FINAL REPORT
ESSEI LAGOON ECOLOGICAL RESTORATION AND CONSERVATION PROJECT

No: SGP-01-10-005

Implemented by
CRISIS ACTIONS SOLUTIONS ORGANISATION (CASOLS)

Funded by
COASTAL RESOURCE CENTER-GHANA

Contact Person:
Richard Adupong
(Programmes Coordinator-CASOLS)
0244 865 842

17th DECEMBER 2010.
This publication is available electronically on Coastal Resources Center’s website at http://www.crc.uri.edu.

For more information contact: Coastal Resources Center, University of Rhode Island, Narragansett Bay Campus, South Ferry Road, Narragansett, Rhode Island 02882, USA. Brian Crawford, Director International Programs at Email: brian@crc.uri.edu; Tel: 401-874-6224; Fax: 401-874-6920

**Citation:** Adupong, R. (2010), Final Report of Essei Lagoon Ecological Restoration and Conservation Project. No: SGP-01-10-005. CASOLS, USAID Integrated Coastal and Fisheries Governance Initiative for the Western Region, Ghana. 17 pp

**Disclaimer:** This publication is made possible by the generous support of the American people through the United States Agency for International Development (USAID)/Ghana. The contents of this report are the responsibility of the Integrated Coastal and Fisheries Governance (ICFG) Program and do not necessarily reflect the views of the United States Government. Associate Cooperative Agreement No. 641-A-00-09-00036-00 for “Integrated Coastal and Fisheries Governance (ICFG) Program for the Western Region of Ghana”.

**Cover Photo:** Essei lagoon, Bakaano

**Photo Credit:** Richard Adupong
## Table of content

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF ACRONYMS</td>
<td>i</td>
</tr>
<tr>
<td>1.0 INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>2.0 BACKGROUND</td>
<td>1</td>
</tr>
<tr>
<td>3.0 MAJOR OUTCOMES AND ACTIVITIES</td>
<td>2</td>
</tr>
<tr>
<td>3.1 Increased knowledge through awareness creation</td>
<td>2</td>
</tr>
<tr>
<td>3.1.2 Engagements with major stakeholders</td>
<td>2</td>
</tr>
<tr>
<td>3.1.3 Production of 400 educational materials</td>
<td>2</td>
</tr>
<tr>
<td>3.1.4 Production of 100 T-shirts</td>
<td>4</td>
</tr>
<tr>
<td>3.1.5 Mounting of four front and back billboards /signpost</td>
<td>5</td>
</tr>
<tr>
<td>3.2 Capacity of YWC built on values of wetlands and mangroves</td>
<td>5</td>
</tr>
<tr>
<td>3.2.1 Formation of YWC in three basic schools</td>
<td>5</td>
</tr>
<tr>
<td>3.2.2 Training of YWC</td>
<td>6</td>
</tr>
<tr>
<td>3.3 Surroundings of Essei lagoon cleaned</td>
<td>7</td>
</tr>
<tr>
<td>3.3.1 Community sensitization durbar and clean up exercise / 350.org</td>
<td>7</td>
</tr>
<tr>
<td>4.0 Extra-Ordinary Activity</td>
<td>16</td>
</tr>
<tr>
<td>5.0 Sustainability</td>
<td>16</td>
</tr>
<tr>
<td>6.0 Lessons Learnt</td>
<td>17</td>
</tr>
<tr>
<td>7.0 Specific Challenges</td>
<td>17</td>
</tr>
<tr>
<td>8.0 Conclusion/Recommendation</td>
<td>17</td>
</tr>
</tbody>
</table>
# LIST OF ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASOLS</td>
<td>Crisis Actions Solutions</td>
</tr>
<tr>
<td>CRC</td>
<td>Coastal Resources Centre</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>FoN</td>
<td>Friends of the Nation</td>
</tr>
<tr>
<td>JHS</td>
<td>Junior High School</td>
</tr>
<tr>
<td>MCE</td>
<td>Metropolitan Chief Executive</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td>SDA</td>
<td>Shama District Assembly</td>
</tr>
<tr>
<td>SHS</td>
<td>Senior High School</td>
</tr>
<tr>
<td>SNV</td>
<td>Netherlands Development Agency</td>
</tr>
<tr>
<td>STMA</td>
<td>Sekondi-Takoradi Metropolitan Assembly</td>
</tr>
<tr>
<td>WR</td>
<td>Western Region</td>
</tr>
<tr>
<td>YWC</td>
<td>Youth-In-Wetlands Club</td>
</tr>
</tbody>
</table>
1.0 INTRODUCTION

This report describes key activities implemented under the Essei lagoon ecological restoration and conservation project, its outcomes and lesson learnt. The project was funded by the Coastal Resource Center-Ghana. It spanned from August to November 2010. It was implemented in Bakaano and Bakaekyir communities in the Sekondi-Takoradi Metropolitan Assembly (STMA) where the Essei lagoon is located.

The project involved sensitizing residents of Sekondi-Takoradi Metropolis particularly; Bakaano and Bakakyire on the ecological, social and economic values of the Essei lagoon and the need for conservation. This was aimed at halting the rapid degradation of the lagoon.

