

Areas of Interest

- *Land Use Planning*
- *Sustainable Development Planning*
 - *Planning for Climate Protection*
 - *Growth Management*
- *Urbanization and Planning Issues in Third World Cities*

Education

Ph.D. in Regional Development Planning (ABD - expected graduation June 2012)

University of Cincinnati, School of Planning, College of Arts, Architecture & Planning (DAAP),

Master of Urban and Regional Planning (1997)

CEPT University, School of Planning, Ahmadabad, India

Post Graduate Diploma in Land Management (2004)

Institute of Housing and Urban Development, Rotterdam, The Netherlands

Bachelor of Architecture (1995)

M. S. University, Faculty of Planning and Technology, Vadodara, India

Doctoral Dissertation

Measuring the impact of land use diversity on household travel related CO2 emissions

My doctoral research is based in the 8-county Greater Cincinnati region. The research hypothesis is that increasing land use diversity reduces vehicular miles travelled. In my dissertation I develop an improved measure of land use diversity using Spatial Analyst tools and other variables using Network Analyst tools in GIS environment. The study will provide key insights on the impacts that different mixes of land uses have on GHG emissions, energy consumption, and climate change. It will inform the case for land use diversity as a long-term climate protection policy measure for cities.

Dissertation Committee: Dr. Carla Chifos (Chair), Dr. Michael Romanos, Dr. Olivier Parent

Awards and Honors

- *Outstanding Teaching Award*, School of Planning, University of Cincinnati, June 2011
- ACSP Student Travel Award, for travel to the ACSP Annual Conference, 2011
- The James R. Webb Foundation Travel Award of the American Real Estate Society, 2011
- *People's Choice Award for the Best Poster*, ACSP Annual Conference, Minneapolis 2010
- Selected for ACSP scholarship for PhD Workshop at Georgia Tech., Atlanta 2010.

- **University of Cincinnati Graduate Scholarship and Research Assistantship** for doctoral studies: 2007-2010.
- **ProVention Applied Research Grant:** ProVention Consortium Round II: ADPC & World Bank 2005-06 (\$4000)
- Conceptualized, wrote, obtained, and managed **European Union - India Small Projects Facility grant for applied research** in 2005-06, for ex-employer Environmental Planning Collaborative (approx. € 60,000 from EU and additional € 20,000 match funding from Gujarat state govt.)
- **Urban Development Expert** for an Expert Group Meeting, Thailand on behalf of UN HABITAT on a project on Housing for the Urban Poor for least developed countries. 2005.
- **Netherlands Fellowship Program** for post graduate diploma short course in The Netherlands: Royal Netherlands Embassy, 2004.
- **United Nations Environmental Program (UNEP) Fellowship** to attend a 2-week Training Program on Management Systems for the Urban Local Environment at Osaka, Japan. 2003.
- Ministry of Human Resource Development, Government of India, Graduate Scholarship, 1995-1997
- Second position in the University for undergraduate studies in Architecture, 1995

Recent Publications

Peer-reviewed Book Chapter

Byahut, Sweta. 2010. Climate change and sustainable urban planning strategies for India. Book chapter in *India Infrastructure Report 2010*. Oxford University Press, New Delhi.

Book Review

Byahut, Sweta. 2011. Book Review of Bernadette Hanlon et al. Cities and suburbs: New metropolitan realities in the US, and Bernadette Hanlon Once the American dream: Inner ring suburbs of the metropolitan United States. *Journal of Urban Affairs*. Vol. 33. No. 2

Research Reports

Byahut, Sweta and others. 2008. Revenue enhancement through underutilized land redevelopment: The case of Hamilton County, Ohio. Academic research project at School of Planning, University of Cincinnati

Byahut, Sweta and others. 2008. Neighborhood redevelopment and revitalization: The case of the Uptown area adjacent to the campus of the University of Cincinnati. Academic research project at School of Planning, University of Cincinnati

Byahut, Sweta and Darshan Parikh. 2007. "Integrating disaster mitigation in urban planning practices in India", in Innovative initiatives in disaster risk reduction. ProVention Consortium (ADPC-World Bank)

Under Progress

The first paper is a comprehensive literature review "Programs, tools, and strategies to respond to the issues of land vacancies and abandonment in American cities"

The second paper is on “Urban poverty and disaster risk reduction through affordable housing: Case studies from Indian cities”. I am amongst 16 doctoral students shortlisted for paper competition on reducing urban poverty in developing countries organized by USAID and ACSP

The third paper in progress is based on part of my dissertation research methodology “Optimizing land use diversity for measuring its impact on climate change”.

