

Muhammad Abid

Address: Centre for Climate Research and Development, COMSATS Institute of Information Technology, Islamabad 45550, Pakistan

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EDUCATION

University of Hamburg Hamburg, Germany
Ph.D. in Natural Sciences (Dr. rer. nat.) January 2017

- **Research Interests:** Climate change adaptation, Vulnerability and impact assessments, Agricultural policies, Institutions and governance, Surveys and research design
- **Dissertation:** “*Climate Change Impacts and Adaptation in the Agricultural Sector of Pakistan- Socioeconomic and Geographical Dimensions*”

University of Agriculture Faisalabad, Pakistan
M.Sc. (Honours) in Agricultural Economics 2008-10

- CGPA: 3.99/4.00 (Second position)
- Thesis: “*Productivity and Resource Use Efficiency of Bt (Bacillus thuringiensis) Cotton Farmers: A Case Study of Punjab Province*”

B.Sc. (Honours) in Agricultural and Resource Economics 2004-08

- Silver medal with CGPA: 3.92/4.00
- Four times receiver of University open merit scholarship

WORK EXPERIENCE

COMSATS Institute of Information Technology Islamabad, Pakistan
Assistant professor at Centre for Climate Research and Development March 2017-todate

- Associated with working group on climate change and agriculture in Pakistan
- P.I. of the project entitled: Public perception and valuation of climate-related risks and willingness-to-pay for policy interventions in metropolitan cities of Punjab, Pakistan funded by Higher Education Commission, Pakistan (0.5 million PKR) [In-progress]
- Local collaborator/ co-P.I. in an international project entitled: A Study on the Social Impact- Response Mechanism of Flood Hazards in Northern Pakistan funded by the Institute of Mountain Hazards and Environment, Chinese Academy of Sciences, Chengdu, China
- Proposal writing in collaboration with different international institutions on different issues related climate change, food, agriculture and water nexus

University of Hamburg Hamburg, Germany
Doctoral researcher with Professors Jürgen Scheffran and Uwe Schneider 2013-2017

Research on social dimensions of climate change in the agriculture sector of Pakistan

- Designed and conducted a comprehensive survey of 450 farm households in Pakistan
- Developed an integrated agricultural sector model for Pakistan using GAMs
- Achieved 4500 Euro field research grant by the Center for a Sustainable University Hamburg
- Participated in six international conferences in UK, Austria, Russia, France, China, Germany
- Participated in writing proposal for project submitted to European Union ERC grant

International Water management Institute (IWMI) <i>Researcher - Agricultural Economics</i>	Lahore, Pakistan 10/2011– 09/2012
<ul style="list-style-type: none"> ▪ Contributing to the different components of the project on revitalizing irrigation in Pakistan ▪ Review of irrigation management system in Pakistan and prospects of new irrigation reforms and its socioeconomic implications for farming communities ▪ Designing survey design, constructing questionnaires, organizing and conducting baseline studies ▪ Supervising, conducting and monitoring farm household surveys and training survey teams ▪ Data analysing using economic modelling tools and report writing 	
Japan International Cooperation Agency (JICA) <i>Coordinator (Reforms)</i>	Lahore, Pakistan 07/2010 – 09/2011
<ul style="list-style-type: none"> ▪ Participating the project on Strengthening Irrigated Agriculture through Participatory Irrigation Management in the Punjab Province ▪ Research on conflict resolution case studies to assess the effectiveness of farmers' organizations (FOs) in Punjab through interviewing FO presidents in Punjab, Pakistan ▪ Monitoring and evaluating the FOs' trainings 	
Asad Ahmad Bukhari (Pvt.) Limited <i>Consultant (supervisor Socio-economic Survey Team)</i>	Islamabad, Pakistan 02/2010 – 07/2010
<ul style="list-style-type: none"> ▪ Contributing to the project impact evaluation study of the National program for Improvement of watercourses (NPIW) in Pakistan ▪ Studying socioeconomic implications of NPIW and its contribution towards socio-economic development and water saving efforts ▪ Leading a 12-member field research team to conduct 2000 farmer interviews and 300 focused group discussions across 35 districts of Punjab province, Pakistan ▪ Field project management and coordination 	
University of Agriculture <i>Research Assistant at the Dept. Environmental & Resource Economics</i>	Faisalabad, Pakistan 09/2009 – 10/2010
<ul style="list-style-type: none"> ▪ Project on “Economics of adopting Bt cotton: Evidence from Pakistani Punjab” ▪ Developing questionnaire and conducting panel survey of 300 cotton farmers in Punjab, Pakistan ▪ Contributed to data entry and assisting PI in data analysis 	
Sustainable Development Policy Institute (SDPI) <i>Field Researcher</i>	Islamabad Pakistan 07/2008 – 08/2008
<ul style="list-style-type: none"> ▪ Contributed in the project on Environmental Fiscal Reforms in Abbottabad district, KPK province funded by International Union for Conservation of Nature ▪ Conducted 300 stakeholders' interviews in Abbottabad, KPK province ▪ Contributed to data cleaning and data entry of collected information 	
Pakistan Institute of Development Economics <i>Research Internee</i>	Islamabad Pakistan 03/2008 – 06/2008
<ul style="list-style-type: none"> ▪ Research on evaluation of safe drinking water filter plants in Rawalpindi district, Punjab Pakistan ▪ Participating in data entry and cleaning of different projects datasets 	

