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Research Topic: Air Quality and Respiratory Health

Pre-Dissertation Travel for Summer Fieldwork in Kampala, Uganda

The Scott Kloeck-Jenson International Pre-Dissertation Travel Grant for the 2021 summer enabled me travel to Kampala, Uganda to conduct my field work. My research focuses on air quality and respiratory health in the capital city of Uganda, Kampala. While my research was slated for just the summer, I enrolled in the study abroad program. This was because of the interruptions from COVID-19 that saw Uganda get into another lockdown making it hard for me to meet anyone. However, during my stay in Uganda after the lockdown was lifted, I managed to meet different stakeholders both from government and private institutions working in the air quality space. The air quality stakeholders I met were from the National Environmental Management Institute (NEMA), The Kampala Capital City Authority (KCCA), Airqo, at Makerere University the biggest public University in the country and one of the largest in Africa, the Eastern African GeoHealth Hub at the School of Public Health, Makerere University (they doubled both with working in the air quality space and hospitals). Lastly, I met the head of the Environment projects at the US mission in Uganda.

Through my interaction with the NEMA which is the equivalent of the EPA in the US, I was invited to be part of the review board for the first National Air Quality Standards and Regulations. In addition, my interaction with the KCCA saw me contribute to the first, Kampala Clean Air Action Plan. While in Uganda, my working station was at the GeoHealth Hub under the Makerere University School of Public Health. The Hub has been collecting air quality data for the past five years from their BAM (a stationary air quality monitor located the school of public health). This is in addition to the health data from six big public hospitals they work with collecting health data. Working with GeoHealth gave me an appreciation of the health data they collect, and how difficult it is to access such data in the absence of any form of electronic system. My stay with GeoHealth Hub saw me finally win over their trust, as it is impossible for anyone to work with you from this region if they do not trust you. This I did through volunteering myself to visit all the six hospitals with them, participating in the data entry while creating systems for them to manage their data well, helping with the monthly maintenance of the stationary air quality monitor among other things. Eventually, I managed to break through which enabled me to form meaningful and healthy working relationships. I learnt that doing research in a resource constrained environment took more than just having funding, but rather social capital! I also learnt how most international funders have created what I now call a “Funding Curse”- Where funding is made available to local organizations doing the work, but it is no funding at all. This is because the funding comes restricted to only doing the activities of collecting data but almost no compensation is given to the people doing the data collection. This I saw firsthand while working at GeoHealth which prompted me to explore other funding sources for them to get the data from the hospitals they were working with. This extra funding came through a generous contribution of Jonathan Patz my research advisor who I reached out to.
From this field experience, I realized why not much work on air quality has been done in Kampala. Besides it being expensive, there is limited capacity to carry out studies like these. No source apportionment work had ever been done to determine what contributions make up the dirty air. This knowledge of how dire the air quality condition is in a first developing city like Kampala with emissions from old vehicles, not only gave me realization of how much more important this research is to me but to everyone who is going to come after me in studying this problem. And I would not have done this if it was not from the Scott Kloeck-Jenson International Pre-Dissertation Travel Grant for the 2021. My work in the end also got attention in the Nelson Institute commons and for more information you can find the link here