

Amy Quandt, Ph.D.

Assistant Professor, Environmental Geography
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Education

- 2017 **Ph.D., Environmental Studies**, University of Colorado at Boulder
Certificate in College Teaching
Dissertation advisor: Dr. J. Terrence McCabe
Dissertation: *Building livelihood resilience in semi-arid Kenya: what role does agroforestry play?*
- 2010 **M.S., Resource Conservation**, University of Montana at Missoula
Emphasis: International Conservation and Development
Thesis: *Agroforestry potential on household lands outside the Mt. Hanang National Forest Reserve, Tanzania: forest conservation and livelihood implications*
- 2005 **B.S., Biology**, University of Puget Sound
Study Abroad: Wildlife Management, School for Field Studies, Kenya

Academic Appointments and Affiliations

Academic Appointments

- 2019 - **Assistant Professor** of Environmental Geography, Department of Geography, San Diego State University.
- 2017 - 19 **Research Assistant Professor**, Jornada Experimental Range, College of Agricultural, Consumer, and Environmental Sciences, New Mexico State University

Affiliations

- 2022 - present Faculty Affiliate, Center for Better Food Futures, SDSU
- 2021- present Faculty Affiliate, NOAA-CESSRST - National Oceanic and Atmospheric Sciences – Center for Earth System Sciences and Remote Sensing Technologies
- 2021 - present Faculty Affiliate, Joint Doctoral Program in Public Health, Global Health, SDSU
- 2020 - present Faculty Affiliate, Blue Gold, SDSU
- 2020 - present Associated Faculty, Sustainability Program

Fellowships

- 2020 - 2025 Global Young Academy Member (globalyoungacademy.net)

- 2019 Grants and Research Enterprise Writing Fellowship (GREW), San Diego State University
- 2017 - 19 SILC (Sustainability Innovation Lab at Colorado) Fellow, University of Colorado Boulder
- 2015 - 17 Resilience Academy Delegate – Enhancing Resilience to Minimize Loss and Damage from Climate Change: Providing Knowledge for the UNFCCC. Three year workshop (2015 Bangladesh, 2016 Germany, 2017 New York) funded by Munich Re Foundation, International Centre for Climate Change and Development (ICCCAD), and the United Nations University (UNU-EHS)
- 2014 - 15 US Borlaug Fellow in Global Food Security Research, USAID Feed the Future
- 2014 - 15 Research Fellow, World Agroforestry Centre, Nairobi, Kenya

Publications

Peer reviewed works published or in press

33. **Quandt, A.**, Larsen, A.E., Bartel, G., Okamura, K., and D. Sousa. 2023. Sustainable groundwater management and its implications for agricultural land repurposing. *Regional Environmental Change* 23:120. Doi: 10.1007/s10113-023-02114-2
32. Larsen, A.E., **Quandt, A.**, Foxfoot, I., Parker, N., and D. Sousa. 2023. The effect of agricultural land retirement on pesticide use. *Science of the Total Environment* 896:165224. Doi: 10.1016/j.scitotenv.2023.165224
31. **Quandt, A.** 2023. “You have to be resilient”: Producer perspectives to navigating a changing agricultural system in California, USA. *Agricultural Systems* 207: 103630. Doi: 10.1016/j.agry.2023.103630
30. Ololade, O.O., O’Shea, B., **Quandt, A.**, Pandey, V., and S.A. Oke. 2023. Editorial: Emerging trends on adaptive capacity and water security measures under a looming climate change threat. *Frontiers in Water* 5: 1139682. Doi: 10.3389/frwa.2023.1139682.
29. **Quandt, A.**, Neufeldt, H., and K. Gorman. 2023. Climate change adaptation through agroforestry: opportunities and gaps. *Current Opinion in Environmental Sustainability* 60: 101244.
28. **Quandt, A.**, Grafton, D., Dawson, P.M., Ibarra, C., Mayes, E., Monteverde, C., Piel, D., and P. Paderes. 2023. Mitigation and adaptation to climate change in San Diego County, California. *Mitigation and Adaptation Strategies for Global Change* 28: 7. Doi: 10.1007/s11027-022-10041-6.
27. Keeney, A.J., **Quandt, A.**, Meng, Y., Flores, L., Flores, D., Garrett, R., Hernandez, P. and M. Villaseñor. 2022. “We all have a job to do in this world, it’s up to us”: Farmer and Farmer Mental Health in a Rural US-Mexico Border Region. *Journal of Agromedicine*. Doi: 10.1080/1059924X.2022.2154298.
26. **Quandt, A.**, Keeney, A.J., Flores, D., Flores Jr, L., and M. Villaseñor. 2022. “We left the crop there lying in the field”: Agricultural worker experiences with the COVID-19 pandemic in a rural US-Mexico border region. *Journal of Rural Studies* 95: 533-543. Doi: 10.1016/j.jrurstud.2022.09.039
25. **Quandt, A.**, O’Shea, B., Oke, S.A., and O.O. Ololade. 2022. Policy interventions to address water security impacted by climate change: adaptation strategies of three case studies across different geographic regions. *Frontiers in Water* 4:935422. Doi:

- 10.3389/frwa.2022.935422
24. Miletic, M., Shahine, F., Sarkar, M., and **A. Quandt**. 2022. A Native American perspective on sustainable and resilient infrastructure in Southern California. *Sustainability* 14: 12811. Doi: 10.3390/su141912811
 23. Awazi, N.P., **Quandt, A.**, and J.N. Kimengsi. 2022. Endogenous livelihood assets and climate change resilience in the Mezam Highlands of Cameroon. *GeoJournal*. Doi: 10.1007/s10708-022-10755-9.
 22. **Quandt, A.**, and P. Paderes. 2022. Livelihood resilience and global environmental change: towards integration of objective and subjective approaches of analysis. *Geographical Review*: 1-18. Doi: 10.1080/00167428.2022.2085104.
 21. Keeney, A.J., **Quandt, A.**, Flores, Daniela, Flores, L. 2022. Work-life stress and COVID-19 among Latina farmworkers in a rural US-Mexico border region. *International Journal of Environmental Research and Public Health* 19: 4928. doi: 10.3390/ijerph19084928
 20. **Quandt, A.** 2022. The role of qualitative social science. Discussion of “Guiding principles for hydrologists conducting interdisciplinary research and fieldwork with participants.” *The Hydrological Sciences Journal* 67(7): 1141-1144. doi: 10.1080/02626667.2022.2060107
 19. Keeney, A.J., **Quandt, A.**, Villasenor, M., Flores, D., and L. Flores Jr. 2022. Occupational stressors and access to COVID-19 resources among commuting and residential Hispanic/Latino farmworkers in a US-Mexico border region. *International Journal of Environmental Research and Public Health* 19(2): 763. doi: 10.3390/ijerph19020763.
 18. **Quandt, A.**, Salerno, J., Herrick, J., Hartter, J., Baird, T., McCabe, J. T., and E. Xu. 2021. Mobile phone use and agricultural impacts among female smallholder farmers in Tanzania. *Journal of Gender, Agriculture and Food Security* 6(1): 43-54. doi: 10.19268/JGAFS.612021.4
 17. Awazi, N.P., and **A. Quandt**. 2021. Livelihood resilience to environmental changes in Kenya and Cameroon: a comparative analysis. *Climatic Change* 165: 33. doi: 10.1007/s10584-021-03073-5
 16. **Quandt, A.** 2021. Coping with drought: narratives from smallholder farmers in semi-arid Kenya. *International Journal of Disaster Risk Reduction* 57: 102168. doi: 10.1016/j.ijdr.2021.102168.
 15. **Quandt, A.** 2021. Agroforestry trees for improved food security on farms impacted by wildlife crop raiding in Kenya. *Trees, Forests, & People* 4: 100069. doi: 10.1016/j.tfp.2021.100069
 14. **Quandt, A.** 2020. Contribution of agroforestry trees for climate change adaptation: narratives from smallholder farmers in Isiolo, Kenya. *Agroforestry Systems*: 1-12. doi: 10.1007/s10457-020-00535-0
 13. **Quandt, A.**, Salerno, J., Neff, J., Baird, T. Herrick, J., McCabe, J. T., Xu, E., and J. Hartter. 2020. Mobile phone use is associated with higher smallholder agricultural productivity in Tanzania, East Africa. *PLoS ONE* 15(8): e0237337. doi: 10.1371/journal.pone.0237337
 12. **Quandt, A.**, Herrick, J., Peacock, G., Salley, S., Buni, A., Mkalawa, C., and J. Neff. 2020. A standardized land capability classification system for land evaluation using mobile phone technology. *Journal of Soil and Water Conservation* 75(3): 1-11. doi: 10.2489/jswc.2020.00023
 11. Abeje, M., Tsunekawa, A., Haregeweyn, N., Nigussie, Z., Adgo, E., Ayalew, Z., Tsubo, M., Elias, A., Berihun, D., **Quandt, A.**, Berihun, M., and T. Masunaga. 2019. Communities’

