

Hayatullah Ahmadzai

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Academic/Professional Appointments

Research Fellow Centre for Research in Economic Development and International Trade (CREDIT), School of Economics, University of Nottingham, UK	2022 - on
Postdoctoral Research Fellow International Center for Biosaline Agriculture (ICBA), Dubai, UAE	2019 - 22
Assistant Professor/Lecturer Department of Agricultural Economics and Extension, Kabul University, Kabul, Afghanistan	2011 - 15
Senior Economist [0.5 FTE] Department for International Development (DfID), Kabul, Afghanistan	2012 - 15
Economist/Development Specialist FLAG International Afghanistan (FIA), Kabul, Afghanistan	2011 - 12
Teaching Assistant Department of Agronomy & Soil Sciences, Kabul University, Afghanistan	2011 - 12

Education

Ph.D. in Development and Agricultural Economics , University of Nottingham, UK	2015 – 19
M.Sc. in Agricultural and Applied Economics , Purdue University, IN, USA	2008 – 11
B.Sc. in Agricultural Sciences , Kabul University, Kabul, Afghanistan	2002 – 05

Research

Research Areas: Agricultural and Applied Economics, Applied Econometrics, Environmental Economics, Development Impact Evaluation, and Sustainable Development & Agricultural Policy.

[Google Scholar Profile](#) (*h-index: 9*) | [ORCID](#)

[a] Published Peer-Reviewed Articles

- 2024 > @ Ahmadzai, H.(2024). Crop Diversification, Household Welfare and Conflict: Afghanistan 2011–2017. *The Journal of Development Studies*, 1–19. Published online ahead of print. DOI:[10.1080/00220388.2024.2404576](https://doi.org/10.1080/00220388.2024.2404576).
- 2024 > @ Ahmadzai, H.(2024). Tests for market failures and overcoming transaction costs barriers to market participation in Afghanistan. Online First. *Journal of Social and Economic Development*. DOI:[10.1007/s40847-024-00364-2](https://doi.org/10.1007/s40847-024-00364-2).
- 2023 > @ Ahmadzai, H., Tutundjian, S., Malhotra, R.(2023). Empirical Analysis of Impacts of Sand and Dust Storms on Agricultural Productivity in Mongolia. *PLOS ONE* 18(2): e0269271. DOI:[10.1371/journal.pone.0269271](https://doi.org/10.1371/journal.pone.0269271).
- 2023 > Ahmadzai, H.(2023). The Impact of Sand and Dust Storms on Agriculture Productivity in Iraq. *Middle East Development Journal*, 15(1), 50–65. DOI:[10.1080/17938120.2023.2166748](https://doi.org/10.1080/17938120.2023.2166748).
- 2022 > Ahmadzai, H.(2022). Hope for Change: Is Diversifying Production Portfolios an Ideal Strategy to Boost Farming Efficiency in Afghanistan?. *Progress in Development Studies*, 22 (1), 7–31. DOI:[10.1177/14649934211031745](https://doi.org/10.1177/14649934211031745).
- 2022 > @ Talabi, A., Vikram, P., Thushar, S., Hifzurrahman, R., Ahmadzai, H., Nhamo, N., Shahid, M., Singh, R.(2022). Orphan Crops: A Best Fit for Dietary Enrichment and Diversification in Highly Deteriorated Marginal Environments. *Frontiers in Plant Science*, 13:839704. DOI:[10.3389/fpls.2022.839704](https://doi.org/10.3389/fpls.2022.839704).

- 2021 > @ **Ahmadzai, H.**, Tutundjian, S., Elouafi, I.(2021). Policies for Sustainable Agriculture and Livelihood in Marginal Lands: A Review. *Sustainability*, 13(16), 8692. DOI:[10.3390/su13168692](https://doi.org/10.3390/su13168692).
- 2021 > @ Hirich, A., Rafik, S., Rahmani, M., Fetouab, A., Azaykou, F., Filali, K., **Ahmadzai, H.**, Jnaoui, Y., Soulaïmani, A., Moussafir, M., Gharous, M., Karboune, S., Sbai, A., Choukr-Allah, R.(2021). Development of Quinoa Value Chain to Improve Food and Nutritional Security in Rural Communities in Rehamna, Morocco: Lessons Learned and Perspectives. *Plants*, 10(2), 301. DOI:[10.3390/plants10020301](https://doi.org/10.3390/plants10020301).
- 2020 > @ **Ahmadzai, H.**(2020). How is Off-farm Income Linked to On-farm Diversification? Evidence from Afghanistan. *Studies in Agricultural Economics*, 13(16) 869. DOI:[10.7896/j.2010](https://doi.org/10.7896/j.2010).
- 2020 > @ **Ahmadzai, H.**(2020). Trends in Quinoa Adoption in Marginal Areas, Economic Viability, and Policy Outlook. *Journal of Agribusiness and Rural Development*, 57(3), 235–247. DOI:[10.17306/J.JARD.2020.01351](https://doi.org/10.17306/J.JARD.2020.01351).

