CURRICULUM VITAE	**SUSAN MALASO KOTIKOT**
	Geography Department, Penn State University
	Email: smk6598@psu.edu

Education Background	
Aug 2019 – Present	The Pennsylvania State University
	PhD Geography
Aug 2014 - May 2017	University of Alabama in Huntsville
Award	Master of Science in Earth System Science (GPA 3.64)
Sep 2009-April 2013	Kenyatta University
Award	Bachelor of Science in Environmental Planning and Management
	(First Class Honors)

Other Trainings	
2nd-7th Dec 2013	Transformational Leadership Skills.
Training Institution	Kenyatta University Mentorship Programme Initiative.
9th-19th Dec 2012	Use of geographic technologies for climate change, food security and agriculture.
Training Institution	*My Community Our Earth* SERVIR East Africa Fellowship Programme.
10th -20th April 2012	Geo-Spatial Database Development and Management
Training Institution	Regional Centre for Mapping of Resources for Development.

Working Experience	
Dates	June 2017 – June 2019
Occupation and position held	Post Master's Research Associate
Main activities and responsibilities	- Perform research activities including literature review and data analysis of projects related to critical infrastructure and climate dynamics
	- Develop tools for the analysis of geospatial data
	- Create, edit and improve models for automation of routine processes
	- Write publication materials including reports, conference and journal articles
	- Attend conferences and give presentations.
Name and address of employer	Oak Ridge Associated Universities (ORAU) – Oak Ridge National Laboratory
Dates	August 2014 – May 2017
Occupation and position held	Research Assistant
Main activities and responsibilities	- Assess requirements and perform assessments and coordination of hub science and technical research for the SERVIR project.

	- Facilitate wide dissemination and increased usage of scientific data in decision making processes at the regions where the project operates. - Perform research for science applications relative to SERVIR science activities and collaborate on writing and presenting of papers at conferences.
Name and address of employer	University of Alabama in Huntsville National Space Science and Technology Center, 320 Sparkman Drive, Huntsville AL, 35805
Dates	April 2013 –July 2014
Occupation and position held	Remote Sensing Technician
Main activities and responsibilities	- Assess accuracy of ancillary data and carry out data cleaning, reworking and validation. - Carry out satellite image processing and interpretation including supervised and unsupervised classification. - Undertake change detection based on the interpreted outputs. - Prepare map products and reports from satellite images and their derivatives. - Search, identification and acquisition of satellite data, image quality analysis and enhancement, image processing and interpretation. - Verify the integrity and accuracy of data contained in remote sensing image analysis systems including classification accuracy assessment. - Adjust remotely sensed images for optimum presentation by using software to select image displays, define image set categories, or choose processing routines.
Name and address of employer	Regional Centre for Mapping of Resources for Development. P.O. Box 632-00618 Roysambu Kasarani Nairobi Kenya
Dates	May 2012-September 2012
Occupation and position held	Internship in the Department of Remote Sensing and GIS
Main activities and responsibilities	- Checking the quality of satellite imagery - Drafting and preparing reports - Image processing and analysis including classification - Preparation of map products - Supporting the general activities of the Green House Gas Inventory Development Project
Name and address of employer	Regional Centre for Mapping of Resources for Development. P.O. Box 632-00618 Roysambu, Kasarani Nairobi Kenya
Publications	
Peer reviewed	- **Kotikot, S. M.,** Flores, A., Griffin, R. E., Sedah, A. Nyaga, J., Mugo, R., Limaye, A., Irwin, D. E. (2018). Mapping threats to agriculture in East Africa: Performance of MODIS derived LST for frost identification in

