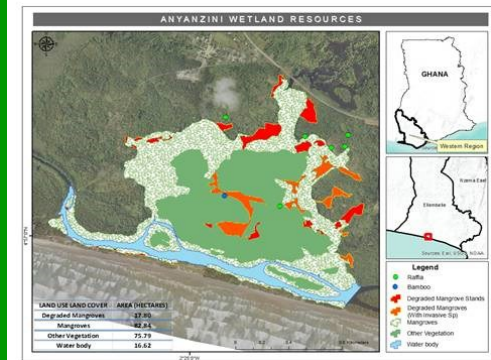


Annual Report for Conservation of Greater Amanzule Wetlands Phase II



Prepared for
COASTAL SUSTAINABLE LANDSCAPES PROJECT

By Hen Mpoano

October 1, 2015 – September, 30, 2016



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1.0 Introduction

The Greater Amanzule Wetland (GAW) conservation initiative is a collaborative effort between Hen Mpoano (HM) and the Coastal Sustainable Landscapes Project (CSLP). It aims at establishing a formal co-management process and improving management planning for the Amanzule wetlands. It contributes to the achievement of the overarching goals of improved natural resources management and increased capacity for low greenhouse gas emissions development.

Under the second phase of the small grant (October 2015 – September 2016) from the CSLP, Hen Mpoano undertook nine (9) broad actions that resulted in the development of co-management structures for natural resources in the GAW. These were based on the experiences and stakeholder inputs obtained through previous work with the ICFG project and under the first phase of the small grant (November 2014 – January 2015) provided by the CSLP. This report presents progress made on these activities. Drawing on the lessons learned during the initial implementation period and stakeholders' input into the process, the report also suggests strategies and activities required for transitioning from wetland management plan development to field-based implementation of actions within the wetland management plan.

1.1 Community and District level structures for conservation

Natural resources management is increasingly the subject of social and political power struggles between groups claiming an interest in specific resources. Today, it is not possible to conserve wetland resources unless technical expertise is combined with an understanding and consideration of the underlying political and cultural processes. It is against this background that community and district conservation committees have been formed to work with traditional authorities and the Wildlife Division of the Forestry Commission to ensure the conservation of the Greater Amanzule wetlands.

1.1.1 Community Wetland conservation committees

Twenty-two (22) community wetland conservation committees have been formed in the Ellembelle and Jomoro Districts. The committees are spear heading the implementation of the management actions in their wetland communities. For example, wetland committee members at Ankobra have established a nursery for mangrove seedlings to be used for the restoration of degraded sites. With mangrove seedlings from CSLP's Yabiw nursery, the committee has been able to replant some degraded areas along the banks of the Ankobra river in the Ellembelle district.

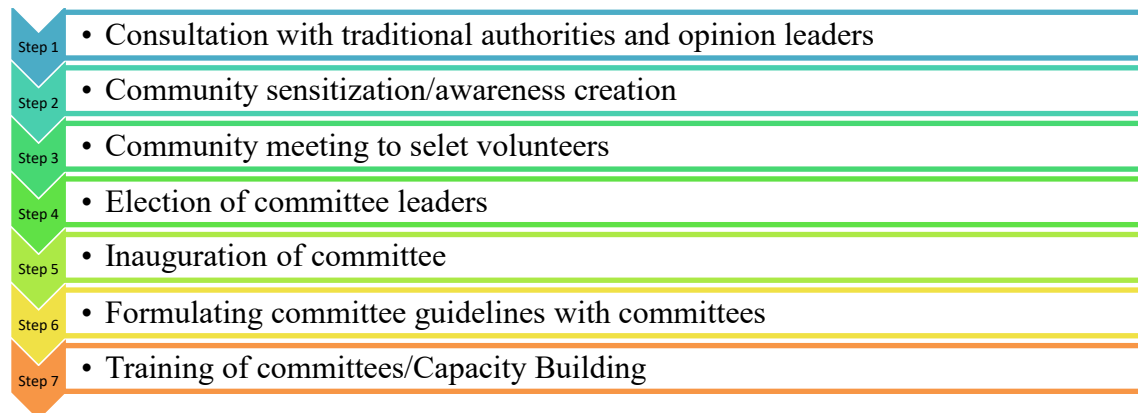
The committees are jointly managing the wetlands with the traditional authorities, district conservation committees and the Wildlife Division of the Forestry Commission to ensure the conservation of the GAW. The communities with established conservation committees are

Sawoma, Alabokazo, Asanta, Bobrama, Azuleloanu, Kamgbunli, Anyanzinli, Bakanta, Ampain, Sanzule and Alloakpoke, all in the Ellembelle District. Communities located in the Jomoro District include Ebonloa, Beyin, Ellonyi, Ezinlibo, Old Kablesuazo, Egbazo, Half-Assin, Ekpu, Metika, managyea and Effasu. They have been given terms of reference and each has executives in place who manage the activities of the committees.



Figure 1 Community Conservation Committee members at Ampain and Alloakpoke

The process of establishing the conservation committee is outlined as follows;



(See Annex for list of volunteers and established guideline for committees)

1.1.2 District wetland conservation committees

Two district wetland conservation committees have been formed and inaugurated at the Ellembelle and Jomoro District Assemblies to work with community level committees at the district level in order to ensure that the committees are well-coordinated and their efforts supported at a higher level, especially the district assembly through the development and environment committees. The District conservation committees have been accepted by the by the two assemblies and their activities placed under the Environment and Extractive sub-committees.

(See Annex for list of committee members and TOR of district conservation committees)



Figure 2 Consultative Meeting with the Jomoro District Conservation committee

1.1.3 Capacity Building for conservation committees

For the conservation committees to understand and work together effectively for the conservation exercise, they were taken through a number of training programmes summarized below;

Training	Venue	Number of participants	Remarks
Mangrove planting and management training (study tour)	Shama, Anlo Village	13	Members of GAWCCC trained in replanting and management of mangrove ecosystems
Mangrove planting and management training	Anyanzinli	15	Beneficiary of study tour and training impacted knowledge to other GAWCCC members.
Trainer of trainers meeting for conservation committee Leaders (wetlands, managing conservation committee, Team work)	Ellembelle and Jomoro Districts	62	GAWCCC executives trained to retrain their members to ensure sustainability of the GAWCCC.
GPS Training for committee members	Ellembelle and Jomoro District	18	Some committee members selected and trained in the use of GPS. Members trained were very useful in the wetland mapping exercises.
NRM Training in GAWC I Topic: How wetland benefit communities	Asanta, Alabokazo, Ekpu, Azuleloanu, Half-Assin, Ellonyi, Bobrama, Ezinlibo, Beyin	164	GAWCCC members trained on the importance of Wetlands and the need for their sustainable management.
NRM Training in GAWC II Topic: Committee Formation training	Ellonyi, Alabokazo, Ezinlibo, Beyin	59	Communities sensitized on the need for collaboration in managing their wetlands.
NRM Training in GAWC III Topic: Managing a committee	Ezilibo, Bobrama, Asanta, Alabokazo, Ankobra, Azuleloanu, Half-Assin, Ellonyi,	151	Committee members trained on good practices for effectively managing a committee

