Integrated Coastal and Fisheries Governance (ICFG) Initiative for the Western Region of Ghana

HEN MPOANO (OUR COAST) Annual Report 2012 October 1, 2011 – September 30, 2012

Cooperative Agreement No. 641-A-00-09-00036-00



OCTOBER 2012



This publication is available electronically on the 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: Coastal Resources Center. 2012. HEN MPOANO (OUR COAST) Annual Report 2012. October 1, 2011 – September 30, 2012. Coastal Resources Center, University of Rhode Island. USAID Integrated Coastal and Fisheries Governance Initiative for the Western Region, Ghana. 99 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 Government (ICFG) Program for the Western Region of Ghana", Under the Leader with Associates Award No. EPP-A-00-04-00014-00. Cooperative Agreement No. GPO-A-00-08-00002-00

Cover Photo: Educating fishmongers of Anlo Beach (Shama District) through rural drama

Cover Photo Credit: Coastal Resources Center - Ghana

The Integrated Coastal and Fisheries Governance (ICFG) Program for the Western Region of Ghana

Annual Report October 2011 – September 2012

Cooperative Agreement No. 641-A-00-09-00036-00

Coastal Resources Center, University of Rhode Island In partnership with: The Government of Ghana Friends of the Nation SustainaMetrix The WorldFish Center

October 2012

List of Key Project Contacts

CRC-GHANA

Mark Fenn CRC-Ghana Program Director (Chief of Party) Tel: +233 (0) 543 694 966 Email: mfenn@crc.uri.edu

Kofi Agbogah National Program Coordinator (Deputy Chief of Party) CRC-Ghana Tel: +233 (0)244 678 007 Email: kofi.agbogah@gmail.edu

CRC/URI

Cindy Moreau Business Manager Coastal Resources Center, URI Tel: 401-874-6488 Fax: 401-789-4670 Email: cindo@gso.uri.edu

Brian Crawford Director, International Programs Coastal Resources Center, URI Tel: 401-874-6225 Fax: 401-789-4670 Email: brian@crc.uri.edu Web: www.crc.uri.edu

FRIENDS OF THE NATION

Donkris Mevuta Executive Director Friends of the Nation –Ghana Tel: +233 (0) 244 520 686 Email: friendsofthenation@gmail.com

WORLDFISH CENTER

Dave Mills WorldFish Center Tel: +20 22 736 4114 Email: d.mills@cgiar.org

SUSTAINAMETRIX

Glenn Page SustainaMetrix Tel: + 1 443 604 6812 Email: glenpage@mac.com

USAID

Peter Trenchard Director, Economic Growth Office USAID / Ghana Email: ptrenchard@usaid.gov

Nino Nadiradze Deputy Director, Economic Growth Office USAID/Ghana Tel: +233 (0) 741322 E-mail: nnadiradze@usaid.gov

Justice Odoi Agreement Officer Representative U.S. Agency for International Development/Ghana Tel: +233 (0)302 741828 Email: jodoi@usaid.gov

Martina Wills Contract Officer Tel: +233 (0)302 741663 Email: mwills@usaid.gov

Frederique Rakotoarivelo Senior Acquisition & Assistance Specialist (Accra/WA/SAAS) Tel: 0302 742720 Email:frakotoarivelo@usaid.gov

List of Acronyms

AFRICOM	United State Africa Command	
AO	Agreement Officer	
AOR	Agreement Officer Representative	
AWG	Amanzule Working Group	
BALANCED	Building Actors for Livelihood & Advancing Communities Excellence in	
	Development	
BBOP	Business Biodiversity Offset Program	
BCS	Behavior Change Support	
BUSAC	Business Sector Advocacy Challenge	
C3P	Cape Three Points	
CAFA	Civil Society Alliance for Fisheries Agenda	
CBAG	Community Biodiversity Advisory Group	
CBD	Community-Based Distributors	
CB-FMC	Community-Based Fishery Management Committee	
CBO	Community Based Organization	
CCM	Center for Coastal Management	
CEC	Community Environmental Committees	
CEMAG	Community Environmental Monitoring & Advocacy Group	
CEWEFIA	Central and Western Fishmongers Improvement Association	
COLANDEF	Community Land Development Foundation	
CRC	Coastal Resources Center	
CREMA	Community Resource Management Areas	
CSOs	Civil Society Organizations	
CSR	Corporate Social Responsibility	
CWOW	Community Watch on Water	
DCOP	Deputy Chief of Police	
DFID	Department for International Development	
DQA	Data Quality Assessment	
EBM	Ecosystem-Based Management	
ECHNTS	Esiama Community Health Nurses Training School	
EIA	Environmental Impact Assessment	
EPA	Environmental Protection Agency	
ESS&F	Ecosystem Services and Functions	
FAO	Food and Agricultural Organization (of the United Nations)	
FBO	Faith Based Organization	
FC	Forestry Commission	
FOAT	Functional Operational Assessment Tools	
FoN	Friends of the Nation	
FTF	Feed the Future	
FWG	Fisheries Working Group	
GCC	Guinea Current Commission	
GCC-SL	USAID's Global Climate Change – Sustainable Landscapes Program	
GCLME	Guinea Current Large Marine Ecosystem	
GEF	Global Environmental Facility	

GES	Ghana Education Service
GHS	Ghana Health Services
GIS	
	Geographic Information System
GMA	Ghana Meteorological Agency
GNCFC	Ghana National Canoe Fishermen Council
GOG	Government of Ghana
ICFG	Integrated Coastal and Fisheries Governance
ICM	Integrated Coastal Management
ICT	Information and Communication Technology
IEC	Information, Education and Communication
IEE	Initial Environmental Examination
INBAR	International Network of Bamboo and Rattan
IUCN	International Union for the Conservation of Nature
LCA	Leadership for Conservation in Africa
LGU	Local Government Unit
LI	Legislative Instrument
LMMA	Locally Managed Marine Areas
LOGODEP	Local Government Decentralization Program
LME	-
	Large Marine Ecosystem
LUPMP	Land Use Planning and Management Project
M&E	Monitoring and Evaluation
MCS	Monitoring Control and Surveillance
MDA	Ministries, Departments and Agencies
METSS	Monitoring and Evaluation Technical Support Services
MLGRD	Ministry of Local Government and Rural Development
MoFA	Ministry of Food and Agriculture
MoU	Memorandum of Understanding
MPA	Marine Protected Area
MT	Management Team
MTDP	Medium Term Development Plans
NADMO	National Disaster Management Organization
NDPC	National Development Planning Commission
NGO	Non-Governmental Organization
NORAD	Norwegian Agency for Development
NSP	National Service Volunteers
OLIVES	Organization for Livelihood Enhancement Services
PCC	Platform for Coastal Communities
PCV	Peace Corps Volunteer
PDD	Project Description Document
PFPI	PATH Foundation Philippines Incorporated
PHE	Population Health and Environment
PIN	Project Idea Note
PMP	Performance Monitoring Plan
PMR	Performance Monitoring Reports
PMU	Program Management Unit
RASAP-CI	Recherche et Actions pour la Sauvegarde de Primates en Côte-d'Ivoire
RCC	Regional Coordinating Council

REDD+	Reducing Emissions from Deforestation and Forest Degradation
SDF	Spatial Development Framework
SNV	Netherlands Development Organization
SO	Strategic Objective
SPAG	Spatial Planning Advisory Groups
SpD	Spatial Dimensions
STAR-Ghana	Strengthening Transparency, Accountability and Responsiveness in Ghana
STMA	Sekondi-Takoradi Metropolitan Assembly
TCPD	Town and Country Planning Department
UCC	University of Cape Coast
UG	University of Ghana - Accra
UK	United Kingdom
URI	University of Rhode Island
USA	United States of America
USAID	United States Agency for International Development
WAPCA	West African Primate Conservation Action
WARFP	West Africa Regional Fisheries Program (World Bank funded)
WERENGO	Western Region Development Network of Non-Governmental Organizations
WFC	WorldFish Center
WR	Western Region
WRCC	Western Regional Coordinating Council
WRSDF	Western Region Spatial Development Framework

Contents

List Con Exe	of Acro itents cutive S	Project Contacts onyms ummary	iv v viii xi 1
1.		Designing Options for Nested Integrated Coastal and Fisheries Governance Syste	ems 5
1.	.1 Op	tions for a Nested Coastal Governance System for the Western Region	5
1.	1.1.1 1.1.2 1.1.3 1.1.4 1.1.5 1.1.6 1.1.7 1.1.8 1.1.9 2 De	Working Paper on Options for a Nested Coastal Management Program Policy Briefs on Key ICM Issues Support for the Establishment of Marine Protected Areas Piloting a Regional Coastal Commission Study Tour to the Philippines on Marine and Coastal Management Strengthening the Center for Coastal Management at University of Cape Coast Training for Regional and District ICM and Fisheries Professionals A Coastal Fund Communication and Liaison between Regional and National Scales eveloping Nested Fisheries Governance in the Western Region	7 10 11 12 13 15 16
	1.2.1 1.2.2 1.2.3 1.2.4	Key Messages for Diverse Stakeholders Building Informed Management Constituency Governance Dialogue Process Promoting Compliance and Enforcement of Fisheries Laws	21 23
2		Improved Coastal Governance at the District and Coastal Settlement Scale	27
2.	2.1.1 2.1.2 2.1.3 2.1.4	ama District Level Coastal Management Anankwari River and Flood Plain Area Shama Shorefront Management Livelihood Resilience for Four Fish Landing Sites eater Cape Three Points	28 28 31 31
2.	2.2.1 2.2.2 2.2.3 .3 Gr	District Level Coastal Management Sustainable Land and Seascapes Livelihoods Resilience at Fish Landing Sites eater Amanzule	36 37
3	2.3.1 2.3.2	District Level Coastal Management Sustainable Landscapes Program Management	41
3.	.1 Pro	ogram Leadership, Structure and Staffing	49
3.	.2 Sta	aff and Partner Capacity Development	49
3.	.3 Mo	onitoring, Evaluation, Performance Management and Reporting	50
3. 3.		me Challenges and Measures Adopted to Address Themanding	
Э.		ununi 5	

4	The Way Forward	. 53
Moving Fa	prward Nationally	. 54
	s54 planning and community resilience prward Regionally	
Fisherie	s55	
	Planning	
	prward in the Districts or Focal Areas	
Annex A:	Summary of Findings & Recommendations of Program Evaluation	. 57
Annex B:	Revised ICFG M&E Indicator Reporting to USAID	. 59
Annex C:	Results to Date (FY 10 – FY 12: September 30, 2012) and Targets for FY 13	. 61
Annex D:	Custom Indicator 1 - Governance scorecards	. 73
Annex E:	Summary of Year 4 Expected Outcomes	. 78
Annex F:	ICFG Advisory Council Members	. 79
Annex G:	Philippines Study Tour Participants	. 79
Annex H:	List of Fisheries Communicators	. 80
Annex I:	TCPD Staff Trained in Computer Based GIS Tool for Planning	
Annex J:	Participants of the Video Training	
Annex K:	Graduate Student Trainees	
Annex L:	ICFG generated reports from September, 2009 – September, 2012	84
LIST OF FI	GURES	
•	AID Program Objectives and the Results Framework of the ICFG Initiative	2
•	up of the six focal districts of the Western Region and the adjoining seascape	3
	aft proposed nested marine and coastal governance system in the Western Region	6
	derwater pictures of near shore reefs habitats around Cape Three Points	9
e	ne activities and observations of the Philippines study tour participants	12
•	ducts of the GIS Training	15
	nple football jersey donated to communities for the World Environment Day	20
U	ticipants at the Fisheries Dialogue	24
	rine Police Training activities ap of Six Coastal Districts showing ICFG Focal Areas	26 27
•	oastal map of Shama District showing the Anankwari floodplains and human use	30
-	Green Belt Map for the Cape Three Points Focal Area	34
-	Inerability Assessment Discussion with Nzema East Advisory Group	36
-	tile of refined Satellite imagery of land cover classification in the Amanzule area	42
•	omparison of Carbon stock in the Amanzule wetland and a tropical forest	43
	arbon Stock studies in the Amanzule Wetlands	43
-	ix different species of bamboo growing in the coastal and surrounding districts	45
-	blunteers and members of the Sea Turtle conservation task force at Beyin	46
-	lgal Blooms on the west coast of Ghana. (A) Enteromorpha (Ulva) and (B):Sargassu	
spp		47

LIST OF TABLES

Table 1: Nested governance	5
Table 2: Policy briefs	7
Table 3: Support for the Establishment of Marine Protected Areas	8
Table 4: Piloting a Regional Coastal Commission	10
Table 5: Study tour to the Philippines on marine and coastal management	11
Table 6: Strengthening the Center for Coastal Management at University of Cape Coast	13
Table 7: Training for Regional and District ICM and Fisheries	14
Table 8: A Coastal Fund	16
Table 9: Communication and liaison between regional and national scales	16
Table 10: Key Messages for Diverse Stakeholders	21
Table 11: Building Informed Management Constituency	22
Table 12: Governance Dialogue	24
Table 13: Promoting Compliance & Enforcement of Fisheries Laws	25
Table 14: District Level Coastal Management	28
Table 15: Anankwari River and Flood Plain Area	28
Table 16: Shama Shorefront Management	31
Table 17: Livelihood resilience for four fish landing sites	31
Table 18: District level coastal management	35
Table 19: Livelihoods Resilience at Fish Landing Sites	37
Table 20: District Level Coastal Management	40
Table 21: Sustainable landscapes	41

LIST OF BOXES

Box 1: Conclusions and Recommendations of the Nearshore Reef Habitats (NSRH)	9
Box 2: Using GIS to develop local planning schemes	14
Box 3: Echoes from Biribireba	17
Box 4: Video production making impacts in communities	18
Box 5: Strategies for communicating flood early warning	29
Box 6: Regulating Development on the Anankwari Floodplain	30
Box 7: Rubber Plantation and Food Security Concerns	39
Box 8: Sea Turtle occurrence in the West Coast	46
Box 9: Spreading PHE Awareness in Ellembelle and Jomoro Districts	48

Executive Summary

The ICFG – Hen Mpoano Initiative made significant progress towards attaining the objectives of the Hen Mpoano Initiative set at the beginning both in terms of designing fresh approaches to governance within the coast of Western Region and in the fisheries in a two-track approach linking discussion on policy implementation with on-the-ground actions. The Initiative has been creatively designing and testing the implementation of policies that address critical coastal issues of food security and maintaining sustainable landscapes and biodiversity. Through partnerships and networking, models were moved further into practice with evolving donor support, notably DFID and the World Bank as well as USAID.

Marine and Coastal Governance

Models were designed and discussed with a range of stakeholders which are currently orienting partnership programs evolving in the Western Region. The growing synergy and engagement with national institutions and international donor funded programs can be largely attributed to the social capital the Hen Mpoano Initiative has established. The past year marked an intensive effort to build capacities within the regional and district level local governments for the practice of Integrated Coastal Management; and at the national level to mainstream climate change considerations into coastal zone planning. Communications through draft issues briefs brought to the forefront critical coastal issues and means for addressing them.

Fisheries Governance

The ICFG Initiative catalyzed the second national dialogues on co-management in fisheries which contributed to greater awareness of the legal refinements and social conditions necessary for moving models into practice. The Initiative prepared local constituencies for co-management and has identified what will be the initial management units for both coastal wetlands and marine habitats critical for many of the inshore fish species. Scenarios for future marine protected areas were also prepared which would need operational support in the future.

The efforts of the Hen Mpoano program in compliance and enforcement are bearing fruit in the Western Region with success stories from an increasingly effective prosecution chain, creative communications programs, and in catalyzing the initial training of marine police units who are beginning to function in a way that is welcomed in fishing communities. Hen Mpoano has been in continual dialogue with the World Bank representatives and Fisheries Commission as the West Africa Regional Fisheries Program was finalized. WARFP is currently in the start-up phase. It is expected that this 5 year (USD \$53 million) investment will adopt and carry forward many of the Hen Mpoano initiatives in fisheries education, communications, training, data collection, fisheries co-management, MPAs, and enforcement and extend them into the other coastal regions of Ghana

Focal Area Actions

The focal area actions were aimed at addressing the spectrum of critical coastal issues that face Ghana's coast. While many of the actions involved spatial planning and capacities in local government to develop and enforce zoning regulations for future development projects. Other actions were aimed at maintaining critical ecosystems and addressed social vulnerability and resilience issues that feed poverty and food insecurity.

Shama District

The Shama District is an early adopter of integrated coastal zone management through coherent spatial planning that frames bye-laws being developed on shoreline development, flood plain management and conservation of critically important wetlands. In addition, networking among local institutions has led to the creation of an early warning system for imminent flooding, the first in Ghana. The District has also modeled innovative Population-Health-Environment and livelihoods programs that can be scaled up in other Districts through other funding mechanisms.

Cape Three Points

Coastal community vulnerability and resilience assessments were completed and fully integrated into the Nzema East and Ahanta West District spatial plans. These assessments served to prioritize areas for pro-active interventions by local government, civil society groups and donors. The spatial plan also highlighted the need for "green belt" planning for the critical coastal and marine habitats that include the Cape Three Points Forest Reserve, four critical wetlands areas and marine habitats that require management in line with fisheries restoration objectives. Community based conservation programs were developed for both the wetlands and forest areas of the "green belt". Finally, engagements with large agro-industrial company – Ghana Rubber Estate Limited and its donors resulted in company donors supporting "out grower programs" for perennial tree crops that involved taking steps to assess negative social impacts and to invest in food production strategies that reduce food insecurity.

Greater Amanzule Wetlands

Similar to that of the Cape Three Points Focal Area, vulnerability and resilience assessments were completed and integrated into ongoing spatial planning for Districts of Ellembelle and Jomoro Districts. Aside from the identification and prioritization of vulnerable communities, the Amanzule wetlands landscape has been zoned for conservation purposes and this status has the endorsement of the traditional authorities. Thorough carbon stock assessments for this wetlands area containing unique peat and swamp forests will form a sustainable landscapes project for REDD+ funding and the Initiative will prepare a Project Identification Note in Year 4, the next step toward a Project Description Document. Finally, the issue of marine algae proliferation, or "green-green", has been taken up by the Guinea Current Large Marine Ecosystem Program and the Hen Mpoano Initiative has been able to fall back to an advisory and local communication role. This is a good example of how the Initiative has brought critical issue to national and international attention, catalyzed action among national institutions, leveraged funding for continuity, and transitioned coordination to partners. The final year 4 will follow this lead on several fronts.

Mid-Term Project Evaluation

USAID contracted an independent mid-term evaluation of the ICFG/Hen Mpoano Program which had the following conclusion:

The Evaluation Team found Hen Mpoano to be a very well designed and well implemented project; it has an exceptionally wide and supportive stakeholder base and is making a very positive change for the people and the governance structure of Ghana's Western Region.

The report highlighted that the Hen Mpoano is very well known and respected in the communities and districts where it has focused and has high visibility in the Western Region. While it was noted

that progress in making targeted changes and communication are evident at the regional level, fewer changes are evident at the national level, in the private sector and within the donor community. It recommended that communication products be targeted to the needs of national and international stakeholder in the final year. The project was seen to have wisely invested very heavily in capacity development and technical assistance and made a large and meaningful difference in target areas.

The Evaluation Team made five specific recommendations which have been incorporated into the Year 4 work plan for the period October 1, 2012 to September 13, 2013.

Identify and document lessons learned: "The project focus its remaining energies more on analyzing and capturing lessons learned than on new initiatives". This recommendation is addressed in a new Component 3 of the Year 4 work plan.

Communicate carefully: "Choose strategic messages, especially targeted, synthetic lessons to upper level, high visibility policy makers and decision makers. Policy briefs and white papers such as those now in progress are valuable; we think there is also a significant need for items that are shorter, more synthetic and more targeted". This recommendation is addressed in progress made in Component 1.1 and 1.2 and in a new Component 3 of the Year 4 work plan.

Empower women: "There seems to be little momentum in helping women to become more organized (e.g., help develop better markets, better products, or alternative products or marketing strategies). Capacity development within the women's communities would be a valuable contribution". This is reinforced further in the Year 4 work plan throughout Component 2 by the community level work in the three geographic focal areas.

Continue to invest in networking and relationship building: "Focus on the long term goal of Hen Mpoano becoming a self-sustaining institution in the Region. Consistent with that long term goal, communicate more effectively, especially at the regional and national levels". This is addressed in Components 1.1 and 1.2 and in the new Component 3 of the Year 4 work plan.

Think carefully about where Hen Mpoano fits within USAID: ICFG is currently funded primarily in Feed the Future (FtF) and is making contributions that will advance FtF goals. But it has activities and is making changes that cross programs. We think this analysis will be valuable because a) it will help identify the variables to be assessed during ICFG's final evaluation, b) it will provide the Mission with valuable information in support of several of its programs and c) it will influence possible future USAID support". This has been addressed through adjustments to the PMP and in the descriptions of the key activities in Components 1 and 2.

Introduction

In September 2009, USAID/Ghana and University of Rhode Island signed a cooperative agreement for the implementation of the **Integrated Coastal and Fisheries Governance (ICFG) Program in the Western Region of Ghana**. This program was planned for a 4-year period ending September 14, 2013 with an estimated funding of US\$10 million and estimated match funding support of US \$2.5 million to be provided by the implementing partners. The ICFG¹ Program locally known as "Hen Mpoano" was designed to contribute to the long-term vision that:

Ghana's coastal and marine ecosystems are being developed and conserved in a sustainable manner - the goods and services produced by coastal ecosystems and fisheries are generating a diversity of long term socio-economic benefits for coastal communities while sustaining biodiversity.

Key results articulated in the design were organized around CRC's Orders of Outcome Framework which contribute to the expected results via networking, coordination and direct implementation but not necessarily be fully or directly attributable in all cases to the Program. Summary of the enabling conditions for achieving the desired outcomes under the framework are:

- 1. The enabling conditions for a fresh and integrating approach to coastal and fisheries governance in the Western Region and at the national and regional scale are assembled.
- 2. Changes in behavior at the local and national level are supporting enhanced social and economic benefits to resource users.
- 3. Changes in behavior at the local, national and regional levels are supporting the ecosystem approach to coastal and fisheries planning and decision-making and more sustainable forms of coastal resource use.
- 4. Some examples of improvements in the quality of life and the condition of the environment may be achieved in this initial four-year Program, but no changes in fish stocks are expected.

The ICFG Results Framework (Figure 1) shows how the program goals and results link to the USAID program objectives of *Feed the Future* and *Biodiversity*.

