

January
2019



USAID | **GHANA**
FROM THE AMERICAN PEOPLE



**UNIVERSITY OF
CAPE COAST**

USAID/UCC FISHERIES AND COASTAL MANAGEMENT
CAPACITY BUILDING SUPPORT PROJECT

YEAR FIVE
QUARTERLY REPORT

1ST OCTOBER, – 31ST DECEMBER, 2018

DEPARTMENT OF FISHERIES AND AQUATIC SCIENCES
UNIVERSITY OF CAPE COAST

This document was prepared for USAID/Ghana under Agreement (PIL No.: 641-A18-FY14-IL#007) awarded on October 24, 2014 to the Department of Fisheries and Aquatic Sciences of the University of Cape Coast entitled; the USAID/UCC Fisheries and Coastal Management Capacity Building Support Project. This document is made possible by the support of the American People through the United States Agency for International Development (USAID). The views and opinions contained in this report are those of UCC/DFAS Project team and are not intended as statements of policy of USAID. As such, the contents of this report are the sole responsibility of the UCC/DFAS Project team and do not necessarily reflect the views of USAID or the United States Government.

Contact Information:

USAID/UCC Fisheries and Coastal Management Capacity Building Support Project,
Department of Fisheries and Aquatic Sciences (DFAS), School of Biological Sciences, College of
Agriculture and Natural Sciences, University of Cape Coast.

UCC Representatives:

Prof. Joseph Ghartey Ampiah
Vice-Chancellor
University of Cape Coast
Tel: +233 (0) 332132378/32050
Email: vc@ucc.edu.gh

Prof. Denis Worlanyo Aheto
Project Manager
USAID/UCC Fisheries and Coastal
Management Capacity Building Support
Project, Department of Fisheries and
Aquatic Sciences
Tel: +233 (0) 242910056
Email: daheto@ucc.edu.gh

USAID Administrative Contacts:

Mr. Kelvin Sharp
Director
Economic Growth Office, USAID/Ghana,
American Embassy, 24 Fourth Circular Rd.
Tel: +233 (0) 302 74 1132
Email: ksharp@usaid.gov

Ms. Susan Bonney
Activity Manager (AM)
Economic Growth Office, USAID/Ghana
American Embassy, 24 Fourth Circular Rd.
Accra-Ghana
Tel: +233 (0) 30 274 1828
Email: sbonney@usaid.gov

Citation:

Department of Fisheries and Aquatic Sciences (2019). The USAID/UCC Fisheries and Coastal Management Capacity Building Support Project. First Quarter Report, October 1 – December 31, 2018. University of Cape Coast, Cape Coast, 66 pp.

Cover Photo: Unmanned Aerial Vehicle (C-ASTRA Bramor) used for mapping coastal ecosystems along the coast of Ghana.

Photo credit: DFAS

LIST OF ABBREVIATIONS

| | |
|-----------|--|
| CANS | College of Agriculture and Natural Sciences |
| CCM | Centre for Coastal Management |
| CDCS | Country Development Cooperation Strategy |
| CSLP | Coastal Sustainable Landscape Project |
| DFAS | Department of Fisheries and Aquatic Sciences |
| EGO | Economic Growth Office |
| FfD | Fish for Development Project |
| FtF | Feed the Future |
| GC | Gas Chromatographic Unit |
| GDP | Gross Domestic Product |
| GIS | Geographic Information Systems |
| GMMB | Ghana Museums and Monuments Board |
| JFCoM | Journal of Fisheries and Coastal Management |
| M&E | Monitoring and Evaluation |
| MoFAD | Ministry of Fisheries and Aquaculture Development |
| PMP | Performance Management Plan |
| <i>RV</i> | Research Vessel |
| SBS | School of Biological Sciences |
| SFMP | Sustainable Fisheries Management Project |
| UCC | University of Cape Coast |
| UAV | Unmanned Aerial Vehicle |
| UK | United Kingdom |
| URI | University of Rhode Island |
| USAID | United States Agency for International Development |
| USG | United States Government |

TABLE OF CONTENTS

| | |
|--|----|
| LIST OF FIGURES | 4 |
| LIST OF TABLES..... | 4 |
| EXECUTIVE SUMMARY..... | 5 |
| 1.0 INTRODUCTION | 6 |
| 1.1 Ghana’s Marine Fisheries Sector | 6 |
| 1.2 Feed-the-Future (FtF) Initiative of the United States Government | 6 |
| 1.3 The USAID Fisheries and Coastal Management Capacity Building Support Project | 7 |
| 1.4 The Department of Fisheries and Aquatic Sciences of the University of Cape Coast..... | 8 |
| 2.0 PROGRAM COMPONENTS, MANAGEMENT AND ACTIVITIES IN THE FIRST QUARTER OF YEAR 5..... | 10 |
| 2.1 Activities Completed in the First Quarter | 10 |
| 2.2 Project Management and Finances..... | 10 |
| 2.3 Monitoring and Evaluation (M&E) | 11 |
| 3.0 PROJECT OUTPUT 1.1: IMPROVED INFRASTRUCTURE..... | 12 |
| 3.1 Activity 1.1.1: Renovating and Equipping Fisheries and Coastal Research Laboratory..... | 12 |
| 3.2 Activity 1.1.2: Refurbishing and Equipping office/Lecture/Computer rooms and Library | 12 |
| 3.3 Activity 1.1.3: Acquisition of Vehicles to Support Educational, Training, Research and Extension Activities | 12 |
| 4.0 PROJECT OUTPUT 1.2 INCREASED TECHNICAL AND SCIENTIFIC KNOWLEDGE..... | 13 |
| 4.1 Activity 1.2.1: Academic and Technical Staff Capacity Strengthening..... | 13 |
| 4.2 Activity 1.2.2: Operationalization of the Centre for Coastal Management | 13 |
| 4.3 Activity 1.2.3: Support for Postgraduate (MPhil & PhD) Training Program..... | 13 |
| 4.4 Activity 1.2.4: Undergraduate Research Grants | 18 |
| 5.0 PROJECT OUTPUT 2.1: INCREASED MARINE AND COASTAL RESEARCH AND RESOURCE ASSESSMENTS..... | 19 |
| 5.1 Activity 2.1.1: Conducting Fisheries Stock Assessment..... | 19 |
| 5.2 Activity 2.1.2: Conducting Research and Assessment on Marine Fisheries Governance Issues... | 19 |
| 5.4 Activity 2.1.4: Analysis of Value Chains of Fish Trade..... | 22 |
| 5.5 Activity 2.1.5: Monitor the Biodiversity and Health of Coastal Ecosystems | 23 |
| 5.6 Activity 2.1.6: Developing Marine and Coastal Fisheries Database..... | 26 |
| 6.0 PROJECT OUTPUT 2.2: COMMUNICATION, EXTENSION AND OUTREACH IMPROVED | 27 |
| 6.1 Activity 2.2.1: Developing Material and Conducting Training on Integrated Coastal Management..... | 27 |

| | |
|---|----|
| 6.2 Activity 2.2.2: Developing Material and Conducting Training on Fisheries Management..... | 27 |
| 6.3 Activity 2.2.3: Developing Manuals and Updating Training Materials on Climate Change Adaptation and Mitigation..... | 32 |
| 6.4 Activity 2.2.4: Developing Material and Conducting Training on the use and Application of Geographical Information Systems (GIS)..... | 32 |
| 6.6 Activity 2.2.6: Building Institutional Partnerships and Collaboration..... | 32 |
| 6.7 Activity 2.2.7: Wetlands Ecological Health Monitoring Using School Clubs and Communities | 33 |
| 6.8 Activity 2.2.8: Strengthening Community-based Groups | 33 |
| 6.9 Activity 2.2.9: Promoting Supplementary Livelihoods in Coastal Communities | 33 |
| APPENDICES..... | 41 |

LIST OF FIGURES

| | |
|---|----|
| Figure 1: DFAS undergraduate and postgraduate students embark on outreach programme at the Adisadel College, Cape Coast..... | 9 |
| Figure 2: Assessment of paddocks for rearing snails as part of the livelihoods program, at the Ankobra community..... | 11 |
| Figure 3: A PhD student displaying a lobster during Southern New England Cooperative Ventless Trap Survey..... | 19 |
| Figure 4: Fixing oyster tissue in Bouins solution..... | 21 |
| Figure 5: Weight measurements of each specimen (left) and extracted gonads from each specimen | 22 |
| Figure 6: Distribution from Sea Fresh to a Restaurant (left) and value chain study tour at Point Judith and Sea Fresh USA..... | 22 |
| Figure 7: Fieldwork on Salt marsh ecology at URI..... | 23 |
| Figure 8: Measuring hydrographic parameters in situ (left) and Mangrove leaf litter prepared for assessing biomass in the laboratory (right)..... | 24 |
| Figure 9: Fish samples obtained from the Enhuli lagoon to assess species diversity in the study | 24 |
| Figure 10: Research assistant on the USAID/UCC Fisheries Project training some individuals on the use of UAV | 25 |
| Figure 11: Use of the Bramor to map coastal water bodies along the coast of Ghana | 26 |
| Figure 12: Analytics of fishcomghana.com website..... | 27 |
| Figure 13: Gender Disaggregation of Participants who attended the Fisheries Management Training | 28 |
| Figure 14: Group photograph (left) and classroom session (right) of participants of the Fisheries Management Short Course..... | 30 |
| Figure 15: Participants knowledge about concepts of Fisheries Management before and after the course | 31 |

LIST OF TABLES

| | |
|---|----|
| Table 2: L400 PROJECT RESEARCH TOPICS (2018/2019) | 18 |
|---|----|

EXECUTIVE SUMMARY

The Fisheries and Coastal Management Capacity Building Support Project is a strategic partnership investment from the American people through a partnership agreement between the United States Agency for International Development (USAID) and the University of Cape Coast (UCC) which was signed on 24th October, 2014 and being implemented by the Department of Fisheries and Aquatic Sciences (DFAS) of UCC. The project provides DFAS with administrative, technical and financial assistance build capacity of students and professionals for sustainable marine fisheries management in Ghana over a period of five years (2014-2019). This report refers to the period covering first quarter activity implementation covering October 1 – December 31, 2018. Key Activities Completed within the First Quarter include the submission of a completed project report covering activities undertaken during FY 2018 and entry of project indicator data into the FTFMS. The short course on Fisheries Management was conducted for professionals. Also the project carried out all required institutional evaluation on funds received by sister universities. The project also conducted field visits and evaluation of supplementary livelihood projects. Other actions included external audit of year 3 activities by the Ghana Audit Service. Contracts were also signed for the commencement of activities on Policy Dialogues, Sustained Governance studies and professional short courses. The funded postgraduate students also benefitted from tailored training in R-software and statistics as part of technical support for postgraduate students to enable them analyse their data. Work planning for second conference on Fisheries and Coastal Environment commenced in this quarter. A key achievement recorded was that all five (5) PhD students successfully completed their semester abroad at URI in the United States.

