

Dr. Azhar Abbas

Associate Professor (Tenured)
Institute of Agricultural & Resource
Economics, University of Agriculture,
Faisalabad-Pakistan



Contact: Phone +92 347-2173764; Office: +92 41-9200644 E-mail: Azhar.Abbas@uaf.edu.pk

Academic Qualifications and Achievements

- 2016: **PhD** (*magna cum laude*) Agricultural Economics, Humboldt University of Berlin, Germany.
- 2014: **Doctoral Certificate Program in Agricultural Economics** from Humboldt University of Berlin, Germany, 2012-2014.
- 2005: **M.Sc. (Honors)** Agricultural Economics from University of Agriculture, Faisalabad.
- 2003: **B.Sc. (Honors)** Agricultural Economics (4 years Program) from University of Agriculture, Faisalabad.

Professional Experience

- 12-11-2022 to date: **Associate Professor (Tenured)**, Institute of Agricultural and Resource Economics, University of Agriculture, Faisalabad (UAF), Pakistan.
- 27-06-2016 to 11-11-2022: **Assistant Professor (TTS)**, Institute of Agricultural and Resource Economics, University of Agriculture, Faisalabad (UAF), Pakistan.
- 16-07-2007 to 26-06-2016: **Lecturer** at Institute of Agricultural and Resource Economics, University of Agriculture, Faisalabad (UAF), Pakistan.
- 01-01-2012 to 25-02-2016: **Research Fellow** at the Institute of Socioeconomics, Leibniz Centre for Agricultural Landscape Research (ZALF) Müncheberg, Germany.
- 31-5-2006 to 10-2-2007: **Secretary Market Committee**: Economics and Marketing Wing of Agriculture Department of Govt. of Punjab-Pakistan.

Research Projects

- **2024-date**: Risk-based assessment of aquifer vulnerability for Khanewal and DG Khan study area. **FAO funded. PI. (PKR. 14.21 million).**
- **2024-date**: Forecasting national agronomic demands of nitrogenous fertilizers for next two decades, **funded by Engro Fertilizers Pvt. Ltd. Team Member (PKR 3.0 million)**
- **2024-date**: Research and analysis of existing local groundwater and salinity management practices in Khanewal, DG Khan, Sanghar and Umarkot Districts. **FAO funded. Co PI. (PKR. 4.25 million).**
- **2021-2024**: Work-package Lead in **UKRI-GCRF funded South Asian Nitrogen Hub (SANH)**. GCRF-UKRI funded. Leading two Work-Packages **WP-1.1**: Building Policy Arena for Effective Nitrogen Management in South Asia and **WP-1.3**: Socioeconomic Drivers of Nitrogen Use Efficiency and Community Engagement (**Budget: GBP 5 million**)

- **2024-date:** Linking Academia & Industry with farmers for Effective Adaptation to Climate change: Exploring Issues and Benchmarking Farmework(s). **Punjab Agri. Research Board (PARB) funded. PI. (PKR 2.395 million).**
- **2019:** Strengthening Vegetable Value Chains in Pakistan (SVVCP) for Greater Community Livelihood Benefits. **ACIAR funded. CoPI (completed in 2022) (PKR 10.62 million)**
- **2021:** South Asian Nitrogen Hub (SANH). UKRI funded. Work-package Lead (Ongoing)
- **2018:** Impact of Subsidized Inputs on the Cost of Cotton Production in Punjab. Punjab Agricultural Research Board. **PARB funded. PI (PKR 0.5 million)**
- **2017:** Vulnerability and Resilience of Farm Households to Flood Risk in Punjab: An Empirical Analysis. **HEC funded. PI (PKR 0.48 million)**
- **2017:** Market Committees in Pakistan: From a Historical Perspective on their Inception to the Current Status of Service Delivery. **USP-CAS funded. PI (PKR 0.78 million)**
- **2017:** An Empirical Study of Risk Perception, Risk Management Strategies and Adaptation among Farmers in Punjab Pakistan. **HEC funded. Co-PI (PKR 0.30 million)**
- **2017:** Disaster Risk Management at Farm Level: Food Security and Household Welfare Perspectives. **HEC funded. Co-PI (PKR 0.48 million)**
- **2016:** Evaluating International Competitiveness of Cotton Production in Pakistan: A Policy Analysis Matrix (PAM) Approach. **USP-CAS funded. PI (PKR 0.85 million)**
- **2014:** Research Fellow in the Project “INKA-BB: Innovative Networking for Climate Change Adaptation in Berlin-Brandenburg” ZALF, Muencheberg, Germany.
- **2013:** Research Fellow in the project “ImpactZALF: Development of Tools and Methods for the Integrated Impact Assessment of Multi-functionality of Land Use” ZALF, Muencheberg, Germany.