Key Implementing Partners

The project is led by the Coastal Resources Center of the University of Rhode Island with several implementing partners including:

- Friends of the Nation an environmental advocacy group based in Sekondi, Ghana
- The WorldFish Center is an international, non-profit research organization dedicated to reducing poverty and hunger by improving fisheries and aquaculture. It has its headquarters in Malaysia and with Africa regional offices
- **SustainaMetrix** a private company based in Maryland that supports effective communications and learning-based approaches to monitoring and evaluation

¹ In this report, ICFG and Hen Mpoano are used interchangeably

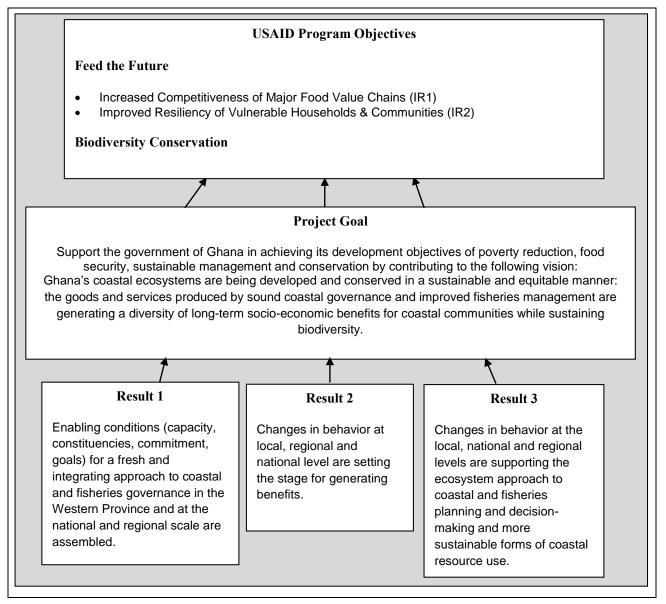


Figure 1: USAID Program Objectives and the Results Framework of the ICFG Initiative

The program has associated with many other local and international institutions that have also provided technical and training support as well as leveraged resources - the University of Cape Coast and University of Ghana; Blue Ventures, Forest Trends, Nature Conservation Research Center, Ghana Wildlife Society, Ghana Police Service, private consulting firms and US Peace Corps. The Initiative has networked with a range of institutions and other USAID programs and donor efforts including the World Bank, AFRICOM, LOGODEP, BCS, FOCUS, DFID, Guinea Current Commission and Path Foundation Philippines Inc.

Geographic Focus and Primary Beneficiaries

The project design emphasized on activities to be centered in the Western Region but acknowledged the need for higher national level coordination and also regionally where Ghana shares many fish stocks and other marine resources and challenges (like the green algae bloom menace). Within the Western Region, the ICFG Initiative focused on the six coastal districts (Figure 2) where fishing communities reside and where there are considerable ecosystem linkages between land- and seascapes.

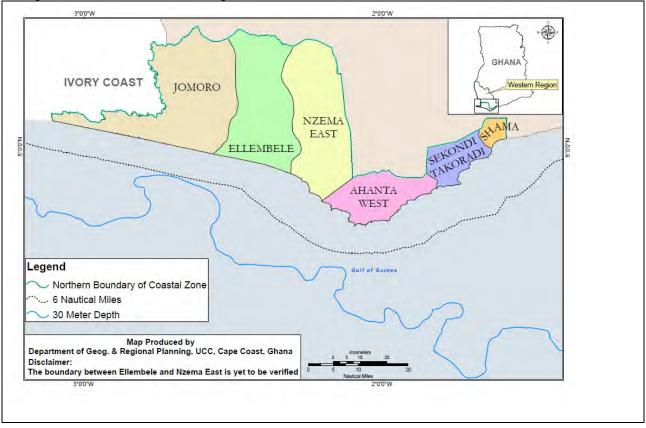


Figure 2: Map of the six focal districts of the Western Region and the adjoining seascape

Due to the integrated nature of the project, no one national agency was designated as the key counterpart. However, the most important at the national level are the Fisheries Commission of the Ministry of Food and Agriculture (MoFA), the Ministry of Environment, Science and Technology (MEST) with a host of subordinate agencies of interest [e.g. Town and Country Planning (TCPD) and Environmental Protection Agency (EPA)] and the Ministry of Local Government and Rural Development (MLGRD).

Key clients in the Western Region are the Western Regional Coordinating Council (WRCC), the six coastal districts, regional offices of Fisheries Commission and Forestry Commission. There are numerous civil society group clients and beneficiaries. These include the Platform for Coastal Communities (PCC), Civil Society Alliance for Fisheries Agenda (CAFA), Western Region Development Network of NGOs (WERENGO), Ghana National Canoe Fishermen's Council

(GNCFC) and Central and Western Fishmongers Improvement Association (CEWEFIA) - a women's empowerment group.

Overview of this Report

This Report covers the period October 1, 2011 to September 30, 2012 and follows the Year 3 work plan outline and highlights expected outputs. It focuses on activities designed to build capacity and assemble preconditions for more effective and efficient coastal and fisheries governance in the six districts and nationally with the following objectives:

- Increase political support to address the critical coastal and fisheries issues within the Advisory Council and project partners.
- Propose legal and institutional design options for nested governance that addresses priority issues in the coastal land- and seascape of the Western Region.
- Instigate improvements in district and regional level information systems for coastal and fisheries management by increasing the knowledge, skills and attitudes of public officials, and community level stakeholders.
- Increase the capacity of regional institutions such as the University of Cape Coast and NGOs to provide training, extension and applied research services.

1. Designing Options for Nested Integrated Coastal and Fisheries Governance Systems

The Year 3 activities are organized to reflect the different roles and responsibilities of the districts, region and national government in supporting Integrated Coastal Management (ICM) policies. The design of a nested governance system for coastal planning was targeted at capacity building for key constituency groups to ensure that there are Ghanaians with capacities and commitment to carry forward the design options and opportunities for nested governance.

1.1 Options for a Nested Coastal Governance System for the Western Region

The objective was to obtain a governmental commitment for a nested system of governance in the Western Region that provides a model of a future ICM program for Ghana.

1.1.1 Working Paper on Options for a Nested Coastal Management Program

A draft *Working Paper*, model for a '*Nested Marine and Coastal Resources Management Program for Ghana*' has been prepared and discussed with a variety of stakeholders including senior level personnel of the Ministry of Local Government and Rural Development (MLGRD), National Development Planning Commission (NDPC), the ICFG Advisory Council, some district coordinating directors and local government practitioners. The consultations allowed for stakeholder refinement prior to a wider public communication.

Planned Outputs	Accomplishments
Working paper drafts - Options for a	Proposal finalized for publication in the national newspapers in
Decentralized National Coastal	November 2012 before final submission to government (Office of the
Management Program	President, NDPC, Ministry of Local Government and Rural
	Development, etc).
Identification and discussion of options	Paper widely circulated and reviewed by many stakeholders. Several
through an inclusive consultative	national round-table discussions already held, more will be completed
process	after the publication in the press to receive final inputs for a more
	refined document.
ICFG Advisory Council working	Four Quarterly Meetings held to advise, discuss and orient the activities
sessions and program review meetings	of the ICFG Initiative and also discuss the draft papers.

The table below outlines the planned outputs and accomplishments under Activity 1.1.1

 Table 1: Nested governance

The document is propositional and will be submitted to the government for consideration. Figure 3 is the proposed structure for a nested governance system for coastal and marine governance for the Western Region (and Ghana).

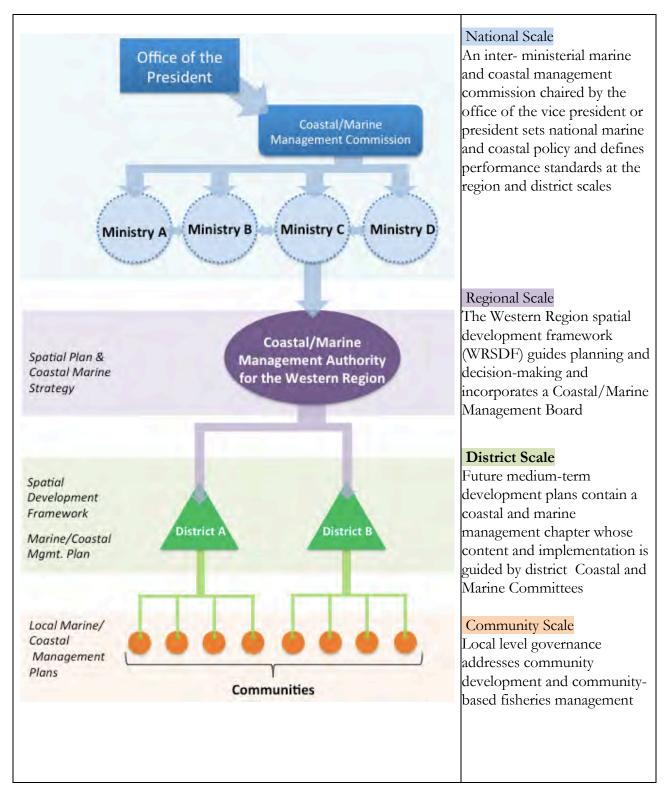


Figure 3: Draft proposed nested marine and coastal governance system in the Western Region

1.1.2 Policy Briefs on Key ICM Issues

A set of 7 short issue briefs have been prepared and circulated internally prior to their release to targeted audiences for their inputs in early Year 4. The issue briefs covered two thematic areas - coastal and fisheries issues.

Planned Outputs	Accomplishments
Policy br iefs a nd presentations t o Advisory Council	Seven policy briefs have been prepared, 5 completed and 2 at the review stage.
Outreach m aterials based on policy briefs	The nested governance and associated policy briefs have been finalized. For many of the briefs, events will be organized to bring attention to the issues as well as what Hen Mpoano is doing on-the-ground.

Table 2: Policy briefs

Coastal

- Shoreline Erosion and Coastal Hazards –Threats and Responses.
- Climate Change and Community Capacity to Adapt
- Conservation of Coastal Wetlands
- Adequate Water for All

Fisheries

- Compliance and Enforcement in Ghanaian Fisheries
- Towards a Nested Governance System for Ghana's Coastal Fishery
- Fisheries Information System

The publication and circulation of these briefs in the local press has been delayed until the first quarter of Year 4 to allow for the final review and release of the proposal on 'options for a nested marine and coastal management program'.

1.1.3 Support for the Establishment of Marine Protected Areas

Ghana has no Marine Protected Areas (MPAs) although there existed a dormant Inter-Ministerial Committee (IMC) which was revived and supported by the ICFG. A small working group within the IMC was tasked to develop scenarios for the establishment of an MPA and a consultant identified to provide recommendations for moving it forward.

Planned Outputs	Accomplishments
Finalize preferred scenarios and Terms of Reference for future MPA Management Authority and regional management units	Scenario finalized and a consultant identified to draft recommendations for governmental endorsement and orienting both the World Bank WARFP and GCLME investments on MPAs. Proposal will be submitted to government after January 2013.
Presentations to relevant government agencies	Draft proposals received general support from MEST, Fisheries Commission and Forestry Commission.
Workshop to develop consensus among agencies	Delayed pending start-up of WARFP and new government in 2013.
Drafting of policy/legal instrument for creation of MPA Management Authority	Delayed pending start- up of WARFP and new government in 2013
Action plan for capacity building of the future authority and training for future MPA	Action plan drafted by consultant Dr. Paul Siegel.
MOU signed with GCLME and relevant government agencies on MPA support program	CRC catalyzed integration of MPAs as one of the 5 components of the GCLME action plan 2011-2016.

Table 3: Support for the Establishment of Marine Protected Areas

Various governmental institutions including Fisheries Commission and Wildlife Division have agreed that the MPA development processes could start at the local level using the community based natural resources management (CREMA) legislation as the basis for establishing MPAs. It is expected that fresh impetus will be given to the process in the coming year (2013) by the new government.

CRC continued to build the foundations for the MPA take-off. It engaged Blue Ventures (an international underwater research NGO) to study and provide a baseline information for underwater and sea floor conditions of potential areas for MPA in the Western Region. The report of the study - *The Nearshore Rocky Reefs of Western Ghana, West Africa: Baseline Ecological Research Surveys* has been completed. Box 1 presents some conclusions and recommendations of the study.

Box 1. Conclusions and Recommendations of the Nearshore Reef Habitats (NSRH)

Effective management of Nearshore Reef Habitats is critical to restoring key functional groups and safeguarding ecosystem resilience.

An ecosystem-based management approach involving a combination of a network of small marine protected areas (MPAs) with multiple use zoning is suggested as the best model. The network of MPAs should include core 'no take zones' at their centre, surrounded by temporary closures and gear restriction zones. Core no-take-zones will allow full recovery of populations, increasing the size and biomass of fish stocks. In the long term this will also benefit adjacent common use areas through supply of adult fish and larvae for recruitment (spill-over effect).

Fisheries management through gear and catch restrictions will limit overfishing and habitat destruction, thereby promoting recovery of fish biomass, restoration of habitat, enhancement of ecosystem resilience and sustainability of fisheries.

An integrated ecosystem approach should be followed as far as possible by considering spatial links and interconnections of NSRH with other adjacent environments so that maximum management benefits can be achieved.

The rapid coastal population growth and urbanization of Western Ghana means that natural resource conservation and management will require high levels of integration and the involvement of multiple and diverse stakeholder groups. Co-management of MPAs with primary stakeholders such as local village councils, chief fishermen and women, fish-traders, should be followed to help ensure that management plans are met with high levels of compliance by local communities and other stakeholders.

In addition, responsible fisheries management will provide an opportunity for Ghana to safeguard its traditional coastal culture and fishing heritage.

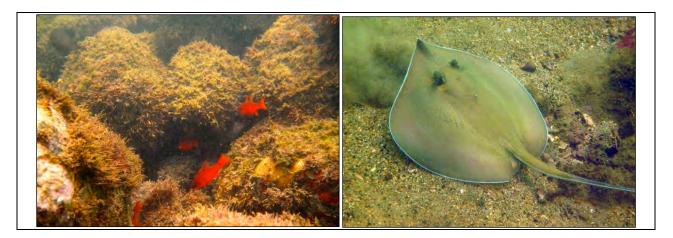


Figure 4: Underwater pictures of near shore reefs habitats around Cape Three Points

1.1.4 Piloting a Regional Coastal Commission

The rapidly evolving initiatives in the Western Region required that the ICFG proposal to pilot a regional coastal commission had to be adjusted and adapted to the new initiatives. This in effect reoriented the planned outputs of this activity (Table 4).

Planned Output	Accomplishments
Develop road map and Terms of Reference through regional forums	This is morphing within the Oversight Committee for the Western Region Spatial Planning Development Framework and the Task Force for the Western Corridor Development Authority (WCDA). Within this initiative, CRC and several of the Hen Mpoano Advisory Council members are permanent members.
Official creation of the Coastal Commission	See above, this could not happen given evolving initiatives in parallel
Action plans for the Commission and for capacity building by ICFG and Coastal Commission	This has been done as part of the study tour to the Philippines
Statutes and Terms of Reference for a regional Coastal Commission	Delayed but part of the nested governance issue brief
Action plan for the regional coastal commission	Not yet defined.
Capacity building and support program developed under an MOU with GCLME	Joint action plan developed with GCLME. CRC played an important role by providing the state of knowledge and important information into developing GCLME's action plan for addressing the algal bloom menace.

 Table 4: Piloting a Regional Coastal Commission

The Hen Mpoano Advisory Council (see Annex E for membership) continued to advise on how to move the ICFG Program forward and orientations on the necessary processes for the establishment of a coastal working group which will address issues of development along coastal Western Region. This was seen as a possible legacy of the Advisory Council.

The Norwegian Agency for Development (NORAD) began funding of the "Oil for Development Program Agreement" to assist with the Western Region Spatial Development Framework (WRSDF) oversight committee tasked by the Office of the President of the Republic of Ghana to provide a conceptual framework for the establishment of a Western Corridor Development Authority. CRC has made important contributions particularly in the management and planning strategies for the coastal zone and shorelines. CRC and TCPD developed an MoU to collaborate on the implementation of the WRSDF activities.

1.1.5 Study Tour to the Philippines on Marine and Coastal Management

This activity was planned to allow selected stakeholders in the Western Region to draw lessons, both positive and negative, from coastal management practices of similar institutions in other countries. Table 5 outlines the planned outputs and accomplishments.

Planned Outputs	Accomplishment
Ten (10) ICM leaders trained	Eight (8) l eaders d rawn f rom va rious i nstitutions – government, district assembly, traditional authority, private sector and civil society participated in a 10 day study tour.
Trip re port and presentation on observations, lessons and implications for options for regional coastal commission and D istrict-level integrated coastal and fisheries governance	Trip report 'Coastal and Fisheries Management: the Philippines Experience' has been prepared. Participants have been using the experience and knowledge to develop initiatives in the region and districts (see narrative below).

Table 5: Study tour to the Philippines on marine and coastal management

The PATH Foundation Philippines, Inc. (PFPI), in collaboration with CRC-URI coordinated a study tour meant to show examples and share lessons regarding the Philippine experience on institutional arrangements, cross sectoral and inter-agency coordination as well as roles and challenges with respect to:

- decentralization of coastal and fisheries planning and management (including law enforcement) functions from the national to the local level
- inter-local government unit (LGU) agreements in law enforcement and establishment/ management of Marine Protected Area (MPA) networks

Observations by the participants included identification of key factors that contribute to the success of coastal and fisheries management in the Philippines which include among others:

- people's participation and ownership of plans/programs
- independence of mayors and governors from central government in making coastal/ fisheries management decisions

Eight senior level Ghanaians (see Annex F) participated in the tour from May 12 to 20, 2012.



Figure 5 Some activities and observations of the Philippines study tour participants

(Clockwise) Study tour participants visiting an MPA in Philippines; Group photo with local Fish Wardens (Bantay Dagat) who provide security for the MPA; A local government ordinance which bans the use of plastics in the district of Bacoor; An interaction with the Mayor of Bacoor (President of the League of Mayors in the Philippines)

An action plan was drawn to use the lessons learned as advocacy tool for reform in coastal and marine governance in Ghana. Study tour participants made presentations and had discussions with district and national level audiences on lessons learned from the tour. In the Ahanta West District, through the advocacy of the District Coordinating Director (a tour participant) a process was begun to establish a coastal and fisheries council with membership selected from across institutions within and outside the District Assembly.

1.1.6 Strengthening t he C enter f or C oastal Ma nagement a t University o f Cape Coast

The Center for Coastal Management (CCM) at the University of Cape Coast - within the Department of Fisheries and Aquatic Sciences (FASD) continued to receive assistance from the Hen Mpoano Initiative to develop an action plan for a regional hub to train coastal managers and provide support and advisory services to programs in Fisheries, ICM and District/Regional planning.

Planned Outputs	Accomplishments
CCM Vision Development workshop and Action Plan	New Charter for CCM was completed and action plans for the operation of the Center developed
Piloting of wetlands monitoring program	Wetland monitoring program initiated in the Ahanta West District
Completed curriculum and monitoring programs for the conservation of selected wetlands in the three focal areas – Shama, Cape Three Points and Amanzule	Curriculum for junior high schools completed and there is agreement with the G hana E ducation S ervice (GES) to pilot it.
A second climate change short-course completed for professionals working on ICM	The s hort co urse w as c ompleted f or 1 1 senior n ational level o fficials fr om ND PC, M LGRD, NADMO and TCPD
Summary coastal issues profiling papers for 5 districts	Completed and integrated into 3 of 5 district spatial plans.
Eight completed MS Thesis and two in preparation	Four s tudents' theses c ompleted. 5 i n p reparation including 1 PhD (see A nnex J for s ynopsis of students' theses)

Table 6: Strengthening the Center for Coastal Management at University of Cape Coast

Through Hen Mpoano support, the Center:

- completed a new charter to guide its operations
- finalized a curriculum for schools on wetlands conservation/education and in agreement from the GES to pilot same in selected junior high schools in the Ahanta West District
- advised on research on fish biodiversity in estuaries and fish identification
- initiated the conduct of a wetland mapping exercise for four wetlands in the Ahanta West District

Also, the CCM was supported to run the second short course on climate change in 2012 for 11 senior level national officers from the MLGRD, NDPC, NADMO and TCPD. The goal was to generate an enhanced understanding of the impacts of climate change in Ghana and methods for assessing physical and social vulnerability and possible adaptation options. Over the life of the project, 6 students from the FASD, 5 at the MSc level and 1 PhD have benefitted from Hen Mpoano support.

1.1.7 Training for Regional and District ICM and Fisheries Professionals

CRC s igned a n M oU w ith the TCPD t o pi oneer a training p rogram f or t he pl anners and technicians from the six coastal districts on the use of GIS to generate district spatial, structural and local plans. This program, the first of its kind used the new spatial planning methodology - Land Use Planning and Management Project (LUPMP).

Planned Outputs	Accomplishment
District and Regional ICM training	Training programs have been held for staff of the district assemblies, Fisheries Commission and core Hen Mpoano Staff. Targeted long-term training for TCPD district and regional personnel completed on spatial planning and use of GIS tools.
District level hazards and resilience surveys	Completed
Training of TCPD personnel on GIS	21 District and Regional Staff of the TCPD completed training programs in GIS
Purchase of equipment for districts and region	Computers, accessories and software were procured and distributed to the physical planning departments of 4 assemblies in the target districts and the Western Regional Fisheries Commission
Workshop on mainstreaming ICM	Completed
Award of research and degree grants	Five students received grants to pursue various post graduate degrees in ICM.
Professional training at URI	University of Rhode Island, USA. Two graduate students (Justice Mensah and Adiza Owusu Aduomih) and 4 professional Alex Sabah, Dominic Dadzie, Patricia Mensah and Charity Kwamla
Summary coastal issues profiling papers for 5 districts	Coastal Issues profiling was completed for five of the six districts. STMA was not considered as it is a heavily built coastal environment

 Table 7: Training for Regional and District ICM and Fisheries

GIS Equipment and Software Support

A r efurbished l aboratory w ith equipment dona ted by C RC t o t he T CPD R egional O ffice i n Sekondi s erves a s a hu b f or I CT training. The c enter ha s been us ed to train 11 s taff of t he regional Fisheries Commission. CRC has also supported the six coastal districts with computers, printers and accessories (seven d esktop co mputers w ith G IS sp ecifications an d Mapmaker software). In addition, 2005 aerial p hotos, t hree (3) a erial phot os (2010 ve rsion) of di fferent resolutions covering the areas between Nzema East and Shama Districts were acquired to assist in resource mapping and change analysis.

Of p articular in terest is the to wn of A kwidaa in the A hanta W est D istrict, where t he Hen Mpoano In itiative p lans (to gether w ith the A hanta West D istrict Assembly) to d esign a community l ocal p lan in Y ear 4. This initiative w as s upported in part by t he U SAID funded LOGODEP.

Box 2. Using GIS to develop local planning schemes

All 21 TCPD persons who benefitted from the GIS training sessions have abandoned their drawing boards, rulers (cartographic tools) and paper carbons formerly used in designing local plans and schemes in their offices and were now using their acquired skills in computerized GIS system and spatial data to preparing local schemes and plans.



Figure 6 Products of the GIS Training

(A) Digitized planning scheme. (B) National Officers of the TCPD Inspecting Products of the Trainees

Multi-stakeholder Spatial Planning Effort

In or der to ha rmonize a ctivities of s takeholder i nstitutions i n spatial pl anning, a m ultistakeholder w orkshop or ganized by L OGODEP br ought t ogether C OWI/NORAD, J ubilee Partners, the Consortium, Spatial Dimensions, TCPD, NDPC, Traditional Authorities and the six District A ssemblies. T he p urpose was t o d raw o n sy nergies and ex periences o f t he v arious initiatives to avoid duplication of effort and resources in the Western Region. While for example LOGODEP supported the Shama District with some computer equipment, Hen Mpoano focused on Nzema East, Ellembelle and Jomoro Districts.

1.1.8 A Coastal Fund

In Year 3, CRC proposed the establishment of a "coastal fund" to leverage private sector (CSR) funding to be accessed by the districts to support projects in their MTDP. CRC provisionally slowed setting up a fund due to similar evolving initiatives in the region.

