

Project Update: April 2022

First Quarter Activities Report (February-April)

Community Awareness Creation and Data Collection

The Lake Bosomtwe catchment area has increased agricultural and infrastructural development in recent years which is having a negative impact on the lake. It was observed during the reconnaissance survey that there are farming activities and lot of building springing up close banks of the lake due to non-adherence to any buffer zone. There is also the clearing of low-lying sites and clearing of vegetation along the mountain ecosystems which seems to be increasing the speed of storm water. The immediate effect as observed are siltation of breeding sites of fish which has contributed to the dwindling of fish stocks. The restoration of lost vegetation through planting of trees along the banks of the lake, rivers and streams and other open/bare sites in the communities could help to minimise volume of storm water and surface runoff into the lake. This is because the trees can intercept the rainwater, thereby reducing its impact and inducing infiltration.

There is a tree planting component of the ongoing project as a contribution restoration of lost vegetation along the banks and open/bare sites and spaces within the 22 fringe communities. This is envisaged to provide some immediate local benefits with regards to the provision of ecosystem services in the near future with a broader impact of climate change mitigation. This is also in harmony with some national agenda called "Greening Ghana", which aims to restore lost tree vegetation and as well plant new areas across Ghana by planting 5 million trees in 2022. It is also relating to the United Nations 2021-2030 Decade on Ecosystem Restoration agenda which seeks to protect and restore degraded ecosystems and reverse biodiversity loss (www.unec.org). Furthermore, IPCC 2022 report (yet to be finalised) emphasises the need to embark for restoration of vegetation in degraded sites globally. This is in effect to improve carbon sequestration and reduce the emission of carbon into the atmosphere and contribute to reducing climate change and global warming trends locally and globally.

Thus, an awareness creation campaign has been started to sensitise the fringe communities on issues relating to the conservation of the Lake Bosomtwe Biosphere Reserve. This is carried out through community forums held in the fringe communities held from February to April 2022. The community forums are dialogue platforms that uses an audience/participants-centred open and thorough discussion approach which provides everyone an opportunity to share views, comment or ask a question concerning a particular subject matter of common interest. Among the issues discussed in the community forums are the need to practice agroecology/agroforestry, restore lost vegetation (emphasis on tree planting), maintaining a buffer around the lake, practising standard fishing methods. Community members are encouraged to engage in active tree planting and restoration activities along the banks of the lake, bare sites within communities, degraded slopes of mountains surrounding the communities. The tree planting activities are well explained to the participant/community members for them to embrace the initiative and own it. Such an approach is used because sustainability of the tree planting will be assured if the communities embrace and own it rather than it being seen as a project of facilitators or donors. The awareness creation has been conducted and completed in a first batch of nine communities namely, Anyetease,

Edwafo, Abaase, Abono, Pippie II, Old Brodekwano, Obo, Abrodwom and Esaase. The communities are enthusiastic about the project willing to adhere to the things discussed and ready to embark on the tree planting activities. The report for the next quarter will detail the activities in the rest of the communities as well as the tree planting activities.



Left: Community forum at Edwafo. Right: Community forum at Abono.

It is important to note that the tree planting activities have been moved from the last to the second quarter of the year. The shift was done because the rainy season in Ghana commences in the second quarter, so, it will be best to undertake the tree planting activities during that time to take advantage of the rains. Seedlings planted during that time acclimatise well, establish on time and survive in the new environment. The planting is planned to coincide with the Greening Ghana Day, which will be held on 11th June 2022. Actions have been taken to complete the securing of seedlings for the planting activities. The seedlings will be supplied between 1st and 10th June 2022. The seedlings to be planted will be a mostly indigenous species with a few exotic species. Community members have expressed interest in planting some trees on their farms, inline agroecology/agroforestry practices which has been explained to them. Thus, some of the seedlings will be provided for those who have expressed interest. This will serve as encouragement to them, and evidence has shown that, farmers are likely to nurture trees to maturing if they realise the benefit that can be obtained.

The third activity that is currently ongoing is the forest data collection to be used for the land use land cover change detection and other spatial analysis of the Lake Bosomtwe Biosphere. The first phase being conducted in the Bosomtwe Range Forest Reserve under the Bekwai Forest Services Division (FSD) in the Ashanti Region with assistance from the FSD staff and local assistants. The operation includes the collection of GPS coordinates of the identified land use systems (closed canopy, open canopy, grassland, farms and bare sites). It also involves the setting up of 20 x 20 m plots and recording the information of all tree species of diameter ≥ 10 cm within it (species name, diameter, height and GPS coordinates of trees). The information will be combined with remote sensing data to map and model land cover changes in relation to carbon and biodiversity trends. The biodiversity and carbon modelling are added activities that could enrich the project and research outcomes.

In conclusion, the awareness creation and data collection conducted has been successful. It is envisaged that the subsequent activities will also run smoothly to ensure that the project activities are achieved. Find below some pictures below the report.

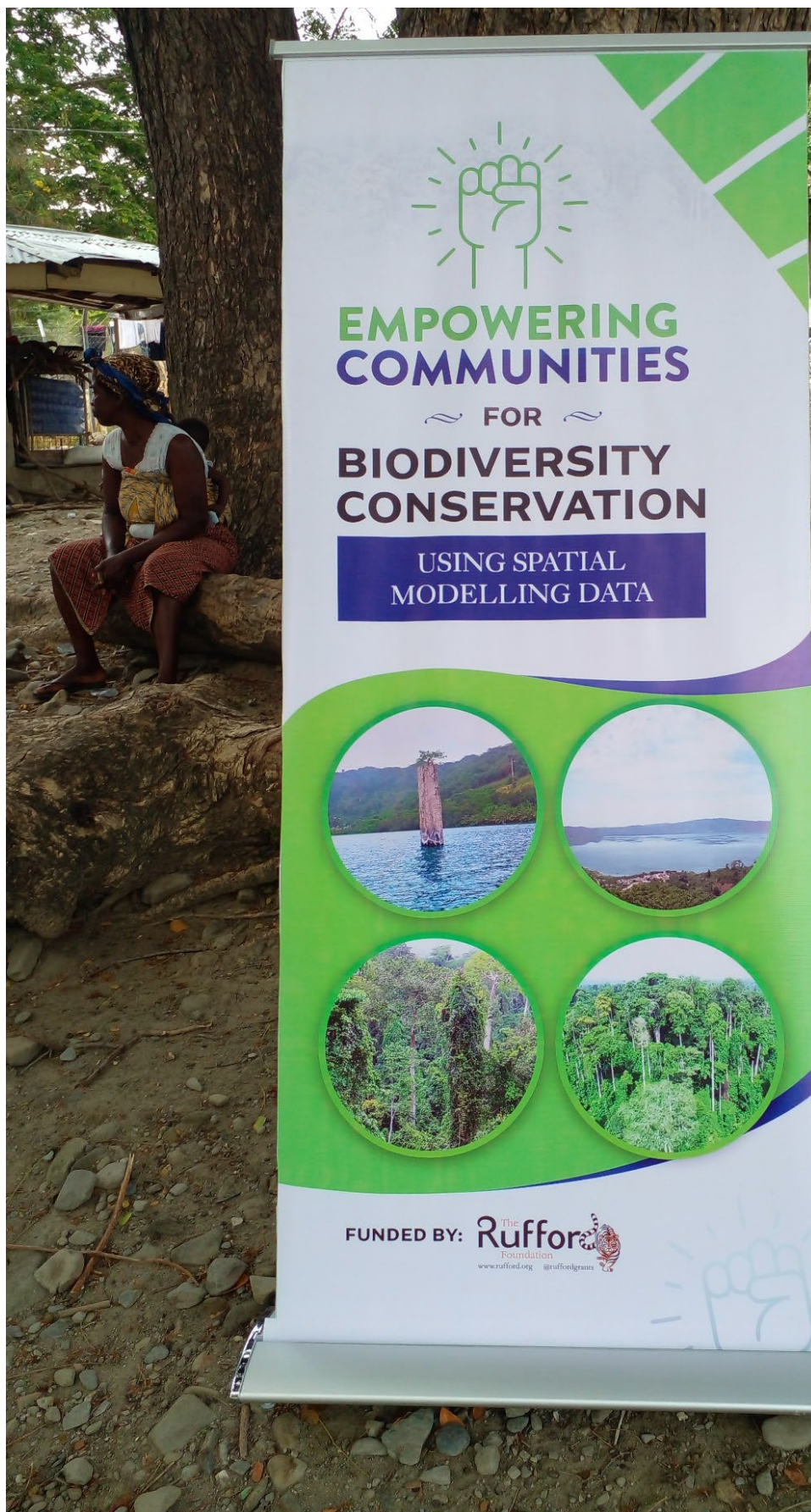


Figure 3: Pull-up banner displayed at Anyinatease community during community forum.



Left: Principal Investigator (PI) directing setting up of plots. Right: FSD field staff assisting in tree species diameter measurement.



Left: PI and local assistance during field data collections. Right: One of the tree species withing a plot.