Student Supervision (Completed): PhD (1), M.Sc. (Hons) Agri. Economics/M.Phil (60), M.Sc. Economics (35), Member Supervisory Committee: > 100

Training Courses/Exchange Program

Books/Book Chapters/Policy Brief/Technical Reports

- **FAO Technical Report:** Ahmad A, Ahmad I, Khan MR., Shah SHH, Kamran MA, Wajid SA, Amin M, Khan A, Arshad MN, Cheema MJM, Saqib ZA, Ullah R, Ziaf K, ul Huq A., Ahmad S., Fahad M, Waqas MM, **Abbas A**, Iqbal A. 2019. **Agro-ecological zones of Punjab, Pakistan – 2019**. Rome, FAO. <https://openknowledge.fao.org/server/api/core/bitstreams/9c3cd013-70e5-47a0-9607-20961050d47d/content>
- **National Nitrogen Policy Report:** Abbas A, Yang A, Aziz T, Wakil A. 2024. Pakistan Nitrogen Policy Report 2024, SANH, UK.
- https://www.research.ed.ac.uk/files/471114786/SANH_Pakistan_National_Nitrogen_Policy_Report_SEPT2024.pdf
- Bakhsh K, Rauf S, **Abbas A**. 2016. Knowledge, Perception and Socioeconomic Vulnerability of Urban and Peri-urban Households to Heat Waves in Pakistan. In: Nautiyal et al. (eds.) Climate Change Challenge (3C) and Social-Economic-Ecological Interface-Building. ISBN: 978-3-319-31013-8, Springer, 191-202.

- Sam AS, **Abbas A**, Arshad M, Kaechele H. 2016. Analyzing Vulnerability to Climate Change in India with Special Reference to Drought Risk: Results from a Field Survey. . In: Nautiyal et al. (eds.) Climate Change Challenge (3C) and Social-Economic-Ecological Interface-Building. ISBN: 978-3-319-31013-8, Springer, pp. 409-427.
- **Abbas, A.** 2024. Agriculture: The wheat procurement conundrum, May 27, 2024. <https://www.dawn.com/news/1835958/agriculture-the-wheat-procurement-conundrum>

