

# SALEH MAMUN

Department of Economics  
University of New Mexico  
MSC 3060  
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## EDUCATION

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University of New Mexico Ph. D. in Economics	Albuquerque, NM <i>Aug 2014 - May 2019 (expected)</i>
University of New Mexico M. A. in Economics	Albuquerque, NM <i>May 2016</i>
University of Dhaka Master of Development Studies	Dhaka, Bangladesh <i>July 2013</i>
University of Dhaka MBA in Finance	Dhaka, Bangladesh <i>July 2010</i>
Bangladesh University of Engineering and Technology B. Sc. in Civil Engineering	Dhaka, Bangladesh <i>November 2006</i>

## JOB MARKET PAPER

Title: “Discrete Choice Experiment on Renewable Portfolio Standards to Map Household Preferences”  
Advisor: Prof. Janie M. Chermak

My research evaluates an energy policy from household perspective using discrete choice experiment technique. The objective of this research is to understand household preferences towards renewable portfolio standards and to explore the taste, scale, and geospatial heterogeneity among households.

## RESEARCH INTERESTS

Primary field: Environmental and natural resource economics, energy economics, agricultural economics  
Secondary field: Public economics, health economics

## TEACHING INTERESTS

Environmental Economics, Natural Resource Economics and Ecological Modeling, Quantitative and Mathematical Economics, Econometrics, Microeconomics, Energy Economics, Public Economics, Agricultural Economics, Managerial Economics

## SCHOLARLY STATISTICS

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- **Google Scholar Profile:** <https://scholar.google.com/citations?hl=en&user=iEUMZPzBI94C>
- **Researchgate profile:** [https://www.researchgate.net/profile/Saleh\\_Mamun](https://www.researchgate.net/profile/Saleh_Mamun)
- **Publon profile:** <https://publons.com/author/1377075/saleh-mamun#profile>

## PUBLICATIONS

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### PEER REVIEWED

1. Horn, B.P., Li, X., **Mamun, S.**, Guerrin, P., McCrady, B., & French, M.T. (2018) “The Economic Costs of Jail-Based Methadone Maintenance Treatment”. *The American Journal of Drug and Alcohol Abuse*, 44(6), 611-618.
2. Roni, M.S., Chowdhury, S., **Mamun, S.**, Marufuzzaman, M., Lein, W., & Johnson, S. (2017). “Biomass Co-Firing Technology with Policies, Challenges, and Opportunities: A Global Review”. *Renewable & Sustainable Energy Reviews*, 78, 1089-1101.
3. Roni, M. S., Eksioglu, S. D., Jin, M., & **Mamun, S.** (2016). “A Hybrid Inventory Policy with Split Delivery under Regular and Surge Demand”. *International Journal of Production Economics*, 172, 126-136.

### PAPERS UNDER REVIEW

4. Bernknopf, R., Broadbent, C., Adhikari, D., **Mamun, S.**, Tidwell, V., Babis, C., & Pindilli, E. “Multi-Resource Analysis: An Analysis of Natural Resource Tradeoffs in the Piceance Basin, Colorado Using the Net Resource Assessment (NetRA) Proof of Concept and Decision Support Tool” (submitted to **United States Geological Survey Circular Series**) Revisions submitted

### PENDING PAPERS \*dissertation chapter

5. **\*Mamun, S.**, Thacher, J., & Chermak, J.M., “Discrete Choice Experiment on Renewable Portfolio Standards to Map Household Preferences” (preparing for **Energy Policy**)
6. **\*Mamun, S.**, Hansen, J.K., Searcy, E., & Jacobson, J. “Managing Cellulosic Biorefinery Risk” (preparing for **Biofuels, Bioproducts and Biorefining**).
7. **Mamun, S.**, Horn, B.P., & Chermak, J.M. “Private vs. Public Prisons? A Dynamic Analysis of the Long-Run Tradeoffs Between Cost and Recidivism Efficiency in the US Correction System” (preparing for **Journal of Policy Analysis and Management**).
8. **\*Mamun, S.**, & Chermak, J.M., “Joint Production of Natural Gas and Oil in the Presence of Externalities” (preparing for **Journal of Environmental Management**)
9. **Mamun, S.** “Effect of Agricultural Extension on Climate Change Adaptation: Evidence from Bangladesh” (preparing for **Journal of Environmental Economics and Policy**).
10. **Mamun, S.** “Impact of Clean Development Mechanism on Environmental Performance” (preparing for **World Development**).