Training	Venue	Number of participants	Remarks
NRM Training in GAWC IV Topic: Team work	Azuleloanu	46	Committee members trained in team building strategies.
NRM Training in GAWC V Topic: Mangrove monitoring	Old Kablesuazo	47	GAWCCC members trained on basic factors and indicators to monitor the health of mangrove ecosystems
NRM Training in GAWC VI Topic: Mobilizing a community for action	Old Kablesuazo	9	Committee members trained on gaining support and buy-in from community members
NRM Training in GAWC VII What is a wetland?	Asanta	14	GAWCCC members trained on what Wetlands are their importance and the goods and services they provide to communities

1.2 Livelihood enhancement and diversification program

1.2.1 Livelihood Assessment and Self-Selection.

To incentivize communities to work together with other stakeholders to conserve the Greater Amanzule wetlands, a program to enhance and diversify livelihood in the communities was pursued. The Livelihood program started with an assessment of the existing livelihood and the identification of alternative livelihoods as well as self-selection of individuals for the pilot programme. The Assessment was done in 12 communities with a total of 356 persons interviewed. (See Annex for details of the Analysis).

1.2.2 Pilot Cassava Project

From the Livelihood assessment, cassava farming was identified as a viable livelihood option. A pilot of the cassava project was started in Old Kablensuazo in conjunction with TRACTOR B-BOVID. A total of 26 farmers were presented with planting materials and farm equipment to start. The cassava programme has currently been expanded to 3 other communities in Egbazo, Ampain and Alloakpoke with a total of 89 farmers benefitting from the initiative. The beneficiaries include 21 farmers in Egbazo, 49 from Ampain and 19 from Alloakpoke. A total of 287 bundles of improved cassava stalks have been distributed to farmers from the 3 communities. The cassava stalks were improved varieties from the crop research institute of Ghana.



Figure 3 Alex of HM assisting farmers during cassava farm pegging

1.2.3 Other Joint Livelihood Initiatives

Together with CSLP, other livelihood activities such as VSLA, organic vegetable farming and bee keeping training was carried out in some selected GAW communities. (See CSLP reports on VSLA, Climate Smart Agriculture, and Bee Keeping for details)



Figure 4 IPM and VSLA Training programmes at Kamgbunli and Old Kablesuazo

1.3 Wetland Mapping

To know the extent as well as the degraded wetlands, especially mangrove resources of the Greater Amanzule, GPS mapping was done in five (5) communities, namely Ampain, Anyanzinli, Metika, Sanwoma and Effasu. The GPS mapping or ground-truthing exercise was preceded by participatory mapping of 13 communities in the Greater Amanzule area and the training of 18 committee members in the use of GPS to assist in the ground-truthing exercise.



Figure 5 Committee Members Engaged in participatory Mapping of their wetlands

1.3.1 Summary of Mapped Areas

	Area (Hectares)					
	Effasu	Metika	Anyanzinli	Ampain	Sawoma	Total
Degraded Mangroves	1.31	3.77	17.80	1.67	115.05	139.6
Mangroves	15.36	8.60	82.84	73.05	117.17	297.02
Other Vegetation	-	-	75.79	11.49	556.73	644.01
Water body	9.71	0.92	16.67	16.27	59.51	103.08

(See Annex maps of mangroves detailing mangrove size and degraded areas)

1.4 Flora and fauna survey of the Greater Amanzule wetlands

An assessment of the Flora and fauna of the greater Amanzule wetlands was carried out together with the Wildlife Division of the Forestry Commission during the year under review. The team comprised of experts in birds, flora, amphibians and mammals. The aim of the exercise was to identify the key flora and fauna found in the Greater Amanzule area and

determine the conservation status of the various species. (see Flora and Flora assessment report of GAW for details).

1.5 Restoration of degraded Mangroves at Sanwoma

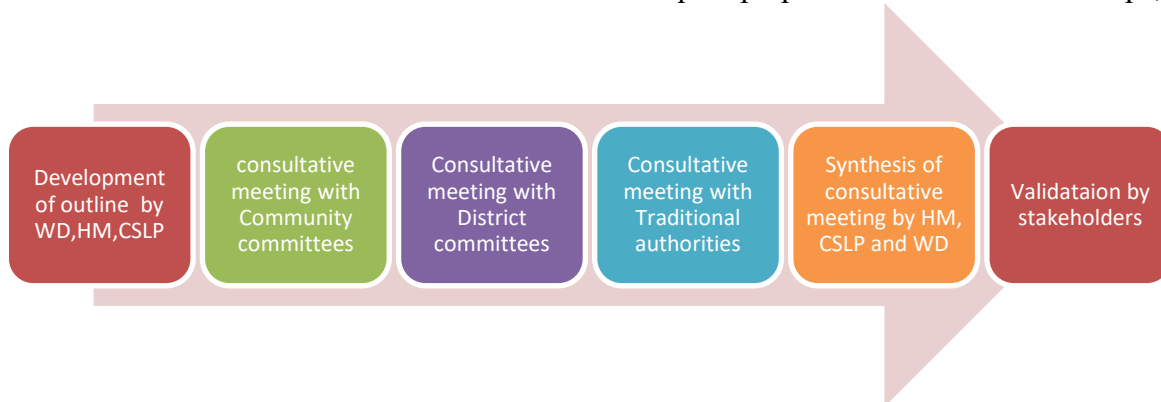
As part of activities by the SFMP to restore degraded mangrove areas within the Ankobra mangrove ecosystem, eight thousand, two hundred and fifteen (8215) mangrove seedlings have been replanted. A total of two thousand, four hundred and eighty-seven mangrove seedlings were received from the CSLP as part of collaboration between CSLP, HM and SFMP. This comprised one thousand, two hundred and eighty-seven (1,287) white mangroves (*Avicennia germinans*) and one thousand, two hundred (1,200) red mangroves (*Rhizophora mangle*). The remaining seedlings (5728) were provided by Hen Mpoano with the support of conservation committees and some community members. The replanting exercise was done by Greater Amanzule Wetland Conservation Committee (GAWCCC) members in Ankobra, community members and some opinion leaders including the Chief of Ankobra. A total of one hundred and thirty (134) participants joined the Hen mpoano team to carry out the mangrove replanting exercise to a successful end. The GAWCCC which was formed with the support of CSLP are raising additional 10,000 mangrove seedlings at the Ankobra Mangrove nursery site to be replanted at degraded sites.

