

# Ipsita Kumar

Email: [ikumar@terpmail.umd.edu](mailto:ikumar@terpmail.umd.edu). Cellphone: +1 (917) 834 2963

---

## EDUCATION

<b>PhD Candidate,</b> University of Maryland, College Park	Aug 2018 - Present
<b>M. A. Climate &amp; Society,</b> Columbia University, New York	2013- 2014
<b>M. Sc. Economics</b> (Environment & Resources) TERI University, Delhi	2009-2011
<b>B. A. Economics Honors,</b> Lady Shri Ram College, Delhi University	2006-2009

---

## RELEVANT EXPERIENCE

<b>University of Maryland, College Park</b> <b>Research Assistant</b> <ul style="list-style-type: none"><li>National Aeronautics and Space Administration (NASA), NASA-LCLUC Programme project “Agricultural Land Use Change in Central and Northeast Thailand: Effects on Biomass Emissions, Soil Quality and Rural Livelihoods” (Grant number 80NSSC18K0722).</li></ul>	Aug 2018 - Present
<b>Teaching Assistant</b> <ul style="list-style-type: none"><li><i>Developing Countries</i> (Fall '18), <i>Human Geography</i> (Spring '19), <i>Natural Disasters</i> (Summer '19), <i>As the World Turns: Society and Sustainability in a Time of Great Change</i> (Summer '20)</li></ul>	
<b>Instructor</b> <ul style="list-style-type: none"><li><i>Developing Countries</i> (Summer '20); <i>Development Geography: Environmental and Social Justice</i> (Winter '21)</li></ul>	
<b>Chair, Diversity and Inclusion Committee, Deans Graduate Student Advisory Council, College of Behavioral and Social Sciences</b>	
<b>Center for Social Science and Humanities, New Delhi</b> <b>Part time Research Assistant</b> <ul style="list-style-type: none"><li>Working on estimating feed availability for livestock in India<ul style="list-style-type: none"><li>Compiling data for estimating the availability feed in the past</li><li>Developing models to estimate the availability in the future</li></ul></li></ul>	May 2018 - Jul 2018
<b>Columbia University, New York</b> <b>Staff Associate</b> <ul style="list-style-type: none"><li>Developed a model to minimize cost of water delivery through reservoir optimization models for the state of Pernambuco, targeting major reservoirs in the state. Using Nonhomogeneous Hidden Markov Models to produce precipitation predictions to use in the reservoir model. Developed an online user interface for the reservoir optimization model.</li></ul>	Feb 2015 - Mar 2018

- Climate change and water in the North Eastern United States, targeting water utilities in Philadelphia. Assessing risks of water quality, and quantity, and infrastructural risks given climate change.

**NASA Goddard Institute for Space Studies** Sep 2013 - Jun 2014  
**Research Assistant**, Urban Climate Change Risk Assessment

**Columbia University, New York** Dec 2013 - Jun 2014  
**Research Assistant**, Natural disasters and its link with development

**The Energy and Resources Institute (TERI), Delhi** Jun 2011 - Aug 2013  
**Research Associate**, Resource and Development Economics

## PUBLICATIONS

- Kumar, I.**, Bandaru, V., Yampracha, S., Sun, L., & Fungtammasan, B. (2020). Limiting rice and sugarcane residue burning in Thailand: Current status, challenges and strategies. *Journal of Environmental Management*, 276, 111228.
- Kumar, I.**, Feng, K., Bandaru, V., and Sun, L.: An Input-Output Approach to Thailand's Energy Transition: Effects on the Land, Water and Food, EGU General Assembly 2020, EGU2020-11142.
- White, D. D., Lawless, K. L., Vivoni, E. R., Mascaro, G., Pahle, R., **Kumar, I.**, ... & Asfora, M. (2019). Co-Producing Interdisciplinary Knowledge and Action for Sustainable Water Governance: Lessons from the Development of a Water Resources Decision Support System in Pernambuco, Brazil. *Global Challenges*, 3(4), 1800012.
- Kumar I**, Josset, L, Silva, EC, Possas, JMC, Asfora, MC, Lall, U (2017) “*Financial Risk Reduction and Management of Water Reservoirs Using Forecasts: A Case for Pernambuco, Brazil*” Abstract [Number: H11J-1340] 2017. Fall Meeting, AGU.
- Kumar, I**, Josset, L, Lall,, ... , JMC, Asfora MC (2017) “*Cost Optimization of Water Resources in Pernambuco, Brazil: Valuing Future Infrastructure and Climate Forecasts*” EGU2017-10147. EGU General Assembly 2017
- Gannon, C, Kandy, D, Turner, J, **Kumar, I**, Pilli-Sihvola, K, Chanda, F S (2014) *Near-term climate change in Zambia. What the research tells us*. Red Cross/Red Crescent Climate Centre, Hague.

## AWARDS

- Deans Research Initiative Award (2020) from College of Behavioral and Social Science, University of Maryland.
- Deans Fellowship (2018-2019) of \$15,000, University of Maryland
- Awarded \$30,000 scholarship from the Department of Earth and Environmental Science, Columbia University for MA in Climate and Society

## SKILLS

Programming Languages: R, RShiny and Matlab

Languages: English (Native), Hindi (Native), Nepali (Intermediate)