[b] Book Chapters

- 2023 > @ Sayed, A., **Ahmadzai, H.**, Choudhury, D., Goh, E., Jahanshiri, E., Mabhaudhi, T., Meschinelli, A., Theminkos, A., Nhamo, N., Talabi, A.(2023). Marginal Areas and Indigenous People Priorities for Research and Action. In: *Science and Innovations for Food Systems Transformation* (pp. 261–279), edited by von Braun, J., Afsana, K., Fresco, L.O., Hassan, M.H.A. Cham, Switzerland: Springer International Publishing. DOI:[10.1007/978-3-031-15703-5_14](https://doi.org/10.1007/978-3-031-15703-5_14).
- 2023 > @ Middleton, N., **Ahmadzai, H.**, Ayurzana, E.(2023). Impacts of sand and dust storms on agricultural production. In: *Sand and dust storms: A guide to mitigation, adaptation, policy and risk management measures in agriculture* (pp. 33–49), edited by Middleton, N., Rome: Food and Agriculture Organization of the United Nations. DOI:[10.4060/cc8071en](https://doi.org/10.4060/cc8071en).
- 2021 > @ Lyra, D., Lampakis, E., Muhairi, M., Bin Tarsh, F., Dawoud, M., Khawaldeh, B., Moukayed, M., Plewa, J., Plewa, W., Al Masjedi, O., Al Marzouqi, K., **Ahmadzai, H.**, Al Tamimi, M., Abou Dahr, W.(2021). From Desert Farm to Fork: Value Chain Development for Innovative Salicornia-Based Food Products in the United Arab Emirates. In: *Future of Sustainable Agriculture in Saline Environments* (pp. 181–199), edited by Negacz K., Pier Vellinga P., Barrett-Lennard E., Choukr-Allah R., and Elzenga T. Boca Raton, Florida, USA: CRC Press Taylor & Francis Group. DOI:[10.1201/9781003112327-11](https://doi.org/10.1201/9781003112327-11).

[c] Policy Papers

- 2022 > @ **Ahmadzai, H.**, Tutundjian, S., Dale, D., Brathwaite, R., Lidderr, P., Selvaraju, R., Malhotra, R., Boerger, R., and Elouafi, I.(2022). Marginal lands: potential for agricultural development, food security and poverty reduction. Rome, FAO. doi: doi.org/10.4060/cc2838en.
- 2022 > @ Ammar, K., Fatnassi, H., **Ahmadzai, H.**, Mohamed, A., Kheir, A.(2022). Agri-tech: A catalyst for treated wastewater deployment in high efficiency food production systems. (pdf). International Center for Biosaline Agriculture (ICBA), Dubai, UAE.
- 2022 > @ Sayed, A., **Ahmadzai, H.**, Choudhury, D., Goh, E., Jahanshiri, E., Mabhaudhi, T., Meschinelli, A., Theminkos, A., Nhamo, N., Talabi, A.(2022). Marginal areas and indigenous people: Priorities for research and action. Food Systems Summit Brief. *Food Systems Summit 2021* doi: doi.org/10.48565/fd4f-rk35.
- 2022 > @ **Ahmadzai, H.**(2022). Addressing sand and dust storms in Northeast (China and Mongolia) and Western Asia (Iran, Iraq, and Kuwait), and North Africa (Algeria): An agricultural prospective.

[d] Under Review

- 2024 > @ **Ahmadzai, H.**, Morrissey, O.(2024). Climate Shocks, Household Food Security and Welfare in Afghanistan. *CREDIT Research Paper, No. 24/04*. The University of Nottingham, CREDIT: Nottingham, UK. Under review at *Food Policy*. Preprint: <https://www.nottingham.ac.uk/credit/news/papers/2024/2404.aspx>.

Teaching Experience

Assitant Professor/Lecturer, Department of Economics and Agricultural Development, Kabul University, Kabul, Afghanistan.

AgEcEx731: Agricultural Production Economics (undergraduate)	2011 – 15
AgEcEx836: Agricultural Finance Management (undergraduate)	2011 – 15
AgEcEx735: Seminar on Research Methods/Research Projects (undergraduate)	2011 – 14
AgEcEx630: Introductory Statistics & Econometrics (undergraduate)	2012 – 14

Conference Activity

Presentations

"Crop Diversification and Farm Household Welfare during Conflict: Afghanistan 2011-2017. " 6th MaDE Workshop on Emerging and Developing Countries. <i>Loughborough Business School</i> , online. Jun 5–6. Slides	2023
"Assessing the Impact of Sand and Dust storms on Agriculture." <i>Food and Agriculture Organization (FAO)</i> , online. Apr 7–11. Slides	2021
"Salinization in Marginal Agricultural Areas: Implications for Global Food Security and Poverty." <i>International Center for Biosaline Agriculture (ICBA)</i> , Dubai, UAE. Jun 27–28. Slides	2020
"Tests for Market Failures and Overcoming Transaction Costs in Afghanistan." <i>Ph.D. Conference, School of Economics, University of Nottingham</i> , Nottingham, UK. Sep 8–12. Slides	2018
"Status, Patterns, and Microeconomic Drivers of the Extent of Diversity in Crop Production: Evidence from Afghanistan." <i>Ph.D. Conference, School of Economics, University of Nottingham</i> , Nottingham, UK. Nov 15-20. Slides	2017
"Crop Diversification and Technical Efficiency: Evidence from Afghanistan." <i>Ph.D. Conference, School of Economics, University of Nottingham</i> , Nottingham, UK. Nov 12-16. Slides	2016