1.0 INTRODUCTION

1.1 Ghana's Marine Fisheries Sector

Available fisheries statistics data show that the number of fishing vessels as well as fishers have increased beyond sustainable levels with corresponding decreases in fish catch, mainly due to open access nature of small-scale fisheries in Ghana. Decreases in fish catch result in lower income levels of fishers, which in turn lead to increased levels of poverty particularly in coastal communities. There is a critical need to address the problem of decreasing fish catches, which can only be achieved through improved fisheries management if the Ghana Poverty Reduction Strategy is to be realized. Indeed capacity building is an enabling condition for improved fisheries management across the world. The justification for the USAID/UCC Fisheries and Coastal Management Capacity Building Support Project is grounded on this premise. The primary aim of the project is to promote sustainable marine fisheries management in Ghana through capacity building actions involving students, professionals and fishing communities, using effective partnerships across public and private institutions, both local and international. The project is sponsored by the United States Agency for International Development (USAID) through the Feed-the-Future (FtF) Initiative of the American Government and contributes to Government of Ghana's national fisheries policies and coastal development objectives.



Figure 1: Fresh fish spread out for sun drying at a fish landing beach

1.2 Feed-the-Future (FtF) Initiative of the United States Government

Feed-the-Future (FtF) is a United States Government (USG) Initiative to address global hunger and food insecurity. In 2009, the United States Government committed US\$3.5 billion over a 3-year period to this global initiative, which was launched in 2010 with the aim of fighting hunger and poverty. FtF is coordinated primarily by the USAID on the basis that every 1% increase in agricultural income per capita reduces the number of people living in extreme poverty by between

0.6 and 1.8%. No other investment has that return. FtF supports initiatives in fisheries and coastal management with funding because most developing nations lack adequate resource capacity to sustainably exploit and effectively manage their coastal and marine resources.

1.3 The USAID Fisheries and Coastal Management Capacity Building Support Project

The Fisheries and Coastal Management Capacity Building Support Project is a partnership agreement program between the USAID and the University of Cape Coast (UCC) which was signed on 24th October, 2014 and being implemented by the Department of Fisheries and Aquatic Sciences (DFAS) of UCC. The project provides DFAS with administrative, technical and financial assistance. USAID's total contribution to this Project is up to the tune of US\$5,500,000, which is sub-obligated on yearly increments to enable DFAS effectively coordinate capacity building at various levels for sustainable marine fisheries management in Ghana over a period of five years (2014-2019). The USAID award represents a strategic investment from the American people for food security in Ghana as part of the USG FtF Initiative, and subject to the terms and conditions of the Agreement signed with the University of Cape Coast (PIL No.: 641-A18-FY14-IL#007).



The main purpose of the award is to contribute towards addressing capacity needs in fisheries and coastal management in Ghana. The project was developed to respond to the issues raised in the DFAS SWOT Analysis, which aims at strengthening the institutional capacity of DFAS to train personnel for fisheries and coastal management, and support the Centre for Coastal Management (CCM) at UCC to become operational. The award also supports the restructuring of integrated data and information support systems for fisheries and coastal management, which serve as building blocks for evidence-based policy formulation and decision making at various levels. Project activities contribute to USAID's development strategy for Ghana as outlined in its Country Development Cooperation Strategy (CDCS), and respond to USAID/Ghana Development Objective 2 relating to Sustainable and Broadly Shared Economic Growth. Expected outcomes from the five-year project include the building of significant capacity for sustainable marine fisheries and coastal management in Ghana, and ensuring that management outcomes become more evident.

Local scientific capacities are strengthened in specific areas such as the provision of quality and relevant educational programs, practical research, extension and advisory support services to help the management of Ghana's fisheries and coastal resources, which will enhance the country's social and economic development. Relevant partnerships are built with institutions with shared research and training interests by creating a platform for regular interaction and dialogues with local and foreign universities, particularly with Centres, Institutes and relevant Academic Departments at the University of Rhode Island (URI). This project has also formed important collaborations with relevant government partners including the Ministry of Fisheries and Aquaculture Development (MoFAD), the Fisheries Commission of Ghana, as well as libraries and research institutions with the idea to promote increased use of science and applied research for decision-making, law enforcement, climate change adaptation and biodiversity conservation for poverty alleviation.

The capacities of academic and technical staff of DFAS and the CCM are continuously strengthened to enhance the use of new technologies and scientific equipment, through the refurbishment of the fisheries and coastal research laboratory, library and offices of academic staff, acquisition of vehicles for field research, extension and the procurement of equipment for the development of fisheries and coastal management database, working with other international data sources and host centres. These initiatives are aimed to facilitate the training of 10 PhD, 20 Masters and 150 Undergraduate students. The award also includes funding for short courses on climate change adaptation and mitigation in coastal communities, fisheries and coastal management as well as Geographic Information Systems (GIS) for targeted professionals over the course of five years, which are all facilitated by the Centre for Coastal Management (CCM) as part of its operationalization.

The project also supports the implementation of a DFAS Strategic Plan, development of a Business Plan for CCM, policy dialogues, and critical research with the help of the refurbished Fisheries and Coastal Research Laboratory. The project conducts research to generate data and information to fill key knowledge gaps that are required for a more effective implementation of Ghana's Fisheries and Aquaculture Sector Development Plan, and undertakes community outreach and extension programs to improve long-term national capacity on fisheries and coastal issues, train personnel in relevant government agencies, and strengthen their links to a network of researchers within national and international research organizations.

1.4 The Department of Fisheries and Aquatic Sciences of the University of Cape Coast

The University of Cape Coast (UCC) is located close to the Atlantic Ocean, which provides vast opportunities for the Department of Fisheries and Aquatic Sciences (DFAS) of UCC to become one of the leading institutions in the area of Fisheries and Marine Sciences in Ghana. DFAS has a vision to become an internationally recognized partner in the conservation of healthy aquatic ecosystems for sustained provision of goods and services, in collaboration with public and private

institutions. This vision has been facilitated by the initiation of the USAID funding support to DFAS.



Figure 2: DFAS undergraduate and postgraduate students embark on outreach programme at the Adisadel College, Cape Coast

Through the project, the capacity of DFAS has been strengthened with the provision of adequate logistics and teaching infrastructure, which has made DFAS more attractive to an increasing number of students wanting to undertake studies at the School of Biological Sciences, and provided enhanced opportunities for institutional collaboration. DFAS now has a state-of-the-art laboratory with relevant modern equipment, which supports hands-on practical-based training of students. This presents DFAS students with future academic prospects. DFAS offers undergraduate (BSc) degree in Fisheries and Aquatic Sciences and postgraduate (MPhil and PhD) degrees that expose students to:

- Oceanography, Limnology and Aquatic Ecology
- Integrated Coastal Resource Management including Petroleum Ecology and Climate Change Studies
- Aquaculture, bridging gaps between demand and supply in the fishing industry and aquaculture entrepreneurship
- Fisheries Science including fisheries ecology and organismic interactions

2.0 PROGRAM COMPONENTS, MANAGEMENT AND ACTIVITIES IN THE FIRST QUARTER OF YEAR 5

2.1 Activities Completed in the First Quarter

Key Activities Completed within the First Quarter:

- ✓ Submission of a completed project report covering activities undertaken during FY 2018 and entry of project indicator data into FTFMS
- ✓ Short course on Fisheries Management conducted for professionals
- ✓ Conducted institutional evaluation on funds receipt and disbursement of undergraduate research grants received by sister universities.
- ✓ Field visits and evaluation of supplementary livelihood projects
- ✓ External audit of year 3 activities by the Ghana Audit Service
- ✓ Training of postgraduate students in R-software and statistics
- ✓ Five (5) PhD students successfully completed semester abroad in URI
- ✓ Contracts signed to commence activities on Policy Dialogues, Sustained Governance studies and professional short courses.
- ✓ Work planning for second conference on Fisheries and Coastal Environment
- ✓ Financial and technical support provided for postgraduate students

2.2 Project Management and Finances

The first quarter of FY 19 set the tone for execution of activities suspended in FY 18 due to limited financial remittances from USAID in FY 18. Project Management within the quarter under review, worked assiduously to seek the approval of USAID to start implementing FY 19 activities. Although the approval was not given prior to the end of the first quarter, Project Management capitalized on available funds to implement pending activities from FY 18. This saw to the review of contracts and drafting of new contracts to engage the services of short-term technical facilitators to implement three key activities: Short courses; Sustained Policy Dialogues on Marine Fisheries and Coastal Management in Ghana; and Sustained Research in Governance Issues on Marine Fisheries and Coastal Management in Ghana.

A financial audit was performed for FY 17 activities which provided the opportunity for the Project to improve on its fiscal discipline especially since the Project is expected to close out at the end of Year 5. On the basis that the project suffered setbacks in relation to key deliverables as a result of limited financial remittances in FY 18, there is a proposition for USAID to approve a no-cost extension of the Project six months after the stipulated close out date to complete all activities outlined in the project description.

2.3 Monitoring and Evaluation (M&E)

One key output during the first quarter was the evaluation of supplementary livelihood projects in four coastal communities. A field visit was made to the communities to assess the status of the projects and recommend actions for the subsequent quarters. In addition, sister universities who benefited from small research grant awarded to their undergraduate students were visited to evaluate the outcome of the grants. The institutions were Department of Fisheries and Water Resources, University of Energy and Natural Resources (UENR); Department of Fisheries and Watershed Management, Kwame Nkrumah University of Science and Technology (KNUST) and Department of Fisheries and Aquatic Resources Management, University for Development Studies (UDS), Tamale. The purpose of the visit was to conduct institutional evaluation on funds receipt and disbursement and retirement for the 2017/2018 academic year; interact with selected student beneficiaries in the evaluating the relevance and efficiency of the program; and assess challenges and provide recommendations to the beneficiaries. The evaluation revealed that five (5) students were supported at UDS and UNER respectively, whilst KNUST supported eleven (11) beneficiaries from the same funds.



Figure 3: Assessment of paddocks for rearing snails as part of the livelihoods program, at the Ankobra community.

It was also observed that the selection process of students at UDS was based on the recommended thematic areas of the USAID/UCC fisheries project whereas in the case of UNER the selection process for student beneficiaries was based on just recommendations by supervisors and therefore not a transparent one. It was recommended to the institutions that the selection process by all beneficiary institution must be fair and clear to all students taking into consideration gender equity. This should include a clear selection guide stating the requirements and gender inclusion. Additionally, due to financial challenges experienced by the project in FY 18, funds were received extremely late when project works for beneficiary students were completely to a large extent. Students therefore had to pre-finance the work. As lesson learned, efforts are being made to release

funds for 2018/2019 academic to beneficiary institutions in time to ensure effective implementation.

