

Peter Läderach (PhD)

Alliance of Bioversity International and CIAT, part of the CGIAR

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Flagship leader on Climate Smart Technologies and Practices for the Climate Change, Agriculture and Food Security (CCAFS) research program of the CGIAR, based in Rome, Italy. Currently also seconded to the UN World Food Programme (WFP) as a Principal Climate Scientist on behalf of CCAFS. Led the expansion of CIAT's Climate Change program to Central America, Africa and Asia, with extensive work experience in more than 15 countries. Nearly 20 years of research experience in developing countries to support the goals of alleviating poverty, adapting to and mitigating climate change, building resilience and protecting the environment. Led climate change assessments of IFAD investments plans globally and advises WFP on its climate programming. Peter holds an MSc in Geography and a PhD in Tropical Agriculture (summa cum laude), he published over 60 peer-reviewed articles, book chapters and books.

Professional experience

2020 Jan - present **Flagship Leader on Climate Smart Technologies and Practices for the Climate Change, Agriculture and Food Security (CCAFS) research program of the CGIAR, Italy, Rome**

Lead the Climate Smart Technologies and Practices Flagship for CCAFS, including overseeing a portfolio of projects globally. Spearheading the development of the Climate Security agenda for the CGIAR. Developing large impact pathways for the CGIAR climate science to reach dozens of millions of beneficiaries. Employing novel evidence based synthesis methods to the entire CCAFS portfolio.

2020 Jan - present **Principal Climate Scientist UN World Food Programme (WFP) - secondment**
Facilitate internal dialogue on food systems under climate change. Identify opportunities to leverage existing climate science and knowledge from CGIAR/CCAFS to inform WFP programming. Lead structured conversations with WFP's divisions and units to compile a detailed portfolio of research needs that can inform a more systematic collaboration between the CGIAR and WFP. Coordinate with partners the elaboration and submission of joint research proposals on climate and conflict.

2019 April- Dec. **Senior Climate Scientist UN World Food Programme (WFP) and UN International Fund for Agricultural Development (IFAD) - secondment**

Led portfolio analysis of WFP and IFAD programming along the humanitarian development nexus to identify entry points for systematic joint programming with the aim of graduating people out of food insecurity. Developed concrete climate science driven programming support using big data approaches and WFP / IFAD's internal data. Led an assessment to understand WFPs contribution to the prospects of peace in climate security settings.

2018 April- June Climate Advisor UN World Food Programme (WFP) - secondment

Conducted a strategic assessment of how climate information is produced/used across different divisions in order for WFP to have an understanding of key strategic and programmatic processes that climate information feeds into, key tools/methodologies used and operational, methodological or capacity gaps.

2014 – 2019 Global Theme Leader Climate, International Center for Tropical Agriculture (CIAT), Vietnam

Led a multi-disciplinary global theme on climate change adaptation, mitigation, climate services, climate policies and gender. Responsibilities include strategic alignment of global agenda, fundraising and proposal development, financial oversight of a portfolio of approximately 10 MIO USD, coordination of support team to assure science quality, effective internal and external communication, achievements of outcomes and impacts.

2011 – 2019 Contact Point, International Center for Tropical Agriculture (CIAT) for the Climate Change, Agriculture and Food Security (CCAFS) program, Vietnam and Nicaragua

Coordinated CIAT's climate change agenda under the globally largest climate change program in agriculture (CCAFS) to assure highest quality research, evidence of research for impact, growing research funding pipeline and successful execution of program.

2008 – 2013 Theme Leader Climate Africa, Central America and the Caribbean, International Center for Tropical Agriculture (CIAT), Kenya and Nicaragua

Led the development of CIAT's Climate Change agenda in Africa, Central America and the Caribbean including a development of regional strategy, fundraising for innovative research projects, staffing and project management. Research projects have been expanded under Peter's leadership to Kenya, Uganda, Tanzania, Ghana, Ivory Coast, Liberia in Africa and Panama, Costa Rica, Nicaragua, Guatemala, el Salvador, Honduras, Mexico, Jamaica, Trinidad and Tobago and Haiti in Central America and the Caribbean.

2005 – 2008 Research Associate, University of Bonn, Germany and Colombia

Co-led a multi-country research project on high value crops with specific focus on coffee. Development of spatial decision support tools to identify high coffee quality niches and approaches to manage coffee quality. Develop the science of the coffee Denomination of Origin DO of the largest Arabica coffee producer country (Colombia).

Education

2005 – 2008	PhD, Tropical Agriculture (summa cum laude), University of Bonn, Germany
2004 – 2004	PhD, Soils and Precision Agriculture, University of Minnesota, USA (visiting)
1998 – 2003	MSc, Geography, Geology, Botany, Ethnology and Paleoclimatology
2002 – 2002	MSc, Universidad de Cantabria, Spain (Erasmus exchange programm)
2002 – 2002	MSc, Universidade de Lisboa, Portugal (Erasmus Exchange programm)

Certificate

2017 Leadership Essential Certificate, Cornell University

Languages

German	Native
English	Full professional proficiency
Spanish	Full professional proficiency
French	Professional working proficiency
Portuguese	Limited working proficiency
Italian	Elementary proficiency
Vietnamese	Elementary proficiency