Invited Panellist

"Challenge and Opportunity of Quinoa for Food and Nutrition Security. " Panellist with Warren T K Lee, chaired by Bo Zhou. <i>FAO Regional Office for Asia and the Pacific (FAO-RAP)</i> . Bangkok, Thailand. Nov 07–08.	2021
"The Economics of Quinoa Production: Opportunity for Marginal Farm Households." Panellist with Dr. José Graziano da Silva. <i>Global Forum on Innovations for Marginal Environments (GFIME)</i> . Dubai, UAE. Nov 20–21.	2021

Certified Short-term Training

Responsible Conduct in Research (RCR)-Research, Ethics, and Compliance. Collaborative Institutional Training Initiative (CITI). Completed online. Mar 24 – Apr 04	2020
Leadership and Governance of Development Programs & Projects. Crown Agents International. Dubai, United Arab Emirates. Nov 11 – 15	2013
Management of Agriculture & Rural Development Projects. Asian Institute of Technology (AIT). Bangkok, Thailand. Nov 21 – Dec 01	2012
Academic English and Cross-Cultural Training Program. International Centre for Intercultural Communication (ICIC). IUPUI, IN, USA. Oct 29, 2007 – May 30, 2008	2008

Grants and Awards

Awards

Khalifa International Award for Date Palm and Agricultural Innovation (KIADPAI), CO-PI on Project : "From desert farm to fork: value chain development for innovative halophyte-based food products"	2021
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Grants, Projects, and Fellowships

IIE-SRF Afghanistan Emergency Initiative Fund (\$50,000). Institute of International Education (IIE). Research Fellowship.	2022
Inter-regional project Catalyzing investments and actions to enhance resilience against Sand and Dust Storms in agriculture (\$53,654). Food and Agriculture Organization of the United Nations (FAO). PI.	2021
Adoption and Impact of Quinoa: How is quinoa perceived by farmers in the marginal areas of the MENA region? (\$68,488). International Center for Biosaline Agriculture (ICBA). PI.	2021
Climate resilient and gender-inclusive cropping systems with nutrient dense crops in climate vulnerable areas in Asia and the Pacific (\$178,441). Food and Agriculture Organization of the United Nations (FAO). CO-PI with Dr R.K. Singh (ICBA).	2021
National Policy to Utilize TSE and Biosolids in Controlled Environment Agriculture to Strengthen Food Security in UAE (\$100,000). Ministry of Climate Change and Environment. Co-PI with Dr Khalil Ammar (ICBA).	2021
Improving agricultural resilience to salinity and climate change through development and promotion of pro-poor technologies and management strategies (RESADE) (\$7 million). IFAD and BADEA. Co-PI with Dr R.K. Singh (ICBA).	2019

Media and Outreach

"How COVID-19 crisis undermined MENA states' food security." <i>Arab News</i> . 20 Nov 2021.	2021
"Agriculture in Marginal Lands." <i>Scholarly Community Encyclopedia</i> . Sep 2021.	2021
"New study reviews status of marginal lands worldwide." <i>ICBA News Article</i> . 29 Aug 2021.	2021
"World's indigenous peoples to bear brunt of climate change, warns UN paper." <i>ICBA News Article</i> . 25 Apr 2021.	2021
"ICBA's quinoa varieties show promise in Morocco." <i>ICBA News Article</i> . 15 Apr 2021.	2021

Academic Services

Journal Peer Reviews

The Journal of Development Studies (JDS)
Sustainability (MDPI)
PLOS ONE
Review of Development Economics (RoDE)
Agriculture (MDPI)
Cogent Economics and Finance
Journal of Development and Agricultural Economics (JDAE)
Indian Journal of Economics and Development

Memberships

Research Affiliate, Centre for Research in Economic Development and International Trade (CREDIT), University of Nottingham, UK.	2019 – on
Member, Agribusiness Sub-network, Association of Agricultural Research Institutions in the Near East and North Africa (AARINENA)	2019 – on
Research Fellow, International Center for Biosaline Agriculture (ICBA), Dubai, UAE.	2019 – 22

Languages and Technical Skills

Languages

Pashto: Fluent (Native)
English: Proficient (TOEFL obtained in 2008)

Persian: Proficient

Other: Arabic (basic/rudimentary), Urdu (basic/rudimentary)

Technical Skills

Statistical Software: Stata (advanced), R, Python (basic), MATLAB, Eviews, SPSS, and @Risk

Survey Tools: World Bank Survey Solutions, Intelligent Survey System (DfID), Qualtrics

Data Visualization: Tableau Desktop, MS Excel, QGIS

Editing Software: MS Word, MS Excel, MS PowerPoint, \LaTeX , Rmarkdown

References

Available on request.