Samuel Levy

Department of Environmental Studies | NYU | 285 Mercer Street, 10003

sam.levy@nyu.edu • +1 857-381-3749 • LinkedIn

PERSONAL INFORMATION

Date of birth: 21st June 1993 Nationality: British (UK)

EDUCATION

2019 – 2022 ETH Zürich

PhD, Department of Humanities, Social & Political Sciences

Dissertation: Can companies end deforestation? The limitations and potential opportunities of zero-deforestation commitments in the Brazilian Amazon and Cerrado https://doi.org/10.3929/ethz-b-000539299 . Supervisor: Prof.

Rachael Garrett (U of Cambridge/ETH Zürich)

2017 - 2019 Boston University

PhD Student, Department of Earth & Environment (transferred to ETH Zürich)

2015 - 2016 University of Oxford

MSc Environmental Change & Management (Distinction)

2011 - 2014 University of Cambridge

BA (Hons) Social Anthropology (2.1)

INSTITUTIONAL APPOINTMENTS

2020 – current New York University

Postdoctoral Research Associate, Department of Environmental Studies

Leading project on conservation impacts of Indigenous land tenure formalization in Indonesia

PROFESSIONAL EXPERIENCE

2017 Global Canopy, Oxford, UK – Research Intern (Supply Chains)

2016-2017 **Proforest Ltd, Oxford, UK** – Environmental Consultant

2016 University of Oxford, Oxford, UK – Research Assistant, Oxford Ecosystems Lab

2013 – 2016 Forestry Commission England, London, UK – Project Manager, Forest survey (Oak Processionary Moth)

2009 - 2014 Coombe Forestry Ltd, London, UK – Sustainable Forester

FIELD EXPERIENCE

2019-2020 **Pará, Brazil** – Expedition leader

Co-led team of 8 field assistants to carry out questionnaire on household/farm-level production, assets, supply chain

linkages and perceived wellbeing for 360 randomly selected farms in four municipalities in Pará state.

2019 **Pará, Brazil** - Expedition leader

Made local contacts as basis for larger field season in late 2019 as well as trialled surveys with soy & cattle farmers using mobile survey platform KoboToolbox. Project: "Assessing the Influence of Zero-Deforestation Supply-Chain Commitments on the Conservation of Ecosystems" (NSF award #1739253) PIs: Dr Rachael Garrett, Dr Kimberly

Carlson, Dr Nelson Villoria

2018 **Matopiba region, Brazil** – Expedition Leader

Surveys & interviews with soy and cattle farmers as well as experts from industry, government and civil society. Project: "Assessing the Influence of Zero-Deforestation Supply-Chain Commitments on the Conservation of Ecosystems" (NSF award #1739253) PIs: Dr Rachael Garrett, Dr Kimberly Carlson, Dr Nelson Villoria

2018 Acre & Rondônia, Brazil – Field Assistant

Surveys & interviews with various types farmers. Project: "Improving agricultural practices for sustainable

development" (NSF award #1602747) PI: Dr Rachael Garrett

2016 **Java & West Kalimantan, Indonesia** – Masters research (independent)

Semi-structured interviews with experts from industry, government and civil society as well as field work at a palm oil plantation and 3 surrounding villages using surveys, interviews & ethnographic methods. Advisors: Dr Tom Thornton

& Dr Constance McDermott

TEACHING EXPERIENCE

2021 Supervision of master's thesis on systematically reviewing the drivers of deforestation across the Amazon basin

Supervising ETH Zurich master's student's thesis systematically reviewing the proximate and underlying drivers of deforestation across the entire Amazon basin, including an assessment of existing and historic policies and a cross-country comparison. Role incl. supervision meetings, assisting the creation of research questions, reviewing R code and providing comments and feedback on thesis drafts and theoretical framework.

2020 Supervision of master's thesis on climate resilience in the Eastern Amazon, Brazil

Supervising ETH Zurich master's student's thesis examining and comparing impacts of social policies and environmental practices on climate resilience. Role incl. setting a reading list, weekly supervision meetings, assisting

the creation of research questions, reviewing R code and providing comments and feedback on thesis drafts.

Guest Lecturer & Teaching Assistant, Policy & Economics of Ecosystem Services, ETH Zürich

Participated in teaching and group discussion, included lecturing on private environmental governance in a virtual (Zoom) class setting for the class "Policy & Economics of Ecosystem Services", a masters-level class with 46

students.