Journal Articles

1. Usman, M., Ali, A., Baig, S.A., Radulescu, M., **Abbas A**, Akram R. Food security in Punjab, Pakistan: rural views on climate disasters and their impacts. *Environ Dev Sustain* (2025). <https://doi.org/10.1007/s10668-025-06047-0>
2. Alotaibi BA, **Abbas A***, Azeem MI, Shahbaz P, ul Haq S, Nayak RK (2025) Role of risk perception and climate change beliefs in adoption of climate-resilient agricultural practices in Saudi Arabia, *Climate Services*, 38, 100552.
3. Mehmood HZ, Abbas A, Ullah U, Wudil AH (2025) Sustainability analysis of better cotton: a cleaner and sustainable production alternative in Pakistan. *J. Animal and Plant Sciences*, 35(1).
4. Razzaq A, Shahbaz P, Haq S, Zhou Y, Erfanian S, Abbas A (2024) Assessment of the heterogeneous impacts of global value chain participation on Sustainable economic growth and environmental quality. *Heliyon*, 10, E35348. DOI: <https://doi.org/10.1016/j.heliyon.2024.e35348>
5. Sannoh AB, **Abbas A***, Fatima A, Wudil AH (2024) Predicting Rice Self-Sufficiency in Sierra Leone using ARIMA Model. *Agricultural Sciences Journal*, 10.56520/asj.24.336.
6. Alhafi Alotaibi B, Muddassir M, **Abbas A**, Nayak R, Azeem MI (2024) Students' Satisfaction and Learning Experiences at Higher Agricultural Education Institutions in Saudi Arabia: An Empirical Inquest. *Frontiers in Education*, Vol. 9, p. 1335663. <https://doi.org/10.3389/feduc.2024.1335663>
7. Ullah, Z., Hassan, S., **Abbas, A.** and Ullah, R. (2024) A Comprehensive Farm Efficiency Analysis of Apple Growers in Newley Merged District South Waziristan. *Journal of Economic Impact*, 6(1), pp. 44–52. doi: 10.52223/econimpact.2024.6106.
8. Akhtar S, **Abbas A***, Faisal M, Raza MH, Samie A, Yu M, Lovell A (2023) Roles of Personal, Household, Physical, and Institutional Factors on Farmers' Efficiency of Hybrid Maize Production: Implications for Food Security. *Agriculture*, 13(9):1840. <https://doi.org/10.3390/agriculture13091840>
9. Shahbaz P, Haq S, **Abbas A***, Azadi H, Boz I, Yu M, Watson S (2023) Role of farmers' entrepreneurial orientation, women's participation, and information and communication technology use in responsible farm production: a step towards sustainable food production. *Frontiers Sust. Food Systems*, 7:1248889.
10. Ali Q, **Abbas A***, Raza A, Khan MTI, Zulfiqar H, Iqbal MA, Nayak RK, Alotaibi BA (2023) Exploring the Students' Perceived Effectiveness of Online Education during the COVID-19 Pandemic: Empirical Analysis Using Structural Equation Modeling (SEM). *Behavioral Sciences*, 13(7):578. <https://doi.org/10.3390/bs1307057>
11. Alotaibi BA, **Abbas A***, Ullah R, Azeem MI, Samie A, Muddassir M, Dabiah AT, Raid M, Sadaf T (2023) Dynamics and Determinants of Farmers' Perceptions about Causes and Impacts of Climate Change on Agriculture in Saudi Arabia: Implications for Adaptation, Mitigation, and Sustainability. *Atmosphere*, 14(6):917. <https://doi.org/10.3390/atmos14060917>
12. Usman, M., Ali A, Bashir MK, Mushtaq K, **Abbas A**, Akram R, Iqbal MS (2023) Modelling wellbeing of farmers by using nexus of climate change risk perception, adaptation strategies, and their drivers on irrigation water in Pakistan. *Environ Sci Pollut Res* 30, 49930–49947 (2023). <https://doi.org/10.1007/s11356-023-25883-z>
13. Badar H, **Abbas A***, Mushtaq K, Dogot T, Lebailly P, Parra-Acosta YK, Azadi H, López-Carr D (2023) Unravelling Consumer Preferences and Segments: Implications for Pakistan's Mandarin Industry Development through Market Relocation. *Land*, 12(5):953.
14. Ul Haq S, Shahbaz P, **Abbas A***, Alotaibi BA, Nadeem N, Nayak RK (2023) Looking up and going down: Does sustainable adaptation to climate change ensure dietary diversity and food security among rural communities or vice versa? *Frontiers in Sustainable Food Systems*, 7 – 2023, <https://doi.org/10.3389/fsufs.2023.1142826>
15. Yang Z, Tang J, Yu M, Zhang Y, **Abbas A***, Wang S, Bagadeem S (2022) Sustainable Cotton Production through Increased Competitiveness: Analysis of Comparative Advantage and Influencing Factors of Cotton Production in Xinjiang, China. *Agronomy*, 12(10):2239. <https://doi.org/10.3390/agronomy12102239>
16. Erfanian S, Zhou Y, Razzaq A, **Abbas A**, Safeer AA, Li T (2022) Predicting Bitcoin (BTC) Price in the Context of Economic Theories: A Machine Learning Approach. *Entropy*, 24(10):1487. <https://doi.org/10.3390/e24101487>

