

**CURRICULUM VITAE**  
**SONIA N. AZIZ**

Moravian University

School of Business and Economics

1200 Main Street

Bethlehem, PA 18018

Office: (610) 625-7702

Email: azizs@moravian.edu

**CURRENT POSITIONS**

Dean, School of Business and Economics, Moravian University

Founding Director, Center of Investigation for Poverty and Inequality, Moravian

University Professor of Economics, Moravian University 2008 – Present

Adjunct Scientist – Center for Health and Population Research (ICDDR, B) 2022- Present

**FIELDS OF SPECIALIZATION**

Environmental Economics, Health Economics, Development Economics, Water Resources

**EDUCATION**

Ph.D. Ecology and Environmental Science, University of Maine August, 2007

**Dissertation:** Valuation of Avoiding Arsenic in Drinking Water in Rural Bangladesh: An Averting Behavior Analysis.

**Committee Chair:** Professor Kevin Boyle

M.Sc. Economics, University of Texas at Austin December 2001

B.A. Economics, University of Texas at Austin August 1998

B.A. Mathematics, University of Texas at Austin August 1998

**RESEARCH AND TEACHING EXPERIENCE**

Instructor, Virginia Tech

Environment and Sustainable Development Economics 2006

Research Assistant

Virginia Tech 2005-2008

Agricultural and Applied Economics

University of Maine 2001-2005

Resource Economics and Policy

University of Texas at Austin 1995-1999

Teaching Assistant, University of Texas at Austin 1999-2001

Principles of Microeconomics, Principles of Macroeconomics

**COURSES TAUGHT**

Health Economics (Graduate Course, Masters in Public Health)

Intermediate Microeconomics (Upper Division)  
Principles of Economics (Introductory Economics)  
Environmental Economics (Upper division), Natural Resource Economics (Upper  
division) Introduction to Environmental Studies (Introductory Environmental Science)

## GRANTS

- Received NASA/RFF Award
  - “Quantifying Benefits of Using Satellite Derived Early Warning System to Predict Cholera in Bangladesh” Investigators: Sonia Aziz, Kevin Boyle, Emily Pakhtigian and Ali Akanda. Sponsor: The Valuables Consortium: A cooperative agreement between Resources for the Future and the National Aeronautics and Space Administration. Amount: \$100K.
- Received NASA Award
  - Economic Evaluation of “A multi-sensor remote sensing approach to predict cholera.” Investigators: Sonia Aziz, Rita Colwell, Anwar Huq and Antarpreet Jutla. Sponsor: National Aeronautics and Space Administration. Amount: \$250K.
- Received ICDDR, B Award.
  - Valuation of “Avoiding arsenic in drinking water in rural Bangladesh” Investigators: Sonia Aziz and Kevin Boyle. Amount: \$50K.

## PUBLICATIONS

Aziz S.N., Boyle K.J., Rahman M. “Knowledge and Risks of Arsenic in Drinking Water” *Journal of Health, Population and Nutrition* 24(3) 2006

Aziz S.N., Aziz K.M.S. [Averting Behavior Framework for Perceived Risk of \*Yersinia enterocolitica\* Infections](#), *Journal of Pathogens*. Volume 2012, Article ID 725373. 2012.  
doi:10.1155/2012/725373.

Aziz S.N., Aziz K.M.S., Boyle K.J. “Valuation of Avoiding Arsenic in Drinking Water in Rural Bangladesh: factors affecting child health. *Frontiers in Public Health*. 57(2) 2014 doi: 10.3389/fpubh.2014.00057

Aziz S.N., Boyle K.J., Crocker T. “Parental decisions, child health and valuation of avoiding arsenic in drinking water in rural Bangladesh. *Journal of Water and Health*. 13(1) pp 152-167 © IWA Publishing 2015 doi:10.2166/wh.2014.213

Hossain M.S., Raheem E., Sultana T.A., Ferdous S., Nahar N., Islam S., Arifuzzaman M., Razzaque M.A., Alam R., **Aziz S.N.**, Khatun H., Rahim A., Morshed M. "Thalassemias in South Asia: clinical lessons learnt from Bangladesh". *Orphanet Journal of Rare Diseases* (2017) 12:93 DOI 10.1186/s13023-017-0643-z

Akanda, A. S., **Aziz S.N.**, A. Jutla, A. Huq, M. Alam, G. U. Ahsan, and R. R. Colwell (2018), Satellites and cell phones from a cholera early-warning system, *Eos*, 99, <https://doi.org/10.1029/2018EO094839>.

