

DR SARAH OPITZ-STAPLETON

DISASTER AND CLIMATE RISK SCIENTIST

CONTACT

Linked In Handle

EDUCATION

PHD / ENVIRONMENTAL STUDIES

University of Colorado 2004 - 2009

MASTERS / WATER RESOURCES ENGINEERING

University of Colorado 2002 - 2004

BACHELORS/ PHYSICS

Creighton University 1998 - 2002

COUNTRY EXPERIENCE

Azerbaijan, Canada, China, Colombia, Ecuador, El Salvador, Ethiopia, Georgia, Kazakhstan, Kenya, Kyrgyzstan, India, Indonesia, Malaysia, Mongolia, Mozambique, Nepal, Nigeria, Niger, Pakistan, Somalia, South Sudan, Tajikistan, Thailand, United States, Uzbekistan, Vietnam

PROFILE

Dr Opitz-Stapleton is the Founder and Managing Director of Staplets Consulting UG, a Germany-based boutique consultancy. Staplets Consulting, UG provides bespoke technical assistance in climate services, disaster and climate vulnerability and risk analysis, and development of and training around climate resilience methodologies.

Dr Opitz-Stapleton has over 20 years' experience providing technical advice and climate services in support of disaster risk management, climate adaptation, resilience and hydrological planning and policy for government, humanitarian and development agencies in Asia, Latin America and Africa. Her experience includes projects assessing and recommending adaptation and resilience actions to local to transboundary climate risks in green energy infrastructure, human health, sustainable development and urban water supply. Select projects focus on the implications of conflict to climate vulnerability and risk in fragile and conflict-affected settings.

Dr Opitz-Stapleton was the Chief Scientific Advisor to the Adapting to Climate Change in China Project (ACCC Phase I and II), advising on the development of the country's 2013 National Adaptation Plan. She previously worked with ISET-International as Senior Scientist on multiple projects, leading climate analysis and risk assessment, including the Asian Cities Climate Change Resilience Network and Water, Urbanization and Climate Change in Jaipur, India. She formally headed Staplets Consulting, LLC, a United States bespoke consultancy from 2012-2021.

Clients include <u>ODI Global</u>, FCDO, <u>ISET International</u>, INTASAVE Asia Pacific, Plan8 Risk Consulting, and Adaptive Telus.

RESEARCH EXPERIENCE

ODI: Senior Research Associate

2017 - Present

Within the Global Risks and Resilience Programme at ODI: climate services and systemic risk analysis; conflict, climate and disasters implications for humanitarian and development programs in Africa; net-zero energy transitions and climate risk in Central Asia and Pakistan; climate and child poverty in India; transboundary climate and adaptation risks with an Africa focus. Select projects include:

- Principal Investigator: Conflict, climate, livelihoods and mediation in Somalia and Nigeria.
 Client: Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises (SPARC)/ FCDO
- Investigator: Rapid assessments on the hunger-climate-conflict nexus in Mali, Somalia and South Sudan. Client: Action Against Hunger Germany
- *Principal Investigator*: Work Package 3: Transboundary climate and adaptation risks in Africa. Client: EU DG Clima/ Adaptation Without Borders
- *Principal Investigator*: Climate risks to renewable energy infrastructure in Kyrgyzstan, Tajikistan, and Uzbekistan. Client: UNDP Kyrgyzstan
- Principal Investigator: Transboundary climate and adaption risks in Africa: perceptions from 2021. Client: SPARC/ FCDO
- *Investigator*: Investing for sustainable climate services: insights from African experience. Client: Weather and Climate Services for Africa (WISER)/ FCDO



SKILLS

R: Statistical Computing

RiverWare

WEAP

Extremes Statistics

Affinity Design

MaxQDA

Science translation

Stakeholder engagement

Capacity building

Adaptation planning

Research design

Research team management

Participatory research methods

ISET: Senior Associate Scientist

2012 - Present

Climate scientist in charge of climate analysis and tailoring of climate information for disaster and climate risk management projects.