COLANDEF (a national NGO) received a STAR-Ghana funding to set up a civil society platform to work with the district assemblies towards achieving similar objectives. Thus, the coastal fund idea gained impetus with the convergence of DFID partnership with the government of Ghana to support developments related to oil gas. There were discussions between CRC, DFID, LOGODEP and COLANDEF to fashion out how to better engage corporations in the use of their corporate social responsibility (CSR) funds.

Planned Outputs	Accomplishments
Study tour of coastal fund to Tamale	Not initiated due to evolving initiatives in the Western Region, moved forward Year 4 of the project
Multi-stakeholder workshop on coastal fund establishment	Several workshops held under a MOU with USAID LOGODEP program and a local NGO COLANDEF and DFID
Creation of Coastal Fund	Process initiated but slowed down to synergize with evolving initiatives from COLANDEF and DFID
Documents detailing the set-up of a coastal fund to facilitate public-private partnerships	Several meetings held with local partners and DFID. The proposed establishment is currently being designed by DFID with CRC and FoN support.

Table 8: A Coastal Fund

LOGODEP and COLANDEF continued to develop the civil society platform at the base in the six coastal districts while CRC collaborated with DFID on the establishment of the "coastal foundation". This is in harmony with discussions and preliminary planning for a marine and coastal commission and a future regional development authority. Also, DFID plans to support common ideas coming from CRC and NORAD funded WRSDF. DFID expects to invest upwards of 5 million British Pounds in this program.

1.1.9 Communication and Liaison between Regional and National Scales

One of the criticisms made in the Hen Mpoano mid-term evaluation was the apparent low level communication to share lessons and successes with national institutions and donor agencies in Accra, although such arrangements were part of the Year 3 work plan.

Planned Outputs	Accomplishment
Update of Communications Strategy and Associated Training	The H en M poano c ommunication s trategy doc ument wa s u pdated t o include new learning
Video Training and Production	15 people (Hen Mpoano staff and partners) were trained
Rural Radio Program	Fifty two episode radio drama and magazine show airing on 3 local FM Radio stations
Special Events and Forums	The Hen Mpoano Initiative and Partners participated in two public events - Farmers Day 2011 and World Environment Day 2012 in the Ahanta West District

 Table 9: Communication and liaison between regional and national scales

Since the evaluation, there have been improvements in communications with national level institutions. Worth mentioning were highly visible events by Hen Mpoano such as the 2nd National Fisheries Dialogue, Marine Police training, presentations at the Guinea Current Commission meetings on the Algal Bloom menace and active participation and presentations made at the national policy fair.

Biribireba Radio Drama

The Biribireba serial is a year-long, 52-episode entertainment-education program targeted at behaviour change in coastal communities. The drama addressed pertinent coastal issues in an educative, humorous and interactive manner. Three local FM Radios GoodNews FM, Ankobra FM and Shama Radio aired weekly episodes. Key messages of the drama included:

- Sustainable fisheries and food security
- Responses to climate change vulnerability
- Protection of wetlands and coastal biodiversity (ecosystems)
- Integrated Coastal Management
- Population Health and Environment (PHE)
- Compliance and Enforcement of Fisheries Regulations

During the period, Ms Linda Bruce from the CRC's BALANCED Program based in Washington DC; Brenda Campos and William Banham of PCI-Media Impact, based in New York, a copartner on the Hen Mpoano Initiative visited and reviewed the content of the episodes. They also held discussions with the script writer and producer on good story lines. A strong in-country capacity has been built in production and broadcast of the drama. The drama has the potential to address new sets of issues/messages as Hen Mpoano enters the critical final year of the current funding.

Box 3. Echoes from Biribireba

A random survey revealed that Bibireba has increased the awareness of fisherfolk and coastal dwellers in the Western Region about community, environmental and fisheries issues. Below are some of the echoes from the field.

A taxi driver from M arket Circle to Adiembra one T uesday evening had this to say a bout the drama on GoodNews FM. "Surely, every Tuesday evening I try not to miss any episode. It is very educative, especially, the a spect that talks a bout illegal and dynamite fishing. I wish by the time the program ends, all fishermen practicing illegal fishing will put a stop to it".

Justice Mensah, a Master's Student from URI-USA, was in Ghana for data collection in the Jomoro District. He chanced on a woman who says she does not miss Biribireba on Ankobra FM. Justice asked for lessons she has learned from the drama and characters she likes the most. She said; "I have learnt from the drama that I should give my children formal education or send them for vocational training, if possible. I like Egya Bentum, Aunt Aba, Kweku Anokye and Officer Bob because they are strong characters that inspire me".

Ebo Hackman, Biribireba host on Radio Shama shared some experiences. "The program is an interesting and insightful one which promotes a wareness on coastal issues and e ducates fishing communities. The program should have come on long ago. It has increased our listenership and I hope it will run for a long time.

Selected remarks from callers.

- The program is educative and entertaining; I have learned a lot and want the story to continue.
- I want some more discussions on the illegal fishing methods and associated dangers in order to educate our fishermen and hope that the program will help change the attitudinal be havior of. fishermen
- The program is full of humour that makes it interesting because as we laugh, we learn.
- We are happy to see some of the cast changing from negative to positive characters.

Video Documentary

To highlight the contribution of fishers to society, the ICFG Initiative commissioned Creative Storm, a local media house to produce a ten-minute documentary titled "*Empty Nets: Challenges of Ghanaian Fisher-folk*". The documentary has been screened in a number of coastal communities and also during capacity-building workshops. Reactions to the documentary have been very encouraging and plans are afoot to screen it on national television.

Training on the Production of Short Video

A five day video training workshop co-facilitated by Mike Schuh² and Creative Storm was held for the Hen Mpoano team and selected MDAs, CSOs and the private sector. The training equipped the 15 participants (see Annex J) with knowledge and skills to tell stories visually and also to be good story-tellers. Consequently, the Communication Officer of CRC underwent a two-day attachment at Creative Storm in Accra for further skills in editing and rudiments of video production.

Video production on mangroves

Hen Mpoano continued to campaign on the benefits of wetlands resources in CREMA communities. A two-man Hen Mpoano team who benefitted from the training visited other wetland communities in Greater Accra and Volta regions and produced a documentary on best practices on mangrove conservation and management. The documentary which highlights the benefits of traditional mangrove conservation has been screened and discussed in the CREMA communities in the Ahanta West District. The documentary rekindled efforts (revisiting traditional norms) at protection of mangroves and wetlands.

Box 4. Video production making impacts in communities

The knowledge and skills training in photography and video making is registering positive impacts in the communities. During the usual community education on mangroves, an in-house produced video documentary was screened. At Asemkor, a community member noted:

The movie has really healed us as a community. We have over the years used the mangroves as fuel wood and sometimes for building materials for our houses, huts for the women for fish-smoking and other domestic purposes.

The video shown tonight has become a great eye-opener to the people of this village. We have always taken the benefits of mangroves and wetlands for granted. That is the reason why we don't get crabs and other fishes these days and the lagoon keeps shrinking. We thought the gods were angry with us.

As an opinion leader of this community, I am going to ensure that no one, I mean no one cuts not even a piece of this special tree (nga-teke) for anything. I am going to admonish the leaders of the various clans to warn their subordinates to desist from the practice henceforth.

 $^{^2}$ Mike Schuh is a faculty member, US National News Press Photographers Association and news reporter for Baltimore Television

Climate change adaptation video

In a separate initiative a 5 minute video "Climate Change Adaptation for the Coastal Communities of Ghana's Western Region", featuring natural hazards and climate adaptation issues, was released on YouTube in April, 2012. The video has received more than 400 online views to date. It has also been presented at Hen Mpoano training events,

Faith Based Training

Under a collaborative agreement with A-Rocha, a Ghanaian chapter of UK based Christian conservation NGO, support for faith based leaders on conservation and stewardship teachings continued. Two-day training programs were held in each of the six districts for Christian, Muslim and traditional faith based leaders. Associations of these leaders have been established in all six districts. A-Rocha has planned to establish an office in the Western Region to support the networks and also to support wetlands conservation programs in the Ankobra river delta.

Inter-Faith Eco-networks

As part of the partnership, a program dubbed "faith in action" was continued for the same faith leaders to enable them use biblical, quranic and traditional conservation examples to stimulate their congregation/followers. A-Rocha produced a number of information, education and communication materials to support teachings in churches, mosques and communities. The acceptance of the program by the various faiths is overwhelming. The Eco-networks have developed their action plans and A-Rocha was considering modalities for supporting their activities.

National and International Events Celebration

World Environment Day

The 2012 W orld Environment Day (5th June) was celebrated in 4 co astal communities in the Ahanta W est D istrict to m obilize c ommunities for w etlands c onservation. The H en M poano adopted theme for the festival was "*Healthy Wetlands: More Fish, More Food*". The occasion was marked over a one week period with activities including a football gala competition, video shows, r ural dr ama and a quiz c ontext. A grand dur bar of the chiefs and pe ople of the four communities climaxed the celebrations with a call on the communities to conserve wetlands.

Farmers Day

Hen Mpoano Initiative together with two of its small grants beneficiaries (OLIVES and Merhans Foundation) participated in the Ahanta West District celebrations of the 2011 Farmers Day and exhibited chicken, grasscutter and rabbit projects, and pictorial display on fish, food security and livelihoods. Visitors to the exhibition encouraged Hen Mpoano to extend the small grants support to more households.



Figure 7 Sample football jersey donated to communities for the World Environment Day

1.2 Developing Nested Fisheries Governance in the Western Region

This activity was designed to develop options for alternative approaches to integrated fisheries governance in the Western Region through working with stakeholders to develop bottom-up approaches to compliment policy making and to further develop options for small-scale fisheries management units. Year 3 led to strong momentum based upon the information gathering and synthesis that has already taken place at the community level, engagement with key stakeholders in capacity building and dialogue, and developing the 'boundary institutions' that are critical for information flows in multi-tiered governance systems

1.2.1 Key Messages for Diverse Stakeholders

This task involved the development of a series of issue briefs (see 1.1.2) that summarized learning from the pilot activities.

Continued fishing with prohibited gears (especially monofilament nets) and other unorthodox methods led to clashes between fishers and a government Task Force enforcing the Fisheries Regulations in some communities. It became apparent that the ecological justifications for the ban of monofilament nets was not clearly understood. As a consequence, Hen Mpoano conducted a study in two fishing communities with the following conclusions:

- monofilament nets were affordable and readily available on the market
- approved nets were 10 times more expensive
- monofilament nets catch comparable amount of fish as approved nets
- fishers were not aware of the negative impacts of monofilament nets on the fishery.

Planned Outputs	Accomplishments
Issues brief on gill nets	Drafted** but mass circulation delayed
Issue brief on data systems and effort	Drafted
Scientific paper draft on effort creep	Drafted and under peer review
Issue brief on nested governance structures	In process of discussion in community and district for a
Issue brief on catch and effort	Drafted
Community materials on governance structures	Developed and being used in community for a
Donor stories (for USAID) on stakeholder engagement in dialog process	Several stories developed in Year 3, notably on stakeholder engagement on enforcement and the prosecution chain

 Table 10: Key Messages for Diverse Stakeholders

** The circulation of the drafted issues briefs has been delayed until the Nested Governance Proposal (see section 1.1.1) has been published as the first in the series of publications in the national press

Also, the Initiative carried out a global review on the use and implications of monfilament gillnets in open waters. The report '*Global lessons and information to assist with monofilament gill net management in Ghana*' has been shared with relevant stakeholders.

Districts Fisheries Communications Fora

A series of fora held across the six Districts Assemblies communicated issues of concern at the beach level to help bridge identified gaps between the fisherfolk and the Assemblies and other institutions (Fisheries commission, MoFA, Navy, Police, etc.). As a consequence, three districts assemblies mandated some sub-committees of the assemblies to address fisheries issues. Hen Mpoano met with and sensitized members of the subcommittees on the fisheries law and regulations to aid their deliberations.

1.2.2 Building Informed Management Constituency

Hen Mpoano created or supported existing institutions to build mechanisms to ensure linkages between these institutions at the local, regional and national levels. These institutions include the Fisheries Commission, Ghana National Canoe Fishermen's Council (GNCFC-WR), and Fisheries Working Group (FWG), Platform for Coastal Communities (PCC), Fisheries Alliance (CAFA) and Fisherfolk Communicators. Table 11 outlines the planned outputs and accomplishment.

Ghana National Canoe Fishermen's Council

The GNCFC-WR was reorganized to enable it better contribute towards resolving the numerous issues confronting the canoe fishermen. A two-member (all female) committee was tasked to ensure representation of women to positions as per their constitution. Also, the GNCFC-WR was assisted to access 56,000 Ghana Cedis funding from the Business Sector Advocacy Challenge (BUSAC) for advocacy and education on voluntary compliance. Meanwhile, 30 members of the GNCFC were trained in advocacy skills. The training was facilitated by BUSAC accredited trainers.

Planned Outputs	Accomplishment
Develop detailed annual plan for capacity building	Training programs held for stakeholders to improve their capacity to support the objectives of the Initiative (see PMP in Annex C)
Convene meetings with Year 2 study tour participants to consolidate learning and prepare inputs for governance dialog	Through various capacity building trainings study tour participant now double as fisheries communicators and working with Hen Mpoano in the coastal communities
Detailed planning and formulation of approach for community level for a	Twelve (12) fisherfolk leaders were selected, trained and supported to communicate and educate their communities on contemporary issues of concern in the fisheries sector
Community fora conducted	Six community for were conducted in selected fishing communities to educate fishermen on the fisheries laws and compliance issues.
Study tour conducted	Study tour for youth and women was not initiated
Training module designed and presented	Completed
Gap analysis to review adequacy of existing institutions to support adaptive governance	Ongoing
Act on outcomes from governance dialog	Completed
Refine indicator analysis to provide specific data required in the redesigned governance system	Ongoing
Continued support for Fisheries Alliance, FWG,GNCFC and PCC	Fisheries Alliance advocated for good governance in the fisheries. FWG endorsed by Fisheries Commission and played advocacy roles at the Western Region and national level GNCFC reviewed their constitution and prepared roadmap to participate in emerging nested governance system. Fisheries communicators trained to support community education PCC identified and strengthened institutional linkages

Table 11: Building Informed Management Constituency

Platform for Coastal Communities (PCC)

PCC is an amalgamation of civil society groups, created with the support of the Hen Mpoano Initiative for advocacy on sustainable marine management/development in coastal communities. The Platform was inaugurated by the Western Regional Minister, in December 2011 with interim executives and 5 zonal support structures. The establishment of the zonal offices was supported with a Hen Mpoano Small Grants facility. LOGODEP also supported their organizational development. PCC has been in the forefront of advocacy for:

- effective and adequate supply of potable water for the STMA and surroundings districts
- interventions to halt pollution from illegal mining in the River Pra.

Fisheries Commission

Hen Mpoano continued to work with the Fisheries Commission at the regional and national levels. The Fisheries Commission endorsed the Fisheries Working Group and supported the training of institutions along the prosecution chain for fisheries law enforcement. Also, the Commission assisted with organizing the national fisheries dialogue. Hen Mpoano provided varied assistance to the Fisheries Commission including capacity building for staff, donation of computer and safety equipment as well as refurbishment of parts of the regional offices. In August 2012, CRC sponsored the Western Regional Director of Fisheries; Mr. Alex Sabah to a two-week fisheries leadership course at the University of Rhode Island.

Western Region Fisheries Working Group

The creation of the Fisheries Working Group (FWG) by the Hen Mpoano Initiative with approval from the Fisheries Commission has served as a forum for dialogue on fisheries issues in the Western Region. She engaged with the Chairman and Director of the Fisheries Commission to discuss pertinent issues in the sector, principally on alternative structures and roles for comanagement at the community scale. The FWG also made important inputs towards good governance in the fisheries sector, proposing strategies for intensification of education of fishers to encourage voluntary compliance of the fisheries laws. They have documented and contributed suggestions to the Fisheries Commission and the EPA on safety measures in pre-mix distribution to avoid fire disasters, like it happened in Axim.

Fisherfolk Communicators

Twelve (12) fisherfolk communicators were trained in fisheries communications for community advocacy. An important observation during community outreach was that the fisherfolks were very comfortable and enjoyed listening to their kith and kin.

Targeted Community Engagement: Youth Workshop

The study tour to Senegal highlighted the importance of youth and women involvement in fisheries management. A similar observation was highlighted working with fishers of Dixcove. A strategy for a participatory digital story telling workshop was put together. The objective of the workshop dubbed "Hen Dzi" (Our Voice) documented issues around fisheries in Dixcove from the perspective of young people. Participants at the workshop included fishermen, fishmongers, students and teachers. The event was an opportunity to explore the issues and learn advocacy skills.

1.2.3 Governance Dialogue Process

Hen M poanot hrough s takeholder participation s ought to i nitiate discussion t owards t he development of a legislative initiative on co-management. Table 12 outlines the planned outputs and accomplishment in the dialogue process.

Planned Outputs	Accomplishment	
Legal and institutional	Underway as a basis for a legislative initiative in the fisheries	
analysis completed	sector. This process will be completed in Year 4	
Consultative selection of	Completed and enabled a range of fisheries sector interests	
dialog participants	(local, n ational a nd in ternational) to participate in Fisheries	
	dialogue	
Background papers	Done	
completed		
Dialog held	Second national fisheries dialogue in April 2012. Proceeding	
	of the dialogue completed and circulated	
Policy brief draft for	On hold	
circulation		
Policy brief released	On hold	
Draft scientific publication	Under review	
on consultative processes		

Table 12: Governance Dialogue

A second national fisheries governance dialogue held in April 2012 was and attended by diverse stakeholders, including parliamentarians, national and international governance researchers and fishmongers. The dialogue was aimed at generating a shared understanding of critical lessons and pathways for fisheries co-management success in Ghana. It was a direct response to the call from both fisheries communities and the Government of Ghana for a change from the way fisheries resources are currently managed. Key issues for co-management synthesized included the need for:

- a system of fisheries governance where community based management units are wellconnected to higher levels of management
- chief fishermen/women be central in any co-management arrangements
- a shift in skills and capacity for both government and communities
- a legal framework to support co-management

The dialogue highlighted common grounds that exist between fisheries stakeholders in their understanding of the need for reform and continuous dialogue to ensure that the voice of all stakeholders is considered in the process of designing and implementing a legislative instrument for co-management system for fisheries in Ghana.



Figure 8 Participants at the Fisheries Dialogue

1.2.4 Promoting Compliance and Enforcement of Fisheries Laws

Since the passing of the Fisheries Regulations LI 1968 of 2010, the Chief Justice of the Republic of G hana d esignated so me circuit c ourts to adjudicate cases on f isheries v iolations. The H en Mpoano Initiative in March 2011 used the opportunity offered to train and enhance the capacity of institutions in the prosecution chain in the Western Region.

Planned Outputs	Achievement
Training of institutions along the fisheries prosecution chain for the establishment of a functioning environmental court for WR.	The performance of actors along the prosecution chain was reviewed in January 2012. A high success rate in prosecution of fisheries violations was attributed to high level of collaboration.
Community engagements on compliance and enforcement.	A series of durbars have been held across fishing communities in all the six districts.
Piloting co-management associations and mobilizing fisheries voices at the district scale.	Process began with support for the Dixcove Fisheries Co- management Forum
Tracking fisheries prosecution in Ghana authorities	Underway in the Western Region and comparing with prosecution success in the other coastal regions
Continued support for the Fisheries Commission WR and FWG.	Continued support for the Fisheries Commission and the FWG
Training of marine police units	A two-week training on social policing for 25 Officers from the Marine Police unit completed.
Development of CWOW program	Program with Vodafone to provide toll free numbers for fishermen to report violations was yet to be completed.

 Table 13: Promoting Compliance & Enforcement of Fisheries Laws

A review session in January 2012 assessed the performance of the institutions trained led to a relatively high success in prosecution due to the improved levels of collaboration among the institutions. Since March 2011, 36 fisheries violations have been sent to the courts in the Western Region and 35 has been successfully prosecuted where as for the rest of the country, there were 5 cases reported with only one prosecution.

Marine Police Unit

The CRC applied for and received the mandate to train 25 personnel of the Marine Police Unit of the Ghana Police Service. It also received a waiver from the US Mission to conduct such training. The course content was reviewed by the Fisheries Commission, Police Administration and USAID. Also, the trainees were vetted and passed by the US Mission. The trainees underwent a two-week intensive training facilitated by the Hen Mpoano, Fisheries Commission, Attorney General's Department, Chief Fishermen and FWG, etc. Key topics covered included:

- current state of the fisheries sector of Ghana; fisheries ecology; history and challenges in fisheries management; traditional management;
- fish marketing and challenges; governance and communications; and

• compliance and enforcement

The trainees visited and had fruitful interactions with 8 fishing communities in the region where they were welcomed with open arms. The Director of Research and Planning of the Ghana Police Service, DCOP David Asante-Apeatu, the Chairman, Fisheries Commission and Hon. Mike Akyeampong, Director of Marine Fisheries Management actively participated in the training sessions. The Ghana Police Service has since adopted the training modules and presentations and materials have been made available for their use in subsequent training programs.



Figure 9 Marine Police Training activities

(Clockwise) (A): Classroom session with Police trainees; (B): Police trainees on board a semi industrial vessel; (C): A trainee inspecting a monofilament (illegal) net; (D). Marine Police socializing with fishing community at the beach

2 Improved Coastal Governance at the District and Coastal Settlement Scale

The aim of this component is to explore and test ways to strengthen the governance of coastal resources at the district and community levels with major emphasis on ICM activities in the three focal areas (Shama, Greater Cape Three Points and Greater Amanzule).

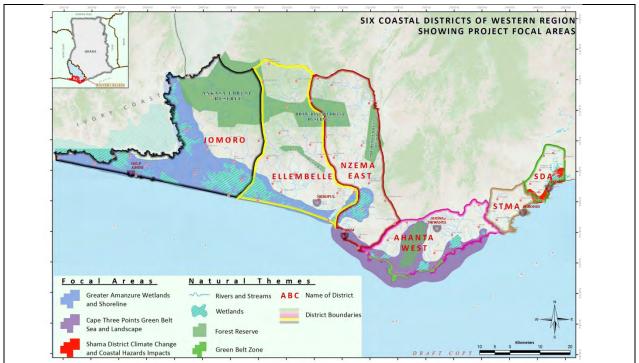


Figure 10 Map of Six Coastal Districts showing ICFG Focal Areas

The priority objectives for work in Year 3 in the three focal areas were to:

- Generate lived experience in selected ICM practices that will serve inform the approach taken by the ICM proposal of Component 1.1
- Build a demand for ICM by demonstrating the benefits of well-informed spatial planning and conflict mediation
- Promote dialogue on ICM issues and how they can be productively assessed.
- Demonstrate the need and benefits of linking ICM good practices with the needs of the canoe fishery
- Model participatory processes of building or supporting local institutions as a component of nested fishery governance
- Pilot processes of participatory scenario development as a tool to design communitybased livelihood and resilience interventions
- Demonstrate the value of community resilience and livelihood interventions as a component of fisheries governance reform and as a tool to ensure legitimacy of management interventions

2.1 Shama

2.1.1 District Level Coastal Management

The S hama (focal a rea) has be en in the l ead in s patial planning and development of I CM strategies in addressing critical co astal issues. The innovative process in I CM has be come a model for other coastal districts in the Western Region.