17. Rizwan M, **Abbas A***, Xu H, Ahmed UI, Qing P, He P, Iqbal MA, Shahzad MA. Role of Nutrition Information in Acceptance and Willingness to Pay for Biofortified Cereal Food: Implications for Better Health and Sustainable Diet. *Nutrients*. 2022; 14(16):3352. <https://doi.org/10.3390/nu14163352>.
18. Shahbaz P, Haq S, **Abbas A***, Batool Z, Alotaibi BA, Nayak RK (2022) Adoption of Climate Smart Agricultural Practices through Women Involvement in Decision Making Process: Exploring the Role of Empowerment and Innovativeness. *Agriculture*. 12(8):1161. <https://doi.org/10.3390/agriculture12081161>
19. Ali Q, **Abbas A***, Khan MTI, Bagadeem S, Alotaibi BA, Tariq M, Traore A (2022) Sustainable Agriculture through Reduced Emission and Energy Efficiency: Estimation of Input–Output Energy and GHG Emission under Tunnel Cultivation of Tomato. *Agronomy*, 12, 1730. <https://doi.org/10.3390/agronomy12081730>
20. Geng J, Haq S, Abbas J, Ye H, Shahbaz P, **Abbas A**, Cai Y (2022) Survival in Pandemic Times: Managing Energy Efficiency, Food Diversity, and Sustainable Practices of Nutrient Intake Amid COVID-19 Crisis. *Frontier in Env. Science*. 10(945774):1-16.
21. Chen T, Rizwan M, **Abbas A** (2002) Exploring the Role of Agricultural Services in Production Efficiency in Chinese Agriculture: A Case of the Socialized Agricultural Service System. *Land*, 11(3):347
22. Razzaq A, Xiao M, Zhou Y, Liu H, **Abbas A***, Liang W, Naseer MAuR (2022). Impact of Participation in Groundwater Market on Farmland, Income, and Water Access: Evidence from Pakistan. *Water*. 14(12):1832. <https://doi.org/10.3390/w14121832>
23. Ge T, Abbas J, Ullah R, **Abbas A***, Sadiq I, Zhang R (2022) Women’s entrepreneurial contribution to family income: Innovative technologies promote females’ entrepreneurship amid Covid-19 crisis. *Frontiers in Psychology*, DOI:10.3389/fpsyg.2022.8280040
24. Mazhar S, Sher A, **Abbas A**, Ghafoor A, Lin G (2022) Empowering Shepreneurs to achieve the sustainable development goals: Exploring the impact of interest-free start-up credit, skill development and ICTs use on entrepreneurial drive. *Sustainable Development*, DOI:10.1002/sd.2313
25. Mahmood HZ, Afzal H, **Abbas A***, Hasan S, Ali A (2022) Forecasts about livestock production in Punjab-Pakistan: implications for food security and climate change. *J. Animal Plant Sciences*, 32(5): Doi: <https://doi.org/10.36899/JAPS.2022.5.0541>
26. Mahmood HZ, **Abbas A**, Hassan S, Ullah R (2022) Socio-economic, farm, and information variables influencing farmer’s decision to adopt a sustainable way of cotton production. *Int. J. Agric. Extens*. 10(1): doi:<https://doi.org/10.33687/ijae.010.01.4010>
