sup> 1999 in Mumbai, India.
61. Participated and presented a paper entitled “Feasibility of Landfill Technology for Management of MSW: A Case Study of Mumbai” in the workshop on “Municipal Solid Wastes: Technology and Management” NDC & West Bengal Pollution Control Board, 15<sup>th</sup> Nov 1999 at Calcutta, India.
62. Participated in Technical Advisory Committee meeting held for Rural Pollution and Health Impacts at IGIDR, Mumbai, India, 15<sup>th</sup> November 1999.
63. Participated in the Brainstorming session which is a part of training programme on Environmental Economics for top level executives from corporate sector under the World Bank Environmental Management Capacity Building Technical Assistance Project (EMCaB) being implemented by MoEF, Govt. of India, 29 June, 2000, IGIDR, Mumbai, India.
64. Participated and presented paper “GHG mitigation from MSW” in the Group Monitoring Workshop of Department of Science and Technology’s “Fast Track Scheme”, January, 2003, Nagpur, India.
65. Participated as a representative of “National Research Institute” for the Sida project at National Dissemination Seminar on, “Asian Regional Research Project on Energy, Environment and Climate (ARRPEEC)”, Central Electricity Authority (CEA), New Delhi, 5<sup>th</sup> May 2003.
66. National review workshop on “Roles of Agriculture” IGIDR, Mumbai, India, 6-7 October 2003 (sponsored by FAO of UN)
67. GEF-Consultant/Expert, Workshop on Cleaner Mobility in Urban Areas in India, UNDP/Ministry of Urban Development, Government of India, New Delhi, 26<sup>th</sup> Aug, 2006.

68. GEF-Consultant for Project Proponent, GEF Empowered Committee meeting at the Ministry of Environment and Forests, Government of India, 6<sup>th</sup> September 2006.
69. Delivered a talk on “Air Quality Modeling: Case Studies of Delhi and Mumbai”, Seminar on Valuation and Accounting of Urban Air Pollution in India, Environmental Economics Workshop, Institute of Economic Growth (IEG), New Delhi, India, 30<sup>th</sup> November 2006
70. Participated in the “LEAD Consultation on the Status of Local Environmental Governance in India and Strategies for Future Action”, 15-16<sup>th</sup> March 2007, India Habitat Center, New Delhi (Organized jointly by LEAD International and British Government (Foreign Office))
71. Delivered a talk on “Urban Transportation and Climate Change in Indian Cities: Experiences from Delhi and Mumbai”, at the Joint Seminar on Climate Change: The Urban Transportation Challenge, Municipal Corporation of Kolkata and the Centre for Social Markets CSM), 8<sup>th</sup> August 2007, The Conclave, Kolkata, India (Funded by Heinrich Böll Foundation, Germany)
72. Participated in the Round-table on “Cities on River: Preparing for Climate Change”, Floatel, Kolkata, 8<sup>th</sup> August 2007, Kolkata, India, Organized by the INTACH and the Centre for Social Markets (CSM), (attended by Mr. Murad Qureshi, Member of London Assembly)
73. Invited Speaker for Environmental training program on “EIA studies and EMP of contaminated sites for industrial sector”, sponsored by Central Pollution Control Board (CPCB), CSIR Central Salt & Marine Chemicals Research Institute, Bhavnagar, Gujarat, India, 13<sup>th</sup> February 2013
74. Invited Speaker at the Maharashtra Water Forum organized by EI Water, Hotel Orchid, Santacruz East, Mumbai, India, 25<sup>th</sup> September 2013 and delivered a keynote speech on “Basic Services in Urban Centers – Present Trends and the Way Forward”
75. Invited Speaker at the UGC Sponsored State Level Seminar on Sustainable Infrastructure Development in India, 11-12 October 2013, Organized by the Department of Economics, Smt. P.N.Doshi Women’s College, Mumbai and delivered a talk on “Urban Transportation Infrastructure: Integrating Strategies for Sustainable Transportation”
76. Invited as a Key note speaker for the UGC sponsored Seminar on “Frontiers in the Field of Science, Technology and Sustainability”, organized by Government of Maharashtra’s Elphinstone College, Mumbai, 14-15<sup>th</sup> February 2014.
77. Key Note Speaker, UGC sponsored Seminar on “Environmental Management: New Paradigm for Water, Sanitation and Sustainability” organized by the School of Engineering, Cochin University of Science and Technology, 23<sup>rd</sup> January 2014 and delivered a key note speech on “Economics for Environmental Management”
78. Participated in the India Development Report (IDR) Workshop organized by Indira Gandhi Institute of Development Research (IGIDR) as a contributing author and presented a paper on “Indian Transportation and Its Sustainability”, 7<sup>th</sup> March 2014, IGIDR, Mumbai