Planned Outputs	Accomplishments
Compendium of interim products including written	Completed
contributions to the Tullow Oil spatial planning process	
GIS products for use by District	Prepared m aps a erial phot ographs a nd software have been distributed to the district assembly
Anankwari vulnerability assessment and adaptation plan	Completed
Shore use and best practices atlas	Completed

Table 14: District Level Coastal Management

A *District Advisory Committee* including representatives, civil society, traditional authority and private sector, provided guidance for the district spatial planning process. The committee reviewed and updated present land uses in the coastal and inland areas which were synthesized into a draft district Spatial Development Framework (SDF). Also, the Advisory Committee assisted in the harmonization of coastal management policies into a draft ICM strategy. The draft SDF and ICM strategy will form the basis for stakeholder consultations.

2.1.2 Anankwari River and Flood Plain Area

In 2010 and 2011, the seasonal rains caused havoc including loss of life in the Shama District, especially along the Pra river estuary and the Anankwari river plains. Studies were conducted in the previous year to simulate flooding with the river catchment. In Year 3 the studies were refined and steps were taken through the District Assembly to give the Anakwari estuary a legal protection. Table 15 outlines planned activities and accomplishment.

Planned Outputs	Accomplishment
Review and refine climate change vulnerability	Completed through a participatory process
assessment with community	
Seek protection status for Anankwari wetland	Bye-law preparation underway
Recommend and seek adoption of remedial	Statutory planning and other committees being empowered to be
control, low impact development practices	able to articulate the issues at the general assembly for adoption
Shore use plan for recreational beach and	Plan developed. Bye-law preparations to give legal backing for
protection of the outlet of Anankwari to sea.	the protection of wetlands and shorefront

Table 15: Anankwari River and Flood Plain Area

In May 2012, a workshop was organized to establish modalities for implementation of community-based flood early warning systems in Shama district. The workshop culminated in the development of a communication mechanism and collaborative action for improving flood

emergency preparedness. Institutions identified as crucial for flood emergency communication and action including the Ghana Meteorological Agency (GMA), Radio Shama, and National Disaster Management Organization (NADMO). Box 4 outlines various strategies for communicating flood emergency information.

Box 5. Strategies for communicating flood early warning

- Ghana Meteorological Agency sends information on potential flood threat
- radio stations receive flood threat information and communicate this to key contacts in communities
- Information is further communicated to the entire community
- NADMO disaster volunteer groups assist in emergency evacuation
- chiefs should use the old practice of communicating to their followers ie. the use gong-gong
- the old system of 'sound calling, talking drums and shouting' should be employed in alerting people of emergency information
- megaphones can be used in making announcements
- cell phones, text messages and local radio must be used in communicating emergency information
- education and sensitization is a "key early warning intervention"
- early warning information should not create fear and panic
- in case of evacuation, residents should move to high ground or designated areas

Vulnerability Assessment

Current and potential vulnerability to flooding impacts was mapped for the Anankwari floodplain. The assessment indicated a dramatic shift in flood history from 10 years to 1 year as a result of settlement encroachment into the flood plain. GIS overlays were prepared to generate spatial information for drafting a bye-law for regulating land uses and improving emergency response.

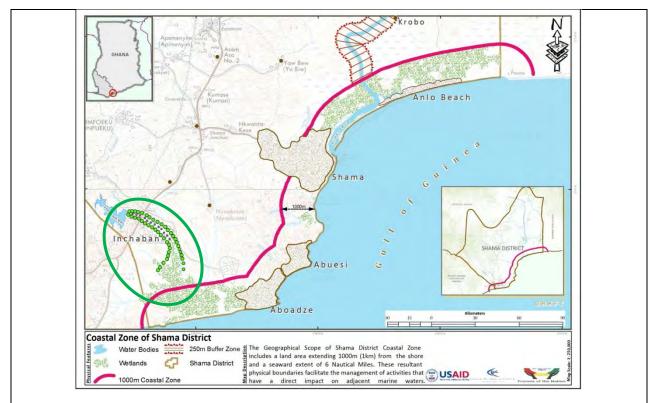


Figure 11 Coastal map of Shama District showing the Anankwari floodplains and human use

Box 6. Regulating Development on the Anankwari Floodplain

Floods have claimed lives and destroyed property year on year in the district. The assistance Hen Mpoano has provided the Shama district in generating flood risk/ hazards maps has improved the District's spatial planning and permit de cision m aking and officials have b ecome k nowledgeable in w hat de velopments s hould be permitted i n f lood z ones. T hey have be come proactive in c ommunicating flood h azard information to prospective investors.

In February 2012, the statutory planning committee received an application from an investor to site a tank farm covering 7.38 he ctares of the A nankwari floodplain. The decision to g rant p ermit w as h alted u ntil detailed assessment of the potential risks to the investment was communicated to the proponent. Through this intervention, the investor has learned and accepted the need to site the facility on higher ground to guarantee longevity of the investment.

STMA Wetlands

A so cio-economic/household and boundary surveys were completed for three wetlands (Whin, Butuah and Essei). The exercise involved the STMA, land owners and traditional authorities, community/assembly persons from the riparian communities. The data generated will inform the design and content of a wetland byelaw being drafted by a legal consultant.

2.1.3 Shama Shorefront Management

With oil and gas related developments in the region, population and infrastructural development in the Shama district are on the increase. Areas most impacted are the shorefront and other marginal areas such as wetlands. Among the issues profiled in earlier participatory exercises was the protection and management of shorefront development in the Shama District. In Table 16 is presented planned outputs and accomplishments.

Planned Outputs	Accomplishment
Review draft shoreline assessment for the protection of shorefront	Completed
management and protection of structures	
Reader-friendly interpretative shore atlas	Completed
Assemble and make readily accessible existing shore monitoring data	Ongoing
along with conducting low-tech local monitoring and data analysis	
Assist in preparing a shore management bye-law if strong interest	In preparation
expressed by District	

Table 16: Shama Shorefront Management

Dialogues on wetland and shoreline management bye-laws

The district statutory planning committee requested assistance in the formulation of bye-laws to regulate land development in coastal wetlands and sensitive shoreline areas. Subsequently, selected members of the committee, the traditional authorities and land owners engaged faculty members of the Department of Geography and Regional Planning of UCC to better understanding the various decision support systems for land use decision making and agreed to the need for extensive public consultations towards drafting a bye-law stage. Hen Mpoano supported the District Assembly to engage a legal consultant to draft the bye-laws for review.

2.1.4 Livelihood Resilience for Four Fish Landing Sites

Activities, including household surveys, flood risk assessment, ecosystem services and livelihood analysis were undertaken as precursors for adaptive co-management in 4 fish landing sites in Anlo Village (Shama), Dixcove and Akwidaa (Ahanta West) and New Town (Jomoro) Districts. Table 17 presents planned outputs and accomplishments for Year 3.

Planned Outputs	Accomplishment
Landscape/wetlands analysis	Completed
Household surveys and vulnerability analysis conducted	Completed
Participatory scenario development	In progress
Building/supporting adaptive management	Completed
Agro-aqua analysis and plan for locally managed fish/shellfish	In progress
Ecosystem services and livelihoods analysis	Completed
Agriculture investment best practices	Not yet started
Flooding risk, hydrology, erosion analysis	Completed
Climate adaptation measures including setbacks and Resettlement	Completed
Anlo Beach wetlands and livelihoods plan	In progress

Table 17: Livelihood resilience for four fish landing sites

Enhancing resilience in communities

Baseline and context studies were conducted to establish the status of livelihoods of households in the four communities to understand starting points and capacity needs for the communities to design a co-management arrangement and implementation. Each of the communities represented a range of livelihoods and conservation issues. A total of 447 households were covered in the study.

Key findings from the survey indicated a high variation among the four communities in terms of livelihoods status and options, low education levels, (the majority being women); high poverty levels. Nearly 73% of respondents were willing to learn new livelihood activities. Validation workshops were conducted with the Anlo Beach community to develop a shared understanding of the problems and capacity building for effective participation in the adaptive management process.

PhD Study

Hen Mpoano extended support to Mr. Isaac Okyere, a PhD student from the University of Cape Coast to assess the eco system h ealth, f isheries and l ivelihoods st rategies of t he A nlo B each community in the Shama District.

Population, Health and Environment

CEWEFIA

CEWEFIA in collaboration with other actors (BCS and Health Keepers Network) continued with education and sensitization programmes on PHE in 5 coastal communities for enhanced access to family pl anning s ervices and pr oper nut rition f or pr egnant and nur sing mothers and infants. Other interventions by CEWEFIA included:

- 17 Community-Based D istributors (C BDs) and peer ed ucators trained in c hild a nd mother health and nutrition
- 125 caregivers received training in improved nutrition methods
- 162 mothers i n 3 c ommunities pr ovided improved nut rition t o c hildren (aged 0-24 months)
- 9 nur ses from G hana H ealth S ervice provided effective f amily pl anning a nd nut rition services.
- An estimated 733 referrals for family planning services were made.

Daasgift

Daasgift, a small grants recipient collaborated with *Cyclus* - a plastic waste recycling company in mobilizing coastal communities in Shama District towards improving shorefront sanitation. Over a 6 months pe riod, m ore t han 2,500k g of pl astic w aste w as c ollected. T wo l ocal entrepreneurs were identified and trained to coordinate the mobilization and collection. The local entrepreneur scheme has proven to be very successful towards reducing the plastic menace. This business m odel e neouraged c ommunities to c lean th eir e nvironment f or s ignificant f inancial reward.

Additional Shama Events

Visit of US Delegations

Two US delegations visited the Western Region to familiarize with the activities of Hen Mpoano and its partners. In January 2012, some important opinion leaders led by Congressman Johnson and supported by USAID Ghana Mission Director, Ms Cheryl Anderson, visited Shama to see at first hand some of activities and issues being addressed. They were hosted by the chiefs and people of Abuesi (Shama) and treated to a local drama by CEWEFIA on the benefits of birth control, maternal and child health and nutrition. They also toured livelihood activity sites and the Abuesi shore front to observe the impacts of coastal erosion on the community.

In June, another delegation, the ONE Group from the Yale University, accompanied by the Director of the Economic Growth Office of USAID, Peter Trenchard, visited Shama and Dixcove.

2.2 Greater Cape Three Points

This focal area provides the best opportunity for demonstrating land and seascape planning. The natural features and coastline are biologically rich and economically important but are und er increasing pressure from development activities (oil and gas related development, rubber and oil palm expansion). The ICFG approach in this focal area is to highlight the importance of the coastal belt and the sound maintenance of critical habitats and arable land for food security and to ensure that developments follow 'best practices', with the ultimate objective to propose a 'green' plan for the area.

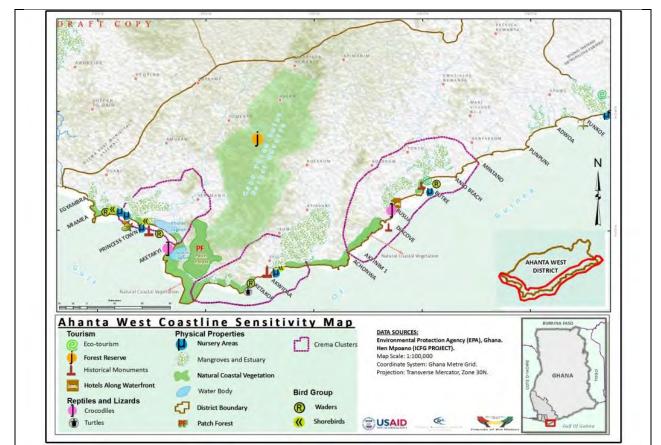


Figure 12 A Green Belt Map for the Cape Three Points Focal Area

Key activities implemented in the focal area included:

- support for District level coastal management process
- conservation of critical sea and landscape habitats

2.2.1 District Level Coastal Management

Table 18 outlines the planned outputs and accomplishments under activity 2.2.1.

Planned Output	Accomplishment
Up-to-date compendium, the ICFG Binder of interim products	Completed for spatial planning document. Tool kit in preparation
Make contributions to the Tullow-supported district spatial planning and the coastal tourism element of the Korean consortium master plan in Ahanta West District	Contributions were made into the process particularly relating to coastal planning
Assessment of shoreline characteristics and uses targeted for expanded tourism development	Completed
Conduct shore use and vulnerability assessments for priority coastal tourism sites	Completed
Develop guidance for voluntary adoption of best development practices for existing and proposed tourism investments	Not initiated
Flooding, erosion, climate vulnerability, shore facilities, adaptation measures for setbacks and resettlement initiated	Vulnerability assessment completed. Adaptation measures for setback and resettlement yet to be negotiated
GIS and other data for use by District	Provided for the District

 Table 18: District level coastal management

Vulnerability Assessment

A participatory process to a ssess the social and physical vulnerability of coastal communities was completed in 31communities (22 in Ahanta West and 9 in Nzema East). The findings have been v alidated and r efined by various s takeholders. Stakeholders have proposed a forum to develop implementable actions to feed into the next round (2013) of the MTDP for the Districts.

Spatial Planning

Targeted s upport was extended to the spatial planning process for the A hanta W est D istrict. Coastal in formation g enerated th rough the IC FG a ctivities were c ontributed to S patial Dimensions³ finalizing the report in the district. This became necessary to avoid duplication of efforts and also to ensure that issues relative to coastal zone planning were adequately captured in the report.

³ Spatial Dimension is private consulting entity which led the Ministry of Environment Science and Technology (MEST) Tullow funded spatial planning effort in five of the six ICFG target districts.



Figure 13 Vulnerability Assessment Discussion with Nzema East Advisory Group

2.2.2 Sustainable Land and Seascapes

Targeted support was extended to the Cape Three Points Working Group. The group engaged the Forestry Commission towards getting formal commitment for the endorsement of an MoU and revision of the conservation management plan for the forest. The CREMAs were strengthened through training of their leaders for improved management of the forest and adjourning coastal wetlands. Six members from each of the 20 communities were trained in rudimentary skills in forest monitoring and boundary patrols to prevent illegal activities in the reserve. Hen Mpoano brokered a deal under which Tullow Oil agreed to support the CREMA conservation activities over the next five years.

Baseline survey of the marine environment was conducted in the focal area to explore opportunities for future MPA establishment (see under 1.1.3). This survey provided a basis for discussion at the national inter-ministerial level on the establishment of a network of MPAs in the Cape Three Points area.

Wetlands Conservation

The Hen Mpoano Initiative through the small grants program continued to partner with the Conservation Foundation, for conservation and restorations of wetlands within the focal area. Over a dozen communities which abut wetlands within the focal area were engaged on

conservation activities. Public awareness and educational programs on wetland resources were held in 14 communities. Constituencies built around the conservation activities include fishmongers, fishermen, fuel wood sellers and charcoal burners and private sector operators and tour guides.

Schools Wetland Conservation Program

Four schools from Butre, Busua, Akwidaa and Cape Three Points participated in the conservation program. Lead teachers have been identified to mobilize the school children for the field work. The effort is supported by a youth leader from Butre and two Peace Corps Volunteers engaged under the Hen Mpoano Initiative.

2.2.3 Livelihoods Resilience at Fish Landing Sites

In the Cape Three Points focal area, the livelihoods resilience programs were focused in two fishing communities - Dixcove and Akwidaa. Dixcove represents a large fishing community and landing site while Akwidaa is highly vulnerable to flooding and will need to re-locate in the near future. Table 19 presents a summary of planned activities and accomplishments.

Planned Outputs	Accomplishment		
Household s urveys a nd v ulnerability analysis conducted	Completed. A draft r eport ha s been c irculated for comments and finalization		
Participatory scenario development	Underway. Women's groups have developed a joint vision for the next 10 years for their community. The process has been slow because of the high illiteracy rate for women as well as passiveness.		
Building/supporting adaptive	Ongoing. As c ommunity engaged i n process, t heir ad aptive cap acity		
management	increases over time.		
Climate v ulnerability and adaptation measures (setbacks an d r esettlement, shore facilities development)	Vulnerability as sessment w as completed w hile ad aptation m easures relative t os etbacks a ndr esettlement will be a ddressed t hrough t he development of local plans to be initiated in Year 4		

 Table 19: Livelihoods Resilience at Fish Landing Sites

Small Grants

The second round of the small grants program allocated additional nine grants to worthy initiatives in middle of Year 2. Some of these grants activities were still ongoing Two of the beneficiaries - OLIVES and Conservation Foundation continued their activities with expanded roles. OLIVES worked with women on the chicken project while Conservation Foundation covered 9 more communities under the wetlands conservation program. Two new organizations, Merhans Foundation and OGSFORD were supported to execute programs in the Cape Three Points Focal Area. The Merhans Foundation involved women to raise rabbits and grasscutters OGSFORD used rural drama to mobilize and educate fishers on the Fisheries Regulations.

The Dixcove Fisheries Co-management Forum

The Dixcove Fisheries Co-management Forum since their formation has actively engaged with stakeholders in the District towards sustainable fisheries management. Towards this, the Ahanta West District Assembly mandated the forum to support the implementation of the district fisheries bye-laws; by monitoring of fishing operations, gears and examination of landed fish.

The Forum was assisted to request for BUSAC funding to address issues of encroachment into the artisanal fishing zone by trawlers, and to engage in consultations with stakeholders at the regional and national levels to contribute to compliance and enforcement of fisheries policy and regulations. In July, the Forum held an grand durbar in Dixcove to host the visiting US delegation (ONE Group) and together with the group visited the landing site to explain some of the important issues and activities at the landing site.

Tree Crop Plantations and Food Security

In Year 3, three crop plantation (Rubber and Oil Palm) became an issue in the communities as many tenant farmers raised issues of loss of livelihood resulting from loss of land to rubber outgrower schemes. While land owners benefitted from the schemes, tenant farmers were progressively losing out and this also posed food security problems. Through engagements and subtle advocacy by Hen Mpoano, the Rubber Company and their financiers agreed to conduct social impact studies to understand how the rubber plantations expansion schemes was negatively impacting on farmers and food security. They also outlined planned investments in improved agriculture for farmers.

Box 7: Rubber Plantation and Food Security Concerns

Food insecurity has been a major issue in the focal area due to rising food prices as a result of declining food crop production fueled by competing land use for rubber plantation a mong other factors. The Ghana Rubber E state Limited (GREL), the owners of the rubber plantation has been engaged in a rapid expansion program through an out-grower scheme that attracted land owners and farmers to use their lands for rubber plantation. This scheme was diminishing land availability for food crop farming and contributing to high cost of food items in the district. Responding t o t his, Hen M poano e ngaged GR EL on the i ssue through s everal i nteractions. As part of t he engagement a field visit was organized for GREL to visit B-BOVID, An agro-business company that promotes innovative a gricultural practices, ecological farming and social en trepreneurship. Consequently, GR EL e ngaged B-BOVID as an agricultural extension agent to transfer knowledge and skills to farmers on mixed cropping and improved farming practices to enhance food production in the focal area. The engagement on the issue has further contributed to the following:

A study has been commissioned to look at social impacts of the GREL Out-growers scheme by development partners and financiers (MOFA, AFD, and KfW).

A review of the out-grower scheme that encourages land to be set aside for food crop farming as a condition for the selection of future rubber out-growers.

Improved linkages between GREL and the Ahanta West District Assembly resulting in the capture of the size and future extensions of rubber plantations in spatial plans of the Assembly.

Planned investments by GREL in forest conservation and establishment of biodiversity corridors between Cape Three Points Forest Reserve and other forest areas

BUSAC is f unding the F orest F orum l ed by M r. N krumah, and s upported b y a P eace Corp v olunteer S arah Carbone, to group displaced farmers into advocacy groups to lobby the District Assembly and MOFA for more reforms and for EIAs to be conducted on large scale land transformations with agro-industrial investments.

2.3 Greater Amanzule

The Greater Amanzule Wetlands straddles the coastal plains of the Ellembelle and Jomoro Districts and to a little extent, the Nzema East District. It is a special area of concern due to its rich biodiversity and special or unique features. It is, however, yet to have formal recognition as a conservation area of importance. Majority of the population lives on a highly vulnerable stretch of dune hemmed between the ocean and the wetland where the fishing communities are suffering from the consequences of, shoreline change, periodic flooding and the algae blooms - green (*Enteromorpha* or *Ulva clathrata*) and brown (*Sargassum sp*).

The relatively small population and the low immediate threats within the wetlands favor the establishment of a large community co-managed protected area. The area was yet to experience the accelerated development like in the other four districts. However, new mining ventures and planned development of oil and gas facilities will undoubtedly have a significant impact on the area in the near future.

2.3.1 District Level Coastal Management

Table 20 outlines the planned outputs and accomplishments for activity 2.3.1

Planned Outputs	Accomplishments
Up-to-date compendium of the interim products in an ICFG	Completed for spatial plans.
Binder	Tool kits in preparation
Make contributions where appropriate to the Tullow-supported	Completed
District spatial planning	
Assessment of shoreline characteristics and identify	Completed
shorefront settlements at high risk	
Conduct shore use and vulnerability assessments for priority	Completed
shorefront settlements and identify adaptation options	
including resettlement	
Contribute GIS and other data for use by District	Completed

 Table 20: District Level Coastal Management

Coastal Vulnerability Assessment

An identical participatory process (see 2.1.2 and 2.2.1) was conducted in 48 communities in the Ellembelle and Jomoro Districts. Priority vulnerability issues profiled with recommendations for the next steps have been discussed with the Spatial Planning Advisory Groups (SPAG⁴). Sharing of the findings with the SPAG was to allow for their understanding, validation and ownership of the process. The process will assist and guide spatial development planning in the coastal areas as well as providing them with information in developing the coastal chapter of the next round of the district Medium Term Development Plan (MTDP).

Support to District Spatial Planning

A private spatial planning consulting group, Spatial Dimensions (SpD) was hired by government to develop a vision for spatial planning in the coastal districts of the Western Region. Funding for the exercise was by Tullow Oil. The Hen Mpoano Initiative collaborated with the consultant to ensure non-duplication of efforts and value addition as well as incorporation of results from the ICFG activities into the vision. The consultant created the SPAGs to ensure the Assemblies' active participation in the process. Unfortunately, work with the SPAGs stalled as a result of some difficulties on the part of the consultant. This rendered the SPAGs inactive for many months. Hen Mpoano Initiative took steps to revive the SPAGs and together agreed on a new terms of reference. The SPAGs now meet regularly to discuss planning issues in the district.

⁴ The SPAG is a selection of Assembly persons and representatives of various heads of department within the decentralized government agencies within the districts. SpD brought this group together to advise on planning and development in the districts.

2.3.2 Sustainable Landscapes

The Amanzule wetlands and surroundings have been largely inaccessible. During the year a number of studies and activities were carried out to better understand the Greater Amanzule ecosystem. Table 21 presents some of the activities undertaken and accomplishments.

