

Name of firm	TERI (The Energy and Resources Institute), Bangalore, India
Name of staff	Ulka Kelkar
Profession	Fellow
Date of birth	11 March 1977
Years with firm 7	Nationality Indian

Education

1997 - 1999: MA Economics (with specialization in World Economy), School of International Studies, Jawaharlal Nehru University, New Delhi
First Class Degree and Ford Foundation Scholarship for academic performance

1994 – 1997: BA (Honours) Economics, Indraprastha College, University of Delhi, New Delhi
First Class Honours Degree

Employment record

8/2006 – present	Fellow, Centre for Global Environment Research, TERI Southern Regional Centre, Bangalore
01/2005 – 8/2006	Associate Fellow, Centre for Global Environment Research, TERI Southern Regional Centre, Bangalore
04/2004 – 12/2004	Associate Fellow, Centre for Global Environment Research, TERI, New Delhi
06/1999 – 03/2004	Research Associate, Centre for Global Environment Research, TERI, New Delhi

During this period, I have worked on projects related to

1. climate change vulnerability and adaptation
2. greenhouse gas inventory and national communication
3. greenhouse gas mitigation and clean development mechanism
4. international climate change negotiations and policy
5. capacity building and outreach

I also coordinated the research activities of the Centre for Global Environment Research, TERI as its Area Convener during November 2000 – February 2004.

Selected research projects

Vulnerability and adaptation

Since 06/2005	Adaptive policies for agriculture, water resources and climate change: designing policies that can adapt to a world of uncertainty, change and surprise <ul style="list-style-type: none"> ▪ Advance the emerging concept of adaptive policy-making and thereby contribute to building the adaptive capacity and resilience of communities to climate change. ▪ Explore through a case study approach, the characteristics and mechanisms of policy instruments that can adapt to surprises and longer-term changes in the context of agriculture-water resource development and climate change. Supported by International Development Research Centre (IDRC), Canada
03/2005 – 09/2006	The Indian insurance industry and climate change: exposure, corporate responsibility and strategies ahead <ul style="list-style-type: none"> ▪ Map the exposure of the Indian insurance sector to climate change – both physical impacts and policy/technology shifts ▪ Prepare a status report of current practices within the sector to understand and manage this exposure ▪ Recommend strategies for the sector, its customers and other key stakeholders to better understand the climate change agenda and become a responsible partner for change

Supported by Department for International Development (DFID), UK

- Since 02/2005 Addressing vulnerability to climate variability and change through assessment of adaptation issues and options
- Assess current coping and adaptation strategies being employed in the agriculture and water resources sectors in India
 - Undertake participatory case studies to elicit information on the extent of their usage and effectiveness
 - Develop recommendations for policy and institutional strengthening to enhance capacity to adapt to climate variability and change
- Supported by The World Bank
- 06/2004 – 02/2006 Pilot application of participatory approach to investigate local vulnerability and adaptation to climate variability and water stress in Uttaranchal State, India
- Use participatory approach to assess vulnerability and adaptive capacity at local level
 - Assess the capacity of households engaged in agriculture to cope with current climatic variability and water stress
 - Explore possible scenarios of interventions that can help build adaptive capacity
- Supported by START (System for Analysis Research and Training)
- 02/2001 – 04/2004 Vulnerability to climate change in the context of economic globalization
- Explore the combined impacts of climate change and economic changes on Indian agriculture
 - Identify highly vulnerable areas and key economic factors that influence agricultural vulnerability in these areas
 - Assess domestic policies that might enhance or constrain the ability of the farmers to cope with the consequent changes
- Supported by Canadian International Development Agency (CIDA) and Government of Norway
- 09/2001 – 12/2004 Socioeconomic scenarios for climate change impact assessment for India
- Develop socio-economic scenarios for climate change impact assessment
 - Project changes in demography, economy, and social structure
 - Provide a consistent framework to interpret, integrate, and synthesize the results of the sector-specific climate impact studies
- Part of Indo-UK Programme on Climate Change Impacts in India, Supported by UK Department of Environment, Food and Rural Affairs (DEFRA) and Ministry of Environment and Forests, Government of India
- 04/2001 – 10/2001 Appraisal of initial steps towards a V&A framework for India with special focus on water resources
- Highlight V&A strategy and priorities of Government of India in preparing its First National Communication to the UNFCCC
 - Appraise with a post COP6 perspective the inter-linkages between V&A sector strategies in water resources and related sectors such as agriculture
 - Study potential adaptation options related to water resources in semiarid areas of India
- Supported by Swiss Agency for Development Cooperation (SDC)
- 01/2005 – 12/2005 Climate change and development
- Conduct consultation exercise to identify the priority research and policy issues for the most vulnerable countries and communities in different regions in the South
 - Elicit views of developing country stakeholders regarding the implications of climate change for poverty reduction and sustainable development.
- Supported by Department for International Development (DFID) through the International Institute for Environment and Development, UK
- 01/2003 - 12/2003 Helping Operationalise Article Two of the UNFCCC

