

UNDERSTANDING SOCIAL-ECONOMIC AND ENVIRONMENTAL DETERMINANTS OF WATER, SANITATION AND HYGIENE CONDITIONS OF PERI-URBAN COMMUNITIES IN KENYA

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In summer of 2014 I had the opportunity to travel to the city of Kisumu in Kenya, located on the shores of the Lake Victoria for my pre-dissertation field research. I was accompanied by my colleagues from UF, John Anderson and PI of the study, Dr Richard Rheingans. It was an opportunity for me to not only visit the continent of Africa for the first time but also experience and learn field level coordination and data collection in a new and unfamiliar setting. Through my PhD research, I hope to gain a better understanding of the relationship between gender and social disparities and how they influence water, sanitation and hygiene (WASH) situations in peri-urban households and communities of Kenya.

Diarrheal diseases, second only to pneumonia, are a major cause of mortality of children under five years of age in Kenya. We know that poor WASH conditions not only in households but in the broader community are a major cause of diarrheal disease. Kisumu is a rapidly growing city of nearly 500,000 inhabitants, located in Kisumu County in the Nyanza region of western Kenya. Over the last 25 years, a large belt of informal settlements has rapidly expanded and now surrounds the municipal boundary, forming a rural-urban continuum with poor sanitation infrastructure and high heterogeneity in population density and socio-economic status. A majority of the population identifies themselves as Luo, but the city attracts people from all over

western Kenya, with varying livelihoods.

We used qualitative research methods to gain a deeper understanding of WASH experiences, existing support mechanisms and perceptions of diarrheal disease risk from poor WASH conditions common to communities in two peri-urban communities in Nyalenda and one in Obunga. We conducted six focus group discussions (FGD) with mothers of who had children of ages 6-36 months, six FGDs with landlords and tenants and seven transect walks within the communities of the three slums. The FGDs with mothers covered a set of pertinent questions for understanding gendered roles and social factors influencing household WASH conditions. Questions were directed to know about their decision making roles within the households, mechanisms of seeking social support and existing challenges in case of their child's illness due to diarrheal diseases, and for not having adequate WASH facilities. The FGDs with landlords and tenants covered questions regarding solid and liquid waste management, household and land tenure systems and ownership policies, social and political participation and decision-making for household WASH conditions and behaviors. Systematic transect walks within the communities helped us better understand the community infrastructure and contamination from the community's perspective, wherein the participants identified and discussed about key WASH issues, challenges and potential for collective action based on



observations of garbage piles, open drains, broken toilets, etc., during the walk.

The data from this first phase of this research is now becoming available and the results are very exciting. I wish to acknowledge the efforts of our partners, Dr Jane Mumma and her staff at the Tropical Institute of Community Health and Development in Africa at Great Lake University of Kisumu. This work could not have been such a success without their help in establishing ongoing relationships with the communities and their skills in collecting these data. This trip was also critical for my dissertation and career development, helping me re-define my research aims and improve my PhD proposal. I hope that the outcomes of this research would help us better understand the various socio-economic and environmental factors which affect WASH conditions and identify sustainable solutions for Kisumu and for similar peri-urban settlements around the world.

Poulomy Chakraborty is a PhD candidate in the Department of Environmental and Global Health. Her pre-dissertation field work was funded by the Center for African Studies, the Madelyn M. Lockhart Summer Research Fund, the UF Office of Research, and the SHARE Research Consortium (United Kingdom).