Planned Outputs	Accomplishments	
Strengthen ecosystem based management for the shared wetland system	Districts a nd t raditional authorities e ndorse conservation zoning for wetland areas	
Complete assessments of wetlands and surrounding landscapes for potential to generate sustained revenues as ecosystem of international significance, and for carbon offset market (REDD+)	Assessments for carbon stocks in mangroves and swamp forests was completed and showed.	
Written assessment on financing options for Amanzule wetlands	In progress. The P DD has be en i nitiated and funding proposals p repared t o l everage additional funds.	
Fish Landing Site value chain improvement and community resilience plan	In progress in New Town	

Table 21: Sustainable landscapes

Habitat Characterization

Using GIS tools, two experts from the University of Rhode Island supported the Initiative to characterize the Greater Amanzule focal area using broad classification classes of natural areas and resource. Ground-truthing assessment was used to refine pre-classified satellite images. The exercise resulted in a refined classification and extent of different vegetations types, habitats and other land features. The maps generated assisted in the Initiatives work and communications with stakeholders.

Carbon Stock Assessment

The Greater Amanzule wetland covers over 20,000 hectares with adjacent additional 10,000 hectares of Tanoe Forest across the international frontier into Ivory Coast. These pristine wetlands with high potential for carbon sequestration provide important ecosystem services including fish nursery grounds and coastal protection.

Hen Mpoano hired consultants (Forest Trends/Nature Conservation Research Centre) supported the Initiative's work to assess the Amanzule's potential for carbon sequestration. Initial results show that the mangrove ecosystems have extremely high carbon content in above and below ground biomass as well as in the soils and over 5 times more, on average, than the tropical rain forests to the north in Ankasa National Park.

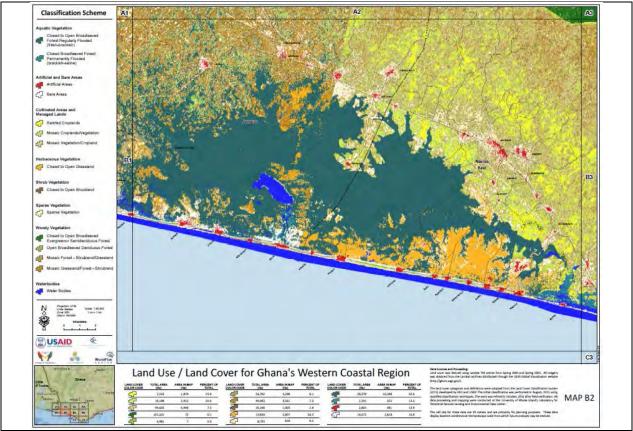


Figure 14 One tile of refined Satellite imagery of land cover classification in the Amanzule area

This peat swamp forest of the Amanzule Wetlands and lower Ankobra River estuary is unique and highly diverse. Threats to the peat swamp forest remain still minimal. In addition, two potentially new species were identified which are currently being confirmed. While the conservation of this rare landscape is crucial, it is possible that carbon finance, in the form of REDD+, soil carbon, or climate smart agriculture could form part of a dynamic conservation and livelihood strategy.

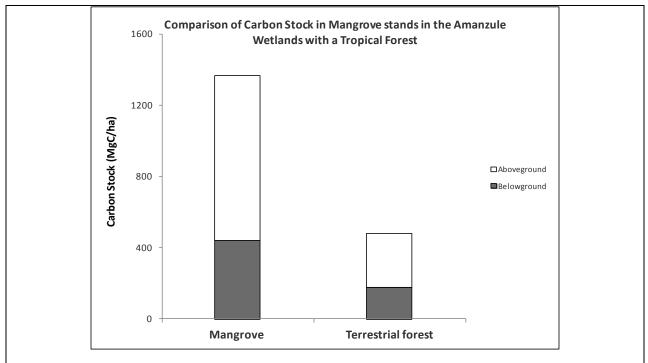


Figure 15 Comparison of Carbon stock in the Amanzule wetland and a tropical forest

Amanzule Retreat

With the support and benediction of the Nzema Manle, a conservation planning retreat was held in March 2012 to discuss strategies for community conservation of the Amanzule wetlands. This 3-day information s haring forum brought together the Nzema Manle Traditional Council (the umbrella c ouncil f or traditional authorities of Nzemaland), thet h ree d istrict a ssemblies, Environmental Protection Agency, Wildlife Division of the Forestry Commission, civil society organizations and private sector interest groups, including the Leadership for Conservation in Africa (LCA). The Nzema Manle Council endorsed the strategy and the processes which provide the bases for potential sustainable financing for conservation through business biodiversity offset program (BBOP) or REDD funding.



Figure 16 Carbon Stock studies in the Amanzule Wetlands

The Amanzule Working Group

The outcome of the Amanzule retreat was the formation of the 'Amanzule Working Group' (AWG) to champion conservation in the area. The Group which meets monthly is composed of representatives each of each the 3 traditional councils, 3 district assemblies, Wildlife Division and civil society groups. It is chaired by Nana Takilik VII, chief of Nzulezo and meets monthly. The terms of reference of the AWG has been endorsed by the Nzema Manle Council. Inputs from the AWG activities will feed into follow-up actions for the promotion of a Project Identification Note (PIN) and a pilot Project Description Document (PDD) for the Amanzule wetlands.

Trans-Border Community Wetlands Conservation

As stated in this report, the Amanzule Wetlands as an ecological unit stretches into Ivory Coast. The West Africa Primate Conservation Association based in Ghana, RASAP-CI, an Ivorian conservation group and Community Conservation, a US based group led by Dr. Rob Horwich carried out a cross-border collaborative assessment on primates and other biodiversity resources in the Amanzule. The studies confirmed the presence of highly endangered Roloway and White Naped Mangabey monkeys. Other species, Black and White Colobus, Olive, Mona and Spot nose were also spotted. Also preliminary cross border investigations by other collaborators speculate the presence of the Miss Waldron monkey *Piliocolobus badius waldronae*, a species which is on the IUCN highly endangered species list or even feared to be extinct. Human activities such as illegal lumbering, hunting, and clearing of large expanse land for development pose major threats to these primates in the Amanzule. The results of the preliminary studies were presented to the Chiefs, people and communities in the Eastern and Western Nzema Traditional Areas Councils and the Ellembelle and Jomoro District Assemblies to deepen their awareness of the importance of community conservation of the Amanzule wetlands.

Options for patching up the wetlands on both sides of the border as one ecological, conservation and management unit was seen as important. To this end, the traditional councils have endorsed partners proposals developed through IUCN-West Africa to the European Union for funding.

Bamboo for Livelihood Diversification Initiative

Bamboo as a resource abounds and grows wild in the Amanzule wetlands. If harnessed and utilized, it can have a positive impact on the local economy through livelihood diversification (bamboo cottage industry). The use of bamboo, other than for charcoal production, could also serve as a source for carbon sink as well as the bases for the blue carbon credit initiative being developed by Hen Mpoano and partners.

Hen Mpoano Initiative mobilized stakeholders in the public and private sector to discuss the potential and the development of a livelihood venture for communities around bamboos. The International Network for Bamboo and Rattan (INBAR), based in Kumasi, Ghana has supported and provided orientations and insights on state and use of bamboo in Ghana.



Figure 17 Six different species of bamboo growing in the coastal and surrounding districts

Preliminary site identification in 40 communities was completed in the seven districts, 3 of which adjoin the Hen Mpoano target districts. The Subri Plantation in the Mpohor Wassa East District was identified to have the most diverse stands of well growing bamboos of both indigenous and introduced species. Figure 13 shows the 6 different species identified. Preliminary findings pointed to high potential and promising stocks to support the proposed industry.

Sea Turtle Conservation

The Hen Mpoano Initiative has supported sea turtle conservation efforts by working with other NGOs, governmental institutions, volunteers, hoteliers and communities. The hoteliers, principally, Beyin and Tenack Beach Resorts in the Jomoro District; and Fanta's Folly and Green Turtle Lodge in the Ahanta West District have played important roles in the conservation of sea turtles. Five more hotels were expected to join in the sea turtle conservation effort.

During the 2011 nesting season, the Hen Mpoano Initiative in collaboration with Beyin Beach Resort supported Neil Davis from the UK to work with communities and hoteliers around Beyin. Neil further invited 5 other volunteers to support his efforts. They engaged and educated about twenty communities along the western coast and identified fishermen and organized them into a conservation task force.



Figure 18 Volunteers and members of the Sea Turtle conservation task force at Beyin

Based on data collected at Beyin, two papers were prepared and presented at the 2012 International Sea Turtle Symposium held in Mexico. Reports were also prepared based on data collected by Fanta's Folly. The topics of these papers were:

- Filling the Gaps: A nesting study and conservation strategy on Ghana's west coast
- Poaching, turtle hunting and other major threats to Ghana's turtle populations in the Western Region
- The hotelier's contribution to sea turtle conservation on the west coast of Ghana: The case of Fanta's Folly'

A Ghana Sea Turtle Conservation Monitoring Manual and Volunteer Guide and data sheet had been published and in use by the hoteliers. The aim is to bring uniformity into the data collection protocols and reporting.

Box 8: Sea Turtle occurrence in the West Coast

Sea turtles face many severe human threats in the Western Region of Ghana. Poaching and consumption of both turtle meat and their eggs are huge problems. Erosion and destruction of critical nesting habitat, oil exploration, pollution, algal blooms, illegal fishing with a severe lack of policing have all contributed to severe declines in turtle populations.

Twenty five years ago five species were commonly found nesting in the Western Region of which only three remain, primarily olive ridleys, followed by less frequent visitors, the green turtle and the leatherback. Both hawksbill and loggerhead turtles have not been recorded nesting in Ghana for a quarter of a century, although they do occasionally turn up as bycatch around the coast.

Algal Bloom in Coastal Waters

With the support of scientists from the Centre de Recherche Oceanologique (CRO) in Ivory Coast, the Hen Mpoano team led by Steve Granger of the Graduate School of Oceanography in Rhode Island, completed investigations in the coastal waters of Ivory Coast and narrowed down the source of the algae bloom to the Aby lagoon and as well as the probable causes. The Aby lagoon is a shared resource by Ghana and Ivory Coast. The results of the investigations have been widely shared with stakeholders in the two countries including Ministries responsible for the Environment; and Foreign Affairs of the two countries, the Council of Ministers of the Abidjan Convention and the Guinea Current Commission (GCC). The results of CRC's research have contributed to the state of knowledge on the bloom in Ghana and internationally.

In June 2012, the GCC organized an international round table to discuss the way forward on the algal blooms. A proposal for future work on the Green Algae bloom was developed by the GCC and submitted to the Global Environmental Facility (GEF). Hen Mpoano will focus its activities on this subject to communications and education on Ghana's west coast. Meanwhile a new algal bloom phenomenon the brown algae – *Sargassum sp.* was recorded along the coast of Ghana which also heavily impacted on the fishing and hospitality industry. The cause has remained uncertain.



Figure 19 Algal Blooms on the west coast of Ghana. (A) Enteromorpha (Ulva) and (B):Sargassum spp

Population Health Environment (PHE)

The Hen Mpoano Initiative continued its collaboration with various institutions especially the Essiama Community Health Nurses Training College to advance PHE awareness. Ms. Leslie Lucas, supported by Taylor Ann Parker, two US Peace Corps Volunteers led PHE activities.

Box 9: Spreading PHE Awareness in Ellembelle and Jomoro Districts

- 400 student-nurses of ECHNTS trained and delivering outreach services in PHE awareness creation
- 16 faculty members of ECHNTS trained and providing support to Peace Corps Volunteer in training student-nurses in PHE
- 6 local government agencies' officials (Ghana Health Service, Dept of Social Welfare and Community Development, Ministry of Agriculture) received awareness training
- **22** CSO operatives (from BCS and IIP) received training
- **66** individuals received training from BALANCED
- **863** counseling visits conducted for family planning/reproductive health (FP/RH) as a result of the PHE program in the districts
- **150** school children (aged 12-18) received information through membership of PHE Clubs 94 in Ahobre (Jomoro) and 46 in Atuabo(Ellembelle)
- 21 community mobilizers (from IIP) oriented on PHE
- Principal of ECHNTS received 3 weeks training in PHE at the University of Rhode Island (URI)

3 Program Management

3.1 Program Leadership, Structure and Staffing

CRC Personnel Changes

There were several personnel changes at CRC that should be noted.

- Mr. Godfred Ameyaw took up a position within the ICFG project for the WFC. His replacement as the new Monitoring and Evaluation Specialist is Ms. Patricia Mensah.
- Ms. Sally Deffor, formerly Communication Officer, has left to the UK to pursue her studies and has been replaced by Elvis Addae who worked on the ICFG Initiative for Friends of the Nation in 2010 (and subsequently for LOGODEP).
- Two other staff at the Accra office Ms. Rebecca Dadzie (Program Assistant) and Charles Birinkorang (Driver) resigned their positions at the end of the year. The vacancies have yet to be filled.
- Ms. Esther Amewode (Finance and Administrative Manager) and Moses Abbey (Bookkeeper) were discharged due to poor oversight which led to the loss of project funds (see under financial Management below)
- Mr. Robert Allou was appointed Finance and Administrative Manager while Mrs. Perpetual Kwakuyi took up a position with CRC-Ghana as Executive Assistant

WFC Personnel Additions

Dr Tendayi Mutimukuru Marivanyika –a community engagement expert, was recruited as a postdoctoral fellow for the remainder of the project duration to lead and strengthen the in-country WorldFish team and activities. She will lead training and participatory research components of community pilot trials. Cephas Asare, A 2010 national service volunteer, was retained for his exceptional performance and has joined the local Worldfish Center team of 3 based in Ghana.

Financial Management

During this period, some financial irregularities were reported. The University Office of Compliance Director, Eileen Tobin traveled with the CRC Business Manager, Cindy Moreau to investigate and document the anomaly. As a result, standard operating procedures were tightened, financial support personnel were terminated and a new more experienced finance administrative manager was hired. There were funds that were embezzled totaling less than \$5,000. This amount is being charged to university institutional funds and no project funds will be charged to USAID for this incident. Comprehensive internal audit of monthly accounts has isolated the problem and we are confident that this problem has been identified and there are not additional incidents that have gone unrectified.

3.2 Staff and Partner Capacity Development

To build the capacity of team and also for the smooth implementation of the project, the entire staff of Coastal Resources Center, Friends of the Nation, World Fish Center and SustainaMetrix underwent 5-day training in organizational and personal leadership. Among the topics treated were: 1) effective communication, 2) coaching, 3) group and group dynamics, 4) teamwork, 5)

collaboration and solution-focused versus problem-focused in conflict resolution process. Perspective and behaviours of members of staff are already showing positive signs of healthy collaboration amongst staff.

The workshop was facilitated by 2 organizational development experts.

Peace Corps Volunteers

In collaboration with Peace Corps Ghana, 5 Peace Corps Volunteers were assigned to the Initiative and are working in communities and with institutions in ICFG target communities. They cover areas in community wetland conservation, training and working with community health nurses in Population Health and Environment and teaching PHE in selected junior high schools and small business advisory.

3.3 Monitoring, Evaluation, Performance Management and Reporting

Monitoring and evaluation activities of the Hen Mpoano Initiative were based on the Orders of Outcome framework and the USAID indicators. Governance scorecards for the three focal areas as well as Fisheries were updated to guide subsequent priorities and actions (see Annex B for sample governance scorecard (process) – ICFG Custom Indicator 1)

The ICFG Performance Monitoring Plan and M&E indicators for USAID reporting was reviewed (Annex C) following new direction in USAID policy and a Data Quality Assessment (DQA) conducted by METSS. As a result, new data collection tools were designed; linkages between ICFG program results framework and USAID Development Objectives (used to be Strategic Objectives)/ Feed the Future Objectives were established in the PMP. More importantly, a management information system (using excel spreadsheets) is being built to shift the M&E system from the manual operation stage to an electronic database system – a good legacy that would facilitate data entry and retrievals.

The goal of performance monitoring and evaluation was to encourage adaptive management and learning within the Initiative and to report results to USAID/Ghana. This requires collecting timely information using indicators selected to provide meaningful information on progress towards stated objectives. The Initiative's Performance Monitoring Plan (PMP) was drafted as part of Year 1 work planning activities. However, given the evolving nature of the objectives and activities in Phase 2, based largely on the outcomes of Phase 1, projecting the best indicators for use over life-of-project and respective targets was not fully possible. As the Phase 2 design was developed as part of the Year2 work planning process, the PMP was revised to fit with a process for undertaking periodic monitoring and evaluation, learning and adaptive management of the initiative. In July 2012, METSS-Ghana assisted the Initiative with the implementation of the DQA recommendations.

SustainaMetrix, a partner on the Initiative has supported M&E activities by conducting two internal M&E learning-driven, self-assessment workshops (February/March and July 2012). These self-assessment workshops served as a principal source of the information to be included in the semi-annual and annual progress reports to USAID and external evaluation of the program. In addition to reviewing progress, these sessions refined the expected results by the

end of the program and outline 'the way forward', if the project were to continue. Summaries of these 'expected results' and the way forward session are included in session 4 and 5 of this report. The Governance Score Cards (Custom Indicator 1) for the three focal areas of the program implementation.

Constraints/challenges and measures adopted: With each M&E session, the in country team has developed increasing capacity to complete routine project M&E requirements and track the progress through the USAID indicators.

Lessons learned: A summary document was written as part of the Year 3 work plan that helped to guide reflections, significant work was also done in advance of the mid-term evaluation which increased overall learning.

In addition to reviewing progress to date relative to the work plan, these sessions refined the expected results by the end of the project and outline the "way forward" if the Initiative were to continue. A summary of these "expected results" and 'way forward" sessions are included as Sections 4 and 5 of this report. The planned external evaluation and mid-term evaluation of the Initiative in the coming reporting period will effectively review the status of the project and further orient what the project should achieve by September 2013.

3.4 Some Challenges and Measures Adopted to Address Them

Spatial pl anning pos es important c hallenges a nd oppor tunities. U ntil the e nd of 2011, C RC collaborated closely with the Jubilee Partner's consultant contractors, Spatial Dimensions, on the preparation of spatial plans for the three western-most districts of Ellembelle, Nzema East, and Jomoro. A ctivities of S patial D imensions e nded a bruptly and t he c onsultant w as una ble t o complete the district plans, creating a rather unfortunate situation for the districts.

The Consultant came back in August to attempt to complete the assignment within a very limited period. CRC thus provided to SpD detailed information and write ups on the coastal zone to enable the consultant complete the process. The difficult situation provided an opportunity for Hen Mpoano to assume a lead role in following through with district spatial plans in conjunction with the ongoing GIS training of the TCPD planners in the districts. In addition, CRC has taken a pro-active role in engaging the Jubilee Partner's CSR team to do the responsible thing and provide additional resources for their contractors Spatial Dimensions to continue their work in the three districts. It is expected that the spatial planning process will be re-started together with the Jubilee Partners but now with Hen Mpoano in a more prominent steering role so as to ensure an appropriate participatory process and local ownership with the District Assemblies.

3.5 Branding

The ICFG Program provides information through many existing channels - presentations at meetings, conferences, outreach sessions and other forums as well as through print media. Target audiences include local communities, local government agencies, national policymakers, grassroots NGOs, and other donors. Acknowledgement is always given to the generous support

of the American people through USAID in all Program communications and materials. Also recognized are partnerships and support from local government ministries, agencies and departments who participate in various activities of the Program.

At the beginning of the Initiative, communicating and branding ICFG was a little awkward in the fishing communities. To overcome this challenge a context was organized for a creative local brand that communities and stakeholders could identify with. The context resulted in *Hen Mpoano* as a brand. After three years, the 'Hen Mpoano' although associated with the ICFG Initiative, has become more or less a 'movement'. They are the first words heard at any meeting or grouping along in the Region. The Initiative is now recognized everywhere as Hen Mpoano than ICFG.

4 The Way Forward

The Hen Mpoano Initiative has made great headway in achieving the ambitious goals and objectives that were laid out in the initial Program Design. However, in trying to address the challenges we took on, it has taken longer than initially anticipated to get to where we are today. While the last Phase of the project as planned will leave some lasting legacies, there are many opportunities where, given the present time-frame, the Hen Mpoano Initiative will not have the time and resources to bring to full fruition and conclusion. Given the nature of many of the governance approaches and models being piloted, sustainability is still at risk.

The way forward will be to consolidate the gains Hen Mpoano has achieved by developing proposals for a nested, increasingly decentralized governance system for fisheries and coastal landscapes. The focus of actions will be on maintaining healthy land and seascapes that support local livelihoods and food security. This will provide both models and practical experiences and windows as to what food security and pro-active planning for climate change mean for West African coastal zones.

Given an expanded time horizon, Hen Mpoano will ensure adoption, implementation and sustainability of these proposals in the Western Region. Hen Mpoano will also lay the groundwork for replication in other coastal regions and districts, by obtaining national recognition and support for piloting these innovations and through expanded awareness and identification of new coastal regions and areas of particular concern ready to adapt and test the approach. The Fisheries Working Group model will be fully tested in the Western Region to improve understanding of fisheries issues, support for policies, compliance and enforcement and the experience shared in the three other coastal regions, in support of the new World Bank fisheries program. The aim of efforts at better enforcement coastal-wide and tests of decentralized co-management approaches in the Western Region is to increase fishing community resilience including fish stocks, settlements and food security throughout the supply chain including nursery grounds and coastal ecosystems, fishing and farming locations, to low-income, vulnerable consumers.

On a parallel but carefully interwoven track, Hen Mpoano will help operationalize and strengthen a decentralized nested-system approach to land and sea-scape management in the Western Region. This will provide a clear, working model of how coastal issues, especially those tied to community resilience, notably food and livelihoods security, and sustainable use of natural resources, can be addressed from multiple perspectives by a carefully arranged decision making system that builds strength and greatly expands participation from policy and decision making that fully engages communities, districts and the region, each playing a critical and appropriate role. Hen Mpoano will also lay the groundwork for replication in the neighboring Central Region, by obtaining national recognition and support for piloting these innovations and through expanded awareness and identification of issues and areas of particular concern ready to adapt and test the approach, following the model set by Our Coast, Our Future and the work of the Western Region Coordinating Council.

Moving Forward Nationally

The fisheries and coastal landscape models will be set in motion during the present implementation phase, based on the idea that ongoing support, notably for capacity building, will greater enhance rapid results and impacts as well as shorten the learning process for scaling up to other coastal regions. National government approval will be sought for (1) piloting decentralized fisheries policies and management in the Western Region, and, (2) consolidating and operationalizing coastal spatial planning and addressing cross-cutting issues such as climate change adaptation in the coastal districts, targeted mainly at fishing communities and their associated food systems.

Fisheries

In collaboration with the Fisheries Commission, consolidate improved stakeholder participation and enforcement mechanisms for marine fisheries. This would likely be some form of new national policy or decree on fisheries governance.

- Obtain a clear national mandate to proceed with pilot decentralized fisheries management model for the Western Region based on new governance arrangements proposed in the previous phase of the project
- Scale up successful models tested in the Western region including the Fisheries Working Group and improved enforcement and prosecution systems by assisting in establishing similar arrangements in the three other coastal regions. This will be undertaken in close collaboration with World Bank supported project which has considerable funding to roll out these approaches nationwide.

Spatial planning and community resilience

- Clarify and strengthen Hen Mpoano collaboration with the Ministry of Environment, including the Town and Country Planning Department, and selected other agencies to proceed with fully operationalizing the nested coastal landscape governance proposal for the Western Region
- Obtain a clear n ational m andate t o i nitiate the i ssue an alysis, c apacity bui lding and identification of areas of particular concern for the Central Region
- Strengthen the Center for Coastal Management (CCM) within the University of Cape Coast to provide capacity building assistance to districts in the Central and Western Regions to embark on outreach/extensions programs for coastal habitat management, monitoring of wetlands and rivers, integrated coastal zone management planning (ICM) including the issue analysis and identification of areas of concern, and climate change adaptation and planning.