79. Invited expert on the panel “Environment and Climate Change” at the Young Social Innovators Conclave organized by Indian Youth Fund, Hindustan Times and Narottam Seksaria Foundation, Mumbai. India, 10<sup>th</sup> October 2014
80. Invited for the Mumbai dialogue on green architecture "Building sense: Beyond the green façade of sustainable habitat" organized by Center for Science and Environment, Studio-X Mumbai Fort, Mumbai, 11<sup>th</sup> October, 2014.
81. Invited as a Coordinator for a Panel Discussion on The importance of developing alternative fuel and technology solutions in India at the 5<sup>th</sup> Integer Emissions Summit India 2015, 25-26 March, Piccadily Hotel, New Delhi
82. Invited as an expert for the International Seminar on “Sustainable Solid Waste Management for Cities: Opportunities in SAARC Countries”, 25-27 March 2015, Nagpur, jointly organized by NEERI and Imperial College London.
83. Invited expert for a two day National Seminar on Industrial Ecology – Inter-disciplinary Perspectives and Opportunities, 20-21 March 2015, Organized by GMR Institute of Technology, Rajam and Department of Science and Technology, Government of India.
84. Invitation as an Expert Speaker to lecture on Environmental accounting of Transport and Solid Waste Management Sector at a one week refresher training program for Statistical Personnel of DES, U. P. on Environment Statistics and Natural Resource Accounting, 23-27 February 2015, Indian Institute of Forest Management (IIFM) Bhopal
85. Invited as an Environmental Economist Expert to deliver a series of lectures at a Workshop on Environmental Economics organized by the Department of Economics, University of Mumbai, 10-12 February 2015.
86. Invited speaker at a Two - day International Seminar on “Natural Resource and National Accounts in South Asia”, 5-6 February 2015, Institute for Social and Economic Change, Bangalore, India and gave a “lecture on Inclusive Valuation of Solid Waste Management services in India”
87. Chair Person, Session on Economics of Climate Change, at a Two - day International Seminar on “Natural Resource and National Accounts in South Asia”, 5-6 February 2015, Institute for Social and Economic Change, Bangalore, India
88. **Invited expert** at the Consultation Workshop on the 3<sup>rd</sup> Regional Plan of Mumbai Metropolitan Region (MMR) for year 2014-2034, MMRDA, BKC Mumbai, 28<sup>th</sup> March 2014.

## **Details of Student Guidance**

### PhD Supervision (2)

- Ph.D. thesis “Analysis of Some Environmental Problems in India: Case Studies from Rural and Urban Areas” submitted by Ms. Sarika Kansal to Indira Gandhi Institute of Development Research (IGIDR), Mumbai, India (2006) - Thesis defended
- Ph.D student (Ms. Shikha Jha) working on Issues in Equitable Transportation, Indira Gandhi Institute of Development Research, Mumbai, India (2010 – till date) – Thesis under progress