- livelihood vulnerability to climate variability in Ethiopia. *Sustainability* 11(22): 6302.
10. Herrick, J.E., Neff, J., **Quandt, A.**, Salley, S., Maynard, J., Ganguli, A., and B. Bestelmeyer. 2019. Prioritizing land for investments based on short- and long-term land potential and degradation risk. *Environmental Science and Policy* 96: 52-58. doi: 10.1016/j.envsci.2019.03.001.
 9. **Quandt, A.** 2019. Variability in perceptions of household livelihood resilience and drought at the intersection of gender and ethnicity. *Climatic Change* 152: 1-15. doi: 10.1007/s10584-018-2343-7
 8. **Quandt, A.** 2018. Household Livelihood Resilience Approach: A sustainable livelihoods approach for measuring livelihood resilience. *World Development* 107: 253-263. doi: 10.1016/j.worlddev.2018.02.024.
 7. **Quandt, A.**, Neufeldt, H., and J.T. McCabe. 2018. Building livelihood resilience: what role does agroforestry play? *Climate and Development*. doi: 10.1080/17565529.2018.1447903.
 6. **Quandt, A.**, Neufeldt, H., and J.T. McCabe. 2017. The role of agroforestry in building livelihood resilience to floods and droughts in semi-arid Kenya. *Ecology and Society* 22(3). doi: 10.5751/ES-09461-220310
 5. **Quandt, A.**, and J.T. McCabe. 2017. “You can steal livestock but you can’t steal trees”: the livelihood benefits of agroforestry during and after violent conflict. *Human Ecology* 45(4): 1-11. doi: 10.1007/s10745-017-9922-5.
 4. **Quandt, A.** and A. Kimathi. 2017. Perceptions of the effects of floods and droughts on livelihoods: lessons from arid Kenya. *International Journal of Climate Change Strategies and Management* 9(3): 337-351. doi: 10.1108/IJCCSM-11-2014-0132
 3. **Quandt, A.** 2016. Farmers and forest conservation: how might land sparing work in practice? *Society and Natural Resources* 29(4), 418 – 431. doi: 10.1080/08941920.2015.1095381
 2. **Quandt, A.** 2016. Towards integrating political ecology into resilience-based resource management. *Resources* 5(4): 31. doi: 10.3390/resources5040031.
 1. **Quandt, A.**, and A. Kimathi. 2015. Adapting livelihoods to climate change in arid Kenya: local perspectives and insights. *African Journal of Rural Development* 1(1): 51-60. Available at: <http://afjrd.org/jos/index.php/ajrd/article/view/93>

Book chapters published or in press

- McCabe, J.T., and **A. Quandt**. 2020. Chapter 11 Drought: A challenge to livelihoods, sustainability, and resilience. In: Angry Earth: Disaster in an Anthropological Perspective, 2nd edition (edited by A. Oliver-Smith, and S.M. Hoffman). New York, NY: Routledge. doi: 10.4324/9781315298917-26

Technical Reports, Policy Briefs, Op-Eds, and Conference Proceedings

- Quandt, A.**, Gorman, K. and L. Mayes. 2023. Opinion: Here are three target areas where San Diego can step up to fight climate change. The San Diego Union-Tribune. Published February 10, 2023. <https://www.sandiegouniontribune.com/opinion/commentary/story/2023-02-10/opinion-here-are-three-target-areas-where-san-diego-can-step-up-to-fight-climate-change>
- Bezner Kerr, R., T. Hasegawa, R. Lasco, I. Bhatt, D. Deryng, A. Farrell, H. Gurney-Smith, H.