SKILLS

- Proficient in statistical analysis and software (R, Stata, SPSS, Netdraw)
- Proficient in developing model in General Algebraic Modeling System (GAMs)
- Basic use of Geographic Information Systems software (ArcGIS)
- Proficient in MS Office (MS word, MS Excel, MS PowerPoint)
- Advanced English (Business fluent), intermediate German, and Urdu (Mother Tongue)

JOURNAL PUBLICATIONS

1. **Abid, M.**, Schneider, U.A., Scheffran, J. (2016). Adaptation to climate change and its impacts on food productivity and crop income: Perspectives of farmers in rural Pakistan, *Journal of Rural Studies*, 47A, 254-266. [\[Web Link\]](#)
2. **Abid, M.**, Schilling, J., Scheffran, J., Zulfiqar, F. (2016). Climate Change Adaptation and Risk Perceptions among Farm Households in Punjab, Pakistan, *Science of the Total Environment*, 546, 447-460. [\[Web Link\]](#)
3. **Abid, M.**, Scheffran, J., Schneider, U. A., Ashfaq, M. (2015). Farmers' perceptions of and adaptation strategies to climate change and their determinants; the case of Punjab province, Pakistan. *Earth System Dynamics*, 6(1), 225-243. [\[Web Link\]](#)
4. Elahi, E., **Abid, M.**, Zhang, L., & Alugongo, G.M. (2017). The usage of wastewater for animals' production and its socioeconomic and welfare implication. *Environmental Science and Pollution Research (Accepted)*.
5. Shah, A.A., Jingzhing, Y., **Abid, M.**, Ullah, R. (2017). Flood risk mitigation strategies at household level and its determinants: a case of Khyber Pakhtunkhwa (KP) province, Pakistan, *Natural Hazards (Accepted)*.
6. Elahi, E., Zhang, L., **Abid, M.**, Javed, M.T., Xinru, H., (2017). Direct and indirect effects of wastewater use and herd environment on the occurrence of animal diseases and animal health in Pakistan. *Environmental Science and Pollution Research*, 1-14. [\[Web Link\]](#)
7. Iqbal, M.A., Ping, Q., **Abid, M.**, Ahmed, U.I. Nazir, A. (2016). Assessing risk perceptions and attitude among cotton farmers: a case of Punjab province, Pakistan, *International Journal of Disaster Risk Reduction*, 16, 68-74. [\[Web Link\]](#)
8. Zulfiqar, Ullah R., **Abid, M.**, Hussain, A. (2016). Cotton production under risk: A simultaneous adoption of risk coping tools, *Natural Hazards*, Doi 10.1007/s11069-016-2468-9. [\[Web Link\]](#)
9. Iqbal, M.A., Ping, Q., **Abid, M.**, Ahmed, U.I., Nazir, A. & Rehman, A. (2016). Adoption of off-farm diversification income sources in managing agricultural risks among cotton farmers in Punjab Pakistan, *Journal of Applied Environmental and Biological Sciences*, 6(8), 47-53. [\[Web Link\]](#)
10. Ahmed U.I., Ying, L., Bashir, M.K., **Abid, M.**, Elahi, E. (2016). Access to output market by small farmers: the case of Punjab, Pakistan, *Journal of Animal and Plant Sciences*, 26(3): 2016. [\[Web Link\]](#)
11. Naseer, A., Ashfaq, M., **Abid, M.**, Razzaq, A., Hassan, S. (2016). Current Status and Key Trends in Agricultural Land Holding and Distribution in Punjab, Pakistan: Implications for Food Security, *Journal of Agricultural Studies*, 4(4), 14-27. [\[Web Link\]](#)
12. Usman M, Ali A, Hassan S, **Abid M** (2015). An efficiency analysis of tuberose cut-flower: A case study, *Journal of Animal & Plant Sciences* 25:1699-1706. [\[Web Link\]](#)