### Post Graduate Student Supervision (7)

- Krishna Chaitanya - M.Tech (Environmental Engineering), Division of Water Resources and Environmental Engineering, Department of Civil Engineering , National Institute of Technology (NIT) Warangal (2008-09) - Awarded as an Outstanding thesis (only excellent grade in the entire division)
- Post-graduate (M.S) thesis “GHG mitigation potential of various MSW disposal options for Mumbai, India” submitted by Ms. Sindhu to Cochin University of Science and Technology, (2003) – Awarded as an Outstanding thesis of the batch
- Nirupam Dutta – Graduate Student - Indira Gandhi Institute of Development Research (IGIDR), Mumbai (2007)
- Alex Rafalowicz, Post-graduate (Master of Law and Economics under reputed ERASMOS-MUNDUS programme of European Union) thesis on Climate Debt – A Developing Country Perspective of Climate Change (2011)
- Soumyaditya Paul, Mapping of Cities for Climate Change Vulnerability, January – May 2015
- Gagan Goyal, Dynamics of Co-benefits of Metro Systems in Urban Transportation in Indian Cities, January – May 2015
- Christoph Rumpler, Post-graduate (Master of Law and Economics under reputed ERASMOS-MUNDUS programme of European Union) thesis on Wildlife Conservation in India – Strategies for a Stakeholder-Inclusive Protected Area Management (2015)
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### Undergraduate student Supervised (4)

- K.Krishna Kanth – Graduate Student, Division of Water Resources and Environmental Engineering, Department of Civil Engineering, National Institute of Technology (NIT), Warangal, 2009-10
- S. Nageswara Reddy - Graduate Student, Division of Water Resources and Environmental Engineering, Department of Civil Engineering, National Institute of Technology (NIT), Warangal, 2009-10
- Vivek Kumar Singh - Graduate Student, Division of Water Resources and Environmental Engineering, Department of Civil Engg, National Institute of Technology, Warangal, 2009-10

- Sandeep Kumar Mahapatra - Graduate Student, Division of Water Resources and Environmental Engineering, Department of Civil Engineering, National Institute of Technology (NIT), Warangal, 2009-10

## Ongoing and Recently Concluded Works

### 1. Sustainability Science and Sustainable Development Goals (SDGs)

- **Cities and Sustainability** – *Issues and Strategic Pathways, Preparation of an edited book for Springer Publishers addressing various important aspects of Sustainability of Cities*
- **Sustainability Science** and its application to **cities** – Analysis of the Sustainability Constructs of Cities
- Analysis of transportation in India and the sustainability efforts and their linkage to the newly Sustainable Development Goals. This work analyses if the proposed SDGs can capture and ensure the **sustainability of transport** system and proposed a new **SDGs** to be negotiated by the Government of India.
- Critical Analysis of Industrialization and **Provision of Infrastructure** in India and the preparedness of national policies towards meeting the ambitious targets set under the newly negotiated **SDGs** globally. This analysis was to help Indian Government in negotiating SDGs and the their targets.

### 2. Sustainable and Equitable Transportation

- Development of a Useful and **Effective Framework** for the analysis of **Urban Transportation** and Its Environmental and Climate Implications and Identification and Development of Policy Alternatives and Assessment of Barriers for Policies as well as Sustainable Alternatives including non motorized modes of transport (Research carried out over a period of 14 years)
- Transportation in India and Its Planning for **Sustainable Mobility** – Analysis of the present transportation trends and the sustainability of the initiatives.
- **Establishing and Measure of relative inequity** (secondary data based) in the provision of transportation service in Mumbai – Development of methodology to measure the relative inequity both for inter and intra ward connectivity. This is a unique approach to establishing the presence of inequity and to measure the same. From the preliminary results, the inequity in provision of travel service is very significant among different sections of the society.
- Questionnaire survey at a **ward level** to **measure the inequity** in provision of travel service to various sections of the city viz. poor - non poor; normal and challenged; basic needs – auxiliary needs; motorized-non motorized, inter-intra ward travel etc.

### 3. Sustainable Waste Management and Waste Minimization

- Identification of Locally Appropriate **Strategies** to Promote **Eco-Industrial Parks** by



employing a questionnaire survey using a questionnaire designed for its universal application. The questionnaire survey was conducted in **South Korean Industrial clusters** located in the City of Ulsan, which is one of the popular industrial towns in the world.