Moving Forward Regionally

At the regional level, a proposed focus is further strengthening of the coordination mandate of the Regional Coordinating Council (RCC) through support for regional coastal commission, in one form or another, that is part of a larger regional development authority. This will be done

through improved coordination and engagements with both private sector and civil society, and better collaboration between the RCC and traditional authorities on the development agenda and management of natural resources.

Fisheries

- Provide continuing support for the Fisheries Working Group in the Western Region with the aim of stabilizing its role and sustaining its operations over the long term
- Strengthen and operationalize a citizens watch program and law enforcement on fisheries is effective to promote compliance.
- Prepare outreach and training materials and conduct a systematic education and awareness campaign, as well as provide technical assistance to the Fisheries Management Council, and the World Bank fisheries program

Spatial Planning

- Western Region Coastal Commission model developed and operationalized so as to provide the necessary guidance on strengthening district and local decision making with information, policy analysis and deliberation on issues of regional concern, and potentially serve as a model for a national coastal commission.
- The Platform for Coastal Communities (PCC) and other civil society groups will be strengthened as part of the coastal fund and provided punctual technical support as they seek to address other pertinent coastal issues such as the evolving potable water crisis or social inequities created by an evolving extractives industries sector.
- Financial sustainability for coastal landscape management and community resilience will include rolling out the Coastal Fund in partnership with DFID and private sector corporations with funding links to revised MTDPs and performance criteria in expanded FOAT (Functional Operational Assessment Tools) in the six coastal districts.
- Technical support will be provided to an improved process of siting facilities of regional concern and impact on the coastal zone, through technical information, training and carrying out one or more large scale project siting planning efforts, for either the gas facilities in the Jomoro District or the refinery project in the Ahanta West District (with a focus on spatial planning to manage the secondary impacts of coastal industrial facilities outside of the "fence" of the infrastructural projects.
- Fully establish the Regional information and data center for coastal landscape and seascape decision support based on the GIS hub now operating with Town and Country Planning, and provide ongoing training for ongoing revisions and updates on spatial planning for the Western Region.
- Provide increased support to establish Coherent byelaws for shoreline management among all six coastal districts established and communicated to the other coastal regions of Ghana based on models emerging in Years 3 and 4 of the Hen Mpoano program, as part of the decentralized nested governance proposal..
- Increase community resilience in high-risk low-capacity communities by addressing region-wide need for a pro-active flood and hazard mitigation plans and early warning systems developed for the Western Region.

Moving Forward in the Districts or Focal Areas

As concerns the districts, more time would benefit completing coastal management planning and implementation in the six coastal districts as well as embarking upon planned interventions (that require more time than is remaining in the present time-frame).

- At the District level, Mid-Term Development Plans, MTDPs, with marine and coastal management chapters will be completed and will include evaluation criteria used for funding allocations (FOAT as previously mentioned) in all six districts.
- Piloting of small scale Locally Managed Marine Areas, LMMA, management units (that form a network of marine protected areas) that form a coherent sea to landscape green belt plan for the Cape Three Point focal area (unified approach to forest-wetlands-farmland-seascape).
- Full implementation of community resilience building actions in at least one representative, high-priority fishing community locations in each coastal District in the Western Region, combining physical hazards, adaptive capacity and fishing community resilience elements.
- Cottage industries supported for bamboo production, coconut production, and selected value chains for other products that can be produced in the coastal belt.
- Amanzule conservation management plan endorsed by the government of Ghana thus allowing for leveraging of funding from diverse sources for implementation. The plan will demonstrate a bi-District approach to natural resources management, possibly a trans-border conservation program with the Ivory Coast, and also addressing the needs of fishing communities along the coastal barrier strip in terms of livelihoods. These plans will also address flood and erosion hazards likely to be intensified by climate change, and incorporating major oil & gas/ industrial facility siting.
- Model for a land trust related to food production lands at risk of disappearance due to land speculation and overheated urban development, rolled out in Ahanta West District in order to further promote food security objectives for the local population in the coastal belt.

Annex A: Summary of Findings & Recommendations of Program Evaluation

A mid-term evaluation was commissioned by USAID in May 2012 which provided USAID, CRC and implementing partners with a detailed understanding about ways the project is effecting change; offered an assessment of the probability it will fulfill its objectives by the end of the project; made suggestions about alternative actions or measurements to increase the probability of success and recommended ways the project team might interact with other donors and/or other institutions to increase the probability of long term change.

The Evaluation Team found Hen Mpoano to be a very well designed and well implemented project; it has an exceptionally wide and supportive stakeholder base and is making a very positive change for the people and the governance structure of Ghana's Western Region. Since the project is designed and implemented as a governance project, the Team found it somewhat difficult to frame quantitative measures of change. It decided to use qualitative measures such as stakeholder involvement, how the mission is interpreted by stakeholders, ability of stakeholders to identify activities, perception among stakeholders on the extent to which the project is leading to sustainable change, and stakeholder guidance (i.e., their perception of the best ways for the project to invest time and energy in its final 18 months).

USAID, CRC and the implementing partners were found to have an understanding of the needs and opportunities when the project was designed, and that implementation has been appropriately adaptive. The Evaluation Team noted that the ICFG project team has adapted well, although not completely, to changes in institutional conditions (e.g., sources of funding within the US AID portfolio). Linkages to US AID's Feed the Future program are evident, but are not sufficiently articulated.

The evaluation report highlighted that the Hen Mpoano project is very well known and respected in the communities and Districts where it has focused, and has high visibility in the other Western Region Districts. While it was noted that progress in making targeted changes are evident at the regional level, more narrowly targeted and fewer changes are evident at the national level, in the private sector and within the donor community. While communication with local and District level stakeholders and of technical materials has been exemplary, communication products targeted to the needs of national and international stakeholders are less well developed and need to be a focus of the final year. The project was seen to have wisely invested very heavily in capacity development and technical assistance and made a large and meaningful difference in its target areas.

A principal recommendation aimed at sustaining the momentum and critical mass of support for fisheries and coastal governance was that the Evaluation Team felt that Hen Mpoano should be sustained in order to advance coastal governance, noting that there is an important role for an institution that serves as the central facilitator of coastal governance issues in the Western Region, drawing together and facilitating the interactions among key players to improve the quality of governance.

Addressing Recommendations from the Evaluation in the Year 4 Work Plan

The Evaluation Team made five specific recommendations for the final year of the current project which have been incorporated into this work plan.

Identify and document lessons learned: "The project focus its remaining energies more on analyzing and capturing lessons learned than on new initiatives". This recommendation is addressed in a new Component 3 of the Year 4 work plan.

Communicate carefully: "Choose strategic messages, especially targeted, synthetic lessons to upper level, high visibility policy makers and decision makers. Policy briefs and white papers such those now in progress are valuable; we think there also is a significant need for items that are shorter, more synthetic and more targeted". This recommendation is addressed in Component 1.1 and 1.2 and in Component 3.

Empower women: "There seems to be little momentum in helping women to become more organized (e.g., help develop better markets, better products, or alternative products or marketing strategies). Capacity development within the women's communities would be a valuable contribution". This is addressed throughout Component 2 by the community level work in the three geographic focal areas.

Continue to invest in networking and relationship building: "Focus on the long term goal of Hen Mpoano becoming a self-sustaining institution in the Region. Consistent with that long term goal, communicate more effectively, especially at the regional and national levels". This is addressed in Components 1.1 and 1.2

Think carefully about where Hen Mpoano fits within USAID: "ICFG is currently funded primarily in Feed the Future (FtF) and is making contributions that will advance FtF goals. But it has activities and is making changes that cross programs. We think this analysis will be valuable because a) it will help identify the variables to be assessed during ICFG's final evaluation, b) it will provide the Mission with valuable information in support of several of its programs and c) it will influence possible future AID support". This will be addressed through adjustments to the PMP and in the descriptions of the key activities in Components 1 and 2.

Annex B: Revised ICFG M&E Indicator Reporting to USAID

	Revised ICFG M&E Indicators for USAID Reporting			
Ind	icator	Old Indicator	New Indicator	Comments
Old	New			
1.	1.	Improvements on a gove rnance s corecard c overing goa ls, constituencies, commitment and capacity dimensions	SAME	Custom Indicator to be maintained
2.	2.	Evidence of I CM & Fisheries S trategies, plans, p olicies, byelaws a dopted by gov ernment with time bound qua ntitative environmental & socio-economic targets	# 4.5.1-24 (FTF Sub IR 1.3) Numbers of Policies/ R egulations/ A dministrative Procedures i n each of the fo llowing stages o f development as a result of USG assistance	Indicator m aintained a nd a djusted t o s uit F TF Standard language
3.	-	Amount of pri vate s ector and/ or gove rnment re sources allocated for planning and implementation of ICM and fisheries management plans or strategies		This ol d i ndicator's droppe d be cause t he s tandard indicator language does not fit for reporting and ICFG has not been able to set targets for this in the past.
4.	3.	Number of C SOs & govt. agencies strengthened such as local NGOs, alliances, trade associations or community management committees or a dvocacy gro ups, di strict n atural r esources offices, etc	(Global Climate Change Indicator EG 5.1) Number of Ins titutions/ Organisations Undertaking Capacity/Competency Strengthening As A R esult of USG Assistance	This i ndicator (Institutional S trengthening) is t o be maintained either as a biodiversity indicator. Used to be old indicator #4.
5.	4.	$N^{\underline{o}}$ of s takeholders participating i n re source m anagement initiatives, workshops, regional meetings , exchange visits	# 4.5.2 - 7 (FTF Sub IR 1.1) Number of i ndividuals w ho ha ve re ceived U SG supported Short-Term Tr aining on a gric. s ector productivity or food security	Maintained but language reviewed to fit into new FTF short te rm t raining indicator (#4. 5.2 - 7). Meetings/workshops, etc would now be designed and structured to suit short term trainings
6.	4.	Number of gove rnment pe rsonnel, c ommunity leaders a nd private sector stakeholders trained	# 4.5.2 - 7 (FTF Sub IR 1.1) Number of i ndividuals w ho ha ve re ceived U SG supported Short-Term Tr aining on a gric. s ector productivity or food security	This i ndicator is maintained (u sed to be part of old indicator #6) which has now been split to reflect both short and long term trainings.
6.	5.	Number of gove rnment pe rsonnel, c ommunity leaders a nd private sector stakeholders trained	# 4.5.2 - 6 (FTF sub IR 1.1) Number of i ndividuals w ho ha ve re ceived U SG supported Long-Term Tr aining on a gric. s ector productivity or food security	Old i ndicator (o ld #6) now split i nto short t erm a nd long term trainings
7.	6.	Number of he ctares in areas of biological significance under improved management	(Global Climate Change Indicator EG 8.1) № of hectares in areas of biological significance under improved management	This i s a n o ld i ndicator to be m aintained a s biodiversity indicator. (used to be old indicator #7)
11.	7.	Number of climate change vulnerability assessments conducted	#4.5.1-21 (FTF Sub IR 1.2) Number of c limate c hange vul nerability assessments conducted	Indicator i s t o be m aintained. It fi ts F TF s tandard language. It is also a biodiversity indicator . Used to be old indicator #11.
8.	8.	Number of rura 1 hous eholds t hat be nefit di rectly from U SG Assistance	#4.5.2-13 (FTF Sub IR 1.2) Number of rura 1 hous eholds benefiting di rectly from USG Interventions	Maintained
9.	9.	Number of Public-Private Partnerships formed	#4.5.2-12 (FTF IR 3) Number of P PPs form ed a s a re sult of FTF Assistance 59	Maintained

10.	10.	Quantity of greenhouse gas emissions sequestered	(Biodiversity Indicator EG 4.8-7) Quantity of gre enhouse ga s e missions measured, reduced or sequestered	To be maintained as biodiversity indicator
12.	11.	Number of i nstitutions w ith i mproved c apacity t o address climate change	#4.5.2-32 (FTF Sub IR 1.1) Number of s takeholders us ing c limate change information in their decision making as a result of USG assistance	This is a n ol d indicator (ol d i ndicator #12) that has been re fined t o s uit F TF l anguage a nd i s t o ha ve included, 'institutions' for populating sheet
-	12.		#4.5.2-27 (FTF Sub IR 1.1) Number of members of produc er organisations and community ba sed orga nisations re ceiving U SG assistance	This is a new indicator that could be reported on (this is w here w e differentiate b etween t rainings a nd beneficiaries
-	13		#3.1.9-1 (FTF IR 8) Number of pe oplet rained i n c hild he alth and nutrition through USG-supported programs	This is an entirely new indicator for PHE reporting on activities in Shama, Ellembelle and Jomoro districts
	14		#4.5.2-11 (FTF IR 1.1) No of food s ecurity pri vate e nterprises, produ cer organizations, CBO receiving USG assistance	New Indicator

Annex C: Results to Date (FY 10 – FY 12: September 30, 2012) and Targets for FY 13

No.	Indicator	FY 10 Target	FY 10	FY 11	FY 11 Results	FY 12 Target	FY 12 Results	FY 13
			Results	Target				Target
1.	CUSTOM IND. Improvements on a governance scorecard covering, goals, constituencies, com- mitment and capacity dimensions.	Areas for score carding determined	4 areas selected for baselining Western Region baseline completed	Increasing	Shama Baseline completed March 2011. Cape Three and Amanzule baselines completed in July 2011 Time 2 scorecard completed in July 2011	Increasing	Time 2 Scorecards for Shama, Cape 3 Points and Amanzule completed with increasing scores Scorecards for fisheries compliance and enforcement completed with increasing scores Western Region Time 3 scorecards completed in July 2012	Increasing
suppl dema Cape FY12 secur rubbe train Focal	y, flooding, construction nd driven process, where Three Points and Amanz Comments: Work start ity and livelihoods as ten r sector stakeholders to displaced farmers on inte Areas and results are for	in flood plains, . T local chiefs and co ule Focal Areas in ed in the Cape Thr ant farmers lose the highlight the issue nsive small scale ve eeding into a large	he Shama partic ommunity people FY 2012 and FY ree Points Focal heir farms to the of rubber and f egetable crop pr er spatial planning	ipatory land use e fully participat 2013 Area where issue rubber outgrow ood insecurity. oduction. Vulne ng process at th	mapping and planning fa ted in the exercise. The ex- ues of expansion of perer ver scheme and other infi This led to the Rubber c- erability and Resilience State the district level. It is imp	cilitated by ICFG I speriences gained finantial tree crops (rub castructural develop ompany supporting urveys have been co portant to note that	ining STMA to Shama; inadequate nitiative and the District Assembly rom the Shama process would serve ober and oil palm) have been major oment being driven by the oil sector g another private company BBOVII ompleted for both the Cape 3 Points ICFG has built support in all the	was a case of a as model for threats to food r. ICFG engage D with funds to s and Amanzule F ocal A reas a s
fisher the go forwa result	ies) show increasing resu- bals of the ICFG Initiative rd. Key ICFG outputs in of the ICFG 'learning by	alts. The last quarter e and in the Cape 3 clude a coastal fou or doing', the ICFG	er of Year 3 focu Points and Ama Indation model f is authoring issue	ised on designin anzule Focal Ar for the Western ue briefs to allo	ng end game plans toward eas the districts have activ Region which received s	Is the completion of ve Spatial Planning upport from major rtinent coastal issue	ause. Scores for all the 4 initiatives of f the ICFG program. Stakeholders h Advisory Groups for pushing ICFC donor organizations like DFID and es to national to all stakeholders (inc.	ave understood B's ICM agenda NORAD. As a

No.	Indicator	FY 10	FY 10 Results	FY 11	FY 11 Results	FY 12	FY 12 Results	FY 13
		Target		Target		Target		Target
2.	FTF SUB IR 1.3 #s of Policies/ Regula tions/ Administrative Procedures in each of the following stages (Analyzed, Drafted, Presented for Legislation, Passed, Implementation) of development as a result of USG assistance	Areas requiring management plans, strategies, policies and bye-laws determined	Areas selected: 3 STMA wetlands Shama Cape Three Points Amanzule	3 wetlands in STMA targeted	1 st Stage underway – Analysis stage (Work on management plans, policies and district bye- laws underway in STMA and Shama.)	4 (Cape 3 Points and commu- nity wet- lands	C3Ps - 1 st /2 nd Stages underway. (Work on manage- ment plans and review of CREMA Wetlands Bye- laws underway in Cape Three Points) Gazetting of 3 STMA wetlands – 1 st /2 nd stages underway. (Socio economic survey completed. Boundary survey underway) Shama 3 products - District ICM Policy (1 st /2 nd stages completed. 3 rd Stage underway) Shoreline Management Byelaw (1 st stage completed. 2 nd Stage underway). 2 Wetland Byelaws (1 st stage completed, 2 nd stage underway)	1 (Amanzule)

Comments: Studies have been conducted to inform decision making wetlands relative to food security, flood control and biodiversity conservation. Meetings were held with STMA officials, legal consultants and other government departments for the enactment of bye-laws for protecting the wetlands. Maps have been prepared for the 3 wetlands. A consultative process for the way forward was still ongoing for the purpose of gazetting the 3 wetlands. The process has not been smooth due to issues of bureaucracy. The ICFG local partner - FoN of the Nation, has conducted a series of social studies using graduate interns from the University of Cape Coast for a stakeholder analysis of the wetland areas. A socio-economic assessment was completed through a participatory survey by selected community persons, assemblymen and women, district personnel and landowners. This was to be followed by a technical land survey to demarcate buffer zones. The results will be validated with stakeholders and this will inform the drafting of the regulations for consideration, passing and gazetting by the STMA. The drafted regulation will be harmonized for all the other coastal districts in order to put the wetlands under a unified code for improved management in FY 2012 and 2013. For the C3P Focal Area, CREMAs have been revived for 20 fringe communities for the protection of the Forest Reserve and wetland areas. Leadership training for the CREMA Executives was completed. Collation of data for the amendment of management plans; constitution and byelaws have also been completed.

2012 Comments – The Cape 3 Points Wetlands byelaw and CREMA constitution are undergoing review. This no longer involves just 4 wetlands but 20 community wetland areas covered by a single integrated byelaw for the umbrella CREMA body. 1st Stage – Analysis: Community meetings have already been organized for the 20 fringe communities relative to trend analysis of health, value and benefit of the wetlands. 2nd Stage – Drafted: Data from the stakeholder consultation processes have fed into the process towards the amendment of the CREMA Constitution. For the Shama, ICM component will feed into the district's spatial development framework. The 1st Stage – Analysis - started with a review of existing information with stakeholders including Coastal Sub-Committee and the Advisory Committee; the output from the 1st stage fed the 2nd Stage (Drafting). The first draft of the SDF has been presented to stakeholders at the district assembly leading to initiation of the 3rd (Presentation) Stage. Relative to Shama shoreline management byelaw, the district's Statutory Planning Committee has assisted with the analysis of existing shoreline management characteristics (Ist Stage) where the output has been summarized into a draft working document (2nd Stage). For the 2 wetlands, analysis of detailed physical vulnerability has been done with district stakeholders and information from the process has been collated into a draft working document. In STMA, the analysis stage of wetlands boundary survey is still ongoing; together with the socio-econo mic survey, the two would feed the draft stage of the byelaws development. In Amanzule, several planning sessions have been completed with traditional authorities, district assembles and government institutions relative to conservation and management of the wetlands. Alongside of this, carbon stock assessments have been completed in managrove, swamp and peat forests within the wetland areas to assess the feasibility for long-term conservation funding through diverse carbon funding

No	Indicator	FY 10 Target	FY 10 Results	FY 11 Target	FY 11 Results	FY 12 Target	FY 12 Results	FY 13
•								Target
3.	Biodiversity Ind.	53 targeted,	30 institutions	15 targeted	21 strengthened,	16, qualitative	19 strengthened	33 (both
	Number of Institutions	qualitative	strengthened		qualitative narrative	narrative provided	qualitative narrative	new and
	/ Organizations	narrative provided	_		provided in PMP on	in PMP on how	provided in PMP on how	continuing)
	Undertaking Capacity/	in PMP on how			how each was	each is being	each is being strength-	
	Competency	each is being			strengthened	strengthened	ened	
	strengthening as a	strengthened.						
	Result of USG	Figure also stands						
	Assistance	for the LOP target						

Comments: 53 organizations were targeted for strengthening as the main targets. The Initiative has worked with most of these in Year 2 but expects strengthening to continue through to end of project so no annual increase in targets. Friends of the Nation, WERENGO (association of 45 NGOs in the Western Region), Hotel Operators Association, Oil and Gas platform, NGOs/CSOs are receiving small grants to conduct resource management and livelihood development activities (~15), Fisheries Commission, Coastal districts (6), University of Cape Coast Department of Geography, Centre for Coastal Management and Department of Fisheries & Aquatic Sciences, Community Health Workers college. The number of organizations receiving assistance is now at 58. University of Cape Coast and Community Health Workers College are also receiving contracts for specific work. The strategy here is to have these organizations learn by doing and mentors or advisors are assigned to each group. Many of these organizations are also being strengthened via training of the personnel and these results are c aptured in Indicator N o. 6 – see below. Ot her forms of strengthening include the provision of w orking e quipment and enhancement of office space. P artnerships have been formed with these organizations and M emorandum of Understanding have been developed and signed with all. The Western Regional Town and Country Planning Department has been strengthened by refurbishing their main drawing room with computers and accessories and training sessions organized for them.

FY12 Comments: The conference room of the Western Regional Fisheries Commission has been refurbished as well as an office space to be fitted with computers and accessories where Hen Mpoano will be coordinating some of their fisheries activities. The Platform for Coastal Communities has received support for the establishment of district offices. Others include mentorship, direction and financial support for CREMA executives in the Cape 3 Points Focal Area to carry out education/sensitization of residents. The Ghana National Canoe Fishermen Council has also received support in the form of funds to revive the Association for enforcement and compliance activities in the area of fisheries. Hen Mpoano has also assisted them to draw up their constitution. The Initiative has also (for some communities) revived and constituted (new ones) 20 CREMAs in fringe communities of the Cape 3 Points Forest Reserve. Hen Mpoano has also supported WAPCA to conduct a series of primate surveys and to spearhead bilateral collaborations amongst fringe communities of the Amanzule in Ivory Coast and Ghana for conservation and protection of wetland areas which are key to food security.