Story from the field

The chief of Ankobra, Nana Alimah underscored the importance of the mangroves to the fishing activities along the coast and the livelihoods of the inhabitants who harvested them for use as fuel wood after he joined over sixty people in a mangrove planting exercise organized by Hen Mpoano as part of the HM/CSLP project.. He encouraged the committee members, some of whom are mangrove harvesters to work hard to conserve the existing mangroves by carrying out more planting exercises to restore the degraded areas and use sustainable methods when harvesting mangrove for various uses. He added that though the present generation had the right to use the existing mangrove resource, it was important to exploit it in such a way that future generations could also have access to the resource.

1.6 GAW Management plan framework

A bottom up approach was adopted in the development of the management plan. The purpose of this approach was to make the plan all inclusive as well as to create a sense of ownership within the communities and other stakeholders. The plan preparation followed these steps;



1.6.1 Consultative Meetings

Traditional authorities, District conservation committees and community conservation committees were consulted to make input into the management plan framework. Their input formed the basis of the management actions required for effective conservation.



1.7 Video Documentary

One of the major activities undertaken during the second phase of the grant was the production of a documentary on the efforts being made to put the Greater Amanzule Wetlands under conservation. The documentary provides details on the current efforts including interviews with key stakeholders. The documentary will be used to educate the communities within and outside the Amanzule wetlands.

2.0 Summary of activities and accomplishments

The tables below summarize the activities and related accomplishments during the reporting period.

Task	Activity	Accomplishment/Output	Remarks
1.0 Community orientation on Phase II	1.1 Community meetings and awareness creation on Phase II	22 selected communities were visited and given orientation on phase II of the GAWC project	Communities expressed concerns about the delay in the starting of the phase II. They however showed commitment to participate in project activities
2.0 Formation of Greater Amanzule Wetland Community Conservation Committees (GAWCCC)	2.1 Mobilization and self-selection of volunteers from Phase I of the project 2.2 Preparation of guidelines/constitution 2.3 Election of committee; executives/patrons selection.	22 GAWCCCs formed with 269 members. <ul style="list-style-type: none"> Guidelines developed Executives elected Patrons selected 	Executives and patrons were chosen by the committees members Committees participated in drawing a draft guideline.
3.0 Inauguration of GAWCCC	3.1 introduction of committee members to communities 3.2 swearing in of executives 3.3 inauguration of GAWCCC	<ul style="list-style-type: none"> GAWCCC executives sworn into office 22 GAWCCCs inaugurated. 	There was a large turn-out at the events signifying community interest in conservation of wetlands.

Task	Activity	Accomplishment/Output	Remarks
4.0 Orientation for Community Conservation Committee Members	4.1 Committee meetings	22 GAWCCC oriented on the purpose of the wetland conservation, working in teams and minute taking.	Most committee members attended the program
5.0 Community Assessment and Self Selection of Livelihood Options Phase I (FGD)	5.1 Focus Group Discussions to assess existing livelihood activities 5.2 Prioritization of livelihood activities based on gender 5.3 Identification of alternative livelihood options	12 FGD organized in twelve selected communities. Livelihood options identified and prioritized (see Annex C)	The existing and identified livelihood activities are natural resource dependent
6.0 Community Assessment and Self Selection of Livelihood Options Phase II (Questionnaire)	6.1 Questionnaire administration	180 males and 176 females (356) community members interviewed.	Majority of respondents opted for livestock rearing and VSLAs
7.0 Collation and compilation of relevant data files	7.1 collation of relevant data files	Data base of relevant data	Data were compiled under different themes for the six coastal districts
8.0 Retrieving and compiling Farm data	8.1 Retrieving and editing farm data	515 farms retrieved, cleaned and stored in a data base	Editing of attributes ongoing
9.0 Purchase of Equipment	9.1 Acquisition of PA system.	1 PA system purchased	Equipment has been very helpful in community meetings
10.0 Formation and inauguration of District Conservation Committees	10.1 Formation of DCC at Ellembelle 10.2 Formation of DCC at Jomoro Districts	9 member GAWDCC for Jomoro and 11 member GAWDCC for Ellembelle	Two District level GAW conservation committee formed, inaugurated and ToRs signed

Task	Activity	Accomplishment/Output	Remarks
	10.3 Inauguration of Ellembele and Jomoro Districts 10.4 Signing of GAWDCC ToR with Ellembele and Jomoro Districts		
11.0 Natural resource Mapping	11.1 Participatory Mapping of wetlands in 13 communities 11.2 GPS Mapping of wetlands in 7 communities	Participatory mapping of Wetlands in Effasu, Mangyea, Metika, Old Kablesuazo, Sawoma, Egbazo, Ebonloa, Alloakpoke, Sanzule, Bakanta, Anyanzinli, Ampain, and Kamgbunli. The participatory mapping was followed by ground truthing (GPS Mapping) in 6 communities (Effasu, Metika, Sawoma, Ampain, Anyanzinli, Bakanta)	Degraded mangroves were mapped out for restoration.
12.0 Pilot Cassava Project	Distribution of improved cassava stalk varieties	95 farmers from Egbozo, Alloakpoke and Ampain received and planted	3 communities selected and provided with improved cassava stalks varieties to enhance their livelihood

3.0 Challenges

The major challenges encountered during this grant period included inadequate logistics such as wellington boots and cutlasses which were demanded by the GAWCCCs for field-based activities. This will be addressed during the third grant phase since budgetary allocation has been made for this type of support. The other challenge is that many more individuals are expressing interest in the pilot livelihood programmes. Due to budgetary constraints and issues of sustainability, Hen Mpoano will prioritize the livelihood activities and begin to ensure that beneficiaries are investing own resources to acquire planting materials and seedlings. As a sustainability measure, group of beneficiaries will be introduced to the VSLA concept to facilitate access to own savings that can be invested in livelihood activities.

4.0 Way Forward

In the third small grant period, to be implemented from October 2016 to September 2017, Hen Mpoano will support community driven implementation of actions proposed in the GAW management plan framework. These will among others;

- strengthening of the governance structures already established
- Intensification of the livelihood program
- Completion of mapping and zoning of wetlands
- Public education on the importance of the wetlands.
- Restoration of degraded wetlands in the various communities.

Hen Mpoano will also work with stakeholder to develop a long-term monitoring and adaptation strategy for all 23 communities, including an action plan for the community and district conservation committees. Additionally, Hen Mpaono will collaborate with the CSLP in the production of geospatial data and products for all the project communities. All project activities will work to mainstream gender and ensure that women are active participants in the conservation of the GAW.