- SEZ in India: How to Make them People Centric and Sustainable – Identification of Challenges and Opportunities and Development of Strategies/Policy Measures in a Multi-stakeholder Consultation Approach
- Development of a methodology - **SYE-Waste Model** – for E-waste estimation based on **Material Flow Analysis** (MFA)
- **Innovative design** of sanitary and hazardous **landfills** for industrial complexes in Iran and India

#### **4. Climate Change Mitigation and International Negotiations**

- Two Decades of **Climate Change Negotiations** – Carbon Budget Allocation Approach to Re-shaping Strategies. This work analyses the global climate scenarios based on historical emissions as well as carbon budget left for the global consumption and propose way to address the equity issues on the global development space.
- **GHG Control** Potential of **Solid Waste Disposal** Methods – Various methods of waste disposal have been assessed for their GHG emissions potential and attributed the control potential for the local conditions in Indian cities.

#### **5. Development, Environment and Sustainability**

- Provision of **basic and civic** and environmental **services** in **urban** centers of India – Challenges and the way forward. This analyses the adequacy in provision of basic services such as water, sanitation, solid waste management and assesses the adequacy of Indian government initiatives for the future and make suggestions on its improvement.
- Urban Energy Dynamics – Estimation of urban energy consumption from all sectors using bottom up modeling to delineate energy consumption and environmental emissions between urban and rural areas
- Does CEPAs Enhance the Industrial Competitiveness – **Analysis of India - Korea CEPA** for their effect on relative industrial competitiveness and also their implications on Environment and Natural Resources.
- Dynamics of Development Process – Why are the Issues Unique in the Developing Cities of Asia? The **Development and the Environment** interaction is analysed using the **Stage model** to understand the dynamics in Asian context, which is in a contrast to the western model.

## Past Research Works Segmented into Broad Thematic Areas

### Solid Waste Management towards Sustainability

- Why are the Waste Management Issues Unique in Asian Countries? Development Growth Model based explanation for the “High End” and “Low End” solid waste management issues in Asian countries/cities
- Identification and *Socio-Economic* and Replication Analysis of Strategies for the Replication and Sustainability of Urban Environmental Innovations – A Case of *Community-based Decentralized Composting* in Dhaka
- *Application of Decision Making Science* to Waste Management - Strategies for the replication of Innovative Urban Practices – Application of Multi-Criteria Analysis to the Dhaka Composting Model
- *Co-benefits* as an approach to align climate change concerns with the national development objectives: Solid waste management
- Development of *integrated waste management models* with due consideration to landfill with gas recovery options and waste composting; a sensitivity analysis to assess the range of effectiveness of these methods of waste management.
- Modified Landfill *Design* for Sustainable Waste Management – Design modifications to the conventional landfill to make it a semi-engineered urban unit
- *Designing (modified) of Landfills* for Energy Efficient Waste Management – A Developmental Plan for Sultanate of Oman
- Waste to Energy - Development of Purpose Built Landfill System for the *Control of Methane Emissions* from Municipal Solid Waste
- Economic Evaluation of LFSGR for MSW Management: A Case Study
- *Techno-economic feasibility* of landfill system for MSW management
- *Economic Insight* to MSW Management in Mumbai
- *Policies and Strategies* for Better Management of Municipal Solid Waste in Indian Cities
- Sustainable Waste Management in Mumbai and London – Drawing comparisons and Lessons
- Development of Decentralized Waste Management Model for Indian Cities
- Bio-methanation: An Alternative *Energy Source* – Appropriate Choice for the Next Millennium

### Transportation and Sustainable Mobility Issues

- Energy demand, pollution and GHG emission forecasting from transport sectors in Delhi and

- Mumbai for a planning period of 20 years;
- Identification of energy saving and GHG mitigation options in urban transport sector and their Techno-economic analysis of urban transport systems – Assessment of energy saving potential, emission reduction potential and economic viability (in terms of marginal abatement cost) of various transportation alternatives;
- Transportation planning for targeted GHG mitigation – by adopting multiple constrained dynamic optimization technique;
- Barrier analysis for the GHG mitigation option in transport sector – by adopting multi-stakeholder approach and analytic hierarchy process with multi-criteria analysis;
- Strategies to promote cleaner fuels (CNG) and alternatives in urban transportation in order to control GHG and other harmful emissions.
- Choosing between Climate Change Mitigation Strategies and Local Emissions Mitigation Strategies from Urban Transport Sector – Comparative analysis of GHG mitigation strategies vis-à-vis local pollution control strategies from transportation sector while conducting long term transportation planning at city level;
- Analysis of strategies to promote non-motorized modes of transportation in developing countries.
- Development of Full Scale GEF Project on Sustainable Mobility in Indian Cities – Integrating it with the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) (Along with Dr. Balachandra of IISc Bangalore)
- Identification of Feasible Green (Sustainable) Mobility Initiatives in cities such as Hyderabad, Pune, Ahmadabad and Thirivananthapuram (Class I cities in India)
- Retrofitting transport-infrastructure projects for climate benefits- incremental cost analysis of the strategies to promote non-motorized modes
- Co-benefits Approach to Urban Transportation – Deriving GHG Mitigation Credits from Local Transportation Strategies, Development of a Generic Framework