### CONFERENCE \*presented by co-author

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1. **Mamun, S.**, Roni, M.S., & Hansen, J.K. (2018). “Implementing Junction Tree Algorithm to Estimate Biomass In-feed Reactor Reliability”. Idaho National Laboratory Intern EXPO, August 09, 2018, Idaho Falls, ID.
2. **Mamun, S.**, Thacher, J., & Chermak, J.M. (2018). “Geospatial and Individual Heterogeneity with Attribute Non-attendance and Importance Ranking in Renewable Portfolio Standard Discrete Choice Experiment”, Department of Economics, Brigham Young University - Idaho, July 12, 2018, Rexburg, ID. (invited speaker)
3. **\*Horn, B.P.**, Li, X., **Mamun, S.**, Guerrin, P., McCrady, B., & French, M.T. (2018). “The Economic Impact of Jail-Based Medication Assisted Treatment: A Cost-Effectiveness Analysis of a Large Jail-Based Methadone Maintenance Treatment Program in New Mexico” W-EIGHTY Issues in Criminal Justice, CPDD 80th Annual Scientific Meeting, June 11, 2018, San Diego, CA.

4. **Mamun, S.**, Hansen, J.K., & Chermak, J.M. (2017). "Modeling Biomass Grower Payment in an Integrated Landscape Design Approach". Shared Knowledge Conference, University of New Mexico, November 8, 2017, Albuquerque, NM
5. **Mamun, S.**, & Hansen, J.K. (2017). "Modeling Biomass Grower Payment". Idaho National Laboratory Intern EXPO, August 11, 2017, Idaho Falls, ID.
6. Kalhor, E., Zemlick, K., Joshi, J., Walter, K., Mamkhezri, J., Lu, N., **Mamun, S.**, Thacher, J., & Chermak, J.M. (2017). "Modeling the Energy/WaterNexus in New Mexico". New Mexico EPSCoR, All Hands Meeting, April 27, 2017, Albuquerque, NM
7. **Mamun, S.**, Horn, B.P., & Chermak, J.M. (2017). "Cost and Recidivism Efficiency Trade-off: A Case of US Correction System". Shared Knowledge Conference, University of New Mexico, April 6, 2017, Albuquerque, NM

## RESEARCH EXPERIENCE

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**Research Assistant, University of New Mexico**, Aug 2014 - Present.

- **The Science Impact Laboratory for Policy and Economics (SILPE)** (Aug 2017 - present)
  - Research assistant to Prof. Richard Bernknopf funded by United States Geological Survey (USGS)
  - Ongoing collaborative research work between USGS Science and Decisions Center, SILPE and Sandia National Laboratories.
  - Assessing the net resource value of natural resources in a complex 2 by 2 system.
- **The Center on Alcoholism, Substance Abuse, and Addictions (CASAA)** (Aug 2016 - July 2018)
  - Research assistant to Prof. Brady P. Horn funded by National Institute of Health (NIH).
  - Project title: Understanding the Societal Value of the Health Improvements Associated with Providing Medication Assisted Treatment in a Large Urban Jail.
- **Established Program to Stimulate Competitive Research (EPSCoR), NM** (Jan 2017 - May 2017)
  - Research assistant to Prof. Janie M. Chermak funded by National Science Foundation (NSF).
  - I am a part of The Social and Natural Science Nexus group. I am in charge of conducting a discrete choice experiment on Renewable Portfolio Standards.

**Graduate Summer Intern, Idaho National Laboratory**, Summer 2017 and Summer 2018.

- **Biomass Grower Payment:** Modeled biomass grower payment in an integrated landscape design approach.
- **Cellulosic Biorefinery Risk:** Compared risk and risk mitigation strategies in advanced vs conventional feedstock supply system.
- **Integrated Process Optimization for Biochemical Conversion:** Implemented junction tree algorithm to estimate the biomass in-feed reactor using probabilistic graphical theory.