2019 Supervision of master's thesis on zero-deforestation commitments in Matopiba, Brazil

Supervised Boston University master's student's honors thesis which used data collected in 2018 field season, incl. set a reading list along with weekly meetings to discuss each paper, assisted with the creation of research questions and provided comments and feedback on three drafts of thesis.

Teaching Assistant for Global Environmental Change & Sustainability (CAS EE 100), Boston University

Lead group discussions and participated in classroom teaching, and graded essays, problem sets and final papers for

introductory geography class GE 100, a class of over 100 students

AWARDS

2020

2018

ional Studies, Switzerland (CHF 5,000)
arch Foundation, Singapore
ersity of Oxford, UK
of Cambridge, UK
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MEDIA APPEARANCES

Swissinfo "Why is the Amazon still at risk despite 'zero deforestation' commitments? tinyurl.com/27bdnq46
 Mongabay "Pay or punish? Study looks at how to engage with farmers deforesting the Cerrado" tinyurl.com/2p8uext3

PUBLICATIONS

Published:

- Garrett, R. D., J. Grabs, F. Cammelli, F. Gollnow, **S.A. Levy** "Should Payments for Ecosystem Services be used to implement zero-deforestation supply chain policies? The case of soy in the Brazilian Cerrado" *World Development 152* (April 1, 2022) https://doi.org/10.1016/j.worlddev.2022.105814
- Cammelli, F., **S. A. Levy**, J. Grabs, J. Valentim & R.D. Garrett, "Effectiveness-equity tradeoffs in enforcing exclusionary supply chain policies: Lessons from the Amazonian cattle sector" *Journal of Cleaner Production* 332 (January 15, 2022) https://doi.org/10.1016/j.jclepro.2021.130031
- Grabs, J., F. Cammelli, **S.A. Levy** & R. D. Garrett. "Designing effective and equitable zero-deforestation supply chain policies," *Global Environmental Change* 70 (January 1, 2022) https://doi.org/10.1016/j.gloenvcha.2021.102357
- Garrett, R.D., F. Cammelli, J. Ferreira. **S. A. Levy**, J. Valentim & I. Viera "Forests and sustainable devleopment in the Brazilian Amazon: History, trends and future prospects" *Annual Review of Environment and Resources* 46 (April 22, 2021): 2.1-2.28. https://www.annualreviews.org/doi/10.1146/annurev-environ-012220-010228
- Garrett, R. D., **S. A. Levy**, F. Gollnow & X. Rueda "Have food supply chain policies improved forest conservation and rural livelihoods?" *Environmental Research Letters* (January 28, 2021) https://iopscience.iop.org/article/10.1088/1748-9326/abe0ed
- Garrett, R. D., **S. A. Levy**, K. M. Carlson, T. A. Gardner, J. Godar, J. Clapp, P. Dauvergne, et al. "Criteria for Effective Zero-Deforestation Commitments." *Global Environmental Change* 54 (January 1, 2019): 135–47. https://doi.org/10.1016/j.gloenvcha.2018.11.003.
- Garrett, R. D., X. Rueda, **S. A. Levy**, J.F. Bermudez Blanco, S. Shah. "Measuring impacts of supply chain initiatives for conservation: focus on forest-risk food commodities." *Meridian Institute*. Washington, D.C. (June 1, 2018). https://www.evidensia.eco/resources/273/measuring-impacts-of-supply-chain-initiatives-for-conservation-focus-on-forest-risk-food-commodities/

In Press:

Levy, S.A., F. Cammelli, G. Gibbs, J. Munger & R.D. Garrett "Deforestation in the Brazilian Amazon could be halved by scaling up the implementation of cattle zero-deforestation commitments" *Global Environmental Change*

In Preparation:

- **Levy, S.**, A.V. Garik, & R.D. Garrett "Current conditions make the effectiveness of corporate zero-deforestation policies unlikely in the Brazilian Cerrado" *in preparation for Geoforum*
- Levy, S.A., Stigler, M., E. zu Ermgassen, T. Garder & R.D. Garrett "Quantifying the impact of indirect suppliers on the effectiveness of cattle zero deforestation commitments in Brazil" in preparation for PNAS
- Cammellli, F., S. Levy, F. Gollnow, E. Bullock & R.D. Garrett "Zero-deforestation policies are failing to reduce forest degradation in the

PRESENTATIONS & CONFERENCES

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In	vited	Prese	ntations:

Invited I resemul	tions.
10/2022	FLARE Conference, Rome, Italy. "The livelihood and environmental impacts of incomplete supply chain policy implementation in the Brazilian cattle sector"
11/2021	Trase Research Dialogue #6, Stockholm, Sweden/online. "The Role of Market Share on the Effectiveness of ZDCs for Cattle"
08/2021	59 th Congresso da Sociedade Brasileira de Economia, Administração e Sociologia Rural (SOBER) & 6 th Econtro Brasileiro de Pesquisadores em Cooperativismo (EBPC) 2021, São Paolo, Brazil/online. "A melhoria da sustentabilidade das cadeias de valor globais" (Improving the Sustainability of Global Value Chains)
05/2021	Swiss Knowledge Exchange on Research on Agriculture, Conservation & Development Issues in Forest-Risk Supply Chains, ETH Zürich, Switzerland – "The role of market share on the effectiveness of zero deforestation commitments"
03/2021	Fourth Global Land Programme Telecoupling Webinar on Governing Telecoupling, GLP Telecoupling working group – "The role of market share on the effectiveness of zero deforestation commitments"
09/2020	2020 Conference on Earth System Governance (Delayed due to COVID-19), Bratislava, Slovakia – 2 presentations: "Livelihood outcomes in smallholder schemes in Indonesian palm oil: An examination of recent policy reforms" & "Quantifying the impact of indirect suppliers on the effectiveness of cattle zero deforestation commitments in Brazil"
05/2020	6 th Annual Duck Family Graduate Workshop on Environmental Politics and Governance, University of Washington, WA, USA – "The role of market share on the effectiveness of zero deforestation commitments in the Brazilian Amazon"
04/2020	International Conference on Learning Representations 2020 Workshop Tackling Climate Change with Machine Learning, ETH Zürich, Switzerland – "How machine learning can help prevent commodity-driven deforestation"
10/2019	Invited Guest Speaker at the Instituto do Homem e Meio Ambiente da Amazônia (Imazon), Belem, Brazil – "Uma abordagem sistemática pantropical para estudar compromissos de desmatamento zero" (A systematic approach to study zero-deforestation commitments across the tropics)
04/2019	Global Land Programme 4 th Open Science Meeting, Bern, Switzerland – "The Impacts of zero-deforestation commitments on deforestation and slaughterhouse siting behaviours"
12/2018	Land Use & Livelihoods Initiative Student Conference, Boston University, MA, USA – "Community-company partnerships for smallholders: An examination of recent policy reforms, Indonesia"
11/2018	Sustainability & Development Conference, Ann Arbor, MI, USA – "Livelihood outcomes in smallholder schemes in Indonesian palm oil: An examination of recent policy reforms"
08/2018	Global Canopy Seminar Series, Oxford, UK – "The impacts of zero-deforestation commitments on deforestation & slaughterhouse siting behaviors: evidence from the Brazilian cattle sector"
03/2017	Sustainability & Development Seminar, University of Oxford, UK – "The livelihood outcomes of Kemitraan smallholder schemes: Evidence from Kalimantan, Indonesia"
02/2016	21CC Student Conference, University of Oxford, UK – "The cross-cutting nature of challenges in the 21st century" (also conference director)
Invited workshop	ps/trainings:
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06/2021	Summer Institute in Computational Social Science, ETH Zürich, Switzerland. Project: "Using web scraping and machine learning techniques to identify and spatialize cattle supply chains in the Brazilian Amazon
01/2018	Qualitative Comparative Analysis workshop, McGill, Montreal, Canada
06/2018	Assessing the potential influence of zero-deforestation corporate supply chain commitments on tropical land cover workshop, SESYNC, Annapolis, MD, USA
11/2017	Land Use Spillovers & Leakage workshop, ZEF, Berlin, Germany

REVIEWS

World Development (1 review), Frontiers (1 review), Environmental Research Letters (1 review)

OTHER SKILLS

LANGUAGES English (native), Portuguese (advanced)

R (advanced), Python (intermediate), ArcGIS (advanced), QGIS, (advanced) Google Earth Engine (advanced), Open DATA SKILLS

Data Kit (advanced)

REFERENCES

 $\begin{array}{l} Prof\ Rachael\ Garrett - \underline{rgarrett@ethz.ch} \ \ (Cambridge\ University\ \&\ ETH\ Z\"urich) \\ Prof\ Kimberly\ Carlson - \underline{kc143@nyu.edu} \ \ (New\ York\ University) \end{array}$

Prof Mari Mulyani – mari.mulyani@ouce.ox.ac.uk (Oxford University & University of Indonesia)