3.0 PROJECT OUTPUT 1.1: IMPROVED INFRASTRUCTURE

3.1 Activity 1.1.1: Renovating and Equipping Fisheries and Coastal Research Laboratory

Much progress was made on the registration of the research vessel *RV Sardinella*. In this quarter, additional accessories were successfully procured for the boat and a team from the Ghana Maritime Authority came to inspect the boat as a step to register the boat. Based on the recommendation of the inspection team, some additional safety equipment will be procured in the second quarter in order for the vessel to be duly registered and licensed to operate in Ghanaian waters. This phase of the vessel registration is expected to be completed in the second quarter.

3.2 Activity 1.1.2: Refurbishing and Equipping office/Lecture/Computer rooms and Library

The refurbishment and equipping of offices and lecture rooms were largely completed in previous years. There is, however, procurement of office equipment and computer accessories, library books and journals when necessary. In this quarter the subscription for some journals have been renewed which saw to the receipt of new volumes of journals to stock the library at DFAS. There will be continuous subscription to relevant journals and the purchase of books on the condition that funds are available for such purpose.

3.3 Activity 1.1.3: Acquisition of Vehicles to Support Educational, Training, Research and Extension Activities

The project has so far acquired three vehicles (i.e. one Ford pick-up, one Toyota Cross-country, and one Toyota Coaster bus) to facilitate research and project activities and performed routine maintenance of these vehicles. However increasing volume of work and pressure on the vehicles have necessitated the project's request for an additional vehicle. In the quarter under review, although the plan to purchase an additional vehicle was not followed through due to lack of funds, USAID/Ghana has indicated the possibility of transferring one vehicle to this project to support our activities. Processes and procedures to effect the transfer began in the first quarter and it is expected that the vehicle would be fully transferred to the project by the second quarter of FY 19.

4.0 PROJECT OUTPUT 1.2 INCREASED TECHNICAL AND SCIENTIFIC KNOWLEDGE

4.1 Activity 1.2.1: Academic and Technical Staff Capacity Strengthening

The Department of Fisheries and Aquatic Sciences successfully recruited an additional academic staff in the person of Dr. Paul Kojo Mensah to support teaching, research and extension mandate of the department. Also, it is the plan of the department to recruit some of the PhD students currently being supported on the Project to augment the workload of staff at DFAS and CCM. Beginning the first quarter, it was planned to train all academic staff on the use of R-software and its related statistics however the academic workload, insufficient funding and the intrusion of the Christmas break made this agenda impossible to achieve within the timeframe. It is expected that the training will be conducted in the second quarter to strengthen the capacity of staff in current statistical trends.

4.2 Activity 1.2.2: Operationalization of the Centre for Coastal Management

Several steps were taken to ensure effective operationalization of the Centre for Coastal Management. Key among this was the participation of the Centre in a call by the World Bank for Higher Educational Institutions to establish Centres of excellence in Africa. CCM submitted a proposal and was conditionally selected as one of the five new Centres of Excellence in Ghana under the World Bank's African Centre of Excellence (ACE) IMPACT III Project. The upgrade of the Centre to the status of Africa Centre of Excellence in Coastal Resilience (ACECoR) will receive a proposed funding amount of US\$ 6 million from the World Bank and Government of Ghana to scale up and expand on its present focus on applied research, technical professional training and policy engagement to include short courses and postgraduate (PhD and Masters) education of Ghanaian and regional students in key new areas to address coastal degradation issues that are fundamental to economic growth of the sub-region. Response to the call, which involved several workshops and write-shops, was made possible with logistic support of the USAID/UCC Fisheries and Coastal Management Capacity Building Support Project. It is expected that the additional funding through the World Bank ACE IMPACT project will sustainably establish CCM to continue its mandate.

4.3 Activity 1.2.3: Support for Postgraduate (MPhil & PhD) Training Program

Over the last four years a total of thirty-six (36) postgraduate have been supported in the areas of tuition and research. One student was withdrawn during the second year of his study and five (5) students at the MPhil level have successfully graduated. For the quarter under review, the project provided financial and technical support to sixteen (16) students comprising eleven (11) PhD students and five (5) MPhil students. The remaining five PhD students who are at various stages in submission of the theses, received technical support from academic and technical staff of DFAS.

Also, the second batch of MPhil students were not financially supported in the quarter under review, because three of them have defended their theses whereas one student submitted his thesis. It is noteworthy that five (5) PhD students who were supported to travel to URI on a semester abroad to study have successfully completed their program and returned home.

This quarter saw the beginning of research activities for the fourth (final) batch of MPhil students which comprise two (2) females and three (3) males. The students submitted and defended their research proposals. Their research projects will be funded by the Project till September 2019 (end of fourth quarter of FY 19). Project Management also organized statistics training for post-graduate students (10 MPhil and 4 PhD) using R software. The course “Data Modeling for Fisheries Sciences using R” ran for four days for each session of two groups of graduate cohorts. The objective was to get participants to gain a level of mastery over the use of the R Statistical platform in the analyses and subsequently modeling building for their research work. It was a purely intensive hands-on session that started with the basics of R and progressed through building linear models, nonlinear models, time series and finally to Bayesian models. Examples were drawn from varied disciplines but the emphasis was on fisheries data mainly from global databases.

USAID/UCC FCMCBSP FUNDED STUDENTS (2014-2019)

| First Batch PhD Students | | | | |
|---------------------------------|-----------------------------|------------------------------------|--------------|---------------|
| No. | Name of Student | Programme of Study | Level | Status |
| 1 | Lawrence Armah Ahiah | Aquaculture | PhD | In Submission |
| 2 | Michelle Naa Kordei Clottey | Fisheries Science | PhD | In Submission |
| 3 | Jemimah Etornam Kassah | Fisheries Science | PhD | In Submission |
| 4 | Rebecca K Essamuah | Integrated Coastal Zone Management | PhD | In Submission |
| 5 | Margaret F. A. Dzakpasu | Oceanography & Limnology | PhD | In Submission |

| |
|----------------------------------|
| Second Batch PhD Students |
|----------------------------------|

| No. | Name of Student | Programme of Study | Level | Status |
|-----|-------------------------|------------------------------------|-------|-------------|
| 1 | Fredrick Ekow Jonah | Oceanography & Limnology | PhD | In Progress |
| 2 | Miriam Yayra Ameworwor | Fisheries Science | PhD | In Progress |
| 3 | Rhoda Lims Osae Sakyi | Aquaculture | PhD | In Progress |
| 4 | Gertrude Lucky Aku Dali | Integrated Coastal Zone Management | PhD | In Progress |
| 5 | Lesley Ntim | Integrated Coastal Zone Management | PhD | In Progress |
| 6 | Elizabeth Effah | Integrated Coastal Zone Management | PhD | In Progress |
| 7 | Sheila Fynn-Korsah | Fisheries Science | PhD | In Progress |
| 8 | Ebenezer Delali Kpelly | Fisheries Science | PhD | In Progress |
| 9 | Rahmat Quairane Duker | Oceanography & Limnology | PhD | In Progress |
| 10 | Isaac Kofi Osei | Fisheries Science | PhD | In Progress |
| 11 | Alberta Jonah | Integrated Coastal Zone Management | PhD | In Progress |

| |
|-----------------------------------|
| First Batch MPhil Students |
|-----------------------------------|

| No. | Name of Student | Programme of Study | Level | Status |
|-----|----------------------|------------------------------------|-------|-----------|
| 1 | Pearl Sakyi-Djan | Fisheries Science | MPhil | Completed |
| 2 | Elsie Akusika Debrah | Integrated Coastal Zone Management | MPhil | Completed |
| 3 | Daniel Adjei | Integrated Coastal Zone Management | MPhil | Completed |
| 4 | Bright Asare | Aquaculture | MPhil | Completed |
| 5 | Prince Dela Tseku | Aquaculture | MPhil | Completed |

Second Batch MPhil Students

| No. | Name of Student | Programme of Study | Level | Status |
|-----|-----------------------|------------------------------------|-------|-----------|
| 1 | Divine Worlanyo Hotor | Fisheries Science | MPhil | Submitted |
| 2 | Jennifer Eshilley | Integrated Coastal Zone Management | MPhil | Defended |
| 3 | Kezia Baidoo | Fisheries Science | MPhil | Defended |
| 4 | Mercy Johnson-Ashun | Aquaculture | MPhil | Defended |
| 5 | Simon Kyei Gyimah | Aquaculture | MPhil | Withdrawn |

Third Batch MPhil Students

| No. | Name of Student | Programme of Study | Level | Status |
|-----|-----------------------|------------------------------------|-------|-------------|
| 1 | Success Adjeley Sowah | Oceanography & Limnology | MPhil | In Progress |
| 2 | Paulina Okpei | Fisheries Science | MPhil | In Progress |
| 3 | William Dogah | Aquaculture | MPhil | In Progress |
| 4 | Nunana Agbemebiese | Integrated Coastal Zone Management | MPhil | In Progress |
| 5 | Justina Ekuwa Annan | Integrated Coastal Zone Management | MPhil | In Progress |

| Fourth Batch MPhil Students | | | | |
|-----------------------------|-----------------------|------------------------------------|-------|-------------|
| No. | Name of Student | Programme of Study | Level | Status |
| 1 | Bernard Yeboah Assiam | Integrated Coastal Zone Management | MPhil | In Progress |
| 2 | Gabriel Gator | Fisheries Science | MPhil | In Progress |
| 3 | Delove Abraham Asiedu | Oceanography & Limnology | MPhil | In Progress |
| 4 | Eugenia Amador | Fisheries Science | MPhil | In Progress |
| 5 | Grace Nikoi-Olai | Aquaculture | MPhil | In Progress |

4.4 Activity 1.2.4: Undergraduate Research Grants

To facilitate the timely disbursement of undergraduate research grant research topics, within the broad thematic areas of the USAID/UCC Fisheries Project, were developed for students in DFAS. In this quarter, a total of seven (7) final year students in DFAS were supported to begin their research. Also, processes and procedures are far advance to disburse funds to sister universities to support undergraduate research in those institutions. Funds are much likely to be received by the institutions beginning second quarter of FY 19.