## TEACHING EXPERIENCE

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- **Pedagogical Training:** Completed OILS 583: Graduate Teaching I and EDPY 630: College Teaching Seminar courses and several workshops on teaching psychology and obtained a certificate in college teaching.
- **Instructor:** ECON 106: Introductory Microeconomics - Online (Fall 2016), Number of students: 76, Teaching Evaluation: 4.38/5

- **Lab Instructor:** ECON 105: Introductory Macroeconomics (Fall 2014), Number of students: 93, Teaching Evaluation: 3.8/5
- **Guest Lecturer:**
  - ECON 106: Introductory Microeconomics, Topic: Market disequilibrium and Public goods, 2 Lectures. Spring 2018 (UNM)
  - ECON 309: Introductory Statistics and Econometrics, Topic: Basic summary statistics, 1 Lecture, Fall 2016 (UNM)
- **Teaching Assistant** \*graduate courses:
  - ECON 105: Introductory Macroeconomics (Fall 2014) with Prof. Christina Reiser
  - ECON 106: Introductory Microeconomics (Spring 2015) with Prof. Brady Horn
  - \*ECON 501: Microeconomics I (Fall 2015) with Prof. Jennifer Thacher
  - \*ECON 508: Statistics and Introduction to Econometrics (Fall 2015) with Prof. David Van-Dar-goes
  - \*ECON 514: Macroeconomics II (Spring 2016) with Prof. Matias Fontenla
  - ECON 105 - online: Introductory Macroeconomics (Summer 2016) with Prof. Dave Dixon
  - ECON 106 - online: Introductory Microeconomics (Summer 2016) with Prof. Dave Dixon

## WORK EXPERIENCE

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- **Associate**, Microcredit Regulatory Authority, Dhaka, Bangladesh Jan 2011 - Jul 2014.
  - Lead on **performance evaluation project** of Microfinance Institutions by researching on grading criteria for regulatory compliance and financial performance. The grading is similar to credit rating institutional grading.
  - Conducted **research on Microfinance** as a team member and **data management** for different regulatory reporting.
  - Assisted **survey design** and lead on **survey implementation** to collect microfinance and women empowerment data by household survey.
  - Conducted **microfinance and regulatory training** for 50 senior managers of Central Bank of Nigeria (**CBN**) and Nigeria Deposit Insurance Corporation (**NDIC**) to develop their regulation skills, training for microfinance professionals in Bangladesh to develop best practices in microfinance.
- **Product Officer (MT)**, Singer Bangladesh Limited, Dhaka, Bangladesh, Sep 2010 - Jan 2011.
  - Lead on **market research** and feasibility of new **product launching**. Launched Pureit (water filter) in Singer Bangladesh Network.
  - Analyzed **product demand** and procure products (from China and Korea)
  - **Trained 300 sales personnels and shop managers** to develop sales and after sales services strategies.
- **Civil Works Coordinator**, M/S Ataur Rahman Khan, Dhaka, Bangladesh, Dec 2006 - Feb 2008.
  - **Designed and supervised** 30 telecommunication sites in Northwestern Bangladesh.
  - Prepared Bill of Quantities (BOQ), Request for Proposal (RFP) and Request for Quote (RFQ) for various government projects in Bangladesh.

## ANALYTICAL PROFICIENCY

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- **Programming Languages:** extensively used **R** and **Python**.
- **Risk and Decision Analysis:** proficient in **@Risk and DecisionTools Suite** of Palisade Corporation.
- **Modeling and Simulation:** used **Powersim 10** for dynamic optimization and introductory knowledge of **Repast** for Agent Based Modeling.
- **Statistical analysis software:** comfortable with **STATA** and **mata** programming.
- **Geographic information system:** used **ArcGIS, QGIS** with **pyqgis** to conduct spatial analysis and remote sensing.
- **Reporting and Organization:** proficient in **Latex, Lyx, Microsoft Word, Microsoft Excel**.

## ACADEMIC HONORS

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- Graduate Teaching Academy Scholar, Center for Teaching and Learning (CTL), 2018 - present
- Research/Graduate/Teaching Assistantship, University of New Mexico, 2014 - present
- Distinction in Microeconomics core examination, Aug 2015
- Distinction in Econometric core examination, Dec 2015
- Summer graduate internship at Idaho National Laboratory, 2017 and 2018
- Technical scholarship, Bangladesh University of Engineering and Technology (BUET), 2001-2006

## PROFESSIONAL ACTIVITIES

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- Journal Reviewer - *Biofuels, Bioproducts and Biorefining; GCB Bioenergy*
- Grant Reviewer, Graduate and Professional Student Association, UNM - Fall 2017
- Membership in American Economic Association

## LANGUAGES

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Proficient in English and Bengali (native). Working knowledge of Hindi.

## REFERENCES

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### Janie M. Chermak

Professor, Department of Economics  
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### Jennifer Thacher

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### Jason K. Hansen

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