No.	Indicator	FY 10	FY 10	FY 11	FY 11 Results	FY 12	FY 12 Results	FY 13 Target
		Target	Results	Target		Target		
**	No of stakeholders	Tracked	512 persons	Tracked	753 persons	Tracked but	** This indicator has been merged to	N/A
	participating in resource	but no	Males - 390	but no	Males - 605	no targets	the ftf Short-Term Training Indicator	
	management initiatives,	target	Females –	targets	Females - 148	_	for FY12 Reporting; the figures below	
	workshops, regional		122				would as such be included to short	
	meetings, exchange						term trainings below	
	visits.						- 1,243 people have participated in	
							resource management meetings, 991	
							males and 252 females	

Comments: Tracked but no target

Several resource management initiatives, workshops, meetings and trainings involving stakeholders such as the District Assemblies, Fishermen's Associations, Fishmonger Associations, Community R esource Users, S patial P lanners, the Fisheries Commission, Wildlife D ivision of the Forestry Commission and the Environmental P rotection Agency were organized during the reporting period. Hen Mpoano has also constituted the Western Regional Fisheries Working Group which is a 12-member group made up of representatives from the Navy, the Police, the Judiciary, the Artisanal, the Semi-industrial and the Industrial fisheries sectors, Ghana National Canoe Fishermen's Council and the Cooperative Fishermen's Service Center. The Fisheries Working Group meets monthly to discuss fisheries issues in the Western Region and look at ways to improve fisheries management in the Western Region. The Group advices the Western Regional Director of Fisheries on fisheries issues in the Western Region. Several participatory land-use management meetings have been conducted with the Wildlife Division of the Forestry Commission and other relevant stakeholders on the Cape Three Points Reserve and the Amanzule wetlands. Exchange visits on Integrated Coastal Management, fisheries co-management, fisheries compliance/enforcement, Marine protected Areas and co-management for forest protection to Rhode Island, Senegal, the Ivory Coast, Tanzania and northern Ghana respectively have been undertaken and an Action Plan workshop organized to implement some of the lessons learned in the Western Region of Ghana. B ilateral discussions have also communities of the Amanzule wetland area in I vory Coast and Ghana on possible conservation programmes for the area. Press meetings and dialogues have also been carried out (and still ongoing) to catalyze actions for water quality and supply issues.

FY 12 Comments: See below (Short term trainings)

No.	Indicator	FY 10	FY 10	FY 11	FY 11 Results	FY 12 Target	FY 12 Results	FY 13
		Target	Results	Target				Target
4.	FTF SUB IR 1.1	100 -	216	100	Total number of	500	Meetings/workshops: 1243: 991m	300
	Number of individuals	(for both	Males - 170	(for both	people trained in FY		and 252f	
	who have received USG	long and	Females – 46	long and	11 is 393;	(for both long	Well-structured short-term	
	supported short-term	short		short term	280 males and 113	and short term	trainings – 1610 : 628 males &	
	agricultural sector	term	Long &	trainings)	females. (for both	trainings)	982females	
	productivity or food	trainings)	short term		long and short term			
	security training		trainings		trainings)			

Comments: Year 1 r esults seemed high and it is due to the fact that some meetings were being counted as training workshop when they probably should not have been. Measures to rectify this situation underway and only truly training events and training workshops or study tours captured here.

As at the end of March, 2011, 260 people (government personnel, National Service Volunteers, graduate students, community leaders and private sector stakeholders - 171 Males and 89 Females) had been trained. A total of 99 people were trained between March and July 2011; 82 males and 17 females. 32 people were trained between July and September, 26 male and 6 females and 2 graduate students, 1 male 1 female started Maters training at URI.

Employees from the Fisheries Commission, the Environmental Protection Agency, the District Assemblies, Fishermen Associations, the Civil Society Platform for Oil and Gas, Friend of the Nation, the University of Cape Coast Department of Fisheries and Aquatic Sciences and the Department of Geography and Regional Planning all benefited from Hen Mpoano trainings. 4 graduate students from the University of Ghana and the University of Cape Coast were awarded field research grants and were trained to undertake research in the Western Region for their Masters' thesis. Hen Mpoano in collaboration with the World Fish Center also organized a training on Adaptive Management of Small-scale fisheries for staff of the Fisheries Commission and local fishermen. There was also a Population-Health-Environment training on Youth Peer Educator Trainer-of-Trainers which took place in the Ellembelle and Nzema East districts of the Western Region. There was a training for faith-based leaders (Muslims, traditionalists and Christians) in all 3 coastal districts for the purpose of management of coastal resources in Takoradi. There was a training on primate monitoring and survey in the Ahanta West district of the Western Region. There have also been several trainings on Integrated Coastal Management and just recently a training on Adaptive Responses to Climate Change in collaboration with the University of Cape Coast that targeted Western regional District Planners and thee Western regional branch of the National Disaster Management Organization as well as for all Hen Mpoano technical staff. District Fisheries representatives in the 6 districts are also undergoing training in GIS proficiency and use. Some community artisans (woodcarvers, graphic designers, etc) have also received capacity building for the development of business plans and for records/keeping and good management skills.

FY12 Comments: These short term trainings include leadership trainings, Marine Police Training, Faith-based trainings for the 3 remaining coastal districts with A Rocha. Others include video trainings, a series of PHE/Peer Educators Trainings with the Esiama Community Nursing School, Business Management training for the Babson artisans, ICM training for the vulnerability and resilience surveys in 4 districts. Others include a PHE and Fisheries Leadership Summer short courses in Rhode Island as well as computer trainings for Fisheries Commission staff in all 6 districts and the 2nd UCC Climate Change Short course for national and regional level planners.

Meetings, workshops and resource management meetings also include Advisory Council meetings, Fisheries and Cape 3 Points Working Group meetings, Amanzule resource co-management meetings with Ivory Coast and Nzema Manle fringe communities. Others include turtle conservation meetings with Ghana Tourist Authority and the hospitality sector as well as ICFG technical and M&E meetings. This deviation for FY12 data result was due to change in the definition of the indicator.

No.	Indicator	FY 10	FY 10 Results	FY 11	FY 11 Results	FY 12 Target	FY 12 Results	FY 13		
		Target		Target		_		Target		
5.	FTF SUB IR 1.1	N/A	216	N/A	12 – 6females, 6males	3	3 Masters and 1 PhD students:	0		
	Number of individuals	See above	Males - 170	See above	2 URI Master Students		2 males, 1 female			
	who have received USG	– short-	Females – 46	 short- 	(1male/1female)					
	supported long-term	term		term	10 National Service					
	agricultural sector	training	Long & short	training	Volunteers					
	productivity or food	target	term	target						
	security training		trainings							
							ries data to strengthen the informat			
fisher	ies in the Western Region. 7	wo graduate s	tudents have been	awarded scho	olarships to study at the U	niversity of Rhode Isl	and beginning the 2011/2012 acad	demic year.		
FY12 Comments: 21 Town and Country planners and technicians have benefitted from a series of geographic information systems (GIS) trainings. These are 4 training										
blocks with each block lasting two weeks over a period of 6 to 7 months. The URI Masters programme is in continuation. Target for FY13 changed to zero as a result of										
chang	e in indicator definition.									

No.	Indicator	FY 10 Target	FY 10	FY 11	FY 11 Results	FY 12 Target	FY 12 Results	FY 13 Target
			Results	Target				_
6.	Biodiversity Ind.	Areas of	Targets	600 hectares	240 hectares (total	11,100 hectares	11,100 hectares	Amanzule –
	Number of hectares	biological	set	(3 wetlands	area): Butuah lagoon –	Cape Three Points	Cape Three Points	21,000 hectares
	in areas of biological	significance to		in S.T.M.A.)	27.3 hectares	5,100 hectares	undergoing	
	significance under	be considered for		targeted	Whin estuary – 204.9	CREMA wetlands	improved	
	improved	improved			hectares	6000 hectares	management	
	management as a	management			Essei lagoon – 8.0			
	result of USG	determined			hectares			
	assistance							

Comments: 32,700 hct (initial estimates but more precise estimates provided on UCC has district and focal area GIS mapping completed). We plan to disaggregate this by hectares under planning, adoption and implementation phases Amanzule – 21,000 hectares Shama - hectares TBD, S.T.M.A. wetlands 600 hectares, Cape Three Points 5,100 hectares, Community-based (CREMA) wetlands – 6000 hectares

Hen Mpoano is working closely with the Wildlife Division of the Forestry Commission, S.T.M.A. and the Survey Department to demarcate the 3 wetlands in S.T.M.A. for improved management. The Survey Department is in the process of budgeting for the demarcation while the S.T.M.A. and the Wildlife Division are also working with Hen Mpoano to draw management plans, policies and to enact district bye-laws to govern these wetlands. The same processes are being followed in the Cape Three Points forest reserve and the Amanzule wetlands in FY 2012 and FY 2013 respectively. Actual hectares of the three wetland areas in STMA (water + vegetation area only) is 240.2hct only as per GIS mapping done by consultants from CCU – see Tech report – Rapid biodiversity assessment on Essei and Butuah lagoons and Whin River Estuary – so the initial estimate of 600hct was wrong. A conservative estimate of size using only the water extent in 2010 and vegetated area in 2010 was used in the calculation.

In the Cape 3 Points Area, 20 Community Resource Management Areas (CREMAs) have been reconstituted for the wetland and forest areas and are already carrying out community sensitization and education programmes as well as collection of data for amendment of management plans and byelaws. For the Amanzule Area initial carbon stock assessment has been completed for over 18 mangrove sites in the area.

FY12 Comments: (*Refer to Indicator 2*) Cape 3 Points activities in year 3 which include mobilization and training of CREMAs for wetland areas and the Forest Reserve, collaborations with Forestry Commission and Conservation Foundation towards effective co-management, establishment of community monitoring teams and primate surveys as well as international events such as world environment day celebrations among others are contributing towards improvement in management of the Cape 3 Points areas of biological significance.

In the Amanzule focal Area, carbon stock assessments and resource management meetings with Ivorian and Ghanaian fringe communities have been conducted (and still ongoing) and aim at developing scenarios for effective co-management towards possible REDD funding.

No.	Indicator	FY 10	FY 10	FY 11	FY 11	FY 12 Target	FY 12 Results	FY 13
		Target	Results	Target	Results			Target
7.	FTF SUB IR 1.2	Not	Not reported	Not	Not reported	3 focal areas	5 surveys conducted in 3 Focal	1
	Number of climate	reported on	on	reported on	on	covering 5	Areas covering 5 Districts:	
	vulnerability	-		_		districts	Cape 3 Points Area – Ahanta	
	assessments conducted						West and Nzema East districts	
	as a result of USG						Amanzule Area – Ellembelle and	
	assistance						Jomoro Districts	
							Shama District	

FY12 Comments: In Shama Focal Area, the spatial planning process has identified vulnerable areas and byelaws are being crafted to arrest development there. Early warning systems for vulnerable areas that are settled are being developed in partnership with the Meteorological Service and NADMO. A Livelihoods resilience survey has also been successfully completed with analysis underway.

For the Cape 3 Points Area, the Vulnerability and Resilience survey covered 33 communities – Ahanta West (22) and Nzema East (11). Issues have been identified, discussed and prioritized with stakeholders. Key issues in the focal area include flooding and high erosion impacts, loss of main livelihoods – fisheries and farming due to decline in fish stocks (as a result of illegal fishing methods, increase in efforts, impact of oil industry) and conversion of farmlands into rubber plantations and other infrastructural developments.

For the Amanzule Focal Area, the survey covered 47 communities – Ellembelle (18) and Jomoro (29). Issues have been identified, discussed and prioritized with stakeholders. Key issues include erosion and sea level rise leading to loss of properties and landing sites, markets, etc. The algal bloom phenomenon which threatens the fisheries livelihood is a major issue where fishermen catch green algae in nets instead of fish. Other issues include flooding and loss of land for farming and settlement due to influx of investors tapping into oil industry.

Results from the survey would feed into a larger spatial planning process at the district level.

No.	Indicator	FY 10	FY 10	FY 11	FY 11 Results	FY 12	FY 12 Results	FY 13 Target
		Target	Results	Target		Target		
8.	FTF SUB IR 1.2	0	70	50	110 community persons	260	1,046 rural community persons:	150
	Number of rural				benefitted: 23males and		534 females / 512 males	
	households benefiting				87females			
	directly from USG							
	interventions							

Comments: Life of project numbers are cumulative. Rural households were supported through the Small Grants Program of Hen Mpoano to undertake different projects in the fishing communities of the 6 c oastal districts of the W estern Region. S mall grants have been a warded to qualified a pplicants a gain for the following fiscal y ears. Households that benefitted are beneficiaries or recipients of the small grants program. Three small grants focused on livelihood development and included: Batik and soap making for 20 women; improvement of fish monger stalls for 30 fishmongers and assistants; training of 20 women and supply of inputs for poultry production. In these cases number of households benefiting for each activity were 20, 30 and 20 respectively.

FY11 Comments: In the second round of small grants, 100 community persons benefitted from training and inputs for the poultry project while 10 others benefitted from training and inputs for rabbitry and grass-cutter household project. (trainings are reported under the short term training indicator)

FY12 Comments: 58 persons are benefitting from a small grant project for the renovation of 3 community boreholes. 863 community people also benefitted from PHE home counseling visits some of which focused on nutrition, family planning/sexual and reproductive health, sanitation as well as the distribution of IEC materials to the households through the Peace Corps/Esiama Health Nursing School home visits. Also 5 care givers each from 25 communities in Shama through CEWEFIA's PHE activities benefitted from training on nutrition values and Population-Health-Environment for the well-being of families/households.. The deviation from the target is the result of decisions taken in the middle of the year to respond to some development challenges in some rural communities

No.	Indicator	FY 10	FY 10	FY 11	FY 11 Results	FY 12 Target	FY 12 Results	FY 13 Target
		Target	Results	Target				
9.	FTF IR 3	Not reported	Cumulative	Not reported	Cumulative –	6	6 new partnerships	Tracked but no
	Number of public-private	on	- see FY12	on	see FY12		established. Bringing	target
	partnerships formed as a		Results		Results		cumulative figure to 50	-
	result of FTF assistance						_	

Comments: The Initiative has formed a considerable number of PPPs which have over the years proved very useful for effective implementation of Hen Mpoano activities aimed at producing mutual benefits. Some of the partnerships have contractual agreements, while others are just by mutual understanding. The Initiative has about 40 partners which could translate to over 150 groups and agencies (A cumulative number gleaned from beginning of 1st Phase of ICFG programme). The Western Region Network of NGOs (WERENGO) is one such group with over 60 NGO members that the Initiative supports with trainings and Small Grants. Tullow Oil and Jubilee Partners are in partnership to support Cape 3 Points CREMAs for conservation projects aimed at promoting food security. LOGODEP (USAID IP) is working with ICFG for establishment of Coastal Fund (together with COLANDEF) and is supporting Platform for Coastal Communities (formed with support and direction of Hen Mpoano) with needs assessment programme. Fisheries Commission, Forestry Commission/Wildlife Division, the 6 coastal District Assemblies are all partners of the Initiative. Working Groups include FWG, Cape 3 Points WG, GNCFC, Hen Mpoano Advisory Council Members and Shama District Steering Committee. Other groups include the Destination Management Organization (for tourism best practices), hoteliers for turtle conservation, Environmental Journalist Group and 2 local radio stations for Hen Mpoano radio drama series.

A Rocha is a faith-based organization for conservation activities; they collaborated with Hen Mpoano for training of faith-based leaders – 6 Interfaith based groups have been formed to carry out resource management messages in each of the 6 coastal districts. Other partners include Blue Ventures, NCRC and Forest Trends for wetland conservation and carbon offset programmes as well as for establishing baselines for Ghana's first MPA. The P eace C orps programme, B abson A rtisans (artisans supported by Initiative with business plans and management trainings), Ministry of Environment, Science and Technology (MEST), GCLME and Ivory Coast Environment Ministry and Fisheries Commission are all partners for the promotion of livelihood resilience and for catalyzing actions for algal bloom menace. Agric-based partners for the promotion of food security and reduction of impacts of perennial tree crops (rubber/palm) include B-BOVID (a local agro-based company) and Ghana R ubber E states. O ther gr oups for advocacy purposes in clude Fisheries Alliance a nd the Community E nvironmental and M onitoring A dvocacy Gr oups (CEMAGs). The West African Primate Conservation Action (WAPCA) and Central and Western Regions Fishmongers Improvement Association (CEWEFIA) are also key partners for carrying out resource management and population, health and environment objectives respectively.

FY12 Comments: For FY12, new collaborators or partners include the Town and Country Planning Department/Ministry of Environment and Science - MEST, Ghana Education Service and Shama Radio. Other partnerships since programme inception are ongoing and building stronger, hence the cumulative nature of results/figures.

No.	Indicator	FY 10	FY 10 Results	FY 11	FY 11	FY 12	FY 12 Results	FY 13 Target
		Target		Target	Results	Target		
10.	Biodiversity Ind. Quantity of greenhouse gas emissions, measured in metric tons of CO_2 equivalent, reduced or sequestered as a result of USG assistance	Not reported on	Not reported on	Not reported on	Not reported on	Tracked but no target	Quantities yet to be determined: Assessments completed and estimates ongoing	Tracked but no target
Activities Activities payments	include conservation and es of Forest Trends, NCRC and	tablishment of m d Cameroonian C uestration is yet t	angrove nurseries Consultant (carbon o be determined. I	for replanting, et stock assessmen Development of c	tc. quantity of ca t) were initial st conservation sce	arbon sequestered eps aimed at asso	on, management tools are bein I is yet to be determined. essing potential of carbon crea g for the purpose of accessing	lits for marine

No.	Indicator	FY 10	FY 10	FY 11	FY 11	FY 12 Target	FY 12 Results	FY 13
		Target	Results	Target	Results			Target
11.	FTF IR SUB	No target	Not	No	9 Institutions	10 additional	12 Institutions for first half FY12 (RCC + 6	Tracked but
	IR 1.1	set as	reported	target set	RCC	institutions	District Town and Country Planning units,	no target
	Number	this was	on	as this	6 District		NDPC, NADMO, Ministry of Local	
	of stakeholders	not yet		was not	Assemblies		Government/ Rural Development now using	
	using climate	an		yet an	NADMO		climate change information. Meteorological	
	information in	indicator		indicator	UCC		Services and Spatial Dimensions are also	
	their decision						being oriented to incorporate climate change	
	making as a						information in plans (12 institutions ie 42	
	result of USG						stakeholders. 9 females and 33 males)	
	assistance							

Comments: District representatives from the National Disaster Management Organization (NADMO) across the 6 districts have also undergone training ai med at better preparing them for proactive measures to disasters as opposed to reactive measures. The University of Cape Coast's (UCC's) Centre for Coastal Management and Geography Departments are all receiving capacity building – in terms of training and provision of equipment – for addressing climate change issues.

FY12 Comments: Six Planners and 15 technicians from the TCPD in the 6 coastal district assemblies have undergone GIS proficiency and use aimed at strengthening their capacity to better address ICM issues. Also, the UCC Climate Change short course and vulnerability and resilience surveys conducted in the 5 districts have drawn the attention of district planners, NADMO officers, NDPC and the MLGRD to climate change issues and relevant information being used in decision making. Through the Shama participatory mapping process and issues profiling , the Meteorological Services started using 'early warning systems' to prompt flood-prone communities of impending hazards. Spatial Planning Advisory Groups in 5 districts (excluding STMA) have been formed from district assembly staff and community people for making ICM contributions into Medium Term Development Plans of District Assemblies. Spatial Dimensions also relying on ICFG's ICM inputs for district level planning.

Note: Two 2 other indicators for FY12 reporting include:

(12) FTF SUB IR 1.1 - Number of members of producer organizations and community based organizations receiving USG assistance and

(13) FTF IR8 - Number of people trained in child health and nutrition through USG-supported programs

Annex D: Custom Indicator 1 - Governance scorecards

Shama Focal Area (Scorecards -both process and outcome have been developed for the other focal areas as well as fisheries)

Baseline Conditions as of July 27, 2012 for Improved Governance of the Landscape Steps and Actions of the Management Cycle.

 \checkmark = Not Initiated \triangle = Underway \bigcirc = Completed

STEP	INDICATORS	PROGRESS
STEP 1: Issue Identification and	Principal environmental, social and institutional issues and their implications assessed	
Assessment	Major stakeholders and their interests identified	
	Issues upon which the H&n Mpoano will focus its efforts selected	
	Goals of the initiative defined	
	Stakeholders actively involved in the assessment and goal setting process	

Comments on Progress in Step 1: Issues upon which Hen Mpoano will focus efforts at the district scale have been selected through a participatory land use mapping and visioning exercise. These issues include; increased risk of people and property to flood hazards; coastal erosion and intensifying shoreline use; conversion of wetlands and mangrove ecosystems to other uses, competing land use etc. Assessment of these issues is underway as evidenced by a draft issue profile. Public reviews and further consultations with the Advisory Committee will be held to refine the issues and define specific goals for the Shama district focal area as Year 2 draws to a close.

Comments July 2012: while the issues have been assessed and documented, review and subsequent validation of the issues is still ongoing through public consultations and outreach at the community level and through multi-stakeholder discussions at the district level. These consultative processes are facilitated by representatives of major stakeholders that constitute a Coastal Steering Group (CSG). Goals were set through a collective review process with stakeholders and broadly communicated at the community, district and regional levels – during the visit of the Advisory Council to assess progress in the Shama focal area. By mid August a floodplain vulnerability assessment will be completed and a DRAFT by-law for land development will be developed.

STEP 2: Design of land use plan and	Scientific research on selected management questions been conducted	
zoning regulations for the Shama District of the Western Region	Boundaries of the area of focus defined (Shama District and other sub-focal areas to be determined)	
	Baseline conditions documented	
	Institutional framework for a nested governance system designed	
	Institutional capacity for implementation developed	
	Pilot activities implemented at selected sites model necessary changes in behavior of resource users and governance institutions	

Comments on Progress in Step 2: The boundaries /sub-focal areas where Hen Mpoano will focus efforts have been defined to include the Anankwari River, its floodplain and watershed; shoreline and fishing communities; Pra River and associated wetlands. This has been followed by technical studies (characterization and inventory of the shoreline and climate change vulnerability assessment on the Anankwari floodplain) to provide more insights and answer specific ICM relevant questions. In the next 3 months, products from these studies will be available to feed dialogue and public outreach at the community level. The institutional framework for the nested governance system is being designed as evidenced by the formation and inauguration of an Advisory Committee with membership drawn from government, civil society and business sectors. A small working group has been constituted from the Advisory Committee to support community level engagements and ensure feedback to Advisory Committee. Selection of governance case studies (Shama shoreline protection and western region water supply) is underway. **Pilot activities addressing sand winning and PHE issues are also underway**. In year 3, a public education program will be implemented; capacity of district government and Hen Mpoano will be strengthened to support land and shorefront management and additional pilot scale activities like restoration of Pra River wetland and beach profiling will be tested.

Comments July 2012: while the general areas where Hen Mpoano will focus efforts have been defined, precise boundaries for land use plan is yet to be delineated. Coastal zone is still being defined (highwater mark - 1000 meters inland for the coastal zone) and the floodplain (250 meters from the river edge to the floodplain). While technical studies on the climate change vulnerability and shoreline functions have been completed, further technical assessments on the implications of livelihood dependence on fast eroding shorelines and dynamic coastal ecosystems at Anlo Beach is underway with WorldFish looking at household resilience. A public outreach programme is underway in target shorefront communities and is deepening awareness and knowledge about land use and conservation of critical landscapes. The District Advisory Committee, comprising all key stakeholders with interest in land use, coastal, fisheries and development issues in the Shama district has been constituted and a small working group, known as the Coastal Steering Group (CSG) has been drawn from this Committee to spearhead the consultative processes and to bridge the communication gap between the sub-committees at the district level and community level organizations. Pilot activities addressing solid waste management and sand wining are underway as part the small grants actions to test community based actions.