Table 1: L400 PROJECT RESEARCH TOPICS (2018/2019)

| LECTURER | PROJECT TOPIC | NO. OF STUDENTS | NAME OF STUDENTS |
|--------------------------|---|-----------------|-----------------------|
| Dr. Emmanuel Acheampong | Effect of heavy metal pollution on marine shellfish | 1 | Priscilla Mantey |
| Dr. Noble Asare | Determination of Microbial Nutrient Regeneration Rate in a Coastal Aquatic System | 1 | Justice Yeboah |
| Prof. Denis W. Aheto | Current status of antibiotic use and resistance in cage aquaculture farms in Ghana | 1 | Alex Asomani Boateng |
| Dr. Paul Kojo Mensah | Combined effects of salinity and temperature on embryonic development and hatching of the blackchin tilapia (<i>Sarotherodon melanotheron</i>). | 1 | Benjamin Gawornu |
| Prof. Joseph Aggrey-Fynn | Biological and Ecological studies on Blackchin Tilapia in Coastal lagoons. | 1 | Francis Bismark Odoom |
| Mr. Joseph Sefa Debrah | Comparing the CPUE of <i>Oreochrouis niloticus</i> and <i>Sarotherodon melanotheron</i> in the Kakum lake. | 1 | Elizabeth Agyekumwaa |
| Dr. Isaac Okyere | Food and reproductive habits of the banded lampeye killifish, <i>Aplocheilichthyes spailauchen</i> and its potential for mosquito biocontrol | 1 | Samuel Ayitey |

5.0 PROJECT OUTPUT 2.1: INCREASED MARINE AND COASTAL RESEARCH AND RESOURCE ASSESSMENTS

5.1 Activity 2.1.1: Conducting Fisheries Stock Assessment



Figure 4: A PhD student displaying a lobster during Southern New England Cooperative Ventless Trap Survey

This activity has the objective to provide information on the status of stocks of some selected commercially important marine fish species in Ghanaian coastal waters to inform management decision making. In previous years, progressive research on important fish species including cuttlefish, shrimp, *Carangidae*, Sparidae, mangrove oysters were spearheaded by postgraduate students with the support of academic and technical staff. Documented results are being reviewed for onward sharing with relevant stakeholders. In FY 18, four female students led this activity at the MPhil and PhD levels respectively. At the time of preparing this report, the students have completed their data collection and at the various stages of writing their theses. There was therefore no record of active studies or field data collection relating to fish stock assessment. Reference to Activity 1.2.3 the

project is not currently funding students or short-term technical facilitators to collect data to feed into this activity. The subsequent quarters will be used to compile, analyze, review and share information emanating from the various studies on this thematic area. The purpose is to improve knowledge of stakeholders in their attempt to develop fisheries management policies based on scientific findings.

5.2 Activity 2.1.2: Conducting Research and Assessment on Marine Fisheries Governance Issues

This activity which in previous years was led by external facilitators was suspended in FY 18. Nonetheless, the Project engaged postgraduate students to execute aspects of this activity to feed into the broader thematic area. For this particular quarter, no active research was conducted by students because the students are working on reports from the researches into academic theses required for their graduation. For the fifth year (FY 19), the Project has plans to continue to engage an external facilitator to complement students' effort in this regard. Contracts for the engagement was signed in the first quarter and research and Assessment on Marine Fisheries Governance study in the Western and Central regions commenced formally in November 2019. Key output of this

engagement was the facilitator linking up with the leadership of Fishermen; Ministries of Fisheries and Aquaculture Development; and Sanitation and Water Resources. Other outputs include training session for field Research Assistants; finalization of field study instrument (75-point questionnaire) and a field survey in two regions. The major activities covered in the survey include characterization of coastal communities and environment; traditional governance; gender and Children; tourism potential; and management of the fisheries.

In addition to these, the profile of some landing beaches in the Western and Central regions were established using a combined effort of ground truthing and Geographical Positioning Survey (GPS) instrument. In areas of intense ecological or economic activity, an unmanned aerial vehicle (UAV) was deployed to map the area from space. As key outputs, ten (10) new landing beaches were inventoried in four districts and in two regions and an estimated fifteen (15) landing beaches survey and mapped.

Some Major Findings:

The major finding cutting across most of the landing beaches are as follows:

- The need for traditional authority over fishing and fisheries issues to be restored and fully backed by Government if the myriad of problems plaguing the marine fisheries is to be arrested and dealt with.
- Close season is a great idea but its implementation must be tied up to other illicit fishing practices in vogue

Challenges

Challenges encountered in the survey were similar in the districts of the two regions and covered the following areas:

- Disputes on status of chief fishermen in some landing beaches making it difficult for data gathering
- Thoughts of Government's unwillingness to rope in perpetrators of illegal fishing for prosecution
- Turning a blind eye on the illegal premix operations
- Allowing political activists too much room to operate in the fisheries management
- Quest to have jobs/alternative livelihood schemes running instead of interviews for data gathering
- Unwarranted demands for money by some Fisheries Commission officers and fishermen from field Assistants.

It is the expectations of the Project that by end of the research and assessments, the interest of all relevant stakeholders will be effectively garnered to influence decisions and policies to sustain the fisheries and coastal sector of Ghana.

5.3 Activity 2.1.3: Research on Fish and Shellfish of Commercial Value

In Year 4, this activity was led by eight (8) postgraduate students who focused on different fin and shell fishes. Research was conducted on molecular diagnosis of cultured Nile tilapia; the nutrition of the Blackchinned tilapia (*Sarotherodon melanotheron*); comparative biology of *Heterobranchus longifilis* and *Clarias gariepinus*; Biology and culture of oyster (*Crassostrea Tulipa*) and many more. Data collected by these students are being processed into theses and manuscripts for publication since the students are at various stages of thesis submission. In this reporting period, three MPhil students (two females and one male) are conducting research into some commercially important fish species. It is the expectations of the Project that findings from the various research activities would contribute immensely to biological information needed to properly manage Ghana's fisheries resources. Funding, based on approved budget submitted by the students will be available to support their research until the fourth quarter of FY 19.



Figure 5: Fixing oyster tissue in Bouin's solution



Figure 6: Weight measurements of each specimen (left) and extracted gonads from each specimen

5.4 Activity 2.1.4: Analysis of Value Chains of Fish Trade

This activity was commissioned to complement activities 2.1.1 and 2.1.3 given the close association among these activities. The research to investigate the value chain of a commercial fish of high value is led primarily by a P.hD student with support by academic staff of the Department. The fish species of interest is the cassava croaker (*Pseudolithus* species) and the aim is to investigate the costs of the various forms of processing the croakers, examine the roles played by the various institutions in the cassava fish trade in the Central and Western Regions of Ghana, and identify the contributions of the financial institutions in the fisheries value chain. In its third year, this study is will receive support through Year 5. In the first quarter, the student had the opportunity to embark on the exchange program in URI.



Figure 7: Distribution from Sea Fresh to a Restaurant (left) and value chain study tour at Point Judith and Sea Fresh USA

As part of her deliverables, the student ensured to (i) identify and compare the fish value chain systems in the U. S. and in Ghana; (2) investigate the various forms of processing in their value addition forms; (3) identify the various linkages along the chain till product gets to the final

consumer in the case of U.S.; and (4) investigate the various methods which can be used to manage barriers in fisheries.

To complement her effort, the student took a course on behavioral management which can be applied in fisheries management. Having returned to Ghana, the student will continue her research on value chains of fish trade in the central and western regions of Ghana bringing to bear, knowledge and skills she acquired from the U.S. This study is expected to be completed by September, 2019 (end of fourth quarter), and as such will be supported by the Project until the due date.

5.5 Activity 2.1.5: Monitor the Biodiversity and Health of Coastal Ecosystems

Following the halt on the engagement of external facilitators due financial challenges (see previous reports), this activity has been largely supported by MPhil and PhD students who are conducting research on several coastal ecosystems. As an add-on from previous years, a total of nine (9) students, comprising three (3) MPhil student and six (6) PhD students led efforts to achieve the objectives of this activity in this reporting period. The focal areas in this activity include lagoons, estuaries, rivers, beaches and mangrove ecosystems in the Central and Western regions of Ghana. Two of these students were part of the second batch of students on the exchange program at URI. The purpose of their participation was to build the necessary capacity of these students to effectively execute their research goals.

One of the studies focused on the assessment of the ecological conditions of the Ankobra estuary and their implications for coastal livelihoods with the aim to quantify the anthropogenic impacts on the health of the Ankobra estuary. Data collection has been completed by the student and results are currently being analysed. Comparatively, an assessment of the ecological health of mangrove forests in the Kakum and Pra Estuaries in the Central and Western regions respectively has been conducted and data being processed by the student. This study has the focus to produce a comprehensive data needed for the sustainable management of these mangrove ecosystems.



Figure 8: Fieldwork on Salt marsh ecology at URI



Figure 9: Measuring hydrographic parameters in situ (left) and Mangrove leaf litter prepared for assessing biomass in the laboratory (right)

A third year Ph.D student is investigating the productivity of selected lagoons and estuaries through nutrient inventories and primary production assessments. These assessments are done in Ankobra estuary and Sumina lagoon in the Western and Central regions respectively. Samples collected from the field were sent to the USA and have been analyzed for carbon and nitrogen contents in a laboratory at Graduate School of Oceanography, University of Rhode Island. Having acquired some skills in computer programming at URI, the student is capable of analyzing data obtained from the field.



Figure 10: Fish samples obtained from the Enhuli lagoon to assess species diversity in the study

Mapping and Monitoring of Coastal Ecosystems

The Project Activity 2.1.5 is to monitor the biodiversity and health of coastal ecosystems. In view of this, the GIS team is using UAV technology to collect spatial data on some vital coastal ecosystems including coastal waterbodies, wetlands and mangrove forests. The team is also employing UAV technology to monitor changes that are occurring along the coast such as shoreline changes and mangrove degradation. For the quarter under review the team conducted two training sessions. The first session was for national service personnel following a request by office of the Dean of students. Nine (9) service personnel, comprising one female and eight males, were trained in the use of Unmanned Aerial Vehicle (UAV) to build their capacity in the use of UAV to monitor student's activities on campus during outdoor events such as Hall week celebration and students' election. The training was carried out in two badges. The first group was from 29th-30th November, 2018 and the second group was from 4th-5th November, 2018 at the University of Cape Coast football pitch.