#### Application of Decision Making Tools

- Application of Analytic Hierarchy Process for the Selection of Alternative Options for Urban Transportation in India – Analysis of Group Aggregation Methodology Adopted in AHP
- Application of multi-criteria approach and AHP to barrier analysis;
- Development and application of a multi-criteria and multi-stakeholder methodology for prioritization of policy measure to implement sustainable transportation modes such as NMT and cleaner modes of transport

### **Climate Change, Energy, Low Carbon Growth and Sustainable Development**

#### **Estimation and GHG Mitigation in Waste and Transportation Sectors**

- Assessment of GHG estimation methods for waste management sector and GHG mitigation

potential of various waste disposal options and policy development for better Solid waste management (Department of Science and Technology, Government of India)

- *GHG emission estimation* and forecasting for Urban Transportation System of Delhi and Mumbai
- Identification and *techno-economic assessment* of various alternative for the control of GHG emission from transport and waste sectors
- Barrier Analysis for GHG mitigation options in urban transport sector
- Application of Decision Making Tools such as Analytic Hierarchy Process (AHP) for Choosing Appropriate GHG Control Measures for Indian Cities

### **Mainstreaming of CC and Co-Benefits Approach**

- Mainstreaming Climate Change Concerns into National Developmental Objectives of Developing Countries – **Co-benefits Approach**
- Co-benefits as an Approach to Climate Change – Sectoral Approach covering Waste and Transportation

### **Low Carbon Growth and Sustainability Science/City**

- Development of Framework for the UNESCAP's Sustainable City Award
- Assessment of Energy and Carbon Intensity of Urban India (in collaboration with Global Carbon Project, NIES, Japan)

## **Pollution Control (Water, Wastewater and Air Pollution)**

### **Wastewater Treatment**

- Purification of pulp and paper mill Effluent using water hyacinth (*Eichornia crassipes*);
- Design and evaluation of a wastewater treatment system for a paper producing industry

### **Water Treatment**

- Development of low cost material and treatment system for the removal of pesticides (Endosulfan) from water;
- Toxic effects of pesticides on colonies of micro organisms;
- Biological degradation of pesticides (Endosulfan) and evaluation of their toxic effects on viable bacterial cells
- Development of low cost adsorber for the removal of Chromium (VI) from water

### **Air Quality Modeling**

- Air quality modeling to estimate the impact of GHG mitigation measures in Delhi and Mumbai urban transport systems on the ambient air quality
- Air quality monitoring and Analysis in Warangal City, Andhra Pradesh, India

### **Urban Environmental Issues and Their Nexus with Economic Development**

- Economic Development, Urbanization and Environment in Asia – A Review
- Urban Environmental Management in Asia – Overview of Issues and Trends
- Dynamics of environmental Issues in Mumbai – A stage Model Approach
- Transportation and Environment in Developing Countries – A critical Analysis
- Water-Carbon-Energy nexus – A quick review of methodologies and intent to Indian system of water and carbon accounting

### **Environment and Socio-Economic Impact Assessment of Development Initiatives**

- Socio-Economic Impact Assessment of a Bauxite Mining Project at Lanjigarh, Orissa State, India
- Development of City level data base (Indian) for economic, social, environmental and sustainability parameters

### **Environment, Agriculture and Climate Change**

- Environmental externalities from Agriculture - National assessment and documentation of positive and negative environmental externalities from agriculture including the GHG emissions from Indian agriculture – For UN-FAO, Rome