



# THE TECHNICAL UNIVERSITY OF KENYA

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NAME: MR STANLEY CHASIA ATONYA

Faculty:	Applied Sciences and Technology
School:	PHYSICS AND EARTH SCIENCES
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## EDUCATION

LEVEL	QUALIFICATION NAME	INSTITUTION	YEAR
Masters of Science (M.Sc.)	Geographic Information Systems	University Of Nairobi(Kenya)	2014
Bachelor of Arts (BA)	Geography	Moi University(Kenya)	2008

## WORK EXPERIENCE

PERIOD	INSTITUTION	POSITION
2015 - To Date	The Technical University of Kenya	TUTORIAL FELLOW

## SELECTED PUBLICATIONS

TITLE	LINK TO PUBLICATION	YEAR
Assessment of soil erosion risk and vulnerability in the transboundary Sio-Malaba-Malakisi watershed in Kenya and Uganda	<a href="#">View online</a>	2024
Margaret Waturu, Lewis Sitoki, Joseph Lalah, Stanley Chasia & Evance Mbao (2023): Effect of land use/land cover changes on water quality in the Upper Athi River sub-catchment in Kenya, African Journal of Aquatic Science, DOI: 10.2989/16085914.2023.2207098	<a href="#">View online</a>	2023
Nyangacha, R. M., Odongo, D., Oyieke, F., Bii, C., Muniu, E., Chasia, S., & Ochwoto, M. (2019). Spatial distribution, prevalence and potential risk factors of Tungiasis in Vihiga County, Kenya. PLoS neglected tropical diseases, 13(3), e0007244.	<a href="#">View online</a>	2019
Ganbold, G., & Chasia, S. (2017). Comparison between Possibilistic c-Means (PCM) and Artificial Neural Network (ANN) Classification Algorithms in Land use/Land cover Classification. International Journal of Knowledge Content Development & Technology, 7(1), 57-78.	<a href="#">View online</a>	2017
Benard Juma, Luke O. Olang, Mohammed A. Hassan, Stanley Chasia, Joe Mulligan, Paul M. Shiundu, Flooding in the urban fringes: Analysis of flood inundation and hazard levels within the informal settlement of Kibera in Nairobi, Kenya, Physics and Chemistry of the Earth, Parts A/B/C, Volume 132, 2023, 103499, ISSN 1474-7065, <a href="https://doi.org/10.1016/j.pce.2023.103499">https://doi.org/10.1016/j.pce.2023.103499</a> .	<a href="#">View online</a>	2023
Chasia, S., Olang, L., Sitoki, L., & Herrnegger, M. (2020, May). Modelling land use/cover change scenarios in a transboundary catchment. In EGU General Assembly Conference Abstracts (p. 9385).	<a href="#">View online</a>	2020
Juma, B., Olang, L. O., Hassan, M., Chasia, S., Bukachi, V., Shiundu, P., & Mulligan, J. (2020). Analysis of rainfall extremes in the Ngong River Basin of Kenya: Towards integrated urban flood risk management. Physics and Chemistry of the Earth, Parts A/B/C, 102929.	<a href="#">View online</a>	2020
Chasia, S., Herrnegger, M., Juma, B., Kimuyu, J., Sitoki, L., & Olang, L. (2021). Analysis of land-cover changes in the Transboundary Sio-Malaba-Malakisi River Basin of East Africa: Towards identifying potential land-use transition regimes. African Geographical Review, 00(00), 1-17. <a href="https://doi.org/10.1080/19376812.2021.2007143">https://doi.org/10.1080/19376812.2021.2007143</a>	<a href="#">View online</a>	2021
Chasia, S., Olang, L. O., & Sitoki, L. (2023). Modelling of land-use/cover change trajectories in a transboundary catchment of the Sio-Malaba-Malakisi Region in East Africa using the CLUE-s model. Ecological Modelling, 476, 110256. <a href="https://doi.org/10.1016/j.ecolmodel.2022.110256">https://doi.org/10.1016/j.ecolmodel.2022.110256</a>	<a href="#">View online</a>	2023
Chasia, S., Olang, L. O., Juma, B., & Sitoki, L. (2024). Understanding the linkages between land-use transitions and soil erosion/sediment deposition: A case study of the transboundary Sio-Malaba-Malakisi watershed in Kenya and Uganda. Physics and Chemistry of the Earth, Parts A/B/C, 133, 103529.	<a href="#">View online</a>	2024

## COURSES TAUGHT

<b>NAME</b>	<b>DESCRIPTION</b>	<b>PERIOD</b>
Photogrammetry and Remote sensing	Principles of photogrammetry, aerial photo concepts, geometric elements of an aerial photo; principles of remote sensing and Earth Observation, digital image processing	2015 - TO-DATE
Introduction to Geographic Information Systems	Principles of Geographical Information Systems, spatial modeling, projection and coordinate reference systems, GIS and data science, geospatial data handling, applications of GIS in hydrology, ecology, geology, environmental management and resource management.	2015 - TO-DATE
Introduction to Cartography	(1) Principles of Cartography i.e., historical perspective on cartography, statistical analysis, principles of symbolization, elements of map projections; (2) Mapping techniques i.e., choropleth mapping, proportional, dot, symbol and Isarithmic mapping, (3) Geovisualization i.e., map animation, geovisual analytics,	2015 - TO-DATE
Environmental Planning and Management	The environmental system, principles of ecology, elements of ecosystems, ecosystems goods and services, human impact on ecosystem, biogeochemical cycles, introduction to climate change and global warming, environmental resources and management.	09.01.2023 - 31.03.2023
Sustainable Water Management	Concepts and definitions, hydrological cycle, water resources, demand, water allocation, water governance, integrated Water resource management, emerging issues, climate change and water resources, legislative framework on water, water and sustainable development	09.01.2023 - 31.03.2023
Disaster Management and Environmental Hazards	Types of disasters, causes and effects, disaster management cycles, disaster preparedness, prevention, management and mitigation, reconstruction.	September, 2022 - December, 2022