Figure 11: Research assistant on the USAID/UCC Fisheries Project training some individuals on the use of UAV

The second session focused on a joint capacity building training between the USAID/UCC Fisheries Project and the Sustainable Fisheries Management Project where organized a three day Unmanned Aerial Vehicle (UAV) training from 11th-13th December, 2018. The purpose of the training was to help the participants acquaint themselves with the operation of the fixed wing UAV (C-Astral Bramor) in preparation towards Pilot certification exams at Ghana Civil Aviation Authority. As part of the training, UAV images of Fosu lagoon were also captured to support on-going post-graduate research activities in the Department of Fisheries and Aquatic Sciences. The resource person for the training was Chris Damion from University of Rhode Island, USA. The training participants were six (one female and five males) in number excluding postgraduate students from Department of Geography and Regional Planning, UCC who came to observe field training on day one. Images from the exercise are

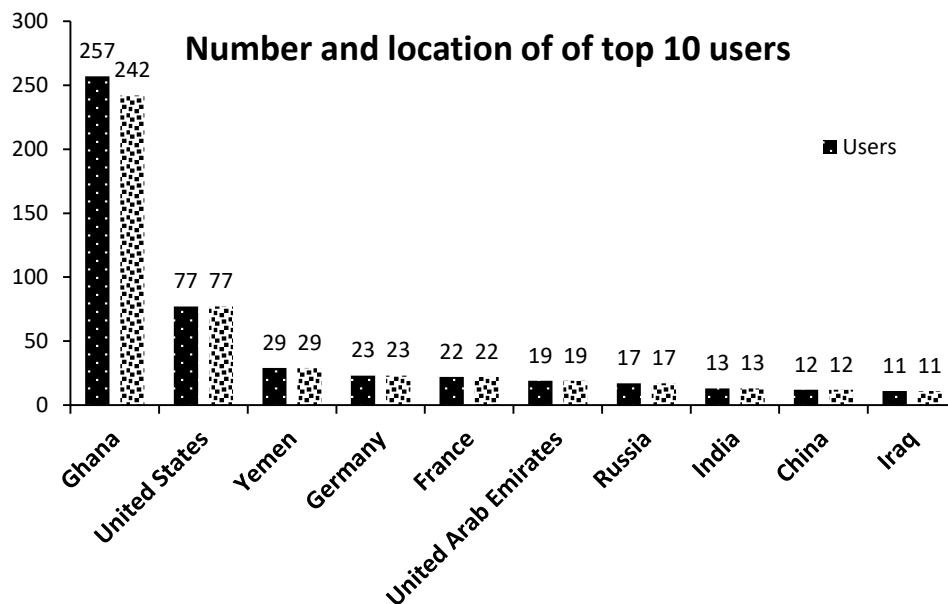
currently being processed. Post-graduate students from.



Figure 12: Use of the Bramor to map coastal water bodies along the coast of Ghana

5.6 Activity 2.1.6: Developing Marine and Coastal Fisheries Database

The online database was fully developed and functional in the first quarter of FY 17 to manage historical data, new field observations and experimental results on Ghana's fisheries and other coastal resources. The database is called FishCoMGhana*, which can be accessed online via <http://fishcomghana.com>. Data is continuously added to the platform. Below are some outputs achieved in this quarter:



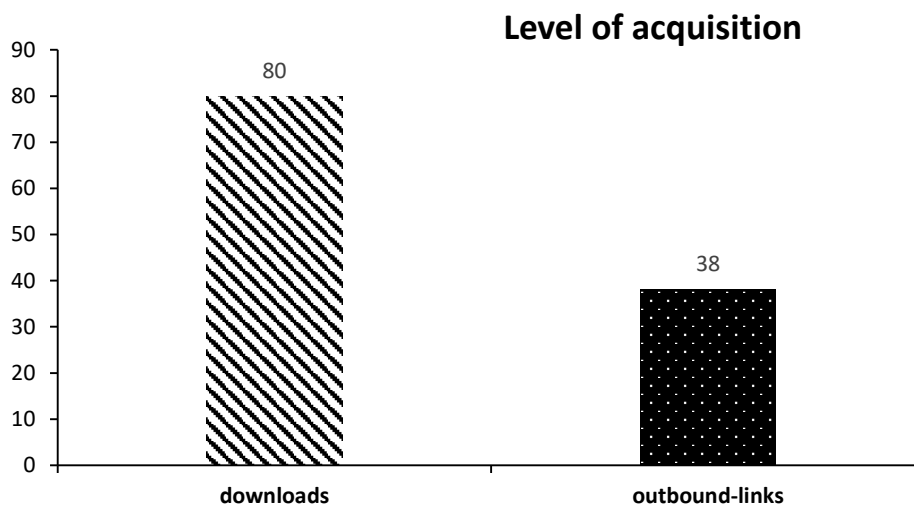
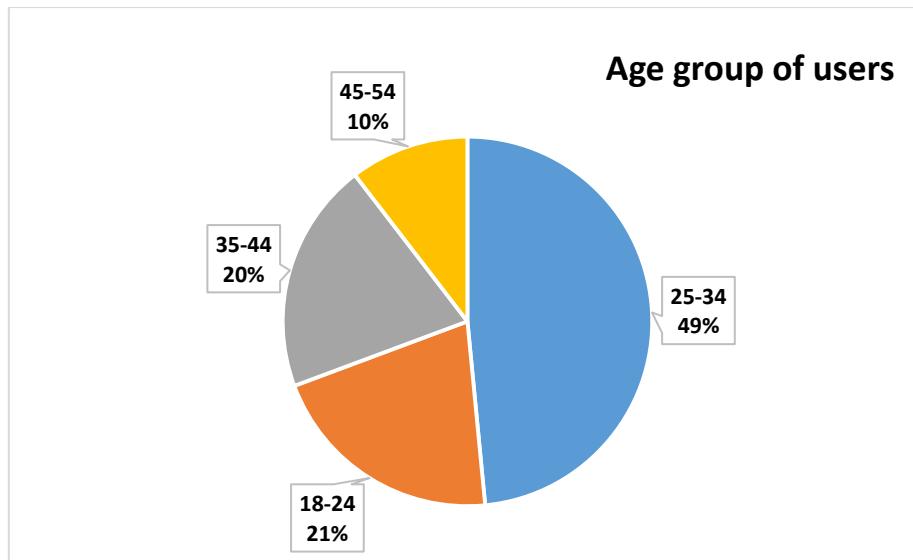


Figure 13: Analytics of fishcomghana.com website

6.0 PROJECT OUTPUT 2.2: COMMUNICATION, EXTENSION AND OUTREACH IMPROVED

6.1 Activity 2.2.1: Developing Material and Conducting Training on Integrated Coastal Management

This activity has been scheduled to take place in the second quarter of FY 19. See activity 2.2.2

6.2 Activity 2.2.2: Developing Material and Conducting Training on Fisheries Management

Due to the backlog of trainings to be conducted spanning FY 18 into FY 19, advertisement was made for all short courses in Daily Graphic and Ghanaian Times (see appendix 1). Only Fisheries Management short course was scheduled to hold in the first quarter. The remaining three short courses will be conducted in the second quarter. The Centre for Coastal Management (CCM) and the Department of Fisheries and Aquatic Sciences (DFAS) collaborated with Nature

Today; a non-profit organization conducted a 5-day Fisheries Management Short-course training for twenty-one (21) selected participants in November 19-23, 2018. The short-course was designed to train policy makers, civil servants, scientists, resource managers and others who play a key role in the development and management of the fisheries sector.

The twenty-one (21) participants made up of 14 males (67%) and 7 females (33%) represented were trained (Figure 1). Participants included staff of the Fisheries Commission (16), Marine Police (2), Ningo-Prampram District Assembly (1) and Media organizations (Journalists from TV3 and Joy News) (2). Participants were selected from the four coastal regions of Ghana; Western, Central, Greater Accra and Volta Regions, to give the training a wider impact

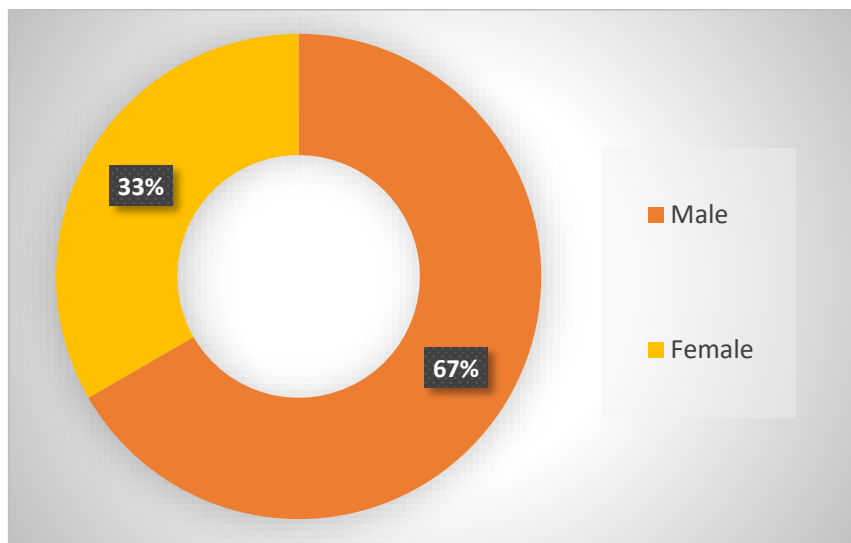
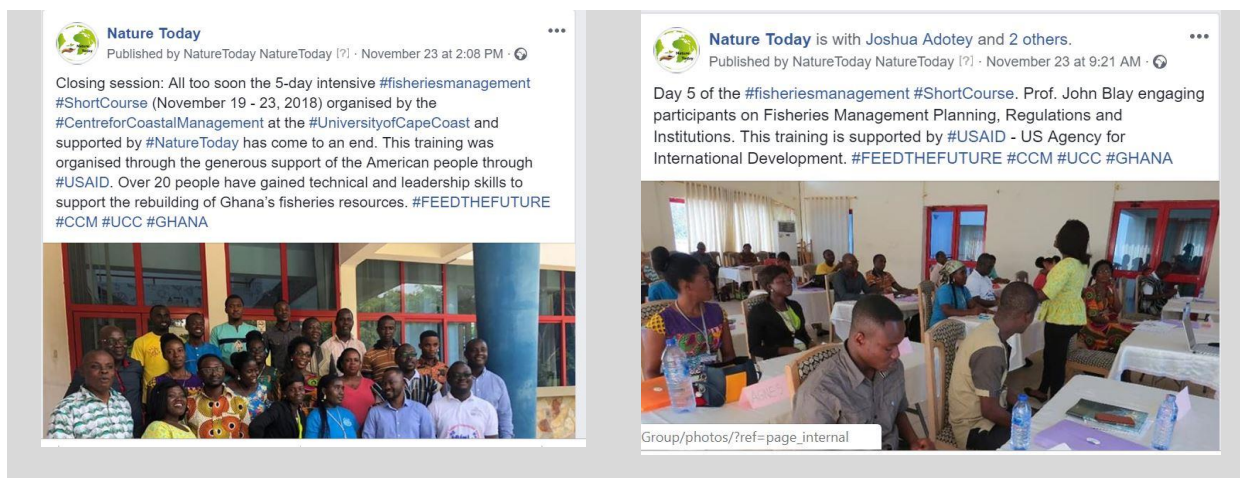