- Science-based policy dialogue on equitable and effective ways to avoid dangerous interference with the climate system and implications for post-Kyoto policies

Supported by VROM through IVM, The Netherlands

Climate change negotiations and policy

Since 04/2006

ADAM (Adaptation and mitigation strategies: supporting European climate policy)

- Garner South Asian perspectives on post-2012 climate regime
- Summarise key elements of existing proposals and policy options

Supported by the European Commission

Since 06/2004

Role of emissions trading in climate policy

- Support the design and implementation of emission trading within the evolving climate regime of Sweden, the European Community, and the larger global community.
- Focus on issues related to globalizing emission trading, including linkages and barriers between different emissions trading schemes and markets, opportunities and risks for developing countries, equity issues/north-south conflicts, and aspects on expanding the market in 2008 and 2013

Supported by MISTRA, Sweden

Since 04/2004

Research on key issues in climate change negotiations for India

- Provide technical support to Ministry of Environment and Forests on issues related to climate change negotiations and developing countries' participation in GHG mitigation efforts
- Review National Communications of key Annex II countries with regard to emission reduction, finance and technology transfer
- Assess issues related to dialogue on long-term cooperative action to address climate change and post 2012 arrangements.

Supported by the Ministry of Environment and Forests, India

12/2005 – 12/2006

International conference on "Energy, environment, and development: analysing opportunities for reducing poverty"

- Focus on challenges posed by energy-, environment-, and poverty-related issues for sustainable development
- Forum for policy-makers, practitioners, researchers, and the donor community to engage in constructive dialogue on possible solutions
- Design agenda for action and policy-relevant research, focusing on developing countries in Asia.

Supported by the Veolia Environment Institute

01/2005 – 04/2005

Ex-post study of selected projects in India under the UNDP-GEF Small Grants Programme

- Assess the impacts of projects supported by UNDP GEF SGP and their contributions to achieve global environmental benefits.
- Bring out longer-term impacts of the projects and elements of sustainability in the project design which will guide the future phases of UNDP GEF SGP.

Supported by UNDP GEF SGP India

Clean Development Mechanism

06/2006 – 12/2006

CDM project in wind energy

- Prepare PDD (project design document) for 2.5 MW wind power project in Davangere district, Karnataka

Supported by Bharat Electronics Ltd

Since 10/2006

Techno-economic-socio-environmental assessment of water lifting and water saving products

- Ascertain relative economics of using devices developed by IDE India
- Assess CDM potential of treadle pumps, drip irrigation devices, etc

Supported by International Development Enterprises (India)

- 12/2003 – 03/2006 Delhi Greenhouse Gas Forum 2006, 2005, and 2004
- Provide the opportunity for participants to discuss and interact with senior policymakers and business representatives from India, Sri Lanka, Nepal, Bhutan, Pakistan and Bangladesh, as well as carbon buyers and eminent international experts.
 - Showcase select CDM projects and serve as a platform for project developers to meet with potential buyers as well as for the development of new partnerships.
- Supported by IETA, WBCSD, and the World Bank
- 01/2004 – 12/2005 Integrated capacity strengthening on CDM in India
- Workshops to build the capacity of policymakers in southern and western India to facilitate CDM project development and implementation
- Supported by the Institute for Global Environmental Strategies, Japan
- 08/2003 – 05/2005 National Strategy Study on CDM in India
- Human and institutional capacity building to identify, develop, implement, and process CDM projects in India, and to exploit global opportunities in these areas
 - Identification of key sectors and development of pipelines of potential CDM projects at sectoral levels where CDM projects can provide synergy with local and national sustainable development priorities
- Supported by the World Bank and Ministry of Environment and Forests, India
- 08/2000 – 12/2003 CIDA energy-efficiency project: CDM component
- Status of CDM-related activities and potential CDM options for India (in power generation, renewable energy, and industrial energy efficiency)
 - Development of 2-4 CDM options shortlisted on the basis of identified selection criteria
 - Coordination with project partners from Bangladesh, China, and Indonesia
- Supported by the Canadian International Development Agency
- Greenhouse gas inventory and national communications*
- 01/2002 – 06/2003 Enabling activity for India's initial national communication to the UNFCCC: Industrial processes inventory component
- Developing a consolidated inventory of GHG emissions from industrial processes sector in India following the IPCC methodology
- Supported by the Ministry of Environment and Forests, India
- 01/2000 – 01/2001 Bhutan greenhouse gas project
- Review and finalization of first greenhouse gas inventory and national communication of Bhutan
 - Training programme and study tour on climate change and greenhouse gas database management
- Supported by the National Environment Commission, Bhutan
- 08/2000 – 08/2001 Laos greenhouse gas project
- Review and finalization of first national communication
 - Training programme on climate change issues for Lao PDR officials
 - Brochure on climate change for public dissemination
- Supported by the UNDP-GEF

Selected publications

Journal articles (full scholarly peer review)

1. O'Brien K, Leichenko R, Kelkar U, Venema H, Aandahl G, Tompkins H, Javed A, Bhadwal S, Barg S, Nygaard L, West J. 2004. Mapping vulnerability to multiple stressors: Climate change and globalization in India. *Global Environmental Change* 14: 303-313.