- Ju, S. Lluch-Cota, F. Meza, G. Nelson, H. Neufeldt, and P. Thornton. 2022: Food, Fibre, and Other Ecosystem Products. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S.Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Lösschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 713–906, doi:10.1017/9781009325844.007. **Contributing Author.**
- Quandt, A.**, and L. Flores. 2022. Op-ed: Farmworkers Face Stress and Depression. The Pandemic Made it Worse. Civil Eats. Published July 28, 2022. <https://civileats.com/2022/07/28/op-ed-farmworkers-face-stress-and-depression-the-pandemic-made-it-worse/>
- Irkiso, A.B., Abebe, B.T., Hadgu, K., Abza, T.G., and **A. Quandt**. 2020. Pilot Testing LandPKS Smartphone Application for Local Level Participatory Land Use Planning in Ethiopia. 2020 World Bank Conference on Land and Poverty, The World Bank – Washington, D.C., March 16-20 2020.
- International Resource Panel (IRP). 2019. Land Restoration for Achieving the Sustainable Development Goals: An International Resource Panel Think Piece. Herrick, J.E., Abrahamse, T., Abhilash, P.C., Ali, S.H., Alvarez-Torres, P., Barau, A.S., Branquinho, C., Chhatre, A., Chotte, J.L., Cowie, A.L., Davis, K.F., Edrisi, S.A., Fennessy, M.S., Fletcher, S., Flores-Díaz, A.C., Franco, I.B., Ganguli, A.C., Speranza, C.I, Kamar, M.J., Kaudia, A.A., Kimiti, D.W., Luz, A.C., Matos, P., Metternicht, G., Neff, J., Nunes, A., Olaniyi, A.O., Pinho, P., Primmer, E., **Quandt, A.**, Sarkar, P., Scherr, S.J., Singh, A., Sudoi, V., von Maltitz, G.P., Wertz, L., Zeleke, G. A think piece of the International Resource Panel. United Nations Environment Programme, Nairobi, Kenya.
- Quandt, A.** 2018. Designing the LandPKS App: Guidelines for Developing a Global App. LandLinks Newsletter, USAID, June 20, 2018. Available at: <https://land-links.org/2018/06/designing-the-landpks-app-guidelines-for-developing-a-global-app/>
- Quandt, A.** 2018. Announcing the Release of LandPKS 3.0. LandLinks, Newsletter, USAID, April 18, 2018. Available at: <https://land-links.org/2018/04/announcing-the-release-of-landpks-3-0/>
- Quandt, A.** 2018. LandCover: A Mobile Tool for Vegetation Monitoring. LandLinks Newsletter, USAID, February 27, 2018. Available at: <https://www.land-links.org/2018/02/landcover-mobile-tool-vegetation-monitoring/>
- Quandt, A.** 2018. Location Matters! The Land Potential-Knowledge System Provides Point-Scale Soil Information. LandLinks Newsletter, USAID, January 30, 2018. Available at: <https://land-links.org/2018/01/location-matters-landpks-can-provide-point-scale-soil-information/>
- Quandt, A.** 2017. Online Training for Using the LandPKS App – Available Now. LandLinks Newsletter, USAID, Dec 20, 2017. Available at: <https://land-links.org/2017/12/online-training-using-landpks-app-available-now/>
- Resilience Academy Participants. 2016. Loss and Damage, Livelihood Resilience: 5 key insights from the Resilience Academy and 5 recommendations for the 5-year work plan on Loss and Damage. United Nations University – Institute for Environment and Human Security. Policy Brief 10. DOI: 10.13140/RG.2.2.25250.63689
- Quandt, A.** 2013. Climate-Smart, Ecosystem-Friendly Livelihood Options in Isiolo County,

Kenya. Prepared for the Partners for Resilience Project, Red Cross/Red Crescent Climate Centre. Available at: https://www.researchgate.net/publication/283928369_Partners_for_Resilience_Livelihoods_Assessment_Report_-_August_2013

Funding

External Grants Funded

- 2023-2025 PI. *Climate change adaptation through agroforestry: an integrated socio-economic and biophysical assessment in two semi-arid regions*. National Center for Atmospheric Research, Early Career Faculty Innovator Program (National Science Foundation Sub-award). \$325,612
- 2022-2025 PI (Co-PI Dr. McCabe, CU-Boulder and Co-PI Dr. Leslie, UNC-Chapel Hill). Collaborative Research: Response and Resilience Following Compound Extreme Events. National Science Foundation (NSF) Cultural Anthropology Program Senior Research Awards, Award Number 2148171. 2022-2025. **\$108,173**
- 2021-2025 Co-PI (PI Dr. Larsen, UCSB). *Sustainable Agroecosystems: Harnessing policy-driven land use change for the sustainability, productivity and vitality of agroecosystems*. United States Department of Agriculture, National Institute of Food and Agriculture (USDA-NIFA), Agriculture and Food Research Initiative (AFRI): Foundational and Applied Science Program in the area of Bioenergy, Natural Resources, and Environment. 2021-2025. **\$649,958**
- 2021 Co-PI (PI Dr. Marta Miletic, SDSU). *Sustainable Leadership Academy: Exposing Girls and Underrepresented Students to STEM Careers*. The San Diego Foundation, San Diego Unified Level Up SD Grant. **\$136,319**
- 2021 Co-PI (PI Dr. Anne Keeney, SDSU, School of Social Work). *Understanding COVID-19 Testing and Vaccine Access for Daytime Farmworkers in Imperial County*. Western Center for Agricultural Health and Safety (WCAHS) rapid response funding opportunity. **\$13,871**
- 2018 - 20 Co-PI (PI Terri Schulz, The Nature Conservancy of Colorado). *Expanding and testing the utility of Land Potential Knowledge System (LandPKS) – an open source grazing land evaluation tool for ranchers*. Natural Resources Conservation Service Conservation Innovation Grants, **\$427,164**
- 2018 - 20 Co-PI (Co-PI's J.W. Karl, E. Winford, A. Hulet, and J. Herrick), *Training on monitoring techniques to support outcome-based management on private and public rangeland*. Western SARE (Sustainable Agriculture Research and Education) Competitive Grants, Professional Development Program, USDA, **\$70,972**
- 2014 - 15 Co-PI (J.T. McCabe, Co-PI), *Building livelihood resilience in semi-arid Kenya: what role does agroforestry play?* US Borlaug Fellows in Global Food Security Graduate Research Grant, **\$19,995**