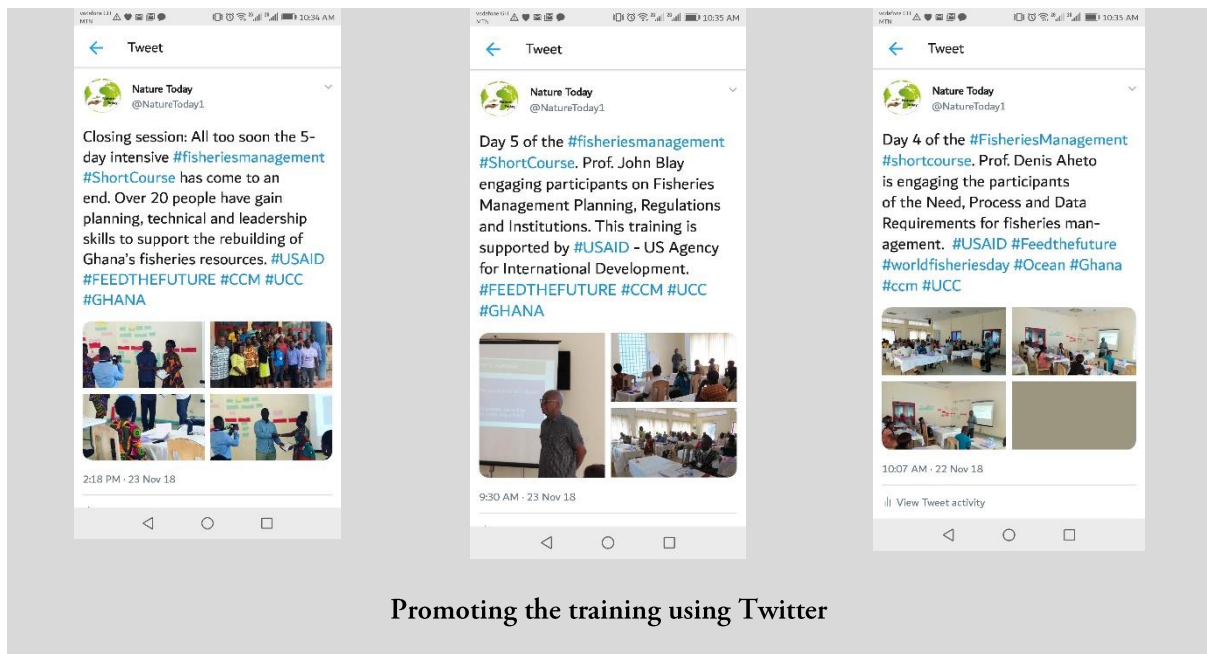
Figure 14: Gender Disaggregation of Participants who attended the Fisheries Management Training

The fisheries management short-course training was promoted through live stream of social media updates and photos in a beautiful real-time display using Facebook, Twitter and Instagram.





Promoting the training using FaceBook



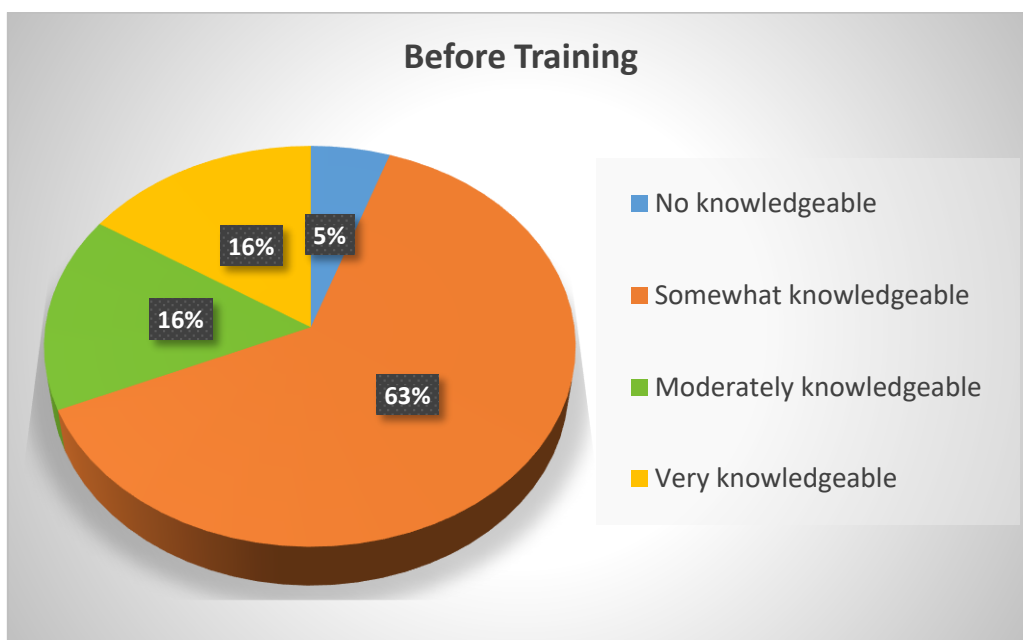
Promoting the training using Twitter

The training employed variety of teaching methods to present course content, including technical PowerPoint presentations, discussions, case studies, simulations and group assignments. At the end of the training, participants acquired knowledge to assist evidence-based policy development, developed critical thinking, interpretation, analysis, leadership and management skills.



Figure 15: Group photograph (left) and classroom session (right) of participants of the Fisheries Management Short Course

From the evaluation of the training, most of the participants moved from having no or moderate knowledge in Fisheries issues to becoming moderately or very knowledgeable in fishery management issues. A similar trend was again observed in the skill of participants where most of the participants moved from having no or fair skills in fisheries management techniques before the training to having good or very good skills in fishery management techniques after the training. These observed trends are indicative of the huge impact that the 5-day training made on the participants in terms of knowledge transfer and acquisition.



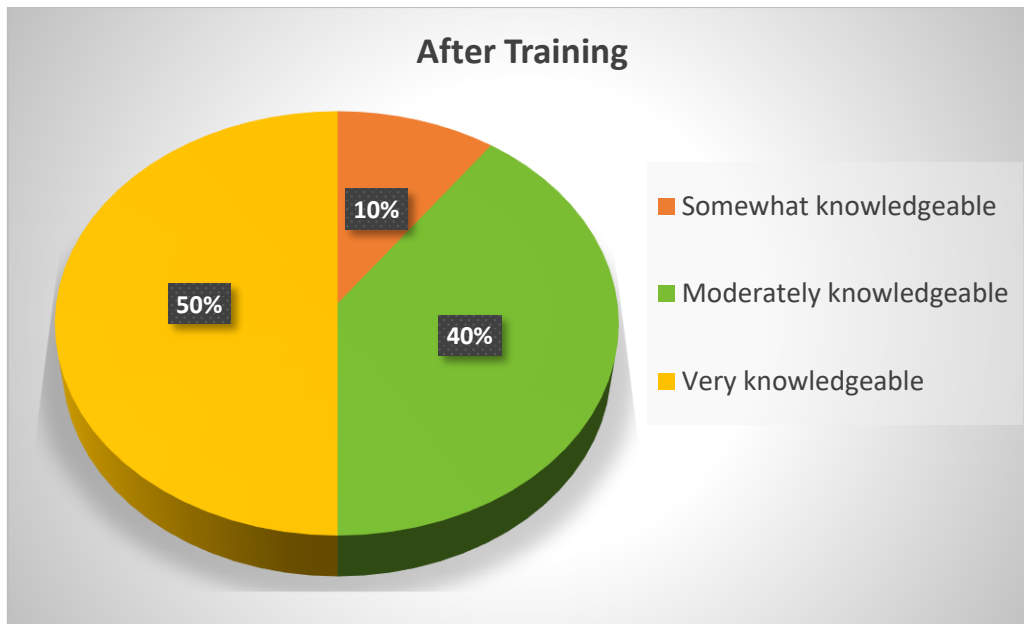


Figure 16: Participants knowledge about concepts of Fisheries Management before and after the course

Overall, participants provided positive feedbacks about the Fisheries Management short-course training. The effectiveness of both the course content and the instructors were evaluated and rated high by the participants. Majority of the participants were happy with the training and indicated that they have gained knowledge in fisheries management issues and are confident to apply the knowledge and skills they have acquired from the training at their work place. As part of lessons learned:

- ✓ There was a call from participants to include communication as a component of the training since most of their work involve daily communication and engagement with stakeholders.
- ✓ Participants requested for follow-up training opportunities to further increase their knowledge and develop their skills in the subject matter.
- ✓ Engagement with Government: According to some participants, the issues, concepts and techniques discussed were very useful and it would have been good for the top government and Fisheries Commission officials to be present at the training since they have the power to effect the necessary change. Participants also recommended that the training should be organized for other fishery officers to help increase the number of officers with the knowledge and skills working in the field to manage fisheries.

There were, however, few challenges associated with organizing the training. These bordered on and the lighting system at the training venue and condition of service at the accommodation facility. Project management has taken notice of these challenges and is working to have them addressed before subsequent trainings.

6.3 Activity 2.2.3: Developing Manuals and Updating Training Materials on Climate Change Adaptation and Mitigation

This activity has been scheduled to take place in the second quarter of FY 19. See Activity 2.2.2 (Appendix 1)

6.4 Activity 2.2.4: Developing Material and Conducting Training on the use and Application of Geographical Information Systems (GIS)

Trainings for this short course has been scheduled to run in second quarter of FY 19. See Activity 2.2.2 (Appendix 1)

6.5 Activity 2.2.5: Engaging Policy Makers to Address Coastal and Fisheries Issues

A major output of this activity in the second quarter is the organization of meetings with Chief Directors of the following agencies: Ministries of Fisheries and Aquaculture Development, Sanitation and Water Resources, Tourism, Culture and Creative Arts. The purpose is to engage government, development partners, civil society organizations and private sector institutions with the goal of establishing a fisheries and coastal management sector working group. The working group will advise government on the development and implementation of policies, strategies and programmes to address the challenges of the sector.

Another feat has to do with planning towards the second conference on Fisheries and Coastal Environment in 2019. The conference is slated to hold on June 3rd - 5th, 2019 (third quarter of FY 19) at the Mensvic Grand hotel, Accra and to be supported by satellite hotels in the vicinity. The projected number of participants is 300 individuals culled from public, CSOs, traditional sectors, government officials and academics. Finally on this activity, effort was made to set up an editorial board and review processes for the Journal of Fisheries and Coastal Management in line with requirements of African Journal Online (AJOL). The period saw the appointment of an Editor-in-Chief, six Associate Editors (two females and four males) and five (5) Editorial Assistants (two females and three males) to the journal. Concurrently, submitted manuscripts were being processed for publication. Accepted manuscripts will be published on www.jfcomonline.com

There is also ongoing activities include compilation of email addresses and contacts of universities and other relevant institutions, within and outside the African region, that are considered to potentially have individuals with interest in fisheries, aquaculture and coastal management at large. This will help in a targeted advertisement of the Journal. Materials and policies are also being developed towards indexing the Journal.