Selected peer reviewed publications

- Baca M, **Läderach P**, Hagggar J, Schroth G, Ovalle O (2014) An Integrated Framework for Assessing Vulnerability to Climate Change and Developing Adaptation Strategies for Coffee Growing Families in Mesoamerica. PLoS ONE
- Chen M, Wichmann B, Luckert M, Winowiecki L, Förch W, **Läderach P** (2018) Diversification and intensification of agricultural adaptation from global to local scales. PLoS ONE13(5): e0196392.
- Díaz Nieto J, Fisher M, Cook S, **Läderach P**, Lundy M (2012) Weather Indices for Designing Micro-Insurance Products for Small-Holder Farmers in the Tropics. PLoS ONE
- Eitzinger A, Cock, J, Atzmanstorfer K, Binderb C, **Läderach P**, Bonilla-Findji O, Bartling M, Mwongera C, Zurita L, Jarvis A (2019) GeoFarmer: A monitoring and feedback system for agricultural development projects. Computers and Electronics in Agriculture: 158: 109-121
- Eitzinger A, **Läderach P**, Rodriguez B, Fisher M, Beebe S, Sonder K, Schmidt A (2016) Assesing high-impact spots of climate change: spatial yield simulations with Decision Support System for Agrotechnology Transfer (DSSAT) model. Mitig Adapt Strateg Glob Change 19:161–176
- Gourdji S, **Läderach P**, Martinez Valle A, Zelaya Martinez C, Lobell DB (2014) Historical climate trends, deforestation, and maize and bean yields in Nicaragua. Agricultural and Forest Meteorology 200 (2015) 270–281
- Hannah, Lee; Donatti, Camila I.; Harvey, Celia A.; Alfaro, Eric; Rodriguez, Daniel Andres; Bouroncle, Claudia; Castellanos, Edwin; Diaz, Freddy; Fung, Emily; Hidalgo, Hugo G.; Imbach, Pablo; **Läderach, Peter**; Landrum, Jason P.; Solano, Ana Lucía. 2016. Regional modeling of climate change impacts on smallholder agriculture and ecosystems in Central America. Climate Change. 1-17 p.
- Jha S, Bacon C.M, Philpott S.M, Mendez V.E, **Läderach P**, Rice R (2014) Shade Coffee: Update on a Disappearing Refuge for Biodiversity. 64 (5) 416-428: DOI doi: 10.1093/biosci/biu038
- Kost A, **Läderach P**, Fisher M, Cook S, Gómez L (2012) Improving Index-Based Drought Insurance in Varying Topography: Evaluating Basis Risk Based on Perceptions of Nicaraguan Hillside Farmers. PLoS ONE 7(12): e51412.
- Läderach, Peter**; Ramirez–Villegas, Julian; Navarro-Racines, Carlos; Zelaya, Carlos; Martinez–Valle, Armando; Jarvis, Andy. 2016. Climate change adaptation of coffee production in space and time. Climate Change. Springer Link, 1-16 p.

- Läderach P**, Martinez-Valle A, Schroth G, Castro N (2013) Predicting the future climatic suitability for cocoa farming of the world's leading producer countries, Ghana and Côte d'Ivoire. Climatic Change DOI 10.1007/s10584-013-0774-8
- Lim K, Wichmann B, Luckert M, **Läderach P** (2020) Impacts of smallholder agricultural adaptation on food security: evidence from Africa, Asia, and Central America. Food Security: X: XX-XX
- Mushtaq S, Kath J, Stone R, Henry R, **Läderach P**, Reardon-Smith K, Cobon D, Marcussen T, Cliffe N, Kristiansen P, Pischke F (2020) Creating positive synergies between risk management and transfer to accelerate food system climate resilience. Climatic Change: X: XX-XX
- Mwongera, Caroline; Shikuku, Kelvin M.; Twyman, Jennifer; **Läderach, Peter**; Ampaire, Edidah; Van Asten, Piet; Twomlowd, Steve; Winowiecki, Leigh A.. 2016. Climate smart agriculture rapid appraisal (CSA-RA): A tool for prioritizing context-specific climate smart agriculture technologies. Agricultural Systems. 151. 192-203
- Peters, M., Herrero, M., Fisher, M., Erb, K.-H., Rao, I., Subbarao, G.V., Castro, A., Arango, J., Chará, J., Murgueitio, E., Hoek, R. van der, **Läderach, P.**, Hyman, G., Tapasco, J., Strassburg, B., Paul, B., Rincón, A., Schultze-Kraft, R., Fonte, S. and Searchinger, T. 2013. Challenges and opportunities for improving eco-efficiency of tropical forage-based systems to mitigate greenhouse gas emissions. Tropical Grasslands 1(2):156-167.
- Ramirez-Villegas J, Jarvis A, **Läderach P** (2011) Empirical approaches for assessing impacts of climate change on agriculture: The EcoCrop model and a case study with grain sorghum. 150/67-78:
- Shikuku, Kelvin M.; Valdivia, Roberto O.; Paul, Birthe K.; Mwongera, Caroline; Winowiecki, Leigh A.; **Läderach, Peter**; Herrero, Mario; Silvestri, Silvia. 2016. Prioritizing climate-smart livestock technologies in rural Tanzania: A minimum data approach. Agricultural Systems. Elsevier B.V. 2017. 204-216.
- Vermeulen S, Challinor AJ, Thornton PK, Campbell BM, Eriyagama N, Vervoort JM, Kinyangi J, Jarvis A, **Läderach P**, Ramirez-Villegas J, Nicklin KJ, Hawkins E, and Daniel R. Smith (2013) Addressing uncertainty in adaptation planning for agriculture. PNAS: 110(21):8357-62