13. Elahi, E., Zhang, L., **Abid, M.**, Altangerel, O., Bakhsh, K., Uyanga, B., Ahmed, U. I., Xinru, H. (2015). Impact of balance use of fertilizers on wheat efficiency in cotton wheat cropping system of Pakistan, *Int. J. Agric. Innov. Res.* 3, 1470–1474. [\[Web Link\]](#)
14. Usman, M., Ashfaq, M., Taj, S., **Abid, M.** (2014). An economic analysis of cut-rose flower in Punjab, Pakistan. *Journal of Animal and Plant Sciences*, 24(2), 651-655. [\[Web Link\]](#)
15. Ashfaq, M., **Abid, M.**, Bakhsh, K., Fatima, N. (2012). Analysis of resource use efficiencies and return to scale of medium sized Bt cotton farmers in Punjab, Pakistan, *Sarhad J. Agric*, 28(3), 493-498. [\[Web Link\]](#)
16. Fatima, S., Azeem, M. M., Elahi, E., **Abid, M.** (2012). Comparative analysis of foreign capital inflows and domestic resources in the economic growth of Pakistan, *Journal of Agriculture and Social Sciences*, 28(1), 34-36. [\[Web Link\]](#)
17. Sheikh, A. T., Elahi, E., **Abid, M.**, Fatima, S., Fatima, N. (2012). Effect of sewage water on the cauliflower productivity in Punjab, Pakistan, *Journal of Agriculture and Social Sciences*. [\[Web Link\]](#)
18. **Abid, M.**, Ashfaq, M., Hassan, S., Fatima, N. (2011). A resource use efficiency analysis of small Bt cotton farmers in Punjab, Pakistan, *Pak. J. Agric. Sci*, 48(1), 65-71. [\[Web Link\]](#)
19. **Abid, M.**, Ashfaq, M., Khalid, I., Ishaq, U. (2011), An economic evaluation of impact of soil quality on Bt (*Bacillus thuringiensis*) cotton productivity. *Soil and Environment*, 30(1), 78-81. [\[Web Link\]](#)

PUBLICATIONS (UNDER REVIEW/ SUBMITTED)

20. **Abid, M.**, Ngaruiya, G.W., & Scheffran, J., (Submitted). The role of social networks in adapting agriculture to climate change in Pakistan: Implications for sustainable agriculture in Pakistan, *Climate*.
21. **Abid, M.**, Scheffran, J., & Schneider, U.A., (Under review). Relating farmers' perceptions of climate change with observed trends and role of accurate perceptions in adapting agriculture to climate change in Pakistan. *Environmental Management*.
22. **Abid, M.**, Gioli, G., & Scheffran, J., (Likely to be submitted). Internal migration and changing environmental conditions: A farmers' perspective from rural Pakistan.
23. Elahi, E., Zhang, L., **Abid, M.**, & Haq S.U., (Under review: Revised submission). Agricultural advisory and financial services; farm level access, outreach and impact in a mixed cropping district of Punjab, Pakistan, *Land Use Policy*.
24. Ahmed, U.I., Bashir, M.K., Ying, L. **Abid, M.**, & Zulfiqar, F. (Under review: revised Submission). Status and determinants of small farming households' food security and role of market access in enhancing food security in rural Pakistan, *PLOS ONE journal*.
25. Elahi, E., Zhang, L., **Abid, M.**, Fazlani, S.A., & Farooque, M., (Submitted). Domestic water buffaloes; access to wastewater and milk yield losses: A case study of Punjab, Pakistan.
26. Zulfiqar, Ullah R., & **Abid, M.** (Under Review). Diffusion of “better practices” in Pakistan: a farm level investigation of determinants and concurrent adoption, *Land Use Policy*.
27. Elahi, E., Zhang, L., **Abid, M.**, Alugongo, G.M., & Hasson, S.U. (Submitted). Domestic water buffaloes: wastewater use, disease prevalence and associated economic losses in Punjab province, Pakistan, *Journal of Dairy Sciences*.