STEP 3: Formal Adoption and Funding of a land use plan and zoning	Policies/plan formally endorsed and authorities necessary for their implementation provided	
regulations by the Shama District	Funding required for program implementation obtained	

Comments on Progress in Step 3: The plan for endorsement starts with the completion of the action plan and then review by the traditional chiefs and then presentation to the District Assembly for their approval and note in the minutes. The action plan should include a budget that is presented in phases - with the first phase aligning with the USAID ICFG grant.

Comments July 2012: Through the information generated from the technical studies as well as the participatory processes in Step 1, a number of tools and approaches have been identified as appropriate for addressing vulnerability to flood risk and other land management issues facing the district and shorefront areas. These tools include; Shoreline management bye-laws, community-based flood hazard plans and actions; Anankwari festival; sanitation bye-laws; and good practices guidelines. Partnerships have also been leveraged for finalizing district spatial development plans wherein Hen Mpoano will make ICM contributions. Two or more of these plans will be completed in Year 3 and reviewed with stakeholders and presented to district government for approval.

STEP 4: Implementation of a formally	Behaviors of strategic partners monitored, strategies adjusted	
constituted land use plan for Shama District of the Western Region	Societal/ecosystem trends monitored and interpreted	
Region	Investments in necessary physical infrastructure made	
	Progress and attainment of goals documented	
	Major stakeholder groups sustain participation	
	Constituencies, funding and authorities sustained	
	Program learning and adaptations documented	

Comments on Progress in Step 4: The implementation of a future land use plan for SHAMA District will be informed by the pilot scale activities undertaken in Phase 2 (including Year 3).

Comments July 2012: there has been a dramatic change in the way district planners review development plans in relation to information generated through technical studies conducted by UCC. This information is currently shaping dialogue on development permitting and regulatory decision-making at the district level. By the end of this project, we will provide a set of implementation suggestions/recommendations to the statutory planning committee, the physical planning department, the Advisory Committee of Development Planning. This will include a review of the capacity to enforce and increase commitment to the by-laws.

STEP 5: Self Assessment and External Evaluation	Program outcomes documented				
	Management issues reassessed				
	Priorities and policies adjusted to reflect experience and changing social/environmental conditions				
	External evaluations conducted at junctures in the program's evolution				
	New issues or areas identified for inclusion in the program				
Comments on Progress in Step 5: Monitoring and evaluation lies at the heart of adaptive ecosystem governance and will be a major feature of both SHAMA project and the nested governance system that it hopes to catalyze. Specific examples of monitoring and evaluation are the governance scorecards and USAID Indicators. An external assessment of the plan has yet to					

Comments on Progress in Step 5: Monitoring and evaluation lies at the heart of adaptive ecosystem governance and will be a major feature of both SHAMA project and the nested governance system that it hopes to catalyze. Specific examples of monitoring and evaluation are the governance scorecards and USAID Indicators. An external assessment of the plan has yet to be decided. The team will explore metrics and indicators such as the use of governance scorecards to provide some recommendations for possible evaluative tools to track progress in the future.

Annex E: Summary of Year 4 Expected Outcomes

The list below presents the expected outcome of ICFG Year 4 activities

Design of Marine and Coastal Management

- A proposal for a coastal management program for the Western Region
- Minutes of the Advisory Council working sessions and program review meetings

Key ICM and Fisheries Issues Briefs

- Eight (8) issue briefs on coastal issues
- Outreach materials prepared and distributed related to issue briefs.

Collaboration sustaining Momentum and Funding

- MOUs with both DFID and NORAD for joint investments on common coastal management objectives.
- Actions plans for moving aspects of the Marine and Coastal Management Design (of 1.1.1) forward
- Minutes of meetings and letter of endorsement from REDD Focal Point for Amanzule PIN
- Concepts notes for voluntary offsets completed and submitted
- MPA Inter-ministerial report finalized and communicated

GIS and Spatial Planning for Regional and District ICM

- Reports on continuing extension and support for mainstreaming ICM into government programs
- An operational GIS "node" within the regional headquarters of Town and Country Planning that serves as a support service to district planners

Communicating key messages for policy implementation

- Crafted elements for a Legislative Instrument (LI) on co-management with action plan for moving the proposed LI to enactment
- Four issue briefs communicated to key fisheries stakeholders to foster informed dialogue on the contents of the LI.
- Summary documents and actions plans for the FWG, PCC, GNCFC
- Orientations reports from the Fisheries Alliance and national co-management working
- Report from the 3rd fisheries dialogue

Strengthening the Capacity of key stakeholders for compliance and enforcement

- Training reports and a lessons learned document for NSP and community associations
- Guidelines documents for expanding prosecution successes, marine police training, and CWOW program to other coastal districts

District level coastal management

- Approved SDF for the two districts
- Implementation planning for SDF within districts
- Tool kits presented to district assemblies
- Guidebook on "best practices" for engaging the gas sector and reviewing EIAs

Conservation of wetlands, natural areas and coastal lagoons in the Greater Amanzule Wetlands

- Communication of PIN to REDD+ national focal point
- Recommendations for Project Design Document
- Managed scenario developed
- Satellite imagery analyzed
- Bamboo feasibility study support documents provided to private sector partner

Resilient Communities in Jomoro District

- PHE peer educators program established
- Local PHE distribution program established

Annex F: ICFG Advisory Council Members

Mr. David Yaro	Chief Director, WRCC, Sekondi (Chairman)				
Mrs. Agnes Adenu Mensah Dep. Managing Director, Nyame Yie Cold Store, Sekondi					
Rt. Rev. John Martin Dark	o Bishop Catholic Diocese, Sekondi Takoradi				
Awulae Adjefi Kwame III	Paramount Chief, Nsein Traditional Area, Nsein				
Nana Kojo Kondua V	Chief Fisherman, Abuesi				
Mr. Alex Sabah	Director, Western Regional Fisheries Commission, Takoradi				
Mr. Yaw Afriyie Safo	Western Regional Director, Environmental Protection Agency				
Mr. Moses Kofi Sam	Western Regional Director, Wildlife Division, Takoradi				
Mr. Eben.Dadzie-Paintsil Director, Physical Planning, Sekondi-Takoradi Metro. Assembly					

Annex G: Philippines Study Tour Participants

Hon. Emelia Arthur	Deputy Regional Minister, Western Region Coordinating Council				
Kwaku Osei-Poku	Director, Regional Coordinating Council				
Nana Kofi Abuna	Traditional Ruler, Chief of Essipon, Ghana				
Alj. Mohammed J. Hardi	Coordinating Director, Ahanta West District Assembly				
Ebenezer Dadzie-Paintsil	Director, Physical Planning, Sekondi-Takoradi Metro. Assembly				
Mrs Agnes Adenu-Mensah	Private Sector Representative, Nyame Cold Store				
Carl Kojo Fiati	Deputy Director, Environmental Protection Agency				
Kofi Agbogah	Program Coordinator, CRC Ghana				
Ms. Hilary Stevens	Representing the CRC-URI home office.				

Annex H:	List of Fisheries Communicators
----------	---------------------------------

Name	Background	Community	District	Gender
1. Nana Kojo Kondua	Chairman GNCFC W/R Chief fisherman	Abuesi.	Shama	М
2 Edward Afful	PRO for GNCFC Study Tour/Senegal	Sekondi	STMA	М
3 Ebanbey Joseph	Chief fisherman, Study Tour/Ivory Coast.	Asanta	Ellembelle	М
4 Adjoa Amissah	Kokonhene, study tour/Senegal	Ngyeresia	Sekondi	F
5 Forson Paul	Fisherfolks leader, study tour/Ivory Coast.	Dixcove	Ahanta West	М
6 Emelia Abaka-Edu	Fish mongers Leader, study tour/Tanzania.	Axim	Nzema East	F
7 Dadzie Francis	Fisher folks leader, study tour/Tanzania.	Dixcove	Ahanta West	М
8 Nana Adam Eduafo	Chief fisherman, study tour/Senegal.	Aboadze	Shama	М
9 John Dickson Eshun	Fisher folks leader, study tour /Tanzania.	Axim	Nzema East	М
10 Joseph K Odum	Fisher folks leader	Sekondi	STMA	М
11 Cecilia Amoah	Fish mongers leader, study tour/Senegal.	Takoradi	STMA	F
12 Mike Abaka-Edu	Fisher folks leader, Study tour /Senegal	Axim-Apuesika	Nzema East	М

No	Name	Designation	District	Gender	Email
1	ASIEDU-BEDIAKO	Planner	Nzema East	Male	asiedubediako@yahoo.com
	Kwabena				
2	SARKODIE Isaac	Technical Officer	Ahanta West	Male	
3	ARHIN Joseph	Technical Officer	Ahanta West	Male	
4	DADSON Robert Ekow	Technical Officer	STMA	Male	
5	SACKEY Olivia	Technical Officer	Shama	Female	
6	APPIAH Daniel	Technical Officer	STMA	Male	
7	GBEXEDE CEPHAS	Technical Officer	Nzema East	Male	
8	ESSIEN MARK	Technical Officer	WR Office	Male	
9	SENYO CHARLES	Technical Officer	Ellembelle	Male	
10	BOAFO KOFI	Technical Officer	Shama	Male	
11	GHANSAH	Technical Officer	Shama	Female	
	CORDILIA				
12	AFETSU PETER DOE	Technical Officer	Shama	Male	
13	AMUZU Sophia Dela	Technical Officer	WR Office	Female	
14	YARTEL Benjamin	Technical Officer	WRI Office	Male	
15	ESILFIE Raphael	Technical Officer	Ellembelle	Male	chiczo2010@yahoo.com
16	AFFUM Isaac	Planner	Ahanta West	Male	zeka4795n@yahoo.com
17	NAKOJA Isaac	Planner	W ROffice	Male	nakojco2005@yahoo.com
18	AGYEPONG Justice	Planner	BAR Office	Male	jkagyapong@yahoo.com
19	OSEI-MENSAH	Planner	Shama	Male	anthony.gh78@yahoo.com
	Anthony				
20	BAFFOE Ashmond	Planner	Jomoro	Male	ashmondb@yahoo.com
21	NSIAH NANA KUSI	Planner	Ellembelle	Male	kusinice@gmail.com

Annex I: TCPD Staff Trained in Computer Based GIS Tool for Planning

Nº	NAME	ORGANISATION		SEX	EMAIL (IF AVAILABLE)
				M/F	
1.	Kwesi Johnson	Friends of the Nation	CSO	М	kwesirandolphjohnson@hotmail.com
2.	Richard Adupong	Friends of the Nation	CSO	Μ	rickyadupong@yahoo.com
3.	Edward Taylor	Friends of the Nation	CSO	М	
4.	Ali Issah	CRC-Ghana	CSO	М	loveissah01@yahoo.com
5.	Kofi Agbogah	CRC-Ghana	CSO	М	Kofi.agbogah@gmail.com
6.	Patricia Aba Mensah	CRC-Ghana	CSO	F	pmensah@crc-ghana.org
7.	Elvis Addae	CRC-Ghana	CSO	М	elvaddae@yahoo.com
8.	Jake McCommons	Peace Corps Volunteer	CSO	М	JDMcCommons@gmail.com
9.	Linda Dsane	SustainaMetrix	CSO	F	lindsane@yahoo.com
10.	Douglas Opoku-Boamah	Script Writer	Private Sector	М	douglas.lovelydouglasob@gmail.com
11.	Ray Agbo	Artisan	Private Sector	М	godusray@email.com
12.	Nicholas Smith	CEWEFIA	CSO	М	s.nicholas46@yahoo.com
13.	Bright Yaboah	OGSFORD	CSO	М	inbight@yahoo.com
14.	Mawuli Afatsiawo	Creative Storm Media House	Private Sector	М	mawuli@creativestormghana.com
15.	Exorm Erskine	Wildlife Division	Government	F	eaerskine@yahoo.com
	Trainers				
16.	Glenn Page	SustainaMetrix	Private Sector	М	glenpage@mac.om
17.	Mike Schuh	Journalist	CSO	М	schuhm@WJZ.com
18.	Kwesi Owusu	Private sector – Creative	Private Sector	М	kwesi@creativestormghana.com
		Storms Media House			

Annex J: Participants of the Video Training

Name	Institution	Project	Status
Justice Camillus Mensah	University of Rhode Island, USA	Application of geographic information systems in coastal zone management (in preparation)	Underway
Adiza Ama Owusu Aduomih	University of Rhode Island, USA	Communication strategies in human uses of mangrove ecosystems (in preparation)	Underway
Evans Kwasi Arizi	University of Cape Coast, Fisheries and Aquatic Sciences	Aspects of the biology and culture potential of cichlids in the Dominli Lagoon, Western Region, Ghana	Underway
Margaret Dzakpasu	University of Cape Coast, Fisheries and Aquatic Sciences	Comparative Ecological Assessment of the Nyan Estuary (Western Region) and Iture Estuary (Central Region), Ghana Based on Benthic Macrofauna Diversity	Underway
Isaac Okyere	University of Cape Coast, Fisheries and Aquatic Sciences	Assessment of ecosystem h ealth, fisheries and livelihoods s trategies of t he Anlo Be ach E we community in the Shama District.	Underway
Linda Boamah	University of Ghana, Environmental Science Program	Chemical contaminants in three demersal fish species caught by artisanal fishers landed in the western coast of Ghana	Completed and Submitted
Daniel Doku Nii Nortey	University of Cape Coast, Integrated Coastal Zone Management Program	Baseline studies and conditions of the Cape Three Points and Whin Estuary mangrove ecosystems in Ghana	Completed and Submitted
John Paul Annan	University of Cape Coast, Sociology and Anthropology	Conservation and management of wetlands – a socio-cultural study of Anyinase, Western Region	Completed and Submitted
Francis Aning Anokye	University of Cape Coast, Sociology and Anthropology	Alternative livelihood strategies among selected fishing communities in the Western Region, Ghana	Completed and Submitted

Annex K: Graduate Student Trainees

Annex L: ICFG generated reports from September, 2009 – September, 2012

Administrative Reports

1. C oastal R esources Center (2009). Associate C ooperative A greement No. 641-A-00-09- 00036-00, fo r "Integrated Coastal and Fisheries Governance (ICFG) Program for the Western Region of Ghana", Under the Leader with Associates Award No. EPP-A-00-04- 00014-00. CRC/URI Rhode Island. 74p

2. Coastal Resources Center (2009). Year 1 Work Plan. Coastal Resources Center, University of Rhode Island. USAID Integrated Coastal and Fisheries Governance Initiative for the Western Region, Ghana. January 1, 2011 – September 30, 2012. 38p

3. **Coastal Resources Center (2010).** Standard Operating Procedures (SOP) Manual. USAID Integrated Coastal and Fisheries Governance Initiative for the Western Region, Ghana (Effective 15 September 2009). Coastal Resources Center, University of Rhode Island.

4. **Coastal Resources Center (2010).** The Integrated Coastal and Fisheries Governance (ICFG) Initiative for the Western R egion of G hana, S emi-Annual R eport, S eptember 2 009 – March 2 010, C oastal R esources C enter, University of Rhode Island, Narragansett, RI USA, 27 pp.

5. Coastal Resource Center (2010), The Integrated Coastal and Fisheries Governance (ICFG) Initiative for the Western Region of Ghana, Annual Report 2010 Ghana, Coastal Resources Center, URI, Narragansett RI USA, 62 pp.

6. Coastal Resource Center, (2010), Phase 2 Strategy and Year 2 Work Plan. (ICFG)., Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 69 pp.

7. Coastal R esources C enter (2011), Integrated C oastal and F isheries G overnance (ICFG) Initiative f or t he Western Region of Ghana. S emi-Annual report. O ct 2 010 –March, 2 011, C oastal R esources Center, U RI Narragansett, RI USA, 85 pp.

8. **Coastal Resources Center, (2011).** Integrated Coastal and Fisheries Governance (ICFG) for the Western Region of Ghana, Annual Report 2011, Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 83 pp.

9. **Coastal R esources Center, (2011),** Year T wo Su mmary S elf-Assessment. Integrated Coastal and F isheries Governance I nitiative (IC FG) O ctober 1, 2010 – September 30, 2011. Coastal Re sources Center, U niversity of Rhode Island, Narragansett, RI USA, 25 pp.

10. **Coastal Resources Center, (2011),** Year 3 Work Plan. Integrated Coastal and Fisheries Governance Initiative (ICFG) October 1, 2011 – September 30, 2012. Coastal Resources Center, University of Rhode Island. Narragansett, RI USA 90p

Governance Case Studies (Consultancy Reports)

11. Abane, H (2010.) Fisheries and Coastal Zone Governance in the Western Region of Ghana: Case S tudy of Community-Based Fisheries Management Committees. A consultancy Report for CRC-Ghana (*Prepared by Dr. Henrietta Abane University of Cape Coast, Sociology Department*)

12. Akunnor E.T. (2010). The Control of Illegal, Destructive and Non-Sustainable Fishing Practices in the Central Region of Ghana. A consultancy report for CRC-Ghana. (*Compiled by, Akunnor, E.T., Sociology Department of Sociology, University of Cape Coast*). 31p

13. Ekumah, E. (2010). Premix F uel Ca se S tudies in the Central Region. A consultancy report for CRC -Ghana (prepared by. Ekumah, E. Sociology Department, University of Cape Coast for CRC Ghana). 40p

14. Traditional Be liefs a nd t he S ea. (Prepared b y J oseph K ingsley A djei, D epartment of S ociology a nd Anthropology, University of Cape Coast for CRC Ghana, 2010). 22p

Technical Reports

15. Coastal Resources Center (2010). Characterization of Coastal Communities and Shoreline Environments in the Western Region of Ghana. Integrated Coastal and Fisheries Governance (ICFG) Initiative Coastal Resources Center, University of Rhode Island, Narragansett, RI USA. 408pp

16. deGraft-Johnson, K.A.A., J. Blay, F.K.E. Nunoo and C.C. Amankwah, (2010), Biodiversity Threats Assessment for the Western Region of Ghana., Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 78 pp.

17. Coastal Resource Center-Ghana/Friends of the Nation., (2010), Rapid Biodiversity Assessment on the Essei and Butuah Lagoons and the Whin River Estuary in the Sekondi- Takoradi metropolis of the Western Region of Ghana, Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 131 pp.

18. Coastal Resource Center-Ghana/Friends of the Nation., (2011), Assessment of Critical Coastal Habitats of the Western Region, Ghana, Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 132 pp.

19. CRC, (2010), Our Coast, Our Future: Western Region of Ghana, Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 64 pp.

20. G ordon, A., and A. Pulis, (2010), L ivelihood D iversification and f ishing c ommunities in G hana's Western Region, Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 69 pp.

21. Snyder, K, (2010), Gender in the Western R egion: R eport on two week visit to ICFG M arch 2010, C oastal Resources Center, University of Rhode Island, Narragansett, RI USA, 8 pp.

22. Finegold, C., Gordon, A., Mills, D., Curtis, L. and A. Pulis, (2010), Western Region Fisheries Sector Review, Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 84 pp.

23. D'Agnes, L and K.R. Johnson. BALANCED project, (2010), Opportunities for integrating family planning, health a nd nutrition i nterventions i nto c oastal-fisheries g overnance a gendas i n WR, Ghana, C oastal R esources Center, University of Rhode Island, Narragansett, RI USA, 34 pp.

24. Gordon, A., A. Pulis and E. Owusu-Adjei, (2011). Smoked marine fish from Western Region, Ghana: a value chain assessment, Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 46 pp.

25. Ajonina, G. (2011). Rapid assessment of mangrove status and conditions for use to assess potential for marine payment for ecosystem services in Amanzuri and surrounding areas in the western coastal region of Ghana, West Africa (Draft Consultancy report for CRC). Forest Trends/MARES. 37p.

26. Mills D., Badjeck M., Delaprte A., Asare C., Amponsah A., Obeng P. A, (2011) Capacity Development and information base for improved fisheries management in the Western Region. Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 76 pp

27. Mills, D. (2011). Global Lessons and Information to Assist with Monofilament Net Management in Ghana. Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 13 pp

28. S. Granger, S. Nixon, A. Oczkowski, K. Agbogah, M. Fenn (2011) Progress Report on Determining the Origin and Ecology of the Green-Green Macroalgae Bloom Along the Coast of Western Ghana and Cote d'Ivoire. Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 6 pp

29. Coastal Resources Center (2012): Determining the Origin and Ecology of a Macroalgae (*Ulva clathrata*) Bloom along the Coast Of Western Ghana and Cote d'Ivoire. A Summary report of field observations and sample collection from surveys conducted in December 2010 and December 2011, Coastal Resources Center, University of Rhode Island, Narragansett, RI USA, 15 pp

Training Reports

30. Page, G., (2010), R eport of the Integrated C oastal and F isheries Governance Initiative, T raining #1, B usua, Ghana, February 1-3, 2010, Coastal Resources Center, University of Rhode Island, Narragansett, RI USA

31. Page, G., (2011), R eport of the Integrated C oastal and F isheries Governance Initiative, T raining #2, B usua, Ghana, February 26-27, 2011, Coastal Resources Center, University of Rhode Island, Narragansett, RI USA,

Students Thesis

32. Linda Boamah (2012). Studies of Polycyclic Aromatic Hydrocarbons and Trace Metal Contaminants in Some Selected S eafoods f rom the C oastal W aters o f Ghana. D issertation f or t he a ward o f a M aster o f S cience, Environmental Science Program, University of Ghana (Draft)

Newspaper Article

33. 'Green-Green.' A Threat L ivelihood in Co astal Communities in the Western Region of Ghana by Donald Underwood and Mark Fenn. Coastal Resources Centre. Daily Graphic, August, 2010

Small Grant Reports

34. OLIVES (2011): Improving Household Nutrition Through Local Poultry Production Systems By Women In Rural Communities. Final Report

35. CONSERVATION FOUNDATION (2011). Mangrove Restoration and Conservation Project. A pilot project at Butre in the Ahanta West District

36. CONSERVATION FOUNDATION (2012): Wetland Conservation and restoration Report Phase II Mid-Term Report

37. OGSFORD (2011): Completion Report of Episode 1 Of The West Coast Green Acts

38 RURAL E NVIRONMENTAL C ARE ASSOCIATION (2011). Enhancing L ocal Participation in W etlands Conservation and M anagement through E ducation, Awareness C reation and C apacity B uilding in the E lembelle District

39. FOUDATION OF ACTION DE VELOPMENT (2011): A S urvey O f S anitation And P opulation I n T he Ngyeresia Coastal Community In The Sekondi – Takoradi Metropolis Area (STMA)

40. SNV (2011) Final Report on Training Program for Tour Guides in the West Coast Destination Management Area

41. SNV (2011) Final Report on Seminars for four West Coast DMA District Assemblies on Tourism Development Planning in the Destination

42. SNV (2011) Final Report on Promoting and marketing of tourism products in 5 coastal communities of West Coast Destination Management Area

Additional Technical Reports

43 Ateweberhan, M., Gough, C., Fennelly L. and Frejaville, Y. (2012). The Nearshore Rocky Reefs of Western Ghana, West Africa: Baseline ecological research surveys. Prepared for the Coastal Resources Center by *Blue Ventures.* 100pp

44. Asante, W. and Jengre N.(2012). Carbon Stocks and Soil Nutrient Dynamics in the Peat Swamp Forests of the Amanzule Wetlands and Ankobra River Basin. Prepared for the Coastal Resources Center by Nature Conservation Research Center. 43 pp