

Eleanor Lea's Dissertation Report

I would like to thank the Turing Fund for funding my dissertation research and work placement. At the beginning of June 2022, I travelled to Ghana to undertake fieldwork for my dissertation and volunteer for the conservation NGO A Rocha Ghana. A Rocha Ghana runs multiple initiatives promoting sustainable livelihoods, landscape restoration, biodiversity protection, climate change resilience, and forest protection and management. I worked part-time in their head office in Accra, and among other things, was tasked with researching the negative impacts of mining for renewable energy materials in Africa, and collecting data on the numbers of deaths related to galamsey (illegal mining) in Ghana.

During the eight weeks I was in Ghana, I used the ethnographic research method of participant observation to acquire qualitative data on the particular situation regarding the Ghanaian government's plan to mine the Atewa Forest Reserve for bauxite. The Atewa Forest is a global biodiversity hotspot and home to 20% of all the threatened animal species in Ghana. Atewa Forest contains a magnificent diversity of flora and fauna, however, at least 78 species have been classified as globally threatened with extinction and a further 24 species are near threatened. Furthermore, 5 species are entirely endemic to the Atewa Forest, being found nowhere else on Earth. The global importance of the biodiversity of Atewa is demonstrated by its protected status. The forest was declared a National Forest Reserve in 1926, a Special Biological Protection Area in 1994, a Hill Sanctuary in 1995, a Globally Significant Biodiversity Area in 1999, an Important Bird Area in 2001, and an Alliance for Zero Extinction site and a Key Biodiversity Area in 2021. However, the Ghanaian government has been planning to mine Atewa Forest, which would result in huge environmental and social harm.

The grounds for protecting Atewa Forest from bauxite mining extend well beyond its biodiversity importance. If large-scale bauxite mining were to go ahead, water sources would be severely impacted, thus detrimentally effecting agriculture and human health. The Birim, Densu, and Ayensu rivers flow from Atewa to provide critical drinking water to over 5 million people. The rivers are also sources of fish, a staple of the local diet. In the regions surrounding Atewa, agriculture is the main source of livelihoods, and the water from the three rivers is the sole source of irrigation. The pollution of the rivers, that would result from mining bauxite, would severely and negatively impact livelihoods and health.

My dissertation explores how A Rocha Ghana is successfully contesting the government's mining plans. By taking legal action against the government, and engaging with local communities, the media and religious and educational institutions, the NGO is working to prevent the Atewa Forest from being destroyed through mining.



(A meeting between A Rocha Ghana and members of the local community to discuss forest conservation)

Although most of my time was spent in the capital Accra, I took two field trips to the Atewa region to experience first-hand the threats that mining poses to the forest. I saw how illegal gold mines destroy forest cover and soil quality, and I also saw the work that A Rocha Ghana is doing to reforest degraded areas.



(A recently exhausted and abandoned gold mine).



(Reforestation: sticks mark where the NGO has planted tree seedlings).



(Tree seedlings at A Rocha Ghana's tree nursery).

I am extremely grateful to the Turing Fund for funding this research project. I used the grant to pay for my vaccinations, flight, and accommodation. I have learnt so much from this experience. I have learnt about resource extraction, protected areas, what it is like to work for an environmental NGO, and have enjoyed experiencing Ghanaian culture. This has been an amazing opportunity. Thank you.