Internal Grants and Awards

- 2023 Co-PI (PI Fernando De Sales, SDSU), Socio-economic equality and environmental sustainability of Southern California and Baja California wineries. Water Across Borders Big Ideas funding. **\$4350**
- 2023 Co-PI (PI Mariana Villada Canela, Universidad Autonoma de Baja California), *Building resilience to climate change impacts through community engagement in water management: A comparative study of California and Baja California*. Water Across Borders Big Ideas funding, **\$4447**
- 2023 PI, *Sustainable Agroecosystems: Harnessing Policy-Driven Land Use Change for the Sustainability, Productivity, and Vitality of Agroecosystems*. San Diego State University, College of Arts and Letters, Critical Thinking Grant for Spring 2024. **Course Release.**
- 2023 PI, *Feasibility of agroforestry for climate change adaptation in San Diego County, California*. 2023 Seed Grant Program, San Diego State University. **\$7500**
- 2022 Faculty Mentor, 2022-2023 Completion of Research and Creative Activity (CORE) Fellowship, Margot Mattson. **\$920**
- 2022 PI, Summer Undergraduate Research Program, San Diego State University. **\$3267**
- 2021 PI, Summer Undergraduate Research Program, San Diego State University. **\$2755**
- 2020 - 21 PI, *The agricultural resilience of the Imperial Valley: historical, current, and future perspectives*. University Grants Program, San Diego State University, **\$9,965**
- 2019 Grants and Research Enterprise Writing Fellowship (GREW), San Diego State University, **\$3,000**
- 2019 Shared Vision Grant, funded by the Department of Geography, San Diego State University, **\$700**
- 2017-18 Research Assistant (J. Hartter, University of Colorado Boulder, PI) Improving access to agricultural knowledge through mobile phones: exploring the potential for technology adoption in Africa. Innovative Seed Grant Competition, **\$50,000**
- 2017 Graduate School Travel Grant, funded by the University of Colorado Boulder, **\$300**
- 2016 Environmental Studies Travel Grant, funded by the University of Colorado Boulder, **\$800**
- 2016 Graduate School Travel Grant, funded by the University of Colorado Boulder, **\$300**
- 2014 Graduate Student International Travel Grant, funded by the University of Colorado Boulder, **\$500**
- 2014 Environmental Studies Travel Grant, funded by the University of Colorado Boulder, **\$1,000**
- 2013 University of Colorado at Boulder Beverly Sears Graduate Student Research Grant, funded by the University of Colorado Boulder, **\$1,000**
- 2009 Presidents Emergency Plan for AIDS Relief Grant, USAID, **\$1,000**
- 2008 Peace Corps Partnership Grant, **\$7,000**

Presentations and Posters

- 2023 *Agroforestry and Sustainable Agriculture*. San Diego State University, Guest lecture in the course Biology 496: Sustainable Agriculture. March 15, 2023. (Invited)