6.6 Activity 2.2.6: Building Institutional Partnerships and Collaboration

Existing partnerships continued with all partner institutions cooperating as usual. Efforts were strengthened with our sister project, the Sustainable Fisheries Management Project (SFMP) to collaboratively organise the 2nd Conference on Fisheries and Coastal Environment. A meeting was therefore held between the USAID/UCC FCMCBSP and the SFMP at the SFMP office in Accra following an earlier discussion in which individuals from both projects were nominated to serve

on the organising committee. The meeting was the first for the organising committee. The main agenda was to discuss big picture objectives, identify potential venue(s), number of participants, pressroom, breakout rooms, etc. Further, the organizing and planning structure for the Conference was set and initial responsibilities of each unit drafted. The appointment of two representatives to the Planning Committee by the Minister of Fisheries and Aquaculture Development was also discussed, among other matters. Minutes of the meeting are attached as Appendix 6.

6.7 Activity 2.2.7: Wetlands Ecological Health Monitoring Using School Clubs and Communities

This activity was largely implemented with the collaboration of the Coastal Sustainable Landscapes Project (CSLP) and two NGOs: Hen Mpoano and Friends of the Nation. In the quarter under review, no activity was recorded primarily because the CSLP, a major collaborator on this activity, closed out and also because funds could not be disbursed to the NGOs, the contracted facilitators, on the basis that the project did not receive approval to implement FY 19 activities. It is the expectation of the project to continue this activity in the second quarter of FY 19.

6.8 Activity 2.2.8: Strengthening Community-based Groups

This activity was merged with Activity 2.2.9

6.9 Activity 2.2.9: Promoting Supplementary Livelihoods in Coastal Communities

During FY 18, this activity came to a momentary halt due to lack of funds. The situation escalated because the respective projects in the four coastal communities were not duly monitored. As a step to assess the status of the projects and learn from the existing challenges, a team of three members of the monitoring and evaluation team was dispatched to undertake this exercise. The communities are Half Assini, Ankobra, Anlo Beach and Narkwa.

The first community was Half Assini in the Western region which was implementing Bee keeping and Snail rearing activities. Given the non-commitment of the group leadership in Half Assini, a suggestion was made to decommission the larger group to allow individuals take up the project by themselves. The members agreed that the few people interested in the SL project particularly, the snail rearing will mobilize themselves and start the project. The plan is to ask interested members to make financial contributions to revive the project. The members then suggested to the team to visit the community again in January to assess the progress made thus far.

On the team's visit to Ankobra in the Western region, it was observed that the group did not meet regularly, the last meeting held was about 6 months ago. This community focused on snail rearing as a supplementary livelihood activity. Deliberations with the members, reveal the following:

- Only one female member tried to start rearing the snails on an individual basis, although the group consist of 25 members. Per records, only seven (7) members were males.
- The members confirmed that the site allocated initially to start the farm was a challenge because it was hot and they did not have access to water. Also, there are no suitable lands to start the snail farms individually.

- As a remedy the leader of the group removed and kept nets and paddock covers safely on his own farm where he attempted rearing the land snails.
- In the spirit of sustenance, the group agreed to call a meeting where they will decide whether to continue the communal farm or embark on the project individually.

The outcome of such meeting which was later communicated to Project management was that, the livelihood project will be continued on individual basis, with support from Project Management.

The next community was Anlo Beach where twenty-five (25) members were trained in bee keeping as a supplementary livelihood option. It was observed that:

- Only 8 members have been consistently active on the project
- Community SL group learnt from initial experiences where first setups were abandoned were abandoned by the bees.
- New setups were constructed with all 5 currently colonized by bees.
- Bees fled one setup but with knowledge acquired from the programme, setup has been re-set.
- Honey has been produced in remaining four hives but may have caked due to incapability of the members to perform an extraction. Because members lacked adequate gears to carry out extraction. Members therefore suggested that they should be trained on different techniques to harvest honey without the gears provided since the gears could attract bees back into the community which may pose a health hazard. Bees involved in the exercise are wild bees that cannot be readily controlled.
- The highlight of the discussion was an innovative idea by one Mr. Kennedy Attipoe to produce Noni honey by cultivating Noni plants in the vicinity of the hives. Mr. Attipoe, with the assistance of the community chief, seems to have taken charge of the whole project and ensuring its survival. He expressed very high motivation and therefore requested for support.

In the Central region, the team visited Narkwa in the Ekumfi district which focused on snail rearing.

These are the highlights of the team's findings:

1. Communal demonstration farm abandoned completely
2. Unavailability of water for rearing snails was a disincentive (members had to buy water and carry to demonstration site)
3. Delayed visit by the Project's monitoring team discouraged project members to continue on communal basis
4. Purported theft cases compounded the problem
 - *Although the project was communal within the same space, paddocks were shared among individuals and this may have bred mistrust among members*
5. A number of the members took up the activity in their homes, rearing the snails in
 - Lorry tires
 - Paddocks in their kitchen
 - Basins/bowls

After the three-day monitoring visit to the four coastal communities benefitting from the SL programme, the following conclusions are drawn:

- ✓ The existing structures and strategy for implementation of the SL programme does not instill a sense of ownership and continuity of programme by the community members themselves and this is thought to defeat the purpose of the programme
- ✓ Thus, community members are largely not motivated to continue activities without involvement of the Project team
- ✓ Further activities of the programme, if any, should focus on communities with demonstrated interest in the order; Anlo Beach, Narkwa, Ankobra, Half-Assini although we are strongly sceptical about the latter
- ✓ In view of this, communities have been admonished to show commitment by reviving communal farms, where there is the need, in order to get support from the USAID/UCC Fisheries Project

i. Photographic observations – Half Assini





ii. **Photographic observations – Ankobra**





iii. Photographic observations – Anlo Beach





iv. Photographic observations – Narkwa







APPENDICES

Appendix 1: Newspaper publication of Short Courses in the Daily Graphic and Ghanaian Times

EXCLUSIVE GraphicSPORTS now **Online!**

Visit: www.graphic.com.gh/showbiz
www.graphic.com.gh/graphicapsports

57

**IN THE SUPERIOR COURT OF JUDICATURE
IN THE HIGH COURT OF JUSTICE
COMMERCIAL DIVISION
ACCRA-A.D. 2018**

SUIT NO: BFS/270/14

PLAINTIFF
BANK OF AFRICA GHANA LIMITED
C131/3 FARRAR AVENUE
ADABRAKA - ACCRA

VS

DEFENDANTS
1. HANSOL MINING LIMITED
Plot No. 142 Asreso Esaso
Near Atonsu
Kumasi - Ashanti Region
2. BERNARD ANTIWI-BOASIAKO
Plot No. 142 Asreso Esaso
Near Atonsu
Kumasi - Ashanti Region
3. THOMAS ANTIWI-BOASIAKO
House No. 224 Asafo
Kumasi - Ashanti Region

(SGD)
JUSTICE JENNIFER ABENA DADZIE
JUSTICE OF THE HIGH COURT
(COMMERCIAL DIVISION)

**ORDER FOR
SUBSTITUTED SERVICE**

UPON READING the affidavit of DANIEL K. BIMPONG of H/No. 6, Amamre Spot, Israel-Lomnava, Accra, Senior Paralegal for Minkah-Preimo & Co, herein filed on 26th September, 2018 in support of Motion Ex Parte for Substituted Service;

UPON HEARING YVONNE NYARKO (HOLDING BRIEF FOR ISAAC OSEI-BONSU) Counsel for and on behalf of Plaintiff/Applicant herein;

IT IS HEREBY ORDERED that the Entry of Judgment together with this Order be served on the Defendants to this suit by substituted service as follows:

- By posting copies of the Entry of Judgment together with this Order on the Law Court Complex, Commercial Division, Accra;
- By posting copies of the Entry of Judgment together with this Order on the 1st and 2nd Defendants' place of business or abode known as Plot No. 142, Asreso Esaso, Near Atonsu, Kumasi, Ashanti Region;
- By posting copies of the Entry of Judgment together with this Order on the 3rd Defendant's last known address or abode known as House No. 224, Asafo, Kumasi, Ashanti Region;

where posting shall remain in place for fourteen (14) days and,

- By a single publication in the Daily Graphic Newspaper.

GIVEN UNDER MY HAND AND SEAL OF THE HIGH COURT OF JUSTICE COMMERCIAL DIVISION, ACCRA THIS 28th DAY OF SEPTEMBER, 2018

(SGD)
MR STEPHEN AFOTYE
(REGISTRAR)

IN THE SUPERIOR COURT OF JUDICATURE
IN THE HIGH COURT OF JUSTICE
COMMERCIAL DIVISION (6)
ACCRA-A.D. 2018

SUIT NO. BFS/270/14

BETWEEN
BANK OF AFRICA GHANA LIMITED
C131/3 FARRAR AVENUE
ADABRAKA - ACCRA

PLAINTIFF

AND

DEFENDANTS
1. HANSOL MINING LIMITED
PLOT NO. 142 ASRESO ESASO
NEAR ATONSU
KUMASI - ASHANTI REGION
2. BERNARD ANTIWI-BOASIAKO
PLOT NO. 142 ASRESO ESASO
NEAR ATONSU
KUMASI - ASHANTI REGION
3. THOMAS ANTIWI-BOASIAKO
HOUSE NO. 224 ASAFO
KUMASI - ASHANTI REGION

ENTRY OF JUDGMENT

DATED AND ENTERED ON THE 30th DAY OF JULY, 2018.

This action having been heard by HIS LORDSHIP, JUSTICE JEROME NOBLE-NKRUMAH sitting in the High Court, Commercial Division on the 30th day of July, 2018, did enter Judgment against the Defendants.

It is this day adjudged that the Plaintiff recovers from the Defendants jointly and severally as follows:

- The payment of the sum of USD\$63,704.02 or its cedi equivalent being the outstanding balance owed the Plaintiff as at 31st July, 2014.
- Interest at the contractual rate of 12% per annum from 1st August, 2014 till date of final payment (i.e. from 1st August, 2014 to August, 2018) being USD\$31,214.97 (or its cedi equivalent at the Exchange Rate of 4.70 being GH\$146,710.36)
- For the recovery of the sum of GH\$3,146,740.64 being the outstanding balance owed the Plaintiff.
- Interest at the prevailing Bank rate of 23% per annum from 1st August, 2014 till date of final payment (i.e. from 1st August, 2014 to August, 2018) being GH\$2,955,313.92
- Cost of GH\$100,000.00.

DATED IN ACCRA THIS 27th DAY OF AUGUST, 2018.