Annex 1: General Guidelines Arising from Meeting with Committee Members within the Twenty-two (22) Communities

1. All committee members must attend meetings. If they cannot attend, they must send apologies with another committee member. If a committee member fails to attend three meetings in a row without sending apologies, he/she loses his/her status as a committee member. The committee will then make arrangement for the election of a new member. The secretary will check the register and report to the committee when such a situation arises. Secretary must give score points to attendance for each of the committee every third meeting of the committee.
2. Committee members must inform absent members from their areas of the content of the meeting that they missed and the date of the next meeting
3. Committee members who have missed a meeting must contact other committee members from their area for the contents of the next meetings
4. Office bearers will be re-elected each year. Any member must be elected to an office for no more than two consecutive years
5. If any member is dissatisfied with the conduct of another member, he/she should inform the committee of the problem. The other committee member will then be asked to respond to the complaint. Having heard both points of view, the committee must investigate and resolve the problem. Cases unable to be resolved at the committee level are supposed to be pushed to patrons, failure at the patrons level should result in the case being moved to HM
6. If the community of an area has a problem with their representatives, they may approach the committee directly and the committee must investigate and resolve the problem.
7. The committee must keep the community informed by calling general meetings, distributing notices and through the representatives talking to people in their areas.
8. The committee may have the following structure:
 - a) Chair person
 - b) Vice Chair person
 - c) Secretary
 - d) Oraganizer(s)
 - e) **Treasurer
9. Committee will meet once every two weeks on the following agreed days and times;

	Community	Meeting days	Meeting times
1	Kamgbuli	Friday	8 pm
2	Alloakpoke	Wednesday	7 pm
3	Ampain	Sunday	7 pm
4	Sanzule	Saturday	6 pm
5	Ayanzini	Sundays	4 pm
6	Bakanta	Sunday	5 pm
7	Effasu	Wednesday	4 pm
8	Old Kablesuazo	Thursdays	9 am

	Community	Meeting days	Meeting times
9	Egbazo	Sundays	2 pm
10	Metika	Sunday	2 pm
11	Ebonloa	Thursday	4 pm
12	Mangyea	Sunday	3 pm
13	Ellonyi	Sunday	5 pm
14	Ezinlibo	Saturday	5 pm
15	Beyin	Sunday	3 pm
16	Allabokazo	Sunday	5 pm
17	Azuleloanu	Saturday	1 pm
18	Ekpu	Wednesday	5 pm
19	Sawoma	Tuesday	7:30 am
20	Bobrama	Thursday	5 pm
21	Asanta	Thursday	4 pm
22	Half-Assin	Wednesday	5 pm

General Roles that can contribute to the wetland conservation by Committee Members within the Twelve Communities

1. Educate, sensitize and create awareness on the importance of the wetlands in the community and the need to conserve
2. Wetland monitoring
3. Mobilize community members to replant/ restore degraded wetlands where necessary
4. Serve as whistle blowers on activities that degrade the wetland
5. Embarking on clean up exercises in the community
6. Undertaking any activity geared toward the conservation of the wetlands as assigned by HM, wildlife or the District assembly at the community level

Annex 2: TOR for district conservation committee

1. Background

The Greater Amanzule wetlands occupy an area of 3.8 square kilometers and stretches from the Ankobra River estuary to the Ivory Coast border. It covers the coastal plains of the Ellembelle and Jomoro Districts and to a little extent, the Nzema East District. These wetlands consist of a very rich ecosystem and comprise various categories of wetland including swamp and mangrove forests, flood plains and holds Ghana's only known peat swamp forest and the country's largest intact swamp forest. The Amanzule wetland area is probably the most biologically rich wetland area of Ghana, yet it has no formal recognition as a conservation area of importance and there is no management plan for the conservation of its unique habitats and biodiversity. Failure to recognize the ecological and socioeconomic functions that wetlands provide has led to the unsustainable use and destruction of these wetlands.

Against this background, a district wetland conservation committee has been constituted to promote stakeholder dialogue on wetland issues and foster the development and implementation of a management plan for the Amanzule wetlands.

2. Name

The name of the Committee shall be Jomoro and Ellembelle District Wetland conservation committee for each district respectively.

3. Aim

To serve as platform for development and harmonization of strategies and actions for wetland conservation at the district level.

4. Scope and Objectives

- a. Establish and maintain the line of communication with local communities, traditional authorities, civil society groups and private sector institutions on matters relative to wetland conservation through the Sub-committees under which they operate.
- b. In consultation with relevant technical departments of the Assembly, recommend good land use practices in wetland areas for adoption and implementation by the District Assembly and other levels of government as necessary.
- c. Inform the Assembly- Coordinating Director, Presiding Member and the Chief Executive about the wetland conservation activities in the Greater Amanzule area through the Sub-committees under which they operate.
- d. Support the formulation and implementation of wetland management plans.
- e. Support and monitor the activities of community wetland conservation committees and assist in the passing of wetland conservation bye-laws drawn up by communities.

5. Authority

The mandate of the district wetland conservation committee shall be advisory. It will provide recommendations to be considered by the appropriate decision making institutions. In performing its functions, the district wetland conservation committee shall not pre-empt, duplicate nor substitute the functions of any of the existing statutory committees or other sub-committees operating at the district level.

6. Membership

The District wetland conservation committee comprises;

For Ellembelle District

1. Development Planning officer
2. Town and Country Planning
3. District Environment and Health Officer
4. District Agriculture officer
5. Communities Development Officer
6. Three District Assembly members from the six communities
7. Chairman of Environment and Mining Sub-Committee
8. NADMO Officer
9. Gender Desk Officer
10. Co-opted member from wildlife division

For Jomoro District

1. Business Advisory Center
2. Town and Country Planning
3. District Environment and Health Officer
4. District Agriculture officer
5. District Planning Officer (Desk Officer for the committee)
6. Two District Assembly members from the six communities
7. Two Members from Sub-Committee on Environment and Extractives
8. Co-opted member from wildlife division

8. Meeting Arrangements

Meetings of the district wetland conservation committee will be convened and presided over by the Chairman. The committee will meet quarterly.

9. Review

These terms of reference shall be reviewed annually from the date of approval. It may be altered to meet the needs of all members of the district wetland committee through consensus.

The above terms of reference for the District wetland conservation committee has been agreed to:

.....