27. Haq SU, Shahbaz P, **Abbas A***, Batool Z, Alotaibi BA, Traore A (2022) Tackling Food and Nutrition Insecurity among Rural Inhabitants: Role of Household-Level Strategies with a Focus on Value Addition, Diversification and Female Participation. *Land*. 2022; 11(2):254. <https://doi.org/10.3390/land11020254>
28. Shah AA, Gong Z, Khan NA, Ali M, Ahmad M, **Abbas A**, Shahid A (2021) Reconnoitering school children vulnerability and its determinants: Evidence from flood disaster-hit rural communities of Pakistan. *Int. J. Disaster Risk Reduction*, <https://doi.org/10.1016/j.ijdr.2021.102735>
29. Alotaibi BA, **Abbas A**, Ullah R, Nayak RK, Azeem MI, Kassem HS. Climate Change Concerns of Saudi Arabian Farmers: The Drivers and Their Role in Perceived Capacity Building Needs for Adaptation. *Sustainability*. 2021; 13(22):12677. <https://doi.org/10.3390/su132212677>
30. Nazir A, Ullah S, Saqib ZA, **Abbas A***, Ali A, Iqbal MS, Hussain K, Shakir M, Shah M, Butt MU (2021) Estimation and Forecasting of Rice Yield Using Phenology-Based Algorithm and Linear Regression Model on Sentinel-II Satellite Data. *Agriculture* 2021, 11, 1026. <https://doi.org/10.3390/agriculture11101026>
31. Faisal M, **Abbas A**, Cai Y, Ali A, Shahzad MA, Akhtar S, Raza MH, Ajmal MA, Xia C, Sattar SA, Batool Z (2021) Perceptions, Vulnerability and Adaptation Strategies for Mitigating Climate Change Effects among Small Livestock Herders in Punjab, Pakistan. *Int. J. Environ. Res. Public Health* 2021, 18, 10771. <https://doi.org/10.3390/ijerph182010771>
32. Sam AS, **Abbas A**, Padmaja SS, Sathyan AR, Vijayan D, Kaechele H, Kumar R, Mueller K (2021) Flood vulnerability and food security in eastern India: A threat to the achievement of the Sustainable Development Goals. *International Journal of Disaster Risk Reduction*, 66, 102589.
33. Faisal M, **Abbas A**, Chunping X, Raza MH, Akhtar S, Ajmal MA, Mushtaq Z, Cai Y (2021) Assessing small livestock herders’ adaptation to climate variability and its impact on livestock losses and poverty. *Climate Risk Management*, 34:100358, DOI: doi.org/10.1016/j.crm.2021.100358
34. Iqbal, MA, Rizwan M, **Abbas A***, Makhdum MSA, Kousar R, Nazam M, Samie A, Nadeem N (2021) A Quest for Livelihood Sustainability? Patterns, Motives and Determinants of Non-Farm Income Diversification among Agricultural Households in Punjab, Pakistan. *Sustainability*, 13(16):9084. Mustafa G, **Abbas A**, Alhafi B, Aldosri AO (2021) Do Erratic Rainfalls Hamper Grain Production? Analysis of Supply Response of Rice to Price and Non-Price Factors. *Agronomy*, 11(8):1463.

