**Kazi Masel Ullah, PhD**

Environmental Sciences Division

Oak Ridge National Laboratory

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**EDUCATION**

***Ph.D. in Forestry and Natural Resources*** May 2022

The University of Georgia, Warnell School of Forestry and Natural Resources Athens, GA

*Thesis title: Modeling adoption of carinata production and designing the supply chain of*

*carinata-based sustainable aviation fuel production in the Southern United States*

***Graduate Certificate in Agricultural Data Sciences*** May 2022

The University of Georgia, Department of Plant Pathology Athens, GA

***Master in Geographical Information Sciences*** May 2014

Lund University, Physical Geography and Ecosystem Sciences Lund, Sweden

*Thesis Title: Urban land-use planning using Geographical Information System and Analytical Hierarchy*

*Process: case study Dhaka city*

***Master of Urban and Regional Planning*** Feb 2012

Bangladesh University of Engineering and Technology, Urban & Regional Planning Dhaka, Bangladesh

*Thesis Title: Finding suitable locations for eco-tourism development in Cox’s Bazar*

***Bachelor of Urban and Regional Planning*** May 2008

Jahangirnagar University, Urban and Regional Planning Dhaka, Bangladesh

**RESEARCH & PROFESSIONAL EXPERIENCE**

Postdoctoral Research Associate Aug 2022 – present

Oak Ridge National Laboratory, Environmental Sciences Division Oak Ridge, TN

Advisor: Dr. Anthony Q Armstrong

Postdoctoral Research Associate May 2022 – July 2022

University at Buffalo, Department of Geography Buffalo, NY

Advisor: Dr. Andrew Crooks

Research Assistant Jun 2018 – May 2022

The University of Georgia, Warnell School of Forestry and Natural Resources Athens, GA

Advisor: Dr. Puneet Dwivedi

GIS and RS Specialist Aug 2016 – May 2018

International Centre for Integrated Mountain Development, Geospatial DivisionKathmandu, Nepal

Advisor: Dr. Mir Matin

Consultant Jan 2016 – July 2016

DM Watch Dhaka, Bangladesh

Research Associate Dec 2013 – Dec 2015

BRAC University, Brac Institute of Governance and Development Dhaka, Bangladesh

**TEACHING & MENTORING EXPERIENCE**

**Course Instructor** Dec 2013 – Dec 2015

BRAC University, Brac Institute of Governance and DevelopmentDhaka, Bangladesh

*Course*: Introduction to GIS and its application for resettlement programs.

**Trainer**  April 2018

International Centre for Integrated Mountain Development, Geospatial DivisionDhaka, Bangladesh

*Course*: Introducing QGIS and FEWS NET for drought monitoring

**Mentor**

Asiful Alam, master’s student, Warnell School of Forestry and Natural Resources, University of Georgia, Fall 2018

*Current status*: Ph.D. Candidate, Warnell School of Forestry and Natural Resources, University of Georgia

**PUBLICATIONS (PEER REVIEW)**

* **Ullah, K.M.**, Crooks, A., & Oladosu, G.A (2023) Evaluating the Incentive for Soil Organic Carbon Sequestration from Carinata Production in the Southeast US, *Journal of Env. Management.* (*revised manuscript submitted*)
* **Ullah, K.M.** & Crooks, A. (2023) Modeling Farmers' Adoption Potential to New Bioenergy Crops: An Agent-based Approach, Proceedings of the 2022 Conference of the Computational Social Science Society of the Americas - Computational Social Science 2022, Springer Nature. (*forthcoming*)
* **Ullah, K.M.**, Masum, F.H., Field, J., & Dwivedi, P. (2023) Designing a GIS-Based Supply Chain for Producing Carinata-Based Sustainable Aviation Fuel in Georgia. *Biofuels, Bioproducts and Biorefining*. <https://doi.org/10.1002/bbb.2483>
* **Ullah, K.**M. & Dwivedi, P. (2022) Ascertaining Land Allocation Decisions of Farmers about the Adoption of Carinata as a Potential Crop for Sustainable Aviation Fuel Production in the Southern United States. *GCB Bioenergy.* <https://doi.org/10.1111/gcbb.12945>.
* **Ullah, K.M.**  & Uddin, K. (2022) The Relationships Between Economic Growth and Cropland Changes in Bangladesh: An Evidence Based on Annual Land Cover Data, *Environ. Challenges.* https://doi.org/10.1016/J.ENVC.2021.100252.
* **Ullah, K.M.** (2019) Determining Poverty Vulnerabilities in Dhaka City Corporation Area: An Asset-based Fuzzy Logic Analysis, *J. Poverty.* 23 (2019) 65–82. https://doi.org/10.1080/10875549.2018.1506960.
* **Ullah, K.M.** & Mansaurian, A. (2016) Evaluation of Land Suitability for Urban Land-Use Planning: Case Study Dhaka City, *Transactions in GIS*., 20–37. https://doi.org/10.1111/TGIS.12137.
* **Ullah, K.M.** & Hafiz, R. (2014) Finding Suitable Locations for Ecotourism Development in Cox’s Bazar Using Geographical Information System and Analytical Hierarchy Process, *Geocarto Int.* 29. https://doi.org/10.1080/10106049.2012.760005.
* **Ullah, K.M.** & Hafiz, R. (2012) Identifying the Impact of Road Networks on Forest Land Using Geographical Information System and Remote Sensing : A Case Study of Teknaf Reserved Forest, *J. Bangladesh Inst. Planners*. 5 (2012) 199–203. ISSN 2075-9363