Aziz S.N., Pakhtigian, E.L., Akanda, A. S., A. Jutla, A. Huq, M. Alam, G. U. Ahsan, and R. R. Colwell (2021), Does Improved Risk Information Increase the Value of Cholera Prevention? *Social Science and*

*Medicine*. 113716. <https://doi.org/10.1016/j.socscimed.2021.113716>

Broyles, L. M. T., Pakhtigian, E. L., Aziz, S.N., Akanda, A. S., and Mejia, A. (2023). Seasonal variation in household water insecurity in rural Bangladesh: A longitudinal analysis. *PLoS Water*, 2 (7), e0000157. <https://doi.org/10.1371/journal.pwat.0000157>

Pakhtigian, E. L., Aziz, S.N., Boyle, K. J., Akanda, A. S., and Hanifi, S. M. A. (2024). Early warning systems, mobile technology, and cholera aversion: Evidence from rural Bangladesh. *Journal of Environmental Economics and Management*, 125, 102966. <https://doi.org/10.1016/j.jeem.2024.102966>.

Nusrat Farah, Akanda Ali S., Islam A., Aziz, S.N., Pakhtigian E. L., Boyle K.J., Hanifi S.M.Z. (2024) Satellite-Derived, Smartphone-Delivered Geospatial Cholera Risk Information for Vulnerable Populations. *Forthcoming*.

## **WORKING PAPERS:**

Lambright-Pakhtigian, E., Aziz S.N., A. S. Akanda, K. Boyle, and A. M. Hanifi. From Space to Villages: Does provision of cholera risk information improve outcomes for Bangladeshi villagers? (*Under review*)

## **PROCEEDINGS**

Aziz, S.N., Boyle, K.J., Smith, K.V., McCollum, D. 2008. A meta-analysis of response rates to contingent valuation surveys conducted by mail. In, *Sample Representativeness: Implications for Administration and Testing of Stated Preference Surveys*, A Krupnick and D. A. Evans (eds.), Resources for the Future, [http://yosemite.epa.gov/ee/epa/eerm.nsf/vwAN/EE-0512-01.pdf/\\$file/EE-0512-01.pdf](http://yosemite.epa.gov/ee/epa/eerm.nsf/vwAN/EE-0512-01.pdf/$file/EE-0512-01.pdf)

Aziz, S.N., Aziz, K.M.S. 2013. Providing Safe Drinking Water Sources in Rural Bangladesh. In, *Application of Bio-Technology in addressing the Development Needs of Bangladesh*.

## **SEMINARS**

Aziz, Sonia “Early Warning Systems, Mobile Technology and Cholera Aversion: Evidence from Rural Bangladesh.” 27<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists. Rimini, Italy. *Experimental Evidence in Pandemic Times*. 28 June – 1 September, 2022

Aziz, Sonia “Early Warning Systems, Mobile Technology and Cholera Aversion: Evidence from Rural Bangladesh.” 13<sup>th</sup> European Conference of Health Economists. *Health Economics of Sustainable Welfare Systems*. Oslo, Norway. 5 – 8 July, 2022.

Aziz, Sonia “Valuables Consortium, Community of Practice Seminar, 17, December 2021

Aziz, Sonia “Early Warning Systems, Mobile Technology and Cholera Aversion: Evidence from Rural Bangladesh.” American Geophysical Union Annual Meeting. *Accelerating Human Agility, Communication and Equity in Shifting Disease Landscapes*. Online. 13-17 December, 2021.

Aziz, Sonia. “Socio-economic Impact of Remote Sensing Aided Cholera Prediction in Bangladesh” NASA Health and Air Quality Applications Program Annual Meetings, 2018, Burlington, Vermont, 17-18

September, 2019.

Aziz, Sonia. “Satellite Aided Outbreak Prevention and Household Willingness to Avoid Cholera in Bangladesh” 12th European Conference on Health Economics, 11 - 14 July 2018, MECC Maastricht, the Netherlands.

Aziz, Sonia. “Socio-economic Impact of Remote Sensing Aided Cholera Prediction in Bangladesh” NASA Health and Air Quality Applications Program Annual Meetings, 2017, Reno, Nevada, 12-13 September, 2017.

Aziz, Sonia. “Factors affecting Domestic Worker Retention in Bangladesh” 11th International Business and Social Sciences Research. Dubai, U.A.E., January 7-9, 2015

Aziz, Sonia. “Providing Safe Drinking Water Sources in Rural Bangladesh.” Presenting in absentia at Application of Bio-Technology in addressing the Development Needs of Bangladesh, May 25 – 26, 2013

Aziz, Sonia. “Estimating Preferences for Avoiding Waterborne Diseases in Rural Households: A Contingent Valuation Approach” Invited Speaker, 13<sup>th</sup> Asian Conference on Diarrheal Disease. Tagaytay, Philippines, 11<sup>th</sup> January 2012.