Annex 3: GIS Maps

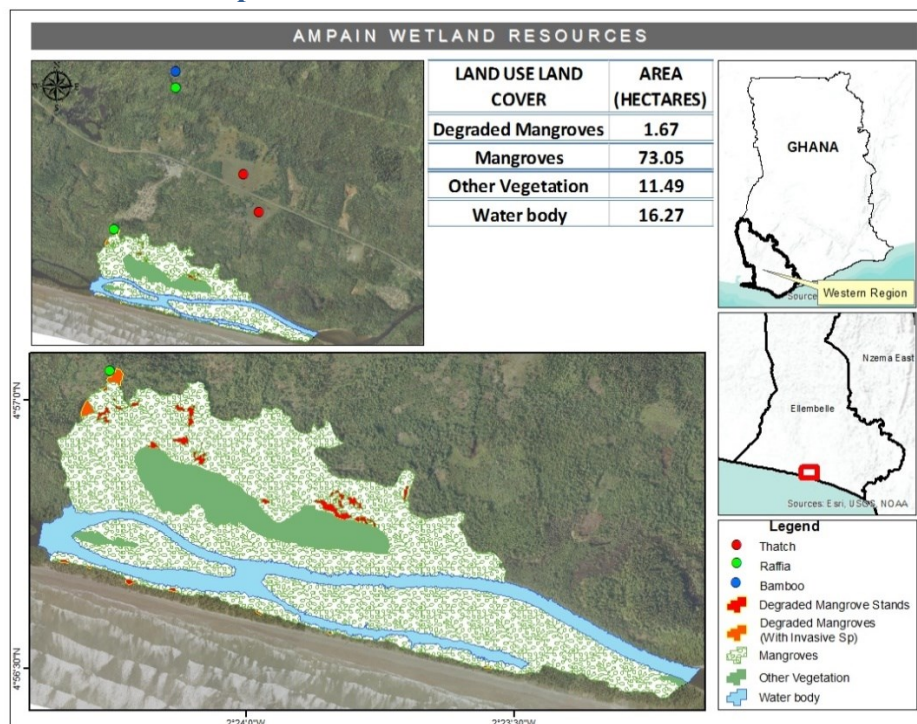


Figure 6 Map of Ampain wetlands showing degraded areas

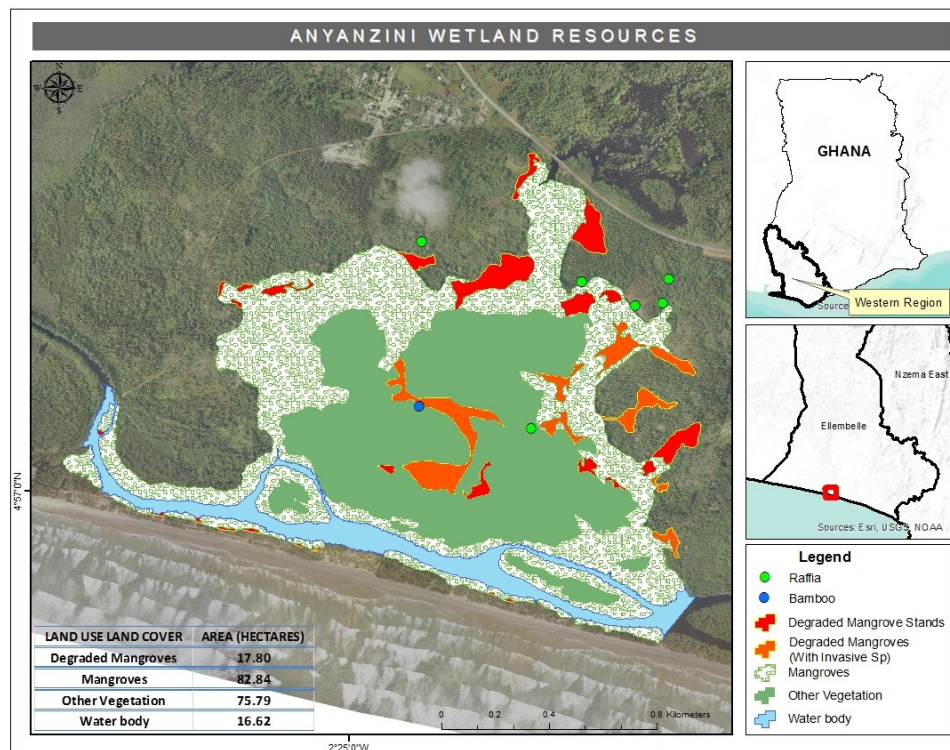


Figure 7 Map of Anyanzini wetlands showing degraded areas

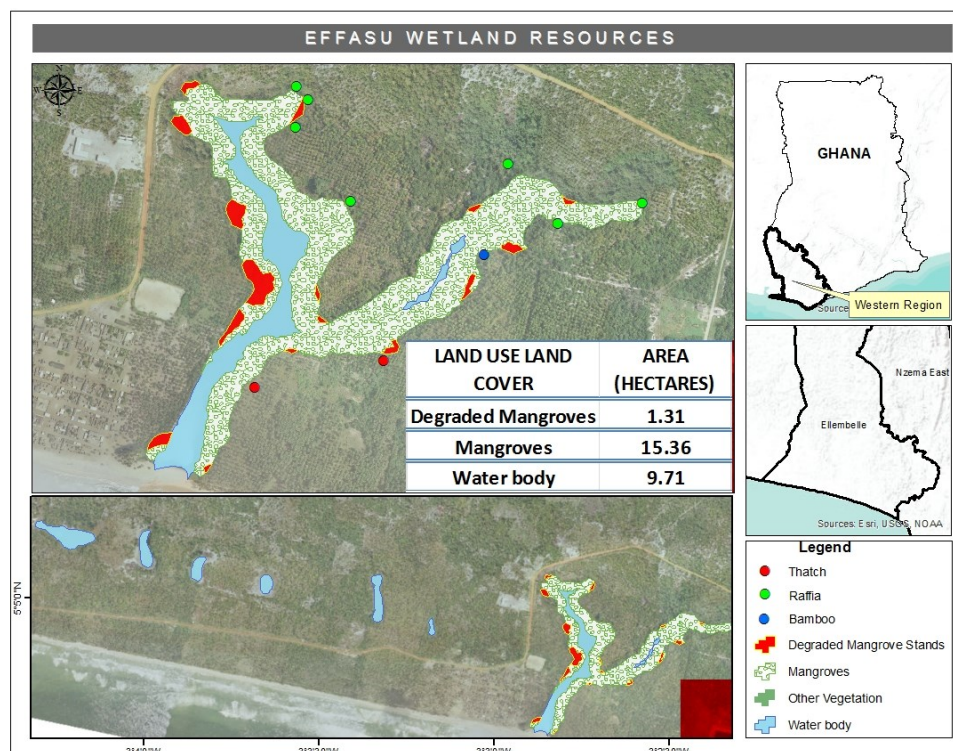


Figure 8 Map of Effasu wetlands showing degraded areas

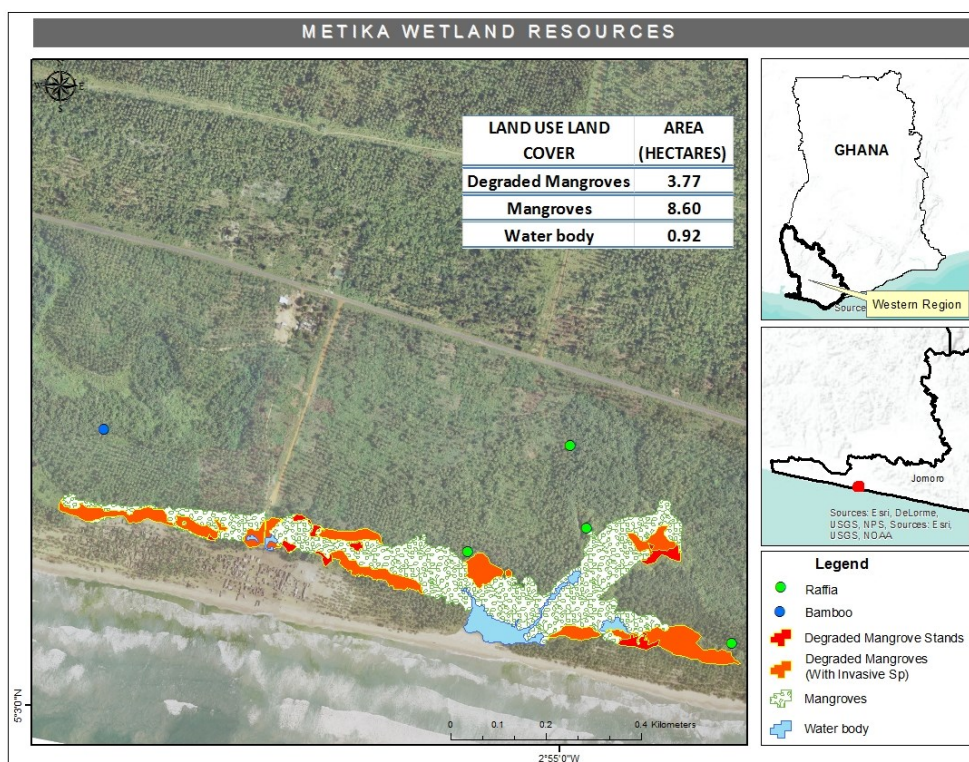


Figure 9 Map of Metika wetlands showing degraded areas

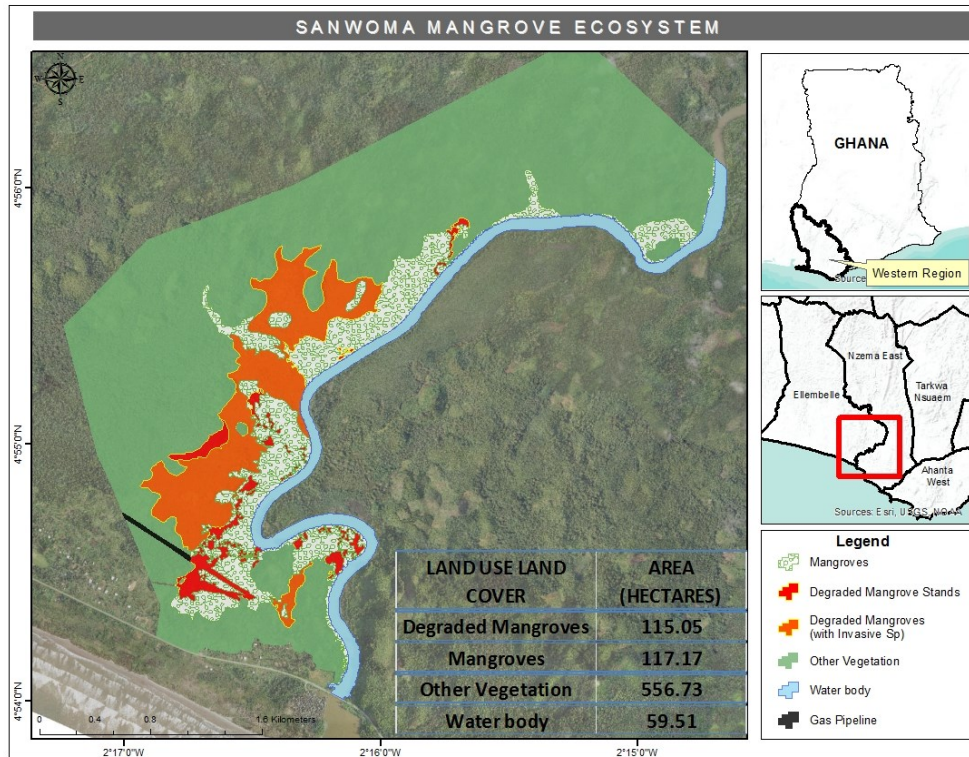


Figure 10 Map of Sawoma wetlands showing degraded areas

Annex 5: Livelihood Enhancement and Diversification Beneficiaries (Cassava Option)

No	Name of farmer	Community	Number of Bundles	Sex	
				M	F
1	Avi Akuba	Egbazo	4		√
2	Mokoa		3		√
3	Charles Attia Sobo		5	√	
4	Wiaka Manza		4		√
5	Blay Tanoe		4	√	
6	Yanyi Yanson		4	√	
7	Nda Mokoa		3		√
8	Adwa		4		√
9	Adaye Akuba		3		√
10	Nyameke Amicha Benie		3		√
11	Akwanzi Asia		3		√
12	Akyingye		3		√
13	Manza Afo		4		√
14	Ngeta		4	√	
15	Aka Akisi		3		√
16	Akasi		3		√
17	Ndale Nyanke		3		√
18	Adela		3		√
19	Blay Abraham		6	√	
20	Agovi Aku		3		√
21	Toboni		4		√
22	Francis Kwofie	Alloakpoke	4	√	
23	Joseph Arizi		4	√	
24	Joseph Mensah		4	√	
25	Albert Mensah		4	√	
26	Aba Kwansema		4		√
27	Doris Ackah		4		√
28	Paulina Yanson		4		√
29	Theresa Blay		4		√
30	Anthony Ackah		4	√	
31	Samuel Acquah		4	√	
32	Mustafa Amoako		4	√	
33	Grace Aucher Soma		4		√
34	Mary Blay		4		√
35	Matilda Mensah		4		√