- 2022 *Land Repurposing in the Southern Central Valley, California: Stakeholder Perspectives and Recommendations*. Washington, DC. ACES: A community on Ecosystem Services. December 15, 2022.
- 2022 *Climate Change Adaptation Through Agroforestry: Opportunities and Gaps*. University of California – Santa Barbara, Climate Talks. October 21, 2022. (Invited)
- 2022 *Intersections of Conservation, Livelihoods, and Health: Case Studies from East Africa and California*. San Diego State University, Global Health Joint Doctoral Program Colloquium. September 21, 2022 (Invited)
- 2022 *Climate Change Adaptation Through Agroforestry: Opportunities and Gaps*. San Diego State University, Department of Biology, Monday Talks. September 12, 2022. (Invited)
- 2021 *Intersections of Environmental Conservation and Resilient Livelihoods: Strategies and Approaches in East Africa and Beyond*. San Diego State University, Global Health Joint Doctoral Program Colloquium. October 27, 2021 (Invited)
- 2021 *Coping with Drought: Narratives from Smallholder Farmers in Semi-Arid Kenya*. University of California – Santa Barbara, Department of Geography Colloquium. April 15, 2021 (Invited)
- 2019 *Perceptions of Drought in Kenya*. San Diego State University, Introduction to Human Geography course. Fall 2019 term, November 20, 2019 (Invited).
- 2019 *LandPKS for Developing Communities*. University of Colorado, Engineering for Developing Communities course. Spring 2019 term, April 16, 2018 (Invited)
- 2018 *Drought in Kenya: An Anthropological Perspective*. University of Colorado, Natural Hazards Course, Summer 2018 Term, July 23, 2018 (Invited)
- 2018 *LandPKS: A New Mobile Tool for Sustainable Land-Use Planning and Management*. Paper presented at the 2018 World Bank Conference on Land and Poverty. The World Bank – Washington, D.C., March 19-23, 2018.
- 2018 *Land-Potential Knowledge System: Mobile Phone Technology for Sustainable Land Management*. Brown Bag Presentation at the Jornada Experimental Range, New Mexico State University, February 23, 2018 (Invited)
- 2018 *The Land-Potential Knowledge System (LandPKS): Mobile Phone Technology for Biodiversity Conservation and Sustainable Land Management*. Lecture presented at the Las Cruces Museum of Nature and Science, February 21, 2018 (Invited)
- 2017 *Agroforestry and agricultural diversity*. Lecture presented in Sustainable Agriculture course at the University of Colorado Boulder, October 26, 2017 (Invited)
- 2017 *The Land-Potential Knowledge System (LandPKS): Mobile apps for sustainable land management*. Paper presented at the Resilience Academy, Woodrow Wilson Center, Washington, DC, Oct 19, 2017 (Invited). Video of presentation available at: <https://www.youtube.com/watch?v=R4S2IuT3VwY> (Between 35 and 43 minutes)
- 2017 *Building livelihood resilience in semi-arid Kenya: what is the role of agroforestry?* Jornada Experimental Range Lecture Series, New Mexico State University (invited)
- 2017 *If and how does agroforestry build livelihood resilience to floods and droughts in semi-arid Kenya*. Paper presented at the Environmental Studies Colloquium Series, University of Colorado Boulder April 3, 2017 (Invited)
- 2017 *Drought: a challenge to livelihoods, sustainability, and resilience*. Paper presented at the Society of Applied Anthropology Annual Meeting, March 30, 2017 (invited)
- 2017 *Building livelihood resilience: What role does agroforestry play?* Paper presented at the Society of Applied Anthropology Annual Meeting, March 30, 2017

- 2016 *Building livelihood resilience to floods and droughts in Kenya: What role does agroforestry play?* Poster presented at the 3rd Annual Institute of Behavioral Science Student Research Symposium, University of Colorado at Boulder
- 2015 *Ecosystem services and loss and damage to climate change.* Workshop session at the Resilience Academy – Enhancing Resilience to Minimize Loss and Damage from Climate Change: Providing Knowledge for the UNFCCC, Bangladesh
- 2015 *Agroforestry and livelihood resilience in Isiolo, Kenya.* Paper presented at the Workshop on Climate/Environment and Insecurity in Kenya (invited)
- 2013 *Climate-smart, ecosystem-friendly livelihood options in Isiolo County, Kenya.* University of Colorado at Boulder, Environmental Studies Colloquium (invited)
- 2013 *Climate-smart, ecosystem-friendly livelihood options in Isiolo County, Kenya.* University of Colorado at Boulder, Center for Science and Technology Policy Research Lunchtime Series (invited)

Popular Coverage of Professional Work

- Research Highlight. Dayrell, C. 2022. Assets and Resilience. Nature Climate Change. [Doi: 10.1038/s41558-022-01523-1](https://doi.org/10.1038/s41558-022-01523-1)
- Ramona Sentinel. [Vines and Wines](#): Ramona’s grape growers help SDSU researchers study impact of climate change on vineyards. October 2022.
- Calexico Chronical. [Re:Border 2021 Highlights Academic Partnerships](#). November 2021.

