

# CURRICULUM VITAE

**Name:** Dr. Sutandra Singha

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## *Academic Profile*

B.Sc. Honours in Geography – 2010, University of Calcutta, West Bengal, India

Field-work – Chitkul Village, Himachal Pradesh, India

M.A. in Geography (Specialisation: Regional Development) – 2012, Centre for the Study of Regional Development (CSR D), School of Social Sciences (SSS), Jawaharlal Nehru University (JNU), New Delhi, India

Field-work – Kinnaur and Kullu District of Himachal Pradesh and Amritsar District of Punjab, India

M.Phil – 2015, Centre for Russian and Central Asian Studies (CRCAS), School of International Studies (SIS), JNU, Delhi. Dissertation Title: “Carbon Dioxide Emissions and Climate Change: A Case Study of Russian Federation, 1992 to 2013”

Ph.D. – (Degree awarded on 25 April 2022), CRCAS/SIS/JNU. Thesis Title: “A Comparative Study of Anthropogenic Carbon Dioxide Emissions and Climate Change in BRICS Countries”

Field-work – Moscow, Russian Federation

Summary: My M.Phil Dissertation deals with the complex issue of CO<sub>2</sub> emissions, climate change in the Russian Federation, and Russia’s role/achievement in international climate change negotiations (especially in the Kyoto Protocol). My Ph.D. research determines and compares the sources of CO<sub>2</sub> emissions in BRICS countries using IPCC’s econometric method and advanced statistical analysis. My study also constructs the Vulnerability-Resilience Index using socio-economic indicators to compare the vulnerability-resilience capacity of each BRICS country against the impacts of climate change. Additionally, BRICS countries have been compared based on the pledges taken and fulfilled at national climate policies, UNFCCC conferences from 1992 to recent times with particular reference to the Kyoto Protocol and Paris Agreement. Both of my M.Phil and Ph.D. research identify the variances and gaps — in both the conceptual and practical understanding, which is not only useful in academic publications but also crucial for decision/policymakers (public and private sectors) to understand anthropogenic CO<sub>2</sub> emissions and climate change risks, identify the socio-economic areas/sectors vulnerable to the impacts of climate change, prioritize the areas/sectors to be protected by alleviating those risks and thus to ensure sustainable environmental management both at the regional and global platforms.

## *Research Fellowships*

UGC-NET Fellowship in Geography for M.Phil. /Ph.D. – July 2013 to December 2017, University Grants Commission, Govt. of India (Ref. No. 52094, Roll No. 1780061)

Indian Council of Social Science Research’s Doctoral Fellowship in International Studies – January 2018 to January 2020, Govt. of India (File No. RFD/2017-18/IR/GEN/147, Dated 9 January 2018)

## *Academic Foreign Visits*

Norway (June 2017), Brazil (August 2018), Italy (September 2018), Sri Lanka (October 2018), Russia (June 2019), Germany (August 2019)

## *Areas of Interest*

Anthropogenic Greenhouse Gas Emissions, Climate Change Vulnerability and Coping-Adaptive Capacity, Sustainable Development, Geopolitics of Natural Resources, Quantitative Research Methods

## *Working Knowledge of Softwares*

Microsoft Office, SPSS, STATA, ArcGIS, EViews, Statgraphics Centurion, Gretle

## *Workshops/Summer Schools/Winter Schools/Field-Work*

### *National*

**Research Methodology Programme for Ph.D. Students in Social Sciences**, 20 – 29 Mar 2017, organized by the **Dept. of Sociology, University of Kalyani, West Bengal, India**. (Awarded full funding by the **Indian Council of Social Science Research, Govt. of India**)

Workshop on **Developments in Climate Change and Sustainable Development**, 21 Nov – 4 Dec 2017, organized by the **Centre for Climate Change and Sustainability Studies, Tata Institute of Social Sciences, Mumbai, India**. (Awarded full scholarship by the **Ministry of Science and Technology, Govt. of India**)