SOLICITOR FOR THE PLAINTIFF
NANA AMA STEPHENS (MRS)

LICENCE NO. GAR 15757/18

THE REGISTRAR
HIGH COURT
COMMERCIAL DIVISION (6)
ACCRA.

AND ON THE DEFENDANTS HEREIN

USAID | GHANA



UNIVERSITY OF
CAPE COAST

**UNIVERSITY OF CAPE COAST
SCHOOL OF BIOLOGICAL SCIENCES
CENTRE FOR COASTAL MANAGEMENT**

CALL FOR APPLICATIONS TO ONE-WEEK PROFESSIONAL COURSES

The Centre for Coastal Management (CCM) at the University of Cape Coast (UCC), Ghana, is organizing short courses to strengthen the capacity of government institutions and professionals who are dealing with myriad challenges in coastal areas of Ghana and beyond. The short courses have been carefully thought out and structured to equip coastal managers with the fundamentals as well as in-depth knowledge for a more integrated approach in the planning and execution of coastal programmes for sustainable development and management of coastal areas.

Interested candidates are therefore invited to apply for any of the three (3) courses currently being run at the Centre. All applications are to be submitted online at the Centre's website at least two-weeks before commencement of the course.

Courses and dates for 2018/19 are as follows:

| Course | Date |
|--|----------------------------|
| Climate Change Adaptation And Mitigation In Coastal Areas | 14th - 18th January, 2019 |
| Geographic Information Systems (GIS) – Introductory Course | 11th – 15th February, 2019 |
| Integrated Coastal Zone Management | 18th – 22nd February, 2019 |

Course fees

A subsidized fee for each short course is as follows:

Local Ghanaian participants

Non-residential (Package 1): GHS 850.00 (Includes tuition and all training materials)
Non-residential (Package 2): GHS 1,175.00 (Includes tuition and all training materials and meals – lunch and snacks)
Residential: GHS 1,775.00 (Includes tuition and all training materials, accommodation and meals – lunch and snacks)

International participants

US \$ 1,000.00 (includes airport pick up, accommodation, tuition, training materials, lunch, and snack breaks)

Please note that the fee does not include visa fees, ground transport (except airport pick up), airfare, travel insurance, or food/lodging before or after the training dates. For local Ghanaian participant, travel to and from Cape Coast is the responsibility of the participant.

Payment should be made to the account details below:

Account Name: Centre for Coastal Management
Bank: Zenith Bank Ghana Limited
Branch: University of Cape Coast
Account Number: 0006011407382

Sponsorship

The Centre is collaborating with the United States Agency for International Development (USAID) under the USAID/UCC Fisheries and Coastal Management Capacity Building Support Project to offer limited funding support for personnel from the following government agencies for the 2019 batch of short courses: Metropolitan, Municipal and District Assemblies (MMDAs), National Disaster Management Organisation (NADMO), Fisheries Commission, Marine Police and the Environmental Protection Agency (EPA).

Females are particularly encouraged to apply

Registration information

All applications to participate in the CCM Short Courses must be submitted online at ccm.ucc.edu.gh. You are kindly requested to apply online before the following deadlines:

Climate Change Adaptation and Mitigation in Coastal Areas of Ghana: 31st December, 2018
Introductory GIS: 24th January, 2019
Integrated Coastal Zone Management: 1st February, 2019

Apply online at ccm.ucc.edu.gh
For more information, contact us at ccm@ucc.edu.gh or call 0332092654

SC-8162

GHS laments health facilities' inability to detect tuberculosis cases

FROM AMA
TEKYIWAA AMPADU
AGYEMAN, KOFORIDUA

THE Eastern Regional Director of the Ghana Health Service, Dr. Mrs. Alberta AdjabenBirwum-Nyarko has expressed worry over the region's health facilities' inability in detecting tuberculosis cases.

According to her, persons living with HIV have other illnesses and infections such as tuberculosis and hepatitis adding that one out of three deaths in people living with HIV was as a result of tuberculosis.

"But as a region we are not doing well in finding out tuberculosis cases," she lamented adding that that it was high time the region's health facilities strengthen their detecting tuberculosis in order to quickly cure people affected.

Dr. Mrs. Birwum-Nyarko was speaking at the Advocacy meeting on strengthening HIV commodity security organised in Koforidua by the Regional Coordinating Council with support from the US Ambassadors Self-Help Project.

The Eastern Regional Director explained that the region now had in its possession multi drug resistance for TB and extreme resistant TB adding that, "We cannot continue with business as usual".

He charged management of health facilities in the region to put in strategies that would enable them to adequately detect TB cases.

She revealed that the theme for the 2019 World Tuberculosis Day was, 'It's Time' adding that to strengthen HIV and TB collaboration there was the need to get people tested for both TB and HIV.

She also stressed the need to link HIV positive people to care and ensure their complete

viral suppression and ensure commodity security for both HIV and TB.

Speaking on the recent estimate of the number of newly infected people living with HIV, she stated that the 19,000 newly infected was by no means a small number adding that stakeholders need to do more in contributing to end AIDS in the country by 2030.

"While the government and its partners are committed to ending AIDS by 2030, I am afraid that the rate of new infections and deaths does not show we are solving rapidly enough to meet the target."

She said even though the Eastern Region which had a high prevalence rate has been able to reduce its prevalence and has moved from the first position to the fifth place it was necessary to do more to help reduce the high prevalence in the country and achieve the agenda 90-90-90 target by the Ghana AIDS Commission.

For his part, the Deputy Eastern Regional Minister, Mr. Samuel Ayitey was glad that the high prevalence of HIV in the region has received a consistent decline.

He called on the regional medical stores to ensure that commodities like the antiretroviral drugs, test kits, condoms are made available for use to help reduce HIV.

Dr. Samuel Ofori, former Regional Coordinator, National AIDS Control Programme commended stakeholders for what has been done so far and pleased that they also preach abstinence among the youth.

He said even though condoms were being distributed among young people it was necessary to preach to them abstinence to enable them desist from engaging in pre-marital sex which may come with it sexually transmitted diseases.



UNIVERSITY OF CAPE COAST SCHOOL OF BIOLOGICAL SCIENCES CENTRE FOR COASTAL MANAGEMENT

CALL FOR APPLICATIONS TO ONE-WEEK PROFESSIONAL COURSES

The Centre for Coastal Management (CCM) at the University of Cape Coast (UCC), Ghana, is organizing short courses to strengthen the capacity of government institutions and professionals who are dealing with myriad challenges in coastal areas of Ghana and beyond. The short courses have been carefully thought out and structured to equip coastal managers with the fundamentals as well as in-depth knowledge for a more integrated approach in the planning and execution of coastal programmes for sustainable development and management of coastal areas.

Interested candidates are therefore invited to apply for any of the three (3) courses currently being run at the Centre. All applications are to be submitted online at the Centre's website at least two-weeks before commencement of the course.

Courses and dates for 2018/19 are as follows:

| Course | Date |
|--|----------------------------|
| Climate Change Adaptation And Mitigation In Coastal Areas | 14th - 18th January, 2019 |
| Geographic Information Systems (GIS) – Introductory Course | 11th – 15th February, 2019 |
| Integrated Coastal Zone Management | 18th - 22nd February, 2019 |

Course fees

A subsidized fee for each short course is as follows:

Local Ghanaian participants

Non-residential (Package 1): GHS 850.00 (Includes tuition and all training materials)
Non-residential (Package 2): GHS 1,175.00 (Includes tuition and all training materials and meals – lunch and snacks)

Residential: GHS 1,775.00 (Includes tuition and all training materials, accommodation and meals – lunch and snacks)

International participants

US \$ 1,000.00 (Includes airport pick up, accommodation, tuition, training materials, lunch, and snack breaks)

Please note that the fee does not include visa fees, ground transport (except airport pick up), airfare, travel insurance, or food/lodging before or after the training dates. For local Ghanaian participant, travel to and from Cape Coast is the responsibility of the participant.

Payment should be made to the account details below:

Account Name: Centre for Coastal Management
Bank: Zenith Bank Ghana Limited
Branch: University of Cape Coast
Account Number: 0006011407382

Sponsorship

The Centre is collaborating with the United States Agency for International Development (USAID) under the USAID/UCC Fisheries and Coastal Management Capacity Building Support Project to offer limited funding support for personnel from the following government agencies for the 2019 batch of short courses: Metropolitan, Municipal and District Assemblies (MMDAs), National Disaster Management Organisation (NADMO), Fisheries Commission, Marine Police and the Environmental Protection Agency (EPA).

Females are particularly encouraged to apply

Registration information

All applications to participate in the CCM Short Courses must be submitted online at ccm.ucc.edu.gh. You are kindly requested to apply online before the following deadlines:

Climate Change Adaptation and Mitigation in Coastal Areas of Ghana: 31st December, 2019

Introductory GIS: 24th January, 2019

Integrated Coastal Zone Management: 1st February, 2019

Apply online at ccm.ucc.edu.gh

For more information, contact us at ccm@ucc.edu.gh or call 0332092654

Appendix 2: Fisheries Management Short Course Training Program

| Day 1: Monday, 19 th November, 2018 | | |
|---|---|-------------------------------------|
| Time | Activities | Responsibilities/Resource Person |
| 08:00 – 08:30 | Arrival and Registration | Sheila Fynn-Korsah |
| 08:35 – 09:00 | Review of objectives and agenda for the training | Cynthia Okine |
| 09:05 – 09:30 | Ice Breaker – Team Building Exercise | Cynthia Okine |
| 09:35 – 10:30 | Theory: Module 1 – Introduction to Fisheries Management | Dr. Isaac Okyere |
| 10:35 – 11:00 | Coffee/Tea Break | |
| 11:05 – 13:00 | Theory/Exercise: Module 1 – Introduction to Fisheries Management (Continuation) | Dr. Isaac Okyere |
| 13:05 – 14:00 | Lunch | |
| 14:05 – 15:30 | Module 6 – Leadership for Change (Fisheries Management) | Cynthia Okine |
| 15:35 - 15:40 | Short Break | |
| 15:45 – 16:30 | Case study: Leadership for Change | Cynthia Okine |
| 16:35 – 17:00 | Closing Round (Questions and Evaluations) | Sheila Fynn-Korsah |
| Day 2: Tuesday, 20 th November, 2018 | | |
| Time | Activities | Responsibilities/Resource Person |
| 08:30 – 09:00 | Review of Day 1 (Introduction to Fisheries Management & Leadership for Change) | Dr. Isaac Okyere Cynthia Okine |
| 09:05 – 10:30 | Theory: Module 4 – Strategies for Fisheries Management: Socio-Economic and Political Factors | Prof Aggrey-Fynn |
| 10:30 – 11:00 | Coffee/Tea Break | |
| 11:05 – 13:30