Teaching and Mentoring

Courses Taught as Instructor of Record

- 2022 - GEOG 570: Environmental Conservation Practice
- 2022 - GEOG 360: Human Dimensions of Climate Change
- 2021 GEOG 770: Seminar in Environmental Conservation
- 2021 - 2022 GEOG 496: Human Dimensions of Climate Change
- 2020 - GEOG 370 Conservation Science and Policy
- 2020 GEOG 590: CAL Experience: Human-Environmental Aspects of COVID-19 (Co-taught course)
- 2017 ENV5 4100-001/ GEOG 4100-003: Special Topics in Environmental Studies/Geography - Agroforestry: A Global Perspective
- 2013-14 WRTG 1150: First-Year Writing and Rhetoric

Graduate Students Advised

- Dan Grafton, PhD, Geography, SDSU/UCSB – ongoing
- Asikunnaby Asikunnaby, PhD, Geography, SDSU/UCSB - ongoing
- Gracie Bartel, MA, Geography, SDSU - ongoing
- Judith Bross, MA, Geography, SDSU – ongoing
- Aidan Patterson, MS, Geography, SDSU - ongoing
- Jackie Weeden, MA, Geography, SDSU - ongoing
- Phevee Paderes, MA, Geography, SDSU – Spring 2023

Kayla Gorman, MA, Geography, SDSU – Spring 2022

Graduate Student Thesis/Dissertation Committees

Rex Peacock, PhD, Geography, SDSU – ongoing
Corrie Monteverde, PhD, Geography, SDSU - ongoing
Sam Orndorff, PhD, Geography, SDSU – ongoing
Nancy Guzman, MA, Anthropology, SDSU – ongoing
June Carrington, MA, Geography, SDSU – ongoing
Reid Endress, MA, Geography, SDSU - ongoing
Christina Garvey, MA, Geography, SDSU - ongoing
Daniel Ochoa, MA, Geography, SDSU – Spring 2023
Margot Mattson, MS, Geography, SDSU – Spring 2023
Tracy Lui, MS, Geography, SDSU – Fall 2022
Gabriela Morales, MS Geography, SDSU – Spring 2022

Undergraduate Thesis or Capstone Students Advised

Piper Horning, Environmental Science, SDSU – 2022-23
Emmalyn Norman, Environmental Science, SDSU – 2022-23
Marina Pangilinan, Environmental Science, SDSU – 2021-22

Ph.D. Dissertation Examiner

Dennis Rweyemamu, Lincoln University, New Zealand.
“Understanding resilience and conflict in a changing climate among agropastoralist and farming communities in Morogoro region, Tanzania”
Ph.D. Examiner, 2019

Teaching Assistant

2016	ENVS 3525-002: Environmental Studies Cornerstone – Sustainable Food Systems
2013	ENVS 2000: Applied Ecology for Environmental Studies
2013	ENVS 3621: Energy, Policy, and Society
2006	University of Montana: Introduction to Recreation Management
2005	University of Puget Sound: Genetics

Pedagogical Development

2017 **Certificate of College Teaching.** Awarded by the Graduate Teacher Program, University Colorado Boulder. Attended 20 workshops, 2 credits of a discipline specific pedagogy course, two videotape consultations, a faculty evaluation, and wrote a teaching portfolio (certificate and portfolio available upon request)

2014 **Pedagogy for Environmental Studies, Geography, and Ecology.** Two credit course on innovative teaching techniques and teaching to a diversity of students.

- 2014 **WRTG 5050: Graduate Studies for Teaching Writing and Rhetoric.** Two credit course focused on how to teaching university writing skills.
- 2012 **Environmental Studies Undergraduate Learning Objectives.** Assisted to develop the learning objectives for undergraduates in the Environmental Studies Program at the University of Colorado at Boulder

Academic Mentoring

- 2018 Advised and supervised a high school student on data analysis for household survey work conducted in Tanzania
- 2017 Advised and directly oversaw two Masters of the Environment students at the University of Colorado Boulder on quantitative data analysis
- 2017 Taught and supervised Tanzanian undergraduate students on household survey methods
- 2015 Taught and supervised 10 Kenyan students on mixed methods social science research including household surveys and qualitative interviews

Other Teaching Activities

- 2017 Developed and managed an online LandPKS training module (<http://learn.landpotential.org/>)
- 2017 Developed and led implementation of the LandPKS One-Day Training in collaboration with the Regional Centre for Mapping Resources for Development (RCMRD) in Nairobi, Kenya
- 2017 Taught a half-day LandPKS training for Peace Corps Volunteers in Morogoro, Tanzania

Service

Editor

- 2023 Guest Editor, *Frontiers in Sustainable Resource Management*, Special Edition on “Operationalizing the Water-Energy-Food Nexus as an Adaptation and Mitigation Strategy for Climate Change and Resource Management”
- 2021-2022 Guest Editor, *Frontiers in Water*, Special Edition on “Emerging Trends in Adaptive Capacity and Water Security Measures under a Looming Climate Change Threat”
- 2022 Guest Editor, *Frontiers in Sustainable Food Systems*