**Research Forum - Climate Jamboree**, 1 Nov – 3 Nov 2018, organized by the **School of Advanced Studies, TERI, New Delhi, India**. (Awarded freeship by the **TERI**)

Online **Science-Academies' Science Leadership Workshop**, 22 – 28 Jun 2020, jointly organized by the **Indian Academy of Sciences, Central University of Punjab (CUP) and Ministry of Science and Technology, Govt. of India**. (Awarded fee-waiver by the **CUP**)

Online Workshop on **Essentials of Research Writing & Using Mendeley Reference Manager**, 20 Nov 2020, to be jointly organized by the **ELSEVIER and Jawaharlal Nehru University, India**.

### *International*

Credit-based summer school **Agenda 2030: Poverty, Climate Change and Sustainability**, 12 – 22 Jun 2017, organized by the **University of Bergen (UiB), Norway**. (Awarded a full scholarship by the **UiB**)

Credit-based summer school **São Paulo School of Advanced Science on Ocean Interdisciplinary Research and Governance**, 13 – 25 Aug 2018, organized by the **University of São Paulo (USP), Brazil**. (Awarded a full scholarship by the **USP**)

**6<sup>th</sup> International Conference on Sustainable Development**, 12 – 13 Sept 2018, jointly organized by the **European Center of Sustainable Development and Canadian Institute of Technology in Italy**. (Awarded full funding by the **Indian Council of Social Science Research, Govt. of India**)

*International Conference on Social Science & Humanities*, 23 – 24 Oct 2018, organized by the **Association for Humanities and Social Science Research, Sri Lanka**. (Awarded full funding by the **Corpus Fund of School of International Studies, Jawaharlal Nehru University, India**)

*Field-trip to Moscow, Russia*, 19 Jun – 08 Jul 2019, facilitated by the **Lomonosov Moscow State University, Russian Academy of Sciences and National Research University Higher School of Economics**. (Awarded full financial assistance by the **Corpus Fund of School of International Studies, Jawaharlal Nehru University, India**)

Credit-based summer school *Connecting Science & Society - Communicating Research on Sustainability and Global Change*, 19 – 30 Aug 2019, organized by the **Institute for Advanced Sustainability Studies (IASS) and the Potsdam Institute of Climate Impact Research (PIK), Germany**. (Awarded partial funding by the **IASS**)

Online training program *Understanding Climate Change Impacts on Water Resources*, 30 Jun 2020, by the **Watershed Academy, United States Environmental Protection Agency (USEPA)**.

Credit-based online summer school *Politics, Ontologies, Ecologies*, 29 Jun – 03 Jul 2020, organized by the **Dept. of Political Sciences, University of Pisa (UniPi), Italy**. (Awarded course fee waiver by **UniPi**)

Credit-based online summer school *Futuring for Sustainability*, 13 – 17 Jul 2020, organized by the **Faculty of Geosciences, Utrecht University (UU), Netherlands**. (Awarded course fee waiver by the **UU**)

Online workshop *China in the Urban Age - Health, Food, and Waste in the Chinese City: Practical, Utopian and Systemic Solutions*, 12 – 30 Oct 2020, organized by the **China Studies Centre of the University of Sydney (USyd), Australia**. (Awarded course fee waiver by the **USyd**)

Virtual *MIT Water Summit 2020 - A World of Water: Reimagining Resilience*, 11– 13 Nov 2020, organized by the **MIT Water Club, Massachusetts Institute of Technology, Cambridge**.

Online workshop *The Oxford Summer School in Economic Networks*, 21–25 June 2021, to be organized by the **University of Oxford, and the University College London, UK**.

### ***Membership of National/International Advisory Boards and Organisations***

Member of the *Global Association for Humanities and Social Science Research (GAHSSR)* since Nov 2016 (Organisation is listed in the *ICSSR Research Information Series - 2*, Govt. of India and the *Open Yearbook of Union of International Associations*, Brussels).

Advisory board member (Jan 2017 – Dec 2019), *Geopolitics of Energy* (Scopus Indexed Journal, Publisher **Canadian Energy Research Institute, Alberta**).

CLIVAR Early Career Scientist Network. URL: <http://www.clivar.org/people/sutandra-singha>.

Planning Committee Member, *Global Adaptation Month* (Oct 2020 – Apr 2021) organised by **EcoAdapt** (A regional partner of **GAN-UNEP**). Washington. URL: <https://www.nationaladaptationforum.org/adaptation-month/2021-planning-committee>.

## ***Peer-Reviewed Publications***

### **Book Reviews in the Journal**

Singha, S. (2015), Disaster by Design: The Multiple Caused Catastrophes of the Aral Sea by N Michael R. Edelstein, Astrid Cerny and Abror Gadaev (eds.), in *Contemporary Central Asia*, Central Asian Studies Foundation, New Delhi and Centre for Russian & Central Asian Studies, School of International Studies, Jawaharlal Nehru University, New Delhi (India), pp. 80 – 86. ISSN: 0973-5690.

### **Chapters in Edited Books**

Singha, S. (2014) “Global Climate Change, El Niño Events and Coral Reefs: A Case Study of Coral Bleaching in Madagascar” in Dr. Govind Chandra Mishra (eds.) *Innovative Energy Technology Systems and Environmental Concerns: A Sustainable Approach*, New Delhi (India): Research India Publications, pp. 239-246. ISBN: 978-93-84144-81-4.

Singha, S. (2016), “Understanding the Causes and Consequences of Deforestation in Nepal (1990-2013)” in Pramod Jaiswal (eds.) *Understanding Nepal in Contemporary Times*, New Delhi (India): Synergy Books India, pp. 436-460. ISBN: 978-93-82059-47-9. (Book enlisted as research fellow publication in the official website of Institute of Peace and Conflict Studies, Old Delhi, India)

Singha, S. (2017), “Globalisation and Environmental Sanitation: Health Implications in India” in Manish K. Verma (eds.) *Globalization, Social Justice and Sustainable Development in India*, New Delhi (India): Gyan Publishing House, pp. 295-310. ISBN: 978-81-212-1415-5. (Book enlisted as faculty publication in the official website of Babasaheb Bhimrao Ambedkar University, Lucknow, India)

### **Research Articles in Journals**

Singha, S. (2016), “Impact of Climate Change on Heat Wave related Deaths in India: Past, Present and Future”, *Journal of Basic and Applied Engineering Research*, Volume 3, Issue 1; January-March, Delhi (India): Krishi Sanskriti Publications, pp. 79-83. Print ISSN: 2350-0077, E-ISSN: 2350-0255.

Singha, S. (2016), “Conservation and Sustainable Management of Bison Swamp in the Nilgiris, Tamil Nadu”, *Gandhara Journal of Research in Social Science*, Volume 1, No 2; Mansehra (Pakistan): Gandhara Research Society, pp. 195-212. ISSN: 2415-2404.

Singha, S. (2017), “Environmental Geopolitics: Kazakh – China Hydropolitics over Lake Balkhash Basin”, *Journal of Central Asian Studies*, Vol. XXIII, Srinagar (India): Centre of Central Asian Studies, University of Kashmir, pp. 17-28. ISSN: 0975-086X.

Singha, S. (2017), “Spatio-Temporal Analysis of Ground Water Levels in NCT Delhi, 1990-91 to 2011-12”, *International Journal of Multidisciplinary Studies*, Vol. 3, Issue 2, Sri Jayewardenepura (Sri Lanka): Faculty of Graduate Studies, University of Sri Jayewardenepura, pp. 79-90. ISSN: 2362-0797.

Singha, S. (2017), “Environmental Politics: A Case Study of Hydropolitics between Egypt and Ethiopia over the Nile River Basin”, *Geopolitics of Energy*, Vol. 39, Issue 1, Calgary (Canada): Canadian Energy Research Institute, pp. 02-10. ISSN: 0273-1371. **(Scopus Indexed)**

Singha, S. (2017), “Environmental and Social Consequences of Oil Geopolitics in Central Asia”, *World Focus (October Issue: Geopolitics of Energy in Central Asia)*, pp. 77 – 82. ISSN: 2230-8458. U.S. Library of Congress No.80910345.

Singha, S. (2018), “Russia - The Dark Horse of Kyoto Protocol Negotiation?”, *Geopolitics of Energy*, Vol. 40, Issue 1, Calgary (Canada): Canadian Energy Research Institute, pp. 2-8. ISSN: 0273-1371. **(Scopus Indexed)**

Singha, S. (2018), “Anthropogenic Carbon Dioxide Emissions and Sustainable Development in Russia”, *Geopolitics of Energy*, Vol. 40, Issue 6, Calgary (Canada): Canadian Energy Research Institute, pp. 2-9. ISSN: 0273-1371. **(Scopus Indexed)**

Singha, S. (2018), “Assessing Vulnerability and Resilience in the Face of Climate Change: A Case Study of North - East India”, *European Journal of Sustainable Development*, Vol. 7, Issue 3, Rome (Italy): European Center of Sustainable Development, pp. 53-64. ISSN: 2239-5938

### **Online Archive**

Sutandra Singha (2019), “The 1998 Floods and Migration in Bangladesh” in Marco Armiero, Ethemcan Turhan, Roberta Biasillo, and Pierre Vanhulst (eds.), *CLISEL Geo Archive*, **KTH Environmental Humanities Laboratory (Sweden) and World Trade Institute (University of Bern)**.

### **Expert Reviewer**

ECR group review (organized by APECS, MRI, PAGES ECN, PYRN, and YESS) of *Chapter 18: Climate Resilient Development Pathways*, Second Order Draft of the Working Group II contribution to the *IPCC Sixth Assessment Report (AR6)*.

### **Training**

*English for Academic Writing and Basic Communication Skills*, Monsoon Semester (6 months) Course (awarded ‘A’ grade) 2013, Linguistic Empowerment Cell, School of Language, Literature and Culture Studies, Jawaharlal Nehru University (New Delhi), India.

30<sup>th</sup> Indian Institute of Remote Sensing (under the Indian Space Research Organisation, Dept. of Space, Govt. of India) Outreach Programme on *Geoinformatics for Forest Fire Management*, 2 - 6 April 2018, Cartographic Lab, CSRD, SSS III, Jawaharlal Nehru University (New Delhi), India.

### **Conferences/Seminars/Symposiums (all as sole author and presenter)**

“Environmental Politics: A Case Study of Hydro-Politics between Egypt and Ethiopia over Nile River Basin”, International Conference on International Relation, Dept. of Political Science, Ravenshaw University, Odisha. Date: 20 – 22 Feb 2014.

“Spatio-Temporal Analysis of Ground Water Levels in Delhi from 1990-91 to 2011-12”, National Seminar on Research Frontiers in Man Nature Interface, Dept. of Geography, Visva- Bharati University, West Bengal. Date: 1 – 2 March 2014.

“Global Climate Change, El Nino Events and Coral Reefs: A Case Study of Coral Bleaching in Madagascar”, International Conference on AFHAFBC-2014, Krishi Sanskriti Organization, Jawaharlal Nehru University, Delhi. Date: 30 – 31 Aug 2014.

“India-US Green Partnership: Together for a Greener and Cleaner Earth”, International Conference on Changing Contours of Indo-US Relations: Perception, Continuity and Change, Birla Institute of Technology & Science, Goa. Date: 31 Oct – 2 Nov 2014.

“Climate Change Induced Bangladeshi Migration and its Implications for India”, 26<sup>th</sup> All India Congress of Zoology & International Symposium on Innovation in Animal Sciences for Food Security, Health Security and Livelihood-2015, Babasaheb Bhimrao Ambedkar University, Uttar Pradesh. Date: 29 – 31 Oct 2015.

“Conservation and Sustainable Management of Bison Swamp in the Nilgiris, Tamil Nadu”, 3rd Lucknow Science Congress & National Conference on Science for Society: An Interdisciplinary Approach, Babasaheb Bhimrao Ambedkar University, Uttar Pradesh. Date: 31 Oct – 2 Nov 2015.

“Impact of Climate Change on Heat Wave Related Deaths in India: Past, Present and Future”, International Conference on Public Health: Issues, Challenges, Opportunities, Prevention and Awareness, Daulat Ram College, University of Delhi, Delhi. Date: 15 – 16 Jan 2016.

“Globalization and Environmental Sanitation: Health Implications in India”, International Seminar on Globalization, Environments and Social Justice: Perspectives, Issues and Concerns, Dept. of Sociology, Babasaheb Bhimrao Ambedkar University, Uttar Pradesh. Date: 15 – 16 Feb 2016.

“Measuring Vulnerability and Resilience to Climate Change: A Comparative Study of Indian States”, CSR-UGC-CAS III (SAP) National Seminar on Climate Change and Agriculture: Vulnerabilities, Livelihood Adaptation and Food Security, Centre for the Study of Regional Development, School of Social Sciences, Jawaharlal Nehru University, Delhi. Date: 25 – 26 Aug 2017.

“Assessing Vulnerability and Resilience in the Face of Climate Change: A Case Study of North - East India”, 6<sup>th</sup> International Conference on Sustainable Development, European Center of Sustainable Development and CIT University of Rome, Roma Eventi Congress Center, Rome, Italy. Date: 12 – 13 Sept 2018.

“Socio-Economic Determinants of Climate Change Vulnerability of North - East India”, Colombo International Conference on Social Science & Humanities (ICSSH), Global Association for Humanities and Social Science Research, Colombo, Sri Lanka. Date: 23 – 24 Oct 2018.

## *Webinars*

“Shodh Shuddhi–Web-based plagiarism detection software URKUND” by Dr. B. R. Ambedkar Central Library of Jawaharlal Nehru University (New Delhi), INFLIBNET Centre (Gujarat) & eGalactic. Date: 30 May 2020.

“Plagiarism Tool for Regional Languages” by Dr B. R. Ambedkar Central Library of Jawaharlal Nehru University (New Delhi), & CFP. Date: 30 May 2020.

“Future of Europe and the Trans-Atlantic Relationship”, jointly organised by the Security & Sustainability Forum and George Washington University, USA. Date: 22 Jul 2020.

“Environmental Justice Communities: Best Practices to Deal with Natural Disasters”, organised by the Security & Sustainability Forum, USA. Date: 15 Sept 2020.

“Environmental Degradation and Human Health”, organised by the Patel Memorial National College (affiliated by Punjab University), India. Date: 12 Oct 2020.

## ***Personal Details***

Nationality/Citizenship: Indian

Date of Birth: 22 April 1989

Gender/Marital Status: Female/Unmarried

Disability: No

Category: General/UR

Languages Known: Bengali (mother tongue), English (fluent), Hindi (fluent), Russian (primary)

## ***References***

### ***Prof. Sanjay Kumar Pandey (Supervisor)***

Designation: Professor and former Director, Centre for Russian and Central Asian Studies, School of International Studies (New Building), Jawaharlal Nehru University, New Delhi-110067, India

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### ***Dr. Rajan Kumar***

Designation: Associate Professor, Centre for Russian and Central Asian Studies, School of International Studies (New Building), Jawaharlal Nehru University, New Delhi-110067, India

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### ***Dr. Nagendra Kumar Maurya***

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Webpage: <https://udrc.lkouniv.ac.in/department/ViewProfile?EId=19>

## ***Declaration***

I hereby declare that the entries made in the Curriculum Vitae are correct to the best of my knowledge and belief.

New Delhi, India

25/05/2022

**Dr. Sutandra Singha**