35. Akhtar S, **Abbas A***, Iqbal MA, Rizwan M, Samie A, Faisal M, Sahito JGM (2021) What Determines the Uptake of Multiple Tools to Mitigate Agricultural Risks among Hybrid Maize Growers in Pakistan? Findings from Field-Level Data. *Agriculture* 11(7):578. (IF: 2.92).
36. Akhtar S, **Abbas A**, Kassem H, Bagadeem S, Ullah R, Alhafi B (2021) Sustainable Crop Production, the Concurrent Adoption of Contract Farming, and Managing Risks through Income Diversification. *Agronomy* 11(5):973.
37. Faisal M, Xia C, **Abbas A**, Raza MH, Akhtar S, Ajmal MA, Ali A (2021) Do risk perceptions and constraints influence the adoption of climate change practices among small livestock herders in Punjab, Pakistan? *Env. Sci. Poll. Res.* DOI: 10.1007/s11356-021-13771-3
38. Khalil IU, Hena S, Ghani U, Ullah R, Jan I, Rauf A, Rehman A, **Abbas A***, Jingdong L (2021) Development and Sustainability of Rural Economy of Pakistan through Local Community Support for CPEC. *Sustainability*. 13(2):686.
39. Iqbal MA, **Abbas A***, Naqvi SAA, Rizwan M, Samie A, Ahmed UI (2020) Drivers of Farm Households' Perceived Risk Sources and Factors Affecting Uptake of Mitigation Strategies in Punjab Pakistan: Implications for Sustainable Agriculture. *Sustainability*. 12(23):9895.
40. Samie A, **Abbas A***, Azeem MM, Hamid S, Iqbal MA, Hasan SS, Deng S (2020) Examining the impacts of future land use/land cover changes on climate in Punjab province, Pakistan: implications for environmental sustainability and economic growth. *Envi. Science & Pollution Research*, 25415–25433.
41. Sher A, **Abbas A**, Mazhar S, Azadi H, Lin G (2020) Fostering sustainable ventures: Drivers of sustainable start-up intentions among aspiring university students in Pakistan. *Journal of Cleaner Production*, Vol. 262:121269.
42. Kousar R, Makhdum MSA, **Abbas A**, Nasir J, Naseer MAuR (2019) Issues and Impacts of the Apricot Value Chain on the Upland Farmers in the Himalayan Range of Pakistan. *Sustainability*, 11:4482. <https://doi.org/10.3390/su11164482>
43. Shahzad L, Tahir A, Sharif F, Khan WD, Farooq MA, **Abbas A**, Saqib ZA (2019) Vulnerability, wellbeing and livelihood adaptation under changing environmental conditions: a case from mountainous region of Pakistan. *Environmental Science and Pollution Research*, 26(26):26748-26764, DOI: <https://doi.org/10.1007/s11356-019-05880-x>
44. Sher A, Mazhar S, **Abbas A**, Iqbal MA, Li X (2019) Linking Entrepreneurial Skills and Opportunity Recognition with Improved Food Distribution in the Context of the CPEC: A Case of Pakistan. *Sustainability*, 11(7):1838; <https://doi.org/10.3390/su11071838>
45. Naseer MAuR, Ashfaq M, Hassan S, **Abbas A**, Razzaq A, Mehdi M, Ariyawardana A, Anwar M (2019) Critical Issues at the Upstream Level in Sustainable Supply Chain Management of Agri-Food Industries: Evidence from Pakistan's Citrus Industry. *Sustainability*, 11(1326):1-19.
46. Sardar A, Yasin MR, **Abbas A**, Waqas M, Gill BA (2018) Willingness to pay for vaccination against Hepatitis B and its determinants: the case study of an industrial district of Pakistan. *Epidemiology, Biostatistics and Public Health*, 15(4). <https://ebph.it/article/view/12954/11670>
47. **Abbas A**, Amjath-Babu TS, Kächele H, Usman M, Iqbal MA, Arshad M, Shahid MA, Müller K (2018) Sustainable survival under climatic extremes: linking flood risk mitigation and coping with flood damages in rural Pakistan. *Environmental Science and Pollution Research*, 25(32):32491-32505. <https://doi.org/10.1007/s11356-018-3203-8>
48. Iqbal MA, Ping Q, Abid M, **Abbas A**, Bashir MK, Ullah R (2018) Extent and determinants of rural poverty in Pakistan: role of adopting risk management strategies. *Journal of Animal and Plant Sciences*, 8(6):1835-1845.
49. Sam AS, **Abbas A**, Padmaja SS, Kaechele H, Kumar R, Mueller K (2018) Linking Food Security with Household's Adaptive Capacity and Drought Risk: Implications for Sustainable Rural Development. *Social Indicators Research*. doi.org/10.1007/s11205-018-1925-0
50. Qamar MU, Azmat M, **Abbas A**, Usman M, Shahid MA, Khan ZM (2018) Water Pricing and Implementation Strategies for the Sustainability of an Irrigation System: A Case Study within the Command Area of the Rakh Branch Canal. *Water*, 10, 509; doi:10.3390/w10040509
51. Iqbal MA, Ping Q, Zafar MU, **Abbas A**, Bashir MK, Ali A, Kousar R (2018) Farm Risk Sources and Their Mitigation: A Case of Cotton Growers in Punjab. *Pak. J. Agric. Sciences*. 55(3):683-690.
52. Iqbal MA, **Abbas A**, Ullah R, Ahmad UI, Sher A, Akhtar S (2018) Effect of Non-Farm Income on Poverty and Income Inequality: Farm Households Evidence from Punjab Province Pakistan. *Sarhad Journal of Agriculture*, 34(2):233-239.

