



## **Collaborative Ecosystems Conservation of Ghana's Lake Bosumtwi Basin**

### **PROGRESS REPORT 2**

#### **INTRODUCTION**

This is the second progress report of the project titled "Collaborative Ecosystems Conservation of Ghana's Lake Bosumtwi Basin" that aims to achieve sustainable conservation of the lake basin and its resources through a collaborative community approach by creating Community Resource Management Areas (CREMAs), awareness creation through conservation education, capacity building through training of community volunteers, livelihood support and engaging communities in waste management. The project with contractual number 2013\_1\_GH1 is being funded by FFEM-IUCN with support from UNESCO and is being implemented by A Rocha Ghana and lake fringing communities.

This report outlines the results achieved in relation to: (a) restoration of degraded land areas (b) CREMA establishment processes (c) Sustainable fishing practices training and (d) Biodiversity monitoring volunteer trainings. Ultimately, this will give project stakeholders information on how far the project has come, lessons, risk and possible adaptable elements that is being implement to achieve the overall goal of the project.

#### **Activity 1: RESTORATION OF DEGRADED LAND AREAS WITHIN THE CREMA ZONES**

Overall, 5,500 tree species were planted in four key locations within the CREMA zones. Pertinent to stakeholder engagement and profiling, the selected planted indigenous species were *Terminalia superba* (1500 species), *Nuclei diderrichii* (1500), *Ceiba pentandra* (2000) and *Cocos nucifera* (500). Indigenous tree species selection was based on the following criteria: Site specific consideration, contribution to general biodiversity of the area and possible economic gains by the local inhabitants (in relation to *Cocos nucifera* (coconut) which communities believe they can eat and sell the fruit for income).

Four priority areas within four communities were selected for the first phase planting (Abono, Obo, Nkowi and Pippie). All communities had a mixture of all the four species for planting. Whereas Abono planting was undertaking by their basic school pupil, the other three communities planting was



Planting coconut trees along the lake shore

## Activity 2: SUSTAINABLE FISHING PRACTICES TRAINING WORKSHOP

Through the workshop deliberation and interaction, the following came to light:

1. All fishermen learn their trade through apprenticeship, mostly with their fathers or close relatives
2. Fishermen begin fishing with acquisition of own raft and gear. All fishermen use a wooden plank called "Pa Dua" as the fishing boat and/or vessel.
3. Fishing is undertaken all seven days of the week in all representative communities

Also, the observed threats to the lake fisheries activities among others are:

1. **Use of illegal mesh size of net to fish:** Several of the mesh sizes used by fishers on Lake Bosumtwi were below stipulated sizes by the country's Fisheries Regulations, (L.I. 1968) 1210. Use of smaller mesh sizes of nets to fish constituted a major negative impact on sustainable exploitation of fish resources of the Lake. This was because the use of mesh sizes of net that would capture fishes prior to species sizes at first maturity, obviously enhanced depletion of fish populations as well as diversity within species

2. **Excessive Fishing Pressure:** The situation or observation that virtually every male and some women, even if limited in numbers presently fish, constituted a major fishing pressure on fish populations in the lake. The pressure coupled with use of illegal gear, posed significant challenges to efforts at fish conservation.

3. **Unavailability of Fishers, Fish Processors and Farmer Association:** One most important challenge to working with fishers or fish processors in Lake Bosumtwi basin is absence of any grouping among them. The situation afforded no platform or institution through which operators in two important traditional industries could be communicated with assisted or their capacities built to contribute to conservation of fisheries resources.



Some fishing nets used by fishermen

Notable among the workshop training activities were:

1. Capacity building of local fishers to support fish catch monitoring & sensitization and awareness creation and consolidation
2. Enhancing fish stocks of Lake Bosumtwi for increased fish production
3. Simple fisheries management concepts & development of Lake Fisheries bye-laws

Accordingly, the following recommendations were made:

1. **Formation and strengthening of Fishers, fish processors and Farmer Associations:** Fishers, fish processors and farmer associations are recommended to be formed and promoted through this project,

although this may not be among project items presently. However the absence of these groups reduces efficiency of working with members of communities.

2. **Cooperation and Collaboration among communities in the lake area:** It has been observed that there is limited collaboration among communities to resolve common problems. It is therefore recommended for the CREMA executive committee (CREMA EC) in the area to push for collaboration among the various communities.

3. **Rest days and appropriate gear use:** Participants agreed that the CREMA body and traditional authorities reinstitute rest days for all communities. All associations formed and CREMA EC should ensure compliance to agreed and accepted bye-laws.

### **Activity 3: COMMUNITY RESOURCE MANAGEMENT AREAS PROCESSES**

The Community Resources Management Area (CREMA) committee and the executive committee members have been working with the project management team to facilitate the approval of the bye-laws at the district assembly level. Both Bosome Freho and Bosumtwi districts have made inputs to the document. Accordingly, the different CREMA committees are currently sharing and discussing the inputs with their respective communities. The CRMCs and CECs will have a consultative meeting to finalize the document for onward submission to the district assemblies.

Pertinent to the CREMA processes, consultative workshop was organized for chiefs and stool land owners of the respective communities. Overall, forty community leaders attended the meeting where old traditional taboos related to the lake was reviewed vis-à-vis its incorporation into the new bye-laws. The traditional leaders were also taking through the bye-laws and through deliberations, their roles and responsibilities in the Lake Bosumtwi CREMA was discussed.

It is important to mention here that, the certification process takes some time. After the discussions of the Assembly inputs in the communities, the document will have to be sent to the assembly for final sitting and deliberation to approve it. It is only then that, the certification will be given for onward submission to the Wildlife Division of the Forestry Commission.



Participant asking a question during a CREMA meeting

#### **Activity 4: BIODIVERSITY MONITORING VOLUNTEERS**

A total of 46 persons (40 community members, 3 A Rocha staff and 3 experts) participated in the basic fauna, flora and fish monitoring protocols. Most of the participants were drawn from the CRMC (purposely because they act as community representatives for ensuring that the bye-laws are strictly followed).

For fish catch monitoring, two collaborative fishers were identified through community leaders representing the Western and Eastern halves of the lake respectively. The fishers were engaged to set the gill nets to estimate Catch per Unit Effort (CPUE) of fishing on stipulated dates and times. Recording is being made to help them appreciate fish status at any time.

For fauna, direct observation, use of signs (faecal, foot prints, feeding signs etc) using the transect line approach was adapted to teaching the participants. Participants were also taken through the wildlife schedule of animals (animals not to be hunted or trapped and those that can be hunted and/or trapped during specific seasons).

For flora, participants were taken through species identification and use of quadrat to estimate relative abundance of species.

Participants were also taken through the use of GPS to mark points. Importantly, four persons were selected (two each from each halve of the lake) and would be taken through simplified data recording procedure. This training on data recording procedure is yet to be undertaken.

## **Activity 5: CONSERVATION EDUCATION AND WASTE MANAGEMENT**

Six conservation and waste management education has been carried out using the community information center radios. Importantly, the project has collaborated with JAKAD information centre (situated at Abono) to regularly do radio programs on the lake conservation in the local dialect. A further 200 education posters and/or materials has been distributed and pasted in the different communities.

### **OTHER OBSERVATIONS DURING THE PROJECT**

It is important to mention here that some farmers already have their grasscutters giving birth. In fact, one farmer already has about 10 more addition to the start-up package.

There is going to be a district assembly election in Ghana to elect new leaders. Accordingly, this is slowing down things at the district assemblies (as members are seriously doing their campaigns in their respective constituents). The project team is working hard to ensure most of the district assembly actions are carried out.

It is also worth noting that the status of the fishermen associations which form part of requirement under the CREMA constitution would receive validation when the CREMA regulations are passed. These groups are therefore currently being organised to undertake activities as recommended under the training they received.