No	Name of farmer	Community	Number of Bundles	Sex	
				M	F
36	Doris Kwame		4		√
37	Elizabeth Addae		4		√
38	Monica Ayiba		4		√
39	Christina Beyi		4		√
40	David E. Ackah		4		√
41	Peter Morkeh	Ampain	3	√	
42	Paul Kaku		3	√	
43	Francis Kojo		3	√	
44	Hannah Aidoo		3		√
45	Esther Morkeh		3		√
46	Agnes Afful		3		√
47	Edmond Ebulley		3	√	
48	Christina Armoh		3		√
49	Kweku Sam		3	√	
50	Mary Blay		3		√
51	Solomon Gyande		3	√	
52	Margareth Alhassan		3		√
53	Kwesi Kwame		3	√	
54	Ibrahim Issah		3	√	
55	Doris Yankson		3		√
56	Amachi Kone		3		√
57	Samuel Ackah		3	√	
58	Grace Fosu		3		√
59	Thomas Gyande		3	√	
60	Samuel Kaku		3	√	
61	Elizabeth Kofi		3		√
62	Aminata Issah		3		√
63	Peter Asuah		3	√	
64	Hagar Mensah		3		√
64	Theresa Nwuley		3		√
66	Amina Mahama		3		√
67	Habiba Mohammed		3		√
68	Elizabeth Mensah		3		√
69	Sene Fameye		3		√
70	Florence Arthur		3		√
71	Margareth Kwafo		3		√
72	Christina Baidoo		3		√
73	Agnes Nyanzu		3		√
74	Augustina Alimah		3		√
74	Hannah Yankey		3		√
76	Grace gyande		3		√
77	Mary Bannor		3		√
78	Afiba Anyimah		3		√

No	Name of farmer	Community	Number of Bundles	Sex	
				M	F
79	Agnes Kaku		3		√
80	Ama Eyeboeba		3		√
81	Daniel Ackah		3	√	
82	Elizabeth Kwofie		3		√
83	Elizabeth Cudjoe		3		√
84	Mary Benle		3		√
85	Ashatu Zakariya		3		√
86	Kukukyi Kaura		3		√
87	Nana Nyameke Fofole II		3	√	
88	Elizabeth Anderson		3		√
89	Elizabeth Ocran		3		√

Annex 6: Summary Report of Participatory Mapping

1. Old Kablesuazo

Natural resources in the community

Natural resources identified within the wetlands of this community are the good agricultural land/soil, water bodies, underground oil, bamboo and raffia

Ownership of land

Land in this community is owned by the stool. The local chief is therefore the custodian of the land and as responsible for making decisions relative to its use.

Importance of resources

Though a coastal community, it is worth noting that marine fishing is not practiced. River fishing is rather preferred thus making the river and the wetland very important resources in the community. Nearby communities such as Egbazo, Ndumsuazo and Bonyere also join them for the river fishing. Periwinkle and crabs are harvested from the wetlands; the mangrove also serves as the breeding place for the fishes in the river.

Raffia and bamboo are the major building materials in the community. The people of Old Kabenlasuazo don't harvest their mangroves and have also managed to stop communities such as Egbazo and Bonyere who occasionally came to harvest the resource for building. The bold stand to conserve the resource is attributed to education gotten from Hen Mpoano on the need for mangrove conservation. This decision, according to them, has resulted in excessive mosquitoes in their area

They claim the oil in the community is harvested by the people in Bonyere to even fuel their cars but they personally do not use it for anything.

Threat to the resources

'Almost all the land in the area has been acquired by VRA leaving a small portion for settlement and agriculture activities. This poses a threat to the resources around because we are not aware of what will happen to the resources. Our Livelihood largely depends on these resources so VRA taking over the place will pose a major livelihood challenge to the community'.

Resource Size

Most of the resources in the community, they claim have increased in size apart from the river which they think is decreasing in size due to the increase in the Mangrove extent.

2. Egbazo

Natural resources in the community include the oil palm, raffia, bamboo, mangroves, trees, and river.

Ownership of land

Lands in the community are mostly stool lands. Some individuals/families also own some lands (wetlands) in the community.

Resource Size

Mangrove has increased in size at the expense of the river

3. Bakanta

Natural Resources in the community

Natural resources in the community includes the mangrove, raffia and the river

Ownership of wetland

The wetland belongs to the stool and some families.

Importance of wetlands

Raffia is used for building and alcohol preparation in the community. Mangrove on the other hand is used for charcoal and fuelwood production. The mangrove is harvested at all times but especially in the dry season when accessibility is easy.

Fish, fuel wood, shrimps, crabs, periwinkle, raffia, bamboo can all be found in the wetland. Resources such as mangroves and bamboo have increased in size over the years.

Threat to resources

‘ENI’s operations will likely destroy the river upstream. This will significantly affect our livelihood as most depend on the river. It is also likely that other companies will come around when ENI starts their operation which will pose threats to the resources’.

‘The high salinity intrusion is also resulting in the destruction of some resources’

4. Sanzule

Natural resources in the community

Bamboo, raffia, mangroves, etc

Ownership of land

The wetlands belong to the chief/stool and some individuals and families. The family land is however more than that of the stool.

Importance of resources

Fishes, trees/fuelwood, crabs, bamboo and alligators are found in the wetlands. Raffia is a major building material in the community. The Mangrove is visited any time but especially in the dry season for fuelwood. The exploitation of mangroves is not as severe as the other terrestrial trees

Threat to Resource

The emergence of oil and gas companies poses a threat to the resources around. According to the committee members, about 45 acres of the 236.66 acres of the ENI concession is wetland. The ongoing road construction in the area has already led to the destruction of some resources and it is feared that ENI will definitely destroy more.

5. Effasu

Natural resources in the community include mangrove, river, raffia, thatch, bamboo. The surrounding water bodies have crocodiles, tortoises and fishes.

Importance of resources

- Mangrove serves as breeding place for fishes
- Raffia is used for building and alcohol distillation
- Fishes, crocodile and tortoise are gotten from the river

Mangrove is harvested anytime but especially in the dry season. Bamboo on the other side is often harvested in the rainy seasons. River has reduced in size due to the increase in the mangrove size.

Ownership of land

Stool land and family lands

6. Mangyea

Threat to resources

- ✓ High tension resulted in the destruction of farms and other resources
- ✓ The construction of the oil facility (Balkhan Energy) led to the destruction of one of the rivers around

'In 2015 an international organization came to make arrangement for the purchase of River Benzum. Though they claim it will be used for tourism purpose, we will have little control once it is purchased and can't tell if it will lead to the destruction of the resources'.

'The land isn't supporting agriculture compared to some years back. We think the introduction of the power badge has resulted in that'

7. Metika

Natural resources in the community

Natural resources in the community include river, agriculture land, thatch, bamboo, forest and mangroves which serve as the habitat for monkeys.

Uses of the resources to the community

River: Fish for food, periwinkles, crabs etc

Bamboo: for construction

Thatch: for roofing, sell for money

Forest: trees and wood are used for construction

Mangrove: habitat for monkeys

Land Ownership

Stool land and individuals

Threat to Resources

1. Bush fires
2. Over exploitation of the mangrove in the past has made the community vulnerable to flooding as the mangroves that hindered the floods from entering the community were removed.

Size of resources

All the resources in the community have reduced in size. The river and the mangrove is mainly due to the over exploitation in the past.