2. Bhandari P, Bhadwal S, and Kelkar U. Forthcoming. Examining adaptation and mitigation opportunities in the context of the integrated watershed management programme of the Government of India. *Mitigation and Adaptation Strategies for Global Change*.
3. Kelkar U, James C R, and Kumar R. Forthcoming. The Indian insurance industry and climate change: exposure, opportunities, and strategies ahead. *Climate Policy*.

Journal articles (simplified or no peer review)

1. Bhadwal S, Singhal S, Krishnan R, and Kelkar U. 2004. Global environmental change: variation in impacts across regions and within populations. In *IHDP Update 1/2004*, pp 11-12.
2. Pachauri R K and Kelkar U. 2002. Climate of concern: International cooperation from Rio to Marrakesh. *Oilinvest Reference Journal Vol 18*.

Books

1. Kelkar U, James C R, and Kumar R. (2006). *The Indian insurance industry and climate change: exposure, opportunities, and strategies ahead*. New Delhi: TERI Press. 63 pp.

Book chapters

1. Kelkar U. 2006. Climate change, Kyoto Protocol, and the clean development mechanism. In Jacob J (ed.). *Kyoto and Indian rubber industry*. Kottayam: Rubber Research Institute of India.
2. Acosta-Michlik L, Liu C, and Kelkar U. Forthcoming. Differential vulnerabilities to climate change in Asia and the challenges for adaptation within the Kyoto context. In Grover V(ed.). *Climate change and Kyoto: ten years and still counting*. Oxford and IBH, India and Science Publishers, United States.
3. Mitra S, Bhadwal S, Kelkar U, and Rangan L. 2006. Climate change and vulnerability in Indian agriculture: a major hurdle towards food security. In Singh R B (ed). *Natural hazards and disaster management –vulnerability and mitigation*. Jaipur: Rawat Publications. pp.273-288.
4. Kelkar U. 2003. Poverty and vulnerability: linking environmental and socio-economic dimensions of adaptation. In TERI. 2003. *Environmental threats, vulnerability, and adaptation: case studies from India*. New Delhi: The Energy and Resources Institute. Pp. 19-27.
5. Contributing author for Chapter 7 on Human Settlements, Energy and Industry in IPCC Third Assessment Report Working Group II on Impacts, Adaptation, and Vulnerability.

Conference and workshop proceedings

1. Kelkar U, Bhujanga Rao DD, Bhadwal S, Girisha G K, and Javed A. 2003. Climate change and economic changes in India: the impacts on agriculture. In Dash S K and Rao P (eds.). 2003. *Assessment of climate change in India and mitigation policies*. New Delhi: WWF-India. Pp. 52-61.
2. O'Brien K, Leichenko R, Kelkar U, Venema H, Aandahl G, Tompkins H, Javed A, Bhadwal S, Barg S, Nygaard L, West J. 2003. Vulnerability of Indian agriculture to climate change and economic change. In IUCN. 2003. *Mainstreaming biodiversity and climate change: Proceedings of the Asia Regional Workshop, 6-11 April 2003, Dehradun, India*.

Working papers

1. Kelkar U. 2005. Insuring climate risk in India: are we prepared. Monograph prepared on the occasion of COP-11. New Delhi: TERI Press. 36 pp.
2. Kelkar U. 2005. The palimpsest of adaptation research: an overview of concepts and frameworks. Policy brief prepared on the occasion of COP-11. New Delhi: TERI Press. 12 pp.
3. Bhadwal S, Bhandari P, Javed A, Kelkar U, O'Brien K, and Barg S. 2003. Coping with global change: vulnerability and adaptation in Indian agriculture. Monograph prepared on the occasion of COP-9. New Delhi: TERI. 26 pp.

Reports

1. Kelkar U. 2006. The climate, development, and poverty nexus in Africa. In Thornton PK, Jones PG, Owiyo TM, Kruska RL, Herrero M, Kristjanson P, Notenbaert A, Bekele N and Omolo A. Mapping climate vulnerability and poverty in Africa. Report to the Department for International Development. Nairobi: International Livestock Research Institute. pp. 168-177.
2. IISD and TERI. 2006. Designing policies in a world of uncertainty, change, and surprise: adaptive policy-making for agriculture and water resources in the face of climate change. Report to the International Development Research Centre. TERI and IISD. 170 pp.

Other information

Member of Organising Committee of START Young Scientists' Global Change conference, Beijing, 7-9 November 2006

Languages

	Read	Write	Speak
English	Excellent	Excellent	Excellent
Hindi	Excellent	Excellent	Excellent

Contact information

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