**UNDER PREPARATION**

* Carbon credits at the farm level to support an effective supply chain for sustainable aviation fuel (with Puneet Dwivedi, Gbadebo Oladosu).
* An Empirical Model on the Adoption of Climate-smart Agricultural Practices (with Esther Parish).
* Energy Crop-based Carbon Banking: A Review of Drivers and Requirements (with Gbadebo Oladosu)
* US and Global Soil Carbon Sequestrations from Climate-Smart Agricultural Practices: An Overview of Existing Studies (with John Field, Gbadebo Oladosu).

**ACADEMIC PRESENTATIONS**

* Exploring the drivers of increased US cover crop adoption. Paper selected for Annual Spatial Econometrics Association Conference 2023, San Diego (with Esther Parish).
* Evaluating the Incentive for Soil Organic Carbon Sequestration from Carinata Production in the Southeast US. NFREC Student Association Seminar Series 2023, University of Florida. (Invited)
* Modeling Farmers' Adoption Potential to New Bioenergy Crops: An Agent-based Approach. Computational Social Science (CSS) Annual Conference 2022, Santa Fe (with Andrew Crooks).
* Geospatial Modelling for Biofuel Economics. Spring 2022 Colloquium Speaker Series, Department of Geography, University at Buffalo. (Invited)
* Determining poverty vulnerabilities in Dhaka City Corporation Area, Dialogue on Tackling Urban Poverty towards addressing Urbanization Challenges in Bangladesh, jointly organized by Bangladesh Institute of Planners and BRAC Urban Development Program, 2016. (Keynote Speaker)
* Urban green and water structures in Dhaka: Availability, quality, derived services/disservices and management and policies, EcoPoor Research Framework Workshop, Dhaka, 6th March 2014.

**RESEARCH GRANTS**

* I submitted a proposal internally in my current research group. According to that proposal I am leading the cover crop adoption task under BETO Project 1.1.2.3, titled "National availability and delivered costs of cover crops managed as biofuel feedstocks." The project has the potential to be renewed for three years from next year. I will be a contributor to this renewal process.
* Shortlisted for an Ecosystem Services for Poverty Alleviation (ESPA), UK fellowship, and got travel and others grant to attend the interview and presenting proposal – around $2000. (2014)

**HONORS & AWARDS**

* Best Poster Award, 9th Annual Carinata Biomaterial Summits, 2022

**SELECTED CREATIVE WRITING / NEWSPAPER ARTICLES**

* How science should be published in mass media (*biggan jevabe gonomaddhome asa ucit),* The daily Prothom Alo, July 10, 2020.
* Nagar Sarkar Naki Rajuker Shoshashon? (City Governance or the self-governance of RAJUK?), *The Daily Jugantor, editorial page,* January 9 2016.
* Urban green and water ecosystem services in Dhaka city – A brief overview. *CUET URP Day 2014,* 1 June 2014. Department of Urban and Regional Planning, Chittagong University of Engineering and Technology (CUET), Chittagong: pp.61-63
* Building web map services for world important places. *World Town Planning Day 2012.* Bangladesh Institute of Planners, Dhaka.

**SERVICE & OUTREACH**

* Manuscript reviewer for Journal of Gocarto International, Sustainable Cities and Society (reviewed 8 articles)
* Worked as a moderator in the GIS Day, 2018 at the University of Georgia.
* Worked as a protocol officer for ICIMOD Board of Governance Meeting, 2016.

**TECHNICAL SKILLS**

* **Programming Languages**: Python, SQL, R, Netlogo, JavaScript
* **Database**: SQL Server, MS Access
* **Statistical and Mathematical Programming**: Excel, SAS, STATA, SPSS, GUROBI
* **GIS and Remote Sensing**: ArcGIS (with available ESRI extension and standalone Python scripting), ArcGIS Server, QGIS, Erdas Imagine, eCognition, Google Earth Engine (GEE)
* **Research Tools**: Agent-based Model, Qualitative and Quantitative Research, Econometrics, Mathematical Programming, Life Cycle Analysis, DayCent.

**REFEREES**

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| **Dr. Puneet Dwivedi**  Associate Professor  Warnell School of Forestry and Natural Resources  University of Georgia  180 E Green St, Athens, GA – 30602  Email: [puneetd@warnell.uga.edu](mailto:puneetd@warnell.uga.edu)  Phone: 706-461-9593 | **Dr. Andrew Crooks**  Professor  Department of Geography  University at Buffalo  Ste 105, Buffalo, NY 14261  Email: [atcrooks@buffalo.edu](mailto:atcrooks@buffalo.edu)  Phone: 202-445-9552 |
| **Dr. Gbadebo A. Oladosu**  Senior Economist  Environmental Sciences Division, Oak Ridge National Laboratory  PO Box 2008, MS636, Oak Ridge, TN – 37831-6036  Email: [oladosuga@ornl.gov](mailto:oladosuga@ornl.gov)  Phone: 865-809-8317 | |