

SUMMARY REPORT FOR N°2024_PROBIO_GH (A-ROCHA G)

Introduction:

The project is being implemented in the Keta Lagoon Complex Ramsar site by A Rocha Ghana and A Rocha France. With an overall objective of having *“The biodiversity, ecosystems and natural resources of the Keta Lagoon landscape conserved and sustainably managed for nature, people and climate resilience”*. The Keta Lagoon Ramsar Site landscape is a critical site for the conservation of bird species and their habitats. It is also important for the education of community members on the importance of wetlands for biodiversity and ecosystem services, restoration and sustainable management of mangrove forests, and building local capacity for farm climate resilience. Important to the project are the migratory birds that the site is known for. The project will produce updated habitat maps and bird species lists, establish local capacity for bird identification and monitoring, and develop local ecotourism opportunities to benefit the local communities. The project will also train communities, especially women and youth, in mangrove restoration and sustainable harvesting, and restore degraded mangrove forests. To build communities' climate resilience and strengthen food security, the project will also train subsistence farmers in climate adaptation techniques that also benefit biodiversity and ecosystems. Over the last 8 months, the project has made progress in its implementation. Below are the updates on progress made.

A1.1: Map the different habitats of the Keta Lagoon from literature, field identification and satellite images: ARF tried to get free satellite images of the Keta Lagoon to perform the habitat mapping. However, it was not possible to find a free picture with a sufficient resolution (i.e, with pixels small enough) to perform a habitat analysis procedure. Therefore, ARF bought a satellite picture of Keta lagoon from the Airbus SPOT6 satellite taken in September 2024, i.e, at the beginning of the project. The resolution of the image is 1.5m. The picture was received in January 2025. ARF and ARG also started to list the different habitats present in Keta lagoon, both based on literature, local knowledge and the first bird inventory field trip which occurred in February 2025 (see below). Currently, ARF is calculating several indices from the satellite image. In the coming weeks, ARF will perform a draft mapping of the habitats, based on the basic information gathered from literature and the field trip. Field verification will be organized by ARG in the coming months in order to refine the modelling and the mapping. This report has not yet been started, as the mapping procedure is currently ongoing

A1.2: Inventory bird species on the site by sampling the different habitats during different seasons of the year: A first field trip was conducted to inventory birds at Keta lagoon from the 12th-21st February 2025. This field trip included 6 days of field inventory of birds, consisting of

- 6 sessions of Bird ringing of passerines and other migratory and resident birds in different habitats (mangrove, reedbeds, thickets)
- Sound inventory of the birds present at the ringing site (with sound recorders)
- Count of waterbirds at different spots around the lagoon

The first results are still being processed (especially the sound recording ones), but hundreds of birds and several dozens of species have been listed, including a number of migratory bird species. A total of 103 bird species were recorded and 63 birds were ringed during the first field visit. ARG staff will continue to deploy the sound recorders in different habitats around the lagoon, in order to complete the inventory with birds present during other times of the year.



Bird ringing and collection of bird data



Team setting up a mist net in a mangrove stand

A.2.1: Design a long-term monitoring protocol for waterbirds on the Keta lagoon: As part of the local partnership between ARG and the Wildlife division in Keta lagoon, in charge of the Ramsar, the WD shared some previous results of previous bird counts. These are being reviewed and will serve as the basis for developing the long-term monitoring protocol. During the review, it was observed that the WD is lacking some critical equipment to perform a successful monitoring protocol of the birds at Keta Lagoon (i.e, spotting scopes). However, they have dedicated time for bird surveys and a growing expertise on birds. Therefore, we believe that it would be appropriate to design the new protocol with them and train them as well as the ARG team, to perform the protocol in the long term, after the end of the project. ARG and the WD also showed great interest in bird ringing. During the next field trip session of the ARF team, the ARF team will train both ARG and WD teams for monitoring waterbirds and ringing passerines.

A2.2: Organize community-based consultations to identify the conservation needs of the communities (e.g. livelihood resources) and bird species for the Keta lagoon: The project has so far undertaken **Community Entry Meetings** in the following communities- Afiadenyigba, Anloga, Tegbi, Horvi, Havedzi, Keta, Seva, and Kedzi. The meeting was with Landowners, Over-Lords and Chiefs. This was to ensure respectful collaboration and build trust with community members within the project landscape. A Memorandum of Understanding (MoU) has been developed and shared with the family heads and traditional leaders for their review and subsequent signing. The MOU clearly outlines roles, responsibilities, and joint ownership of the project outcomes. These meetings were held on 12th February, 2025 and 17th May, 2025. The project also through a stakeholder workshop, deploying the Marine Protected Area (MPA) Governance Baseline Tool to facilitate the discussions. The Governance Baseline tool enables communities to take stock of their resources, identify drivers of landscape changes, identify the needs of communities and plan for the sustainable management of their landscape. These actions help strengthen community understanding of marine ecosystem governance and initiate participatory assessments of resource use, threats, and solutions in the Keta Lagoon Complex Ramsar Site. Participants included fishermen, farmers, unit committee members, assembly members, mangrove and turtle volunteers, and officers from the Keta Lagoon Complex Ramsar Site (KLCRS). In all, about 80 participants were engaged in this meeting.



Meeting with traditional leaders on project goals



Resource stock taking during stakeholder consultations

A3.1: Organize and implement 16 community and school awareness events to educate on bird conservation, biodiversity, ecosystem services (including climate resilience), and livelihood resources of Keta Lagoon. This is ongoing. Currently, 2 communities have been engaged on various biodiversity conservation issues, notably the importance of habitat conservation, the significance of the site for migratory birds, and the benefits of mangrove conservation and restoration for building coastal resilience. About 150 community members have been engaged through these sensitization events.



Community sensitization session

A4.1: Establish a mangrove seedling nursery and train women to manage it.

Mangrove Nursery establishment: One (1) nursery site has been established in the gardens of the Keta lagoon Ramsar site management office in Anloga, where Forestry Officers and community members/volunteers, mostly women, have been selected to manage it. Nursery staff were trained on seed collection and sorting; Germination monitoring and watering routines; and record-keeping and nursery care. The Project Management Team (PMT) agreed to use this site, particularly because of water availability and other management implications. Currently, the nursery has about 30,000 mangrove seedlings at their developmental stage, comprising of three species: Red Mangrove (*Rhizophora spp.*), White Mangrove (*Laguncularia racemosa*), and Black Mangrove (*Avicennia germinans*). The project has also purchased 60 pieces of cutlasses and 60 pairs of rubber boots to facilitate active community participation in mangrove restoration efforts.



Nursery establishment, woman filling a polypot



mangrove nursery

The project has also profiled and mapped of degraded mangrove sites in preparation for the restoration activities. The profiling considered the following factors: community proximity to the planting site and site-specific characteristics (hydrology of the sites, blocked channels, current existing species, etc). Initial feasibility assessment on degraded mangrove sites was carried out on the 11th and 12th February, 2025

The rest of the project activities are yet to be undertaken.