- Principal Investigator: Analysis of Global and Regional Climate Change Models: Identification of Hazards and Socioeconomic Implications for the City of Jijiga, Ethiopia. Client: Mercy Corps
- *Investigator:* Climate trends and projections analysis for vector-borne disease model for Ecuador. Client: CDKN
- Lead Climate Scientist: Tailored climate trend analysis and projections Sheltering from a Gathering Storm, a climate change and disaster resilient housing project in India, Pakistan and Vietnam. Client: Rockefeller Foundation
- Principal Investigator: Protecting Urban Livelihoods from Climate Change Building Heat Stress Resilience Amongst Da Nang City's Most Vulnerable Workers. Client: Rockefeller Foundation

Plan8 Risk Consulting: Senior Climate Risk Consultant

2014 - 2019

- Principal Investigator: Translational Sciences for Climate Services in China Work Package
 5.3 of Climate Science for Services Partnership in China. Client: UK Met
- *Principal Investigator:* Assessing Climate Risks to Low Carbon Urban Projects in Kuala Lumpur, Malaysia. Client: Carbon Trust

INTASAVE Asia Pacific: Head of Climate Risk

2014 - 2016

- Technical Advisor: Adaptation and Mitigation Co-Benefits. Client: NDRC
- *Principal Investigator*: Gendered Climate Variability and Change Impacts in Jinping and Guangnan Counties, Yunnan Province, China. Client: Plan-China
- Chief Scientific Advisor: Adapting to Climate Change in China Phase II (ACCCII). Client: NDRC and Swiss Development Cooperation

• Fundación Futuro Latinoamericao: Technical Expert

2012-2014

- Expert Reviewer and Technical Advisor to Programa Regional de Investigación sobre Desarrollo y Medio Ambiente (PRISMA) on the development of El Salvador's national adaptation strategy
- Expert Technical Reviewer to Instituto de Investigaciones Marinas y Costeras (INVEMAR) on the development of the City of Cartagena de Indias', Colombia adaptation plan
- Expert Technical Advisor to INVEMAR on the urban vulnerability assessment for the City of Cartagena de Indias

Adaptive Telus: Technical Advisor

2011-2012

• *Investigator*: Climate information needs review for British Colombia decision makers. Client: Pacific Climate Impact Consortium



ISET: Senior Scientist 2006 - 2012

Climate scientist in charge of statistical downscaling, climate analysis and tailoring of weather and climate information for use in disaster risk management and climate adaptation and resilience projects. Select projects include:

- *Principal Investigator*: Climate Variability and Social Transition Water, Urbanization and Climate Change in Jaipur, India. Client: US NOAA
- Investigator: Asian Cities Climate Change Resilience Network (ACCCRN). Client: Rockefeller Foundation
- Investigator: Climatic Variability and Social Transition: Implications for Management of Urban Water Supplies in Arid Portions of India. Client: US NOAA
- Investigator: Monitoring Climate Change in Nepal. Client: ISET-Nepal
- Investigator: Climate Scenarios, Impact and Adaptation in Nepal. Client: DfID
- Investigator: Adaptation to Climatic Variability and Change: the Role of Climate Information in Coastal and Other High Vulnerability Regions of South Asia. Client: US NOAA.
- Investigator: From Risk to Resilience. Client: US NOAA
- Technical Advisor: Adapting to Climate Change in China Phase I (ACCCI). Client: DflD
- Investigator: Adapting to Climate Change in Asia Identifying Critical Knowledge

Natural Hazards Center, University of Colorado Graduate Research Assistant	2005 - 2006
Center for Advanced Decision Support for Water and Environment Systems, University of Colorado Graduate Research Assistant	2003 - 2005
Dept of Civil, Environmental and Architectural Engineering, University of Colorado Alliance for Graduate Education and Professoriate Fellow	2002 - 2004

SELECT PUBLICATIONS

- Opitz-Stapleton, S., C. Lindsay, et al. (2025) <u>Cross-border, cascading climate risks and the Least Developed</u>
 <u>Countries Group: catalyzing management options within the UNFCCC</u>. Adaptation Without Borders Policy
 Brief. ODI Global
- Nur, L., S. Koné, S. Opitz-Stapleton, et al. (2024) <u>Assessing and financing loss and damage due to climate change in Somalia.</u> SPARC Technical Report, SPARC
- Gulati, M., S. Opitz-Stapleton, et al. (2023) <u>Climate-resilient development for Somalia.</u> SPARC Technical Report, SPARC
- Opitz-Stapleton, S., C. Lindsay and A. Anisimov (2023) <u>Policy mechanisms of the African Union and the Regional Economic Communities to manage transboundary climate risks</u>. ODI Global and Adaptation Without Borders
- Opitz-Stapleton, S., L. Mayhew, et al. (2023) <u>Rapid assessments of the hunger-climate-conflict nexus. First assessment: lived experiences relating to food and nutrition security in Mali, South Sudan and Somalia.</u> London: ODI.
- Opitz-Stapleton, S. (2023) 'Chapter 2.9: Transboundary climate risks and livelihoods' in *The Global Transboundary Climate Risk Report*. Anisimov, A. and Magnan, A. (eds.) IDDRI and Adaptation Without Borders.
- Opitz-Stapleton, S., O. Borodyna, et al. (2022) <u>Managing climate risks to protect net-zero energy goals: Net-zero transition opportunities in Kyrgyzstan, Tajikistan and Uzbekistan</u>. London: ODI Global