2.0 BACKGROUND

Like many wetlands, the Essei Lagoon (located in Bakaano-STMA) is threatened by localized pollution emanating from operation of auto-mechanic and carpentry workshops along its upstream banks. These activities churn out tones of inorganic and organic wastes on daily basis into the lagoon. The lagoon is used as defecating site by operators of these workshops. Chemicals comprising heavy metals are also emptied into the lagoon. Sawn dusts are also dumped directly into the lagoon. As compared to the downstream section, the upstream sections of the lagoon show deep green colours, indicating high eutrophication levels in the shallow waters. Due to these activities, the size of the lagoon has reduced over the years and the natural ecology is disrupted. Moreover, at the slightest downpour, the lagoon overflows its banks causing regular flooding in the upstream communities.

The Essei Lagoon Ecological Restoration and Conservation Project was aimed at conserving the Essei lagoon and its biodiversity. Specifically the project sought to create awareness on the ecological functions and social and economic values of Essei lagoon as well as to protect the lagoon from pollution. Key activities included organizing one community durbar, mounting of four billboards, production and distribution of 100 educational leaflets on wetlands, formation of 3 Youth-In-Wetlands Clubs (YWC), production of 60 T-shirts for YWC members and organizing one communal clean up.
3.0 MAJOR OUTCOMES AND ACTIVITIES

Within the framework of the project, almost all the scheduled activities have been completed. The following is a presentation of the status of the activities and outputs at the time of winding up the project.

3.1 Increased knowledge through awareness creation

This outcome has been achieved through the following activities.

3.1.2 Engagements with major stakeholders

There were engagements with community leaders and members, basic schools (Aggrey Memorial, Gyandu M/A JHS and Salvation Army schools) around the project site as well as other key stakeholders such as mechanics and carpenters around the lagoon for the successful implementation of the project.

An informal interview with the stakeholders revealed their happiness about the formation of YWC as a key outcome of the project. According to them, the YWC would further promote the educational campaign of the project and lead to attitudinal change in the way people degrade the Essei lagoon.

3.1.3 Production of 400 educational materials

400 (as against the original proposal of 100 copies) educational leaflets/brochures on wetlands / mangroves were produced and distributed to members of YWC (Aggrey Memorial, Gyandu M/A JHS and Salvation Army schools). Other pupils/students in basic and second cycle schools (such as St. Johns Senior High School) as well as the general public were given copies of the brochure at the community durbar held on 10/10/10.

Figure 1 Back page of the educational leaflet on the values of wetlands
What are Wetlands?

They are areas where water is the major element controlling the environment and its associated plant and animal life. Or simply an area covered with water more of the time.

There are THREE main types of Wetlands:

1. Inland Wetlands: marshes, lakes, rivers, swamps, mangroves, estuaries
2. Marine/Coastal wetlands: Coral reef, mangroves, estuaries
3. Man-made wetlands: Ponds, rice paddies, irrigated land, reservoirs

Examples of wetlands in Sekondi-Takoradi Metropolis

- Emul Inlet at Bubua
- باتارك Inlet at New Tawera
- White Estuary at Adeko Ipe
3.1.4 Production of 100 T-shirts

100 T-shirts for the YWC (i.e. 40 extra T-shirts) were produced and given to the club members and their lead teachers. As planned, they are to be worn on each program that involves the club. Subsequently, all members of YWC worn the t-shirts during the mangrove conservation festival held on 10/10/10.

![Front view of YWC T-shirt](image3)

**Figure 3** Front view of YWC T-shirt

![Back view of YWC T-shirt](image4)

**Figure 4** Back view of YWC T-shirt
3.1.5 Mounting of four front and back billboards /signpost

Four communicative billboards/sign posts with clear messages on the importance of Essei Lagoon and the need for its preservation were strategically mounted at both sides of the lagoon on 8th October, 2010.

Figure 5 One of the 4 billboards located at the east of Essei Lagoon

3.2 Capacity of YWC built on values of wetlands and mangroves

This was accomplished through the formation and training of YWC members on the values and importance of wetlands and mangroves.

3.2.1 Formation of YWC in three basic schools

Three Youth-In-Wetlands Clubs (YWC) were formed in 3 basic schools around the Essei lagoon; namely, Aggrey Memorial, Gyadu JHS and Salvation Army schools. The Metro Directorate of Education gave its support and formal approval in the formation exercise. Each school has at least 25 members in the club with the number increasing each day. Pupils were asked to join the club voluntarily. Also, there is a lead/focal teacher in each school.
YWC members were tasked to ensure cleanliness in their environment particularly the surroundings of Essei lagoon and engage in activities relating to wetlands, mangrove conservation as well as general sanitation related activities. Cleaning tools (3 wheel barrows, 3 rakes, 3 holes and 3 dustbins) given to each club were to aid cleaning activities. The club planned to meet every fortnight to briefly discuss general issues pertaining to good sanitary conditions.