Other Publications

Byahut, Sweta. 2006. Greater Role for Professionals in the Development Regulation System. *GICEA News* (Indian journal)

Byahut, Sweta et al. 2005. *Design Manual for a Barrier-Free Built Environment*. Handicap International (India)

Byahut, Sweta. 1997. Declining Agricultural Biodiversity in the Doon Valley of India, Unpublished graduate thesis, School of Planning, CEPT University, Ahmedabad, India

Byahut, Sweta. 1995. Integrated Tourism Development Plan for Champaner World Heritage Site. Unpublished undergraduate thesis, Faculty of Technology, M.S. University, Vadodara, India

Teaching Experience

School of Planning, University of Cincinnati, Ohio

- Instructor: Film and the Global Village – 23PLAN397 (Spring 2011)
- Instructor: Environmental Processes and Programs - 23PLAN 606 (Fall 2010)
- Co-Instructor: Urban Spatial Structure - 23PLAN 651 (Spring 2010)
- Teaching Assistant: Environmental Processes and Programs - 23PLAN 606 (Winter 2009)

Relevant Work Experience

Research Assistant at University of Cincinnati

- Innovative models of sustainable land management regimes for integrated heritage protection areas in US and Canada with Dr. Carla Chifos
Prepared desk based research case studies. I coordinated about 40 desk based case studies from across North America and Europe, as well as was involved in developing country profiles
- Researching script facts for Research script facts for documentary film on decline of first suburbs of America “The New Metropolis”. 2007.
- Literature review on built environment and climate change with Dr. Carla Chifos. 2008-09
As part of writing grant applications, I undertook extensive literature review over one year exploring linkages between urban land use pattern, transportation, and their impact on the global climate. My dissertation research is an offshoot from this literature research.

Program Coordinator, Project Manager and Urban Planner at Environmental Planning Collaborative, a not-for-profit urban planning firm in Ahmedabad, India (1997 –2006)

- Legal and Administrative Framework for Development Regulation in Gujarat, study for EPC funded by the European Union (2005-06)
This was enabled by a EU-India Small Projects Facility grant (EU – INDIA SPF Project No. 96-425) of approx. 60,000 Euros that I conceptualized, wrote, managed and coordinated. The project involved transfer of European knowledge to India through forging partnerships between a European organization, the state

government and local city managers. It involved a series of three capacity building training programs and workshops. I was responsible for overall coordination, grant management, liaisoning with state and local agencies, and the EU. As a part of this project, I led a team of 6 state government officers to the UK on a knowledge transfer tour.

- **Enabling Area Specific Building Byelaws and Local Area Planning in Delhi, study for EPC funded by USAID FIRE (D) Project (2004-05)**

I served as part of the core team that undertook the legal drafting of detailed Building Byelaws and drafting legislative amendments to the Delhi Municipal Corporation Act, 1956. Focus was on streamlining procedures and building performance regulations. In the first phase, I assisted the Expert Group with consultations and research on building byelaws, legislative and policy and recommendations to reform the regulation system that culminated in a Consensus Paper.

- **ProVention Applied Research Grant Project, individual research project (2005-06)**

The ProVention Applied Research Grant by ProVention Consortium (World Bank and Asian Disaster Preparedness Center, Bangkok) allowed me to undertake research on “Integrating Disaster Mitigation in Urban Planning Practices in India”. Project involved case studies in Delhi, Ahmedabad, and Mumbai.

- **Rationalizing Development Control Regulations for Ahmedabad City, study for EPC funded by the Gujarat State Disaster Management Authority (2003-04)**

This extensive applied research project involved analysis of the current development regulation systems in Gujarat state – examining enabling legislations, enforcement agencies and protocols, method of framing and content of development regulations, certification of professionals, etc. Process involved in-depth analysis of current regulations and consultations with government planning staff, experts; global best practices; intended and inadvertent consequences of regulations on safety and stability and alternative regulatory approaches. This project was funded by Asian Development Bank and the Gujarat State Disaster Management Authority.

