## The Political Ecology of Water-Mining Nexus

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## Water@leeds SPRING AWARD



Figure 1a. A leaking tailings dam where the polluted water to flow into upstream rivers.

This year, Ghana was congratulated for surpassing South Africa to be the leading gold producing country in Africa. This 'enviable' achievement, however, comes with a cost. It is estimated that precious minerals like gold are sourced by miners or mining companies who continually engage in conflicts over land, settlement and water in their various communities. In addition, gold mining (both artisanal/small or large scale) have been the major culprit in land and water pollution in many Sub-Saharan countries. Yet, both the material and political process by which gold mining shapes water use, access and distribution in mining communities remains unclear. My PhD project "the Political Ecology of Water-Mining Nexus" takes an interdisciplinary

approach that combines environmental science with politics to

understand the holistic interaction and impact between water, mining, people and politics.



Figure 1b Downstream, women like Akua have little option but to resort to the polluted river for domestic use

The research adopts mixed approaches which include regular mining site visits, surveys, participatory observation, key informant interviews and focus group discussions as my field methodologies. Thus, conducting ethnographic research is both laborious and expensive and requires financial, emotional and physical investment. I am thankful to water@leeds SPRING funding for supporting me at the start of this journey. It was an honour to be the first student from the School of Politics and International Studies to receive this award. My ethnographic fieldwork began in October 2019 and is still ongoing. The fund received from water@leeds helped financed my relocation and accommodation in the study site. With the support of the SPRING award, I was able to stay in my study area, having a direct day to day interaction with my respondents and participants. Due to the sensitivity of the

topic, it was important that I stayed in the field longer, developing relationships and trust with the people. In addition, the fund allowed me to travel regularly to visit district, municipal and regional offices to conduct interviews. The award also

assisted me in employing one research assistant who is helping me to conduct a water use survey in the village.

Though data collection is ongoing, my PhD research has indicated that it is impossible to ignore the influence of both local and national politics in the nexus between water and mining. Power dynamics at various scales shape how new mining frontiers are discovered and how gold is mined, which consequently impact on rivers and groundwater. The resultant consequence of these complex interactions is manifested through enhanced social struggles by vulnerable groups of people such as women, poorer farmers etc. within communities in terms of access, use and distribution of water, consequently deepening socio-economic inequalities in the community.