Aziz S.N. “Mitigating Exposure to Environmental Hazards in Developing Countries: A Microeconomic Analysis.” Invited Keynote Speaker, 5<sup>th</sup> International Japan-Bangladesh conference on Food, Health and Environment: Problems and Prospects in Developing Countries, Dhaka, Bangladesh, December 2010

Aziz S.N., Boyle K.J. “Valuation of Avoiding Arsenic in Drinking Water in Rural Bangladesh: An Averting Behavior Analysis.” Annual Meeting of the International Health Economics Association, Beijing, China, July 2009.

Aziz, Sonia. “Modeling Household Health Risk of Avoiding Waterborne Diseases.” Invited Speaker, 12<sup>th</sup> Asian Conference on Diarrheal Disease. Yogyakarta, Indonesia, May 2009.

Aziz S.N., Boyle K.J. “Valuation of Avoiding Arsenic in Drinking Water in Rural Bangladesh: An Averting Behavior Analysis.” Annual Meeting of the American Agricultural Economics Association, Orlando, FL. July 2008.

Aziz, Sonia N. “Averting Diabetes: A Health Economics Approach” Presented at the Diabetic Association of Bangladesh, July 2006.

## **WORKSHOP**

Grants for Assessing the Benefits of Satellites Workshop, Resources for the Future (RFF), Washington D.C. 29-30 October, 2019

## **TEAM PRESENTATIONS**

**Antar Jutla**, and **S. Aziz**, **A. Huq**, and R. Colwell. “How Remote Sensing of Vibrios Influence Public

**Health Decisions: Lessons Learned from Bengal Delta and Haiti**” American Meteorological Society, 98<sup>th</sup> Annual Meeting, Austin, Texas, Jan 8-11, 2018

Antar Jutla, and S. Aziz, Akanda A.S., A. Huq, R. Colwell, M. Alam, G.U. Ahsan. “PREDICT: A next generation platform for near real-time prediction of cholera.” American Geophysical Union, Annual Meeting, New Orleans, LA, Dec 11-15, 2017.

Antar Jutla, and S. Aziz, Akanda A.S., A. Huq, R. Colwell, M. Alam, G.U. Ahsan. “Remote Sensing of Waterborne Diseases in Bangladesh”. Service Workshop. NSU, Dhaka, Bangladesh, August 19-21, 2017.

## **PROFESSIONAL SERVICES**

Session Discussant and Moderator – 27<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists. Rimini, Italy

Session –*Experimental Evidence in Pandemic Times*

Session Chair and Moderator - Asian Conference of Diarrhoeal Diseases and Nutrition (ASCODD) XIII on *Health and Wealth in a Changing World*

Session: Parallel Symposium on Rotavirus Vaccine

Session Chair and Moderator – Annual Meeting of the International Health Economics Association, Beijing, China, July 2009.

Session: “Self-Assessed Health Status” and “Children’s Health Outcomes”

Session Chair and Moderator - 12<sup>th</sup> Asian Conference on Diarrheal Disease. Yogyakarta, Indonesia, May 2009.

Session: “Avoiding Waterborne Disease”

Session Chair and Moderator – Annual Meeting of the American Agricultural Economics Association, 2008.

Session: Conceptual Challenges in Nonmarket Valuation

Committee Service – Moravian University

Planning and Budget Committee – Fall 2014 - Present

Academic Program and Planning Committee – Spring 2011

Academic Standards Committee (Spring 2009-Present)

Faculty Research and Development Committee (Spring 2009-Spring 2010)

Sustainability Task Force (Spring 2009 – Fall 2011)

Referee for Water and Environment (2017-Present)

Referee for Frontiers in Public Health (2017)

Referee for Journal of Population and Space (Spring 2012)

Referee for: American Journal of Agricultural Economics (Spring 2006) Referee for Journal of Health, Population and Nutrition (Fall

2007)

International Advisory Editor (2008 to Present) - Bangladesh Journal of Medical Science **SOCIETY MEMBERSHIPS**

Member – Valuables Consortium: 2019-Present

Founding member for Committee of Action on Research Extension and Services in Bangladesh (CARES): 2010-Present

Member – International Health Economics Association (2008-Present)

Member - American Agricultural Economics Association (2008 – Present)

Member - Bangladesh Society of Microbiologists (2005 – Present)

### **PROFESSIONAL SKILLS**

Field work, SAS, Duali, GAMS and Mathematica.

### **REFERENCES**

Available on request