CONFERENCE PAPERS

1. **Abid, M.** (2017), Climate change impacts on rural health in Pakistan, A keynote presentation at 8th International Health Conference at Khyber Medical University (KMU), Peshawar, April 25-27, 2017.
2. **Abid, M., & Scheffran, J.** (2016), Climate change adaptation to sustain local food security; a farmers' perspective from Pakistan at Data Analysis and Modeling in Earth Sciences (DAMES), University of Hamburg, September 26-28, 2016.
3. **Abid, M., G. Gioli, Scheffran, J.** (2016), Climate change and rural-out migration: a farmers' perspective from rural Pakistan, the 33rd International Geographical Congress, Beijing, China, August 21-25, 2016.
4. **Abid, M. & Scheffran, J.** (2016). Investigating the role of local actors and climate change adaptation in enhancing food security among farming communities in Pakistan, Cambridge Conference on Global Food Security 2016, Cambridge University, UK, June 23-24, 2016.
5. **Abid, M. & Scheffran, J.** (2016). Impact of farm level adaptation to climate change on agricultural productivity and farmers' wellbeing: Empirical evidence from Pakistan, General Assembly of European Geoscience Union (EGU), Vienna Austria, April 17-22, 2016.
6. **Abid, M.** (2015). The role of social networks in adapting agriculture sector to climate change: implications for sustainable agriculture in Pakistan, International Geographical Union Regional Conference, Moscow, Russia, August 17-21, 2015.
7. **Abid, M. & Scheffran, J.** (2015). Managing climate-induced risks and adaptation in the agriculture sector; a case of Punjab province, Pakistan, Global conference on Climate Smart Agriculture, Le Coram, Montpellier, France, March 16-18, 2015.

REVIEWER FOR

- Regional Environmental change (2016)
- Natural Hazards (2015; 2016)
- Sustainability journal (2016)
- Int. J. Sust. Dev. and World Ecology (2015)
- International Journal of Climate Change Strategies and Management (2017)
- Professional Geographer (2016)
- Journal of Cleaner production (2016)
- Natural Resources Forum Journal (2016)
- Int. J. Disaster Risk Reduction (2016)
- Oncotarget (2017)

TRAINING RECEIVED

- Advanced Scientific Writing Course (5 days) 03/2016
- Training course on Workflow of Statistical Analysis with STATA: Data (5 days) 02/2016
- Scientific Writing Course (5 days) 11-12/2015
- Training on Crafting a Research Proposal (2 days) 11/2015
- Training course on Introduction to Stata (5 days) 09/2015
- Training course on General Algebraic Modeling System (5 days) 02/2015
- Training course on General Algebraic Modeling System (5 days) 02/2014
- Geographic information system (GIS) software ArcGIS (10 days) 01-02/2014
- Starting A Professional Career in Industry (2 days) 07/2014
- Writing Skills for Science and Research (2 days) 09/2014
- Intensive Advanced German Language course (A1, A2 and B1) (6 Months) 10/2012 -01/2013

- Workshop on High Efficiency Irrigation System (HEIS) (2 days) 03/2011
- Short course on Research methods with SPSS and Minitab (5 days) 07/2009
- Training Course on Gender Analysis and Project Preparation (5 days) 06/2008
- Training Course on Database through MS Access (5 days) 04/2008
- Short Course on Effective Communication (5 days) 03/2008

SELECTED COURSES

- **Economics:** Applied Econometrics, Mathematical Economics, Micro and Macro Economics
 - **Agricultural Economics:** Production Economics, Agricultural Policy, Marketing & Agribusiness,
 - **Rural Development:** Rural Development, Agricultural Finance, Project Planning and evaluation
 - **Environmental change:** Climate and Society, Economics of Climate Change, Environmental Economics, Natural Resource Economics, Sustainability
 - **Modeling and research methods:** Statistical Methods, ABM, GAMs, R, Social networks
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REFERENCES

1. Prof. Dr. Jürgen Scheffran

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 Relationship First PhD advisor
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2. Prof. Dr. Uwe Schneider

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 Relationship Second PhD advisor
 Email / phone Uwe.schneider@uni-hamburg.de / +49 40 42838 6593
 Address Grindelberg 5, 20144 Hamburg, Germany