8. Ebonloa

Natural resources in the community

Natural resources in the community include raffia, fertile land, forest and bamboo. The river is a source of fishes and drinking water in the community. The forest provides the community with trees for wood and medicine. Hunting is also done in the forest. Raffia is used for alcohol, building and traps. Others sell the raffia and bamboos for money.

Seasons of exploitation

There isn't any special time for exploiting the resources. It is done anytime. However it is a bit difficult accessing it in the rainy seasons. Canoes are used to access resources in the rainy seasons due to floods.

Ownership

Stool land

Size of Resources

Resources in the community are still intact because members of the community allow the exploited land to fallow and regenerate over a period of time as they harvest resources from new areas.

Threat to resources

The activities of chain saw operators may pose some threat to the resources which have been managed and regulated by the local authority.

9. New Bakanta (Anyanzinli)

Resources in the community include river, mangrove and agricultural land. Fish, periwinkle, and crabs are harvested from the wetland in the community. The mangrove serves as a breeding place for the fishes. The dead mangroves are also used for fuelwood.

Ownership

Stool land

History

A war broke out between the Ashanti's and the Nzemas. The Nzema's used the wetland in the community as a hide out to protect all the Nzema chiefs and also to defeat the Ashanti's.

Size of the resources

Mangrove has increased in size which has also resulted in the river decreasing in size. All the raffia trees in the community were lost to natural circumstances. This phenomenon is believed to be the result of high salinity

Threat

'Charcoal making in the past resulted in the destruction of some of the mangrove sites. This is the main reason why we embarked on mangrove replanting together with the Ghana Wildlife Service to restore the degraded sites'.

10. Kamgbunli

Natural resources in the community include three rivers (Fia, Ebi and Amanzule), mangroves, bamboo and raffia. The rivers provide fishes, crabs, drinking water, shrimps, periwinkles, etc. The marshy area is also suitable for rice and vegetable farming. The mangrove also provides the community with fuel wood and also serves as the breeding place for fishes. Alcohol and building materials are gotten from the raffia. The bamboo also provides the community with building materials.

Ownership of land

Stool land

Threat

Infrastructure development led to destruction of thatch in the community. Storms destroy the mangroves/raffia. An area or portion within the mangrove is dying naturally

Size

Apart from the thatches that have been lost completely due to infrastructural development, Raffia has also reduced in size because of agriculture. Mangrove has also reduced in size.

11. Ampain

Resources in the community are the river, mangroves, fertile wetland soil, thatch, raffia, forest and bamboo. The mangrove serves as breeding grounds for the fishes. Fuelwood, periwinkles, and crabs are also gotten there in abundance. Raffia is used for basketries, building, alcohol and fuel wood. Thatch is used for construction or sometimes sold for money.

Ownership

Stool land

Size

Mangrove and thatch have reduced in size.

12. Alloakpoke

Natural resources in the community include river, raffia, thatch, trees, sand and bamboo. The trees are used for charcoal and fuelwood. Raffia is used for alcohol and building. Thatch is used for roofing. It is also sold for money to hotel operators. Sand is used for construction. Fishes are gotten from the river.

Ownership

Stool land

History

The people migrated from Atuabo. A river within the wetland called Ewurame is believed to be a god that represents justice. The river measures to the waist of whoever stands in it, whether a child or adult, whether young or old. In times of hunger the river God also gives them Fish.

Threat

Excessive sand winning in the area is a threat

Exploitation of resources

Sand winning is not done in the rainy season. Fishing is however effective at that time



Figure 11 Community participatory map of Metika



Figure 12 Community participatory map of Effasu

Annex 7: District Conservation

Committee Members

Ellembelle

No	Name	Organisation / Community	Position	Phone Number
1	Ebenezer Leo Kweku Eshun	EDA	Mines & Envi. Sub Committee Chairman	0244207992
2	Derrick Obeng Dapah	Dev't planning Office	D.O.P	0244939179
3	David S. Asihene	MOFA	Production officer	0553987944
4	David E. Ackah	Alloakpoke	Assemblyman	0508014208
5	Hon. Paul E. Amoah	Ankobra	Assemblyman	0503775041
6	Owusu Mann Isaac	Ellembelle D/A	A. C. A. O	0246803383
7	Hon. Raphael Ackah	Azulenloanu/Ampain	Assemblyman	0242718203
8	Bright Adu-Anim	Ellembelle D/A	E. H. O	0249506066
9	Esther Cudjoe	N. F. F. D	Secretary	0246959758
10	Angelina B. Kwofie	NADMO	Secretary	0249539331
11	Kwabena Asiedu-Bediako	EDA	Town Planning Officer	0244293818
12	Daniel D. N. nortey	Hen Mpoano	Project Officer	00269786540
13	Al-Amin Yussif Mohammed	Hen Mpoano	Driver	0243742532
14	Alex Owusu Amoakoh	Hen Mpoano	Field Officer	0547639333
15	Balartey Gormey	Hen Mpoano	Project Officer	0205744792

Jomoro

No	Name	Organisation / Community	Position	Phone Number
1	Emmanuel Armoo	Comm. Dev.	District Officer	0249218325
2	Augustus Arthur Quansah	NADMO	Ag. Dist. Coordinator	0244797904
3	Abdul Jalil Mahama	JDA	DPO	0207404362
4	Hon. Fredrick Nyame	JDA	Hon. Member (Assemblyman)	0240527501

No	Name	Organisation / Community	Position	Phone Number
5	Augustine Ofora	JDA	Sub-committee member (Assemblyman)	0240470252
6	Raymond Seworh	JDA	DEHO	0244892048
7	James K. Okyere	JDA	Assistant Planning Officer	0246654994
8	Osei-Mensah Anthony	JDA	Dist. Town Plan. Off.	0246746335
9	Hon. Thomas Guane	JDA	Sub-committee member	0209418196
10	Bernard A. Eholrade	GWS	Tourism Officer	0206333265
11	Emmanuel Ntiri	CSLP	Asst. Director	0208244514
12	George A. Blay-Morkeh	JDA	Assemblyman	0246427628
13	Abudu Amadu	JDA	DCD	0200247632
14	Samuel Tatuani	JDA	Assistant Director	0242087624
15	Ali Issah	Hen Mpoano	Logistics	0265411111
16	Daniel D. Nii Nortey	Hen Mpoano	Program Officer	0269786540
17	Stephen Morkeh	GWS	Tour Guide	0248782590
18	Gifty Nkrumah Arthur	JDA	Assistant Director	0249742194
19	Alex Owusu Amoakoh	Hen Mpoano	Field Officer	0547639333
20	Ernest Kaku	JDA	Assemblymen	0273901651
21	Yussif Mohammed	Hen Mpoano	Driver	0262767979
22	Joyce Bereliw	JDA	Staff	
23	Justice C. Mensah	Hen Mpoano	GIS Officer	0269222063