Provision of potable water to communities in northeastern Ghana

*Geoscientists Without Borders Application: Q3Q4 2021*
FollowUp Form

Basic Information

Project Name*
Name of Project
Provision of potable water to communities in northeastern Ghana

Project Performers*
List all project participants. Include their title and affiliation.

Dr. Elikplim A. Dzikunoo (Lecturer, Department of Earth Science - University of Ghana)
Miss Abigail Ayikwei (Assistant Lecturer, Department of Earth Science - University of Ghana)
Miss Jennifer Agbetsoamedo (Assistant Lecturer, Department of Earth Science - University of Ghana)
Prof. Sandow M. Yidana (Professor, Department of Earth Science - University of Ghana)
Dr. Thomas Armah (Senior Lecturer, Department of Earth Science - University of Ghana)
Dr. Yvonne Sena Loh (Senior Lecturer, Department of Earth Science - University of Ghana)

Project Start Date*
Select the date when your project was started.
06/01/2022

Anticipated Project End Date*
Select the date when you expect the project to be completed.
12/16/2022

Report

Summary of Project Goals and Objectives*
Provide a short summary of the project's goals and objectives.

Main goal - provide potable water to 2 communities in NE Ghana. Sub-goals - 1) determine suitable geophysical siting methods 70%; 2) deliver potable water to locals 0%; and 3) characterize aquifer system of the 2 boreholes 0%.

The objectives include, 1) successful geophysical calibration and siting of boreholes 0%; 2) lithostratigraphic descriptions 0%; 3) hydrogeochemical analyses of water 0%; and 4) design and installation of local filtration system depending on water quality 0%.
Summary of Progress Made*
Provided a brief summary of the progress you have made toward the planning and execution of the tasks in your project as outlined in the statement of work in the grant agreement. If available, preliminary results should be included in this section.

1. Engaged service providers and relevant contracts between the University and service providers have been obtained - 80%.
2. 4 students (3 undergraduate and 1 MPhil) have been successfully selected. This was done after a call for applications was advertised - 100%.
3. Forward modelling and geophysical survey design has been done. This was done based on existing knowledge of the rock types and expected signatures to give details on field procedures to follow and results to anticipate - 70%.

Problems or Challenges Encountered*
Describe any problems or challenges that the project team has encountered and what actions have been taken to mitigate those problems.

1. Late start to project due to delays from the University of Ghana in reviewing and signing the project contract. This has necessitated a revision of the project period. The new period is June to Dec. 2022.
2. The field component of the work was rescheduled for the period of Sept. - Nov. 2022. However a shift in the peak of the rains has delayed the start of the field work. The project team anticipates that field work can begin in Nov./Dec. 2022 at which point the rains would have subsided.

Evaluation of project schedule*
Give an assessment of how the project is progressing according to the projected schedule. Is it on schedule? If not, what has contributed to the delays? How will the schedule need to be adjusted to complete the project? What, if any, challenges will the adjustment(s) create?

The project is currently not on schedule with the delays caused by underestimating the intensity and duration of the rains. The siting and drilling have to be pushed to the dry season in Nov./Dec., pushing other aspects of the projects into 2023. The adjustments are not likely to create challenges.

Please provide high resolution photos and/or videos of project participants, people from the community, places impacted by the project and activities associated with the project to withoutborders@seg.org. Please use Dropbox.com, WeTransfer.com, or some other file transfer program to send photos and videos. The SEG server will block any email with an attachment that is larger than 8 MB.