53. Usman M, Reimann T, Liedl R, **Abbas A**, Conrad C, Saleem S (2018) Inverse Parameterization of a Regional Groundwater Flow Model with the Aid of Modelling and GIS: Test and Application of Different Approaches. *ISPRS International Journal of Geo-Information* 2018, 7(1), 22; doi:10.3390/ijgi7010022
54. **Abbas A**, Akhter W, Butt M, Ullah R, Iqbal MA (2017) Potential of Livestock TAKAFUL in Pakistan: An Empirical Investigation. *Sukkur IBA Journal of Economics and Finance*, 1(1)29-37.
55. Rauf S, Bakhsh K, **Abbas A**, Sarfraz H, Ali A, Kächele H (2017) How hard they hit? Perception, adaptation and public health implications of heat waves in urban and peri-urban Pakistan. *Environmental Science and Pollution Research*, 24:10630–10639. <https://link.springer.com/article/10.1007/s11356-017-8756-4>
56. Choudhury MA, **Abbas A** (2017) Agriculture as Social Wellbeing System in Food Security: An Epistemological Study. *Theoretical Economics Letters* 7:429-447.
57. Arshad M, Kächele H, TS, Krupnik, Amjath-Babu TS, Aravindakshan S, **Abbas A**, Mahmood Y, Müller K (2016) Climate variability, farmland value, and farmers' perceptions of climate change: implications for adaptation in rural Pakistan. *International Journal of Sustainable Development & World Ecology*. DOI: 10.1080/13504509.2016.1254689
58. Arshad M, Amjath-Babu TS, Krupnik TJ, Aravindakshan S, **Abbas A**, Kächele H, Müller K (2017) Climate variability and yield risk in South Asia's rice–wheat systems: emerging evidence from Pakistan. *Paddy and Water Environment*. DOI 10.1007/s10333-016-0544-0
59. **Abbas A**, Amjath-Babu TS, Kächele H, Usman M, Müller K. 2016. An overview of flood mitigation strategy and research support in South Asia: implications for sustainable flood risk management. *International Journal of Sustainable Development and World Ecology* 23(1):98–111.
60. **Abbas A**, Amjath-Babu TS, Kächele H, Müller K. 2016. Participatory adaptation to climate extremes: An assessment of households' willingness to contribute labor for flood risk mitigation in Pakistan. *Journal of Water and Climate Change*, 7(1). DOI: 10.2166/wcc.2016.002.
61. Usman M, **Abbas A**, Saqib ZA. 2016. Conjunctive use of water and its management for enhanced productivity of major crops across tertiary canal irrigation system of Indus basin in Pakistan. *Pakistan Journal of Agricultural Sciences*, 53(1).
62. **Abbas A**, Amjath-Babu TS, Kächele H, Müller K. 2015. Non-structural flood risk mitigation under developing country conditions: an analysis on the determinants of willingness to pay for flood insurance in rural Pakistan. *Natural Hazards* 75(3):2119–2135.
63. Usman M, Liedl R, Shahid, MA, **Abbas A**. 2015. Land use/land cover classification and its change detection using multi-temporal MODIS NDVI data. *Journal of Geographical Sciences*, 12:1479–1506.
64. Jalil A, Ahmad M, **Abbas A**, Sheikh AD (2011) Economic factors responsible for net income variation on small farms in Southern Punjab, Pakistan. *J. of Agricultural Research*, 49(3):419–427.
65. Sharif S, Javed MS, **Abbas A**, Hassan S. 2008. Impact of WTO's trade liberalization on selected food crops in Pakistan. *Pak Dev Rev* 47(4):547–563.
66. Sheikh AD, **Abbas A**. 2007. Barriers in efficient crop management in rice-wheat cropping system of Punjab. *Pak J Agric Sci* 44(2):341–349.
67. **Abbas A**, Sheikh AD. 2005. Comparative economics of crop production in saline and sodic areas of Central Punjab. *J Agric Res* 43(3):243–255.
68. Haleem U, Mushtaq K, **Abbas A**, Sheikh AD. 2005. Estimation of export supply function for citrus fruit in Pakistan. *Pak Dev Rev* 44(4):659–672.

Guest Editor

Sustainability (Special Issue on: Agricultural Sustainability at the Crossroads: Indicators, Approaches, Impacts and Options) DOI: 10.13140/RG.2.2.10586.67526): **2020-21**.

Discover Sustainability (Special Issue on: Land Systems for Sustainability: Challenges, Options and Measurement) <https://link.springer.com/collections/ibbiaejcja> (in progress)

Member of Editorial Advisory Board

1. Nature's **Humanities and Social Sciences Communication** (Associate Editor)
<https://www.nature.com/palcomms/editorialboard>
2. International Journal of Ethics & Systems', Emerald Group.
<https://www.emeraldgroupublishing.com/journal/ijoes>

3. Sustainability (Reviewer Board Member)
4. Atmosphere (Reviewer Board Member)

Journal Reviewer: Reviewed more than 300 journal articles. See Publon's Record:
<https://www.webofscience.com/wos/op/peer-reviews/summary>