



## Areidy Aracely Beltran-Peña

Postdoctoral Scholar, Earth System Science

### Bio

---

#### BIO

Areidy Beltran-Peña is an Earth System Scientist and a Stanford Doerr School of Sustainability Dean's Postdoctoral Fellow. She leverages integrated assessment and Earth system models to investigate the global and regional impacts of climate change on water resources available for natural and human consumption. Overall, her research sheds light on the intricate dynamics impacting water and food security amid a changing climate, highlighting the importance of both global and regional analyses.

#### HONORS AND AWARDS

- Stanford Doerr School of Sustainability Dean's Postdoctoral Fellowship, Stanford University (2023 - 2025)

#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of California Berkeley (2023)
- Master of Arts, University of California Berkeley (2017)
- B.A., University of California, Berkeley , Environmental Earth Science (2015)
- M.A., University of California, Berkeley , Earth and Planetary Science (2017)
- Ph.D., University of California, Berkeley , Environmental Science, Policy, and Management (2023)

#### STANFORD ADVISORS

- Noah Diffenbaugh, Postdoctoral Faculty Sponsor

### Publications

---

#### PUBLICATIONS

- **Future Food Security in Africa Under Climate Change** *EARTHS FUTURE*  
Beltran-Pena, A., D'Odorico, P.  
2022; 10 (9)
- **Potential for sustainable irrigation expansion in a 3 degrees C warmer climate** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Rosa, L., Chiarelli, D., Sangiorgio, M., Beltran-Pena, A., Rulli, M., D'Odorico, P., Fung, I.  
2020; 117 (47): 29526-29534
- **Global food self-sufficiency in the 21st century under sustainable intensification of agriculture** *ENVIRONMENTAL RESEARCH LETTERS*  
Beltran-Pena, A., Rosa, L., D'Odorico, P.  
2020; 15 (9)

- **Values-Based Scenarios of Water Security: Rights to Water, Rights of Waters, and Commercial Water Rights** *BIOSCIENCE*

Jenkins, W., Rosa, L., Schmidt, J., Band, L., Beltran-Pena, A., Clarens, A., Doney, S., Emanuel, R. E., Glassie, A., Quinn, J., Rulli, M., Shobe, W., Szeptycki, et al  
2021; 71 (11): 1157-1170