



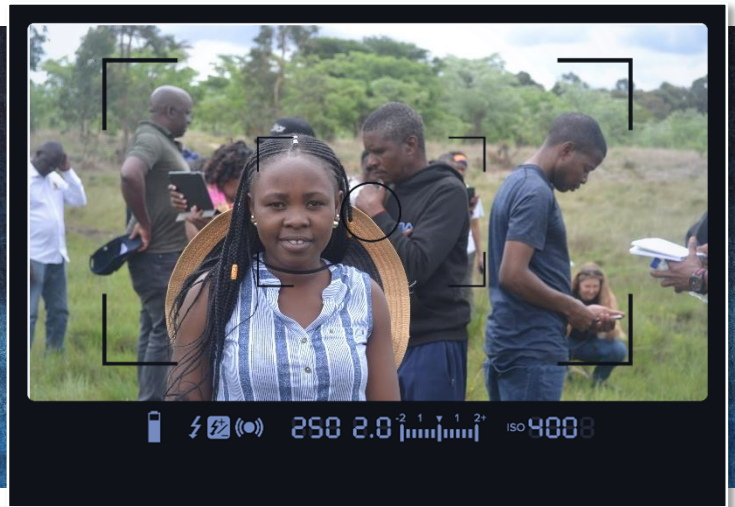
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STUDENT FEATURE

Keto Ngwenya

Stakeholders' knowledge and use of Earth Observation (EO) data in assessment and monitoring of Driefontein and Intunjambili wetlands, Zimbabwe



Keto is enrolled in a Master of Philosophy in Geography and Environmental Studies at the Department of Geography and Environmental Studies, Midlands State University, Gweru, Zimbabwe. Her thesis title is "Stakeholders' knowledge and use of Earth Observation (EO) data in assessment and monitoring of Driefontein and Intunjambili wetlands, Zimbabwe".

What contribution Keto wants to make with his study?

Keto explains that she aims at examining stakeholders' knowledge and use of EO data in the assessment and monitoring of wetlands, with special focus on Driefontein and Intunjambili wetlands in Zimbabwe. She is hoping to achieve this by analysing stakeholders' involvement in wetland assessment. Stakeholders will be identified that are working together with communities in wetland assessment and monitoring. Moreover, she will identify relationships that exist amongst different categories of stakeholders involved.

After analysing stakeholders' involvement, she will assess stakeholders' knowledge and establish the level of use of EO data in wetland assessment and monitoring. Since the scope of the study extends beyond being descriptive, the student will also produce a hypothesis test that will help identify whether there is a relationship between stakeholders' knowledge and the use of EO data in wetland assessment and monitoring. What Keto wants to achieve by this is to understand, whether stakeholders with knowledge on the use of EO data

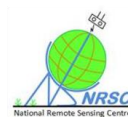


Figure 1: Keto observing wetland use patterns during the Driefontein site visit

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(including Sentinel imagery, freely obtained from the Copernicus Open Access Hub) in wetland assessment and monitoring, are utilising the knowledge or not. The ultimate objective will be to understand the reasons why stakeholders are not fully utilising EO data in Zimbabwe for wetland management.

Keto will also assess stakeholders and users' expectations on EO data integration in wetland assessment and monitoring. Stakeholders are most likely to have different expectations as compared to wetland users. This is because their capacities to use the EO platform to be developed vary. Lastly, the student will examine socio-economic and technical challenges faced by different stakeholders involved in wetland assessment and monitoring.



Figure 2: Keto capturing co-ordinates of water points in Intunjambili wetland during the familiarization tour

Reconnaissance, community engagement and data collection



Figure 3: Keto capturing wetland use patterns during the Driefontein site visit

As a part of Keto's work methodology, she has conducted reconnaissance surveys to familiarise herself with the study sites in the Driefontein wetland in Chirumanzu district, Midlands province followed by the visit to the Intunjambili wetland in Matobo district, Matabeleland South. During the familiarisation expeditions, GPS co-ordinates of features of interest (artificial wells, gardens) were collected in addition to delineating the wetland boundaries.

Keto has also already defined her research instruments (interview guide, household questionnaire and observation guide), and engaged with some stakeholders involved in wetland assessment and monitoring during the WeMAST Stakeholder Engagement and User Needs Assessment workshop conducted in Harare, Zimbabwe, in December 2019.

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