	Kenya's tea plantations. International Journal of Applied Earth Observation and Geoinformation, 72, 131-139.
	- **S. M. Kotikot**, C. Ajinjeru, A. Odukomaiya and O. A. Omitaomu, "Geospatial Framework for Estimating Household Electricity Demand for Urban Infrastructure Planning in Select African Countries," 2018 IEEE PES/IAS PowerAfrica, Cape Town, 2018, pp. 613-618.
	- Al-Hamdan, M. Z., Oduor, P., Flores, A. I., **Kotikot, S. M**., Mugo, R., Ababu, J., & Farah, H. (2017). Evaluating land cover changes in Eastern and Southern Africa from 2000 to 2010 using validated Landsat and MODIS data. International Journal of Applied Earth Observation and Geoinformation, 62, 8-26.
	- **Kotikot, S. M**., & Onywere, S. M. (2015). Application of GIS and remote sensing techniques in frost risk mapping for mitigating agricultural losses in the Aberdare ecosystem, Kenya. Geocarto International, 30(1), 104-121.
Under Review	- **Kotikot, S. M**., Flores, A., Griffin, R. E., Sedah, A. Nyaga, J., Mugo, R., Emily Adams, Limaye, A., Irwin, D. E. Statistical Characterization of Frost Zones: Case of Tea Freeze Damage in Kenya. International Journal of Applied Earth Observation and Geoinformation
Working papers	- **Kotikot, S.M**., Omitaomu, A. Olufemi, Budhendra L. Bhaduri, Examining Past, Near-term and Future Patterns of Drought in the Contiguous United States.
	- **Kotikot, S.M**., Omitaomu, A. Olufemi, Bandana Kar, Multi-Criteria Evaluation Technique for Strategic Placement of Transformers and Generator Reserves in Puerto Rico
Presentations	- Geospatial Framework for Estimating Household Electricity Demand for Urban Infrastructure Planning in Select African Countries. Urban Dynamics Institute, Oak Ridge National Laboratory, May 2018, Oak Ridge Tennessee
	- Examining Past, Near-term and Future Patterns of Drought over the Contiguous United States. American Association of Geographers Annual meeting, April 2018, New Orleans Louisiana
	- VIIRS Day/Night Band (DNB) Data for Monitoring Power Recovery: Applications and Challenges. University of Tennessee Geography Symposium (GEOSYM 2018), February 2018, Knoxville Tennessee
	- Mapping threats to agriculture in East Africa: Performance of MODIS LST for frost identification in Kenya's tea plantations. American Association of Geographers Annual meeting, April 2017, Boston Massachusetts
	- Application of Digital Elevation Models in Sustainable Landscape design for building long term local resilience against flood risk, case of Narok town, Kenya. American Association of Geographers Annual meeting, April 2015, Chicago Illinois
	- Application of GIS and RS Techniques in Frost Risk Mapping for Mitigating Agricultural Losses, American Association of Geographers Annual meeting, April 2014, Tampa Florida

Research activities completed while at Kenyatta University	
February 2013	- Assessing the Impacts of Land Use Conflicts to the Sustainability of Maasai Mara Ecosystem.
October 2012	- Assessing the Effectiveness of Community Forest Associations (CFAs) in Forest Management in Kieni East District.
September 2011	- Sustainable Spatial Plan of Nyahururu Municipality to the year 2030.
Awards and Achievements	
2012	- My Community Our Earth (MyCOE) / SERVIR 2012, a global fellowship award on use of geographic technologies; GIS and Remote Sensing for climate change, food security and agriculture. *https://www.servirglobal.net/Global/Articles/tabid/86/Article/1262/mycoeservir-fellow-susan-malaso-a-shining-star.aspx*
September 2013	- Best poster award on '*Application of GIS and Remote Sensing to frost risk mapping for mitigating agricultural losses within the Aberdare region of Kenya'* research project during the first Esri Eastern Africa Education User Conference held at Kenyatta University.
April 2015	- Best Poster award on '*River Discharge as Affected by Precipitation, Temperature and Soil Characteristics'* research project during the University of Alabama research horizons day on 7th April 2015.
Technical skills and competencies	- GIS and Remote Sensing software (ArcGIS - *Expert*, Erdas Imagine - *Intermediate*, ENVI - *Proficient*, Quantum GIS - *Intermediate*). - Statistical software (R scripting - *Intermediate*) - GPS mapping - *Proficient*. - Programing and scripting for GIS (Python - *Intermediate*)
Referees	Available upon request