Committees and Advising

- 2021- Diversity Committee Chair, Department of Geography, San Diego State University
- 2021- Faculty advisor for the Geography Graduate Student Association, San Diego State University
- 2021 Hiring Committee Member for Assistant Professor of Remote Sensing and

Environmental Geography Position, Department of Geography, San Diego State University

2020- Scholarship Committee, Department of Geography, San Diego State University

2020- MA/MS Committee, Department of Geography, San Diego State University

2020- Mundt Cambodia Fellowship Review Committee, College of Arts and Letters, San Diego State University

2019-2021 Diversity Committee, Department of Geography, San Diego State University

2015-16 Happy Hour Coordinator, Environmental Studies Program, University of Colorado at Boulder

2012-14 Sports Viewing Committee Member, Environmental Students Program, University of Colorado at Boulder

2006-7 Graduate student group Vice-President, Department of Society and Conservation, University of Montana

Reviewer

Nature Climate Change (1); Nature Sustainability (1); WIREs Climate Change (1); International Journal of Disaster Risk Reduction (7); Human Ecology (5); Heliyon (5); Climatic Change (4); Climate and Development (4); PLOS ONE (3); Society and Natural Resources (3); Sustainability (2); Natural Resources Forum: A United Nations Sustainable Development Journal (2); Environment, Development and Sustainability (2) Ecology and Society (2); Journal of Agromedicine (2); World Development (1); Forest Policy and Economics (1); Journal of Political Ecology (1); Resilience: International Policies, Practices, and Discourses (1); Mountain Research and Development (1); The Open Agriculture Journal (1); Climate Policy (1); Journal of Rural and Community Development (1); Food Security (1); Environment and Planning E: Nature and Space (1); The Scientific World Journal (1); Frontiers in Sustainable Food Systems (1); Frontiers in Forests and Global Change (1); Weather, Climate, and Society (1); Agricultural Systems (1); Frontiers in Climate; Agroforestry Systems (1); Environmental Development (1); Regional Environmental Change (1); Environmental Management (1); Current Opinion in Environmental Sustainability (1); Population and Environment; Elementa: Science of the Anthropocene (1)

External reviewer for The Bill & Melinda Gates Foundation Grand Challenge Explorations Program, 2018

Ad Hoc Reviewer for National Science Foundation, Decision, Risk, and Management Sciences Program, 2019

Reviewer for National Science Foundation, Graduate Research Fellowship Program, 2019-20

Reviewer for student applications to the Mundt Peace Fellowships in Cambodia, San Diego State University, 2020

Grant Reviewer for the International Foundation for Science – IFS Sweden, 2020

Trainings

Macroaggression and Implicit Bias Training, SDSU, Fall 2019
Military Ally Training, SDSU, Fall 2019
Ability Ally Training, SDSU, Spring 2022

Professional Memberships

Society for Applied Anthropology
International Sustainable Development Research Society
National Peace Corps Association
American Association of Geographers

Professional Work Experience

- 2010 - **Founder and Director**, Barjomot Scholarship Foundation
 - Foundation provides scholarship to secondary school for students in Barjomot, Tanzania
- 2017-19 **Global Coordinator**, Land-Potential Knowledge System
 - Lead adoption and user-centered design of mobile apps for sustainable agricultural development, biodiversity conservation, and land management
- 2013 **Junior Researcher**, Red Cross/Red Crescent Climate Centre, Isiolo, Kenya
 - Created, conducted, and analyzed a climate-smart, ecosystem-friendly livelihoods survey
- 2012 **Natural Programs Director**, Camp Namanu Campfire Camp, Oregon
- 2011-12 **Base Manager**, Thai Elephant Conservation Project, Global Vision International, Huay Pakoot, Thailand
 - Managed daily logistics, volunteer-led data collection, and community-based projects
- 2007-9 **United States Peace Corp Volunteer**, Tanzania
 - Worked as a rural extension agent in the Environmental Education and Sustainable Agriculture in Rural Communities Program

Skills

Computer Programs

Microsoft Office (Word, Excel, PowerPoint)
Stata
ArcGIS
NVivo
R

Research Skills

Social science mixed-methods
Quantitative Surveys
Qualitative interviews
Focus groups
Archival research
Key informant interviews
Participant observation

Languages

English – Native speaker
Swahili – Advanced conversational
Spanish – Beginner