- **Development Plan for Bhuj Area Development Authority, for EPC funded by the Gujarat Urban Development Company and Asian Development Bank (2001-02)**

Bhuj town in western India had a population of 250,000 and was ravaged in 2001 earthquake, killing 14,000 people. Extensive post-disaster reconstruction planning was undertaken by the Gujarat government agencies. As a Land-use Regulation Specialist on the statutory Development Plan for Bhuj town, I was responsible for formulating development control regulation and building regulations for the disaster affected town of Bhuj. Project was funded by Asian Development Bank through the Gujarat Urban Development Company.

- **2002. Gandhinagar Urban Development Plan and Implementation Strategy, for EPC funded by GUDA (1999-2002)**

The planned area covered 387 sq. km including the core city and adjoining 40 villages. The Plan contains proposals for land use zoning, road network, infrastructure development and development control regulations for the year 2011. As the Project Manager, I was responsible for supervising project related activities, prepared project reports, and coordinating various aspects of the plan with the project team including preliminary data collection, land use surveys; consultations with a wide variety of stakeholders, formulated development proposals, zoning and road network proposals. Later I was also involved in reviewing and incorporating public opinion and preparing the Comprehensive Development Strategy. The client was the Gandhinagar Urban Development Authority.

- **Reformulation of Development Plan for Fringe Area of Ahmadabad for 2011 (1998-2000)**

It included fringe area planning of a rapidly growing metropolitan area of 5 Million populations including zoning plan, growth management strategies, planning for a controversial 80 km. long Ring Road, its alignment planning, Right of Way configuration planning, and its implementation strategy. Many proposals of the plan like the 80 km Ring road is now implemented as part of the plan following land pooling and land readjustment as technique to develop ring road, alignment rationalized, zoning rationalized, phasing of infrastructure development and phasing of town planning schemes materialized as recommended in the plan

- **Surat Old City Revitalization Plan – A USAID funded & UNCHS Award Winner (1997-98)**

The plan was aimed to transform the old city into vibrant business district, and it addressed traffic congestion, aging infrastructure, deteriorating environment, dilapidating housing and economic revitalization.

- Ahmadabad Walled City Revitalization Plan – A USAID funded & UNCHS Award Winner project (1997)

These two USAID funded plans won the UNCHS 100 Global Best Practices award (Dubai Municipality). This participatory and collaborative Plan involved City officials and key stakeholders in identifying a roster of 34 implementable capital improvement, project development, institutional strengthening and capacity building projects across 14 plan components. I was responsible for data collection, mapping & development and detailing of plan proposals. Of 14 plan components, I focused on open space management, city center redevelopment detailed area study, infrastructure, and solid waste management.

Senior Consultant, at School of Planning, CEPT University (2001-02)

- Sub-regional Development Plan for Vagra-Dahej, Gujarat – A comprehensive regional development strategies and plan for a coastal region (2001-2002)

The plan involved a multi prong approach to achieve balanced growth in a coastal region facing development dichotomy: a resource rich region with poor people. The plan included Water resource management plan; Livelihood regeneration and natural resource management plan; Economic and infrastructure development plan and Land management plan including their implementation strategy.

Peer Reviewed Conference Papers

- Byahut, Sweta. May 2011. Paper presentation on “Operationalizing land use diversity”, in the 17th International Sustainable Development Research Conference, New York.
- Byahut, Sweta. April 2011. Paper presentation on “Approach to improved methodology for computing land use diversity”. American Real Estate Society Annual Conference, Seattle.
- Byahut Sweta. October 2010. Award winning poster presentation on my dissertation research proposal at ACSP Annual Conference, Minneapolis.

Invited Lectures

- Guest lecture entitled “Sustainable Urban Development in the United States”, at Sustainable Urban Engineering, University of Cincinnati, March 2008.
- Guest lecture entitled “Land use and climate change connection: what do we know about it”, at Sustainable Urban Engineering, University of Cincinnati, March 2010.
- Principal Workshop Coordinator for a series of three workshops and focus group meetings on modifying the Legal and Administrative Framework for Development Regulation in Gujarat, 2006
- Urban Development Expert for the Expert Group Meeting at Udon Thani, Thailand, on behalf of UN Habitat. Formulating a training agenda for a project on Housing for the Urban Poor, July 2006
- Principal Workshop Coordinator for stakeholder consultation for developing a vision and a City Development Strategy for Ahmedabad City, for EPC, funded by the World Bank.2003

References

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