- Opitz-Stapleton, S., L. Cramer, et al. (2021) *Transboundary climate and adaptation risks in Africa: Perceptions* from 2021. SPARC Policy Report, SPARC
- Opitz-Stapleton, S., R. Street, et al. (2021) 'Translational Science for Climate Services: Mapping and Understanding Users' Climate Service Needs in CSSP-China' *Jn Meteorological Research*: https://doi.org/10.1007/s13351-021-0077-3
- Opitz-Stapleton, S., F. Khan, et al. (2021) <u>BRI energy projects in Pakistan: Environmental and climate risks and opportunities</u>. London: ODI Global
- Dupar, M., L. Nur and S. Opitz-Stapleton (2021) <u>Investing for sustainable climate services: insights from African experience</u>. London: ODI Global
- Diwakar, V., E. Gogerty. S. Opitz-Stapleton, et al. (2019) <u>Child poverty, disasters and climate change:</u> <u>investigating relationships and implications over the life course of children</u>. London: ODI Global
- Opitz-Stapleton, S., R. Nadin, et al. (2019) *Risk-informed development: from crisis to resilience*. London: ODI Global
- Opitz-Stapleton, S., P. Sayers, et al. [uncredited] (2019) 'Climate Risks and Adaptation. Chapter 9' in: <u>Low Carbon Development: A Paradigm Shift Towards a Green Economy in Indonesia</u>. BAPPENAS, Government of Indonesia.
- Opitz-Stapleton, S., R. Nadin, et al. (2017) <u>Climate change, migration and displacement.</u> The need for a risk-informed and coherent approach. London: ODI Global and UNDP
- Opitz-Stapleton, S., L. Sabbag, et al. (2016) 'Heat Index Trends and Climate Change Implications for Occupational Heat Exposure in Da Nang, Vietnam' *Climate Services*: https://doi.org/10.1016/j.cliser.2016.08.001
- Opitz-Stapleton, S. (2016) *Precipitation and Temperature Shifts Due to Climate Change in Northwest Quito Canton, Ecuador.* Sub-Component Study of Climate Vulnerability of the Health Sector in Quito: Making Technical Data Accessible to Policy Makers. ISET-International and Universidad San Francisco de Quito.
- Nadin, R., S. Opitz-Stapleton and Y. Xu (eds) (2015) <u>Climate Risk and Resilience in China</u>, Oxford: Taylor and Francis
- Opitz-Stapleton, S. (2013) *Jorhat, India: Simple Climate Projections by the 2030s*, Technical brief for Gorakhpur Environmental Action Group. Boulder, CO, USA: ISET-International
- Opitz-Stapleton, S. and K. Hawley (2013) *Da Nang's Extreme Rainfall and Climate Change by the 2020s and 2050s*, Technical Report for ISET-International and CDKN
- Opitz-Stapleton, S. and K. Hawley (2013) *Gorakhpur: Extreme Rainfall, Climate Change and Flooding.*Technical report for ISET and CDKN
- Opitz-Stapleton, S. and L. Sabbag (2012) *Simple Scaled Climate Projections and Their Potential Implications for Jijiga, Ethiopia*. Technical report for Mercy Corps-Ethiopia. Boulder: ISET-International
- Opitz-Stapleton, S., et al. (2011) *The Uncomfortable Nexus: Water, Urbanization and Climate Change in Jaipur, India.* ISET and CEDSJ
- Opitz-Stapleton, S. and S. Gangopadhyay (2010) 'A non-parametric, statistical downscaling algorithm applied to the Rohini River Basin, Nepal' *Theoretical and Applied Climatology*: https://doi.org/10.1007/s00704-010-0301-z
- Opitz-Stapleton, S., S. Gangopadhyay and The Risk to Resilience Study Team (2008) *Downscaling: Potential Climate Change Impacts in the Rohini Basin, Nepal and India*. From Risk to Resilience Working Paper 3. ProVention Consortium, ISET and ISET-Nepal.
- Moench, M. and S. Stapleton (2007) <u>Water, Climate Risk and Adaptation. Working Paper 2007-01</u>. Delft, The Netherlands: Co-operative Programme on Water and Climate

Full publication list available upon request. Training events and presentations available upon request.