### 3.2.2 Training of YWC

A training session in collaboration with the Wildlife Division of the Forestry Commission was conducted on Friday, 1st October, 2010 for members of the YWC. The Wildlife division was full of praise for the formation of YWC and appreciated the level of knowledge on wetlands gained by the club members; most of whom were girls. The training was facilitated by Mrs. Exorm Amertordo, an Assistant Wildlife Officer at Takoradi Wildlife Division.

The Wildlife Officer touched on wetlands and mangroves (definitions, types, importance, threats etc) and the need for their conservation.
3.3 Surroundings of Essei lagoon cleaned

This has been achieved through the following activities

3.3.1 Community sensitization durbar and clean up exercise / <350.org>

The community sensitization durbar and clean up exercise coincided with the international event <350.org> (for mangrove planting to reduce carbon emissions) and was jointly held with CRC-Ghana on 10th October, 2010. The durbar was named ‘Mangrove conservation festival’. It involved two main sessions; morning (which witnessed cleaning the surroundings of the Essei lagoon and planting of mangroves amidst brass band music) and evening (festival-launching of YWC and film show/documentary)

- **The morning session**: The session involved cleaning the surroundings of the Essei lagoon and planting of mangroves by members of YWC, staff of CASOLS, FoN, CRC-Ghana and community members. Zoomlion Ghana, a waste management company, provided the cleaning tools for the exercise.
Figure 8 People getting ready to clean

Figure 9 Cleaning by staff of CASOLS, FoN and CRC
Evening session: The session witnessed a community durbar/festival with live band music and ended with a documentary on wetlands/mangroves. Attendance were over 300 and comprised members of YWC, Community members, Assembly members, staff of CASOLS, CRC-Ghana, FoN, officials of Zoomlion and Waste Management Department of STMA, EPA, SNV, youth groups, community champions, students from SHS among others.
There were brief speeches on wetlands conservation by the Western Regional Director of EPA – Ms. Irene Heathcote; Assembly member of Bakaano Jim Amo; Deputy Programme Director of CRC-Ghana-Kofi Agbogah; Programme Coordinator of CASOLS-Adupong Richard and the Metropolitan Chief Executive of STMA-Hon. Kobina Pra Annan
Figure 13 Ms. Irene Heathcote of EPA delivering her speech at the festival
The MCE for Sekondi-Takoradi, Hon. Kobina Pra Annan formally lunched the Youth-in-Wetlands Clubs and called on the members to be ambassadors of wetlands conservation.

Figure 14 MCE launching the YWC; with him were Assembly member of Bakaano & Deputy Director-CRC

Figure 15 Members of YWC listening to the MCE during the launch
CASOLS, as part of the project purchased cleaning tools (wheel-borrows, rakes, holes and dustbins) and were presented to each school by the MCE. Additionally, each school received a certificate.

Figure 16 MCE presenting certificate to the focal teacher of Aggrey Memorial School YWC

Figure 17 MCE presenting cleaning tools to the focal teacher of Gyandu JHS YWC
Figure 18 MCE (middle) & Assembly member of Bakaano with Salvation Army School YWC

Figure 19 Some members of YWC
There was an interesting film show/documentary on wetlands/mangroves during the evening session (from 6-7:45pm)
The documentaries further broaden the knowledge base of the general public on wetlands and mangroves.

A publication of the festival was on October 16, 2010 edition of Daily Graphic.

4.0 Extra-Ordinary Activity

CASOLS, during the project cycle engaged YWC members in Aggrey Memorial and Gyandu Junior High Schools in ‘Draw Our Coast’ art competition organized by CRC/FoN on 26th November, 2010. The competition involved 7 schools (3 SHS and 4 JHS) from STMA, SDA and Ahanta West Districts.

5.0 Sustainability

This CRC-Ghana funded project recommends sustainability from the following perspective.

- Most of the stakeholders are aware of the ecological importance of the Essei lagoon and are prepared to conserve it.

- The school clubs through their activities will always remind stakeholders of the need to conserve the lagoon.
6.0 Lessons Learnt

- Before the project, most community members did not care about the lagoon.
- The production and distribution of more educational materials is essential to sensitizing and addressing the poor attitude of residents towards the degradation of the Essei lagoon.
- Some community members have the desire and the willingness to engage in communal clean-up exercises to improve the condition of the lagoon.
- Members of the YWC will transfer the knowledge gained to their peers and relatives.

7.0 Specific Challenges

There were bureaucratic delays in seeking permission from the Metro Directorate of Education to engage the basic schools around the project site.

The formation of the YWC was delayed with the long vocation of the basic schools. Members of YWC were restricted to 25 per school for the start, due to the budget line in relation to the activities of the club.

Some residents around the project site believe that general issues about sanitation should be dealt with by Zoomlion Ghana, a waste management company as they have been contracted by the Metropolitan Assembly to clean the areas.

8.0 Conclusion/Recommendation

The engagement with YWC should be continued to ensure the strengthening and sustainability of the club for conservation of wetlands. Again, using school children as agents of change is supreme in changing the attitude of the adult population. Consequently, any attempt to improve wetlands within and outside the STMA should involve basic schools around the wetland.

An intensive and continuous sensitization on importance of wetlands and aggressive campaign on attitudinal change is paramount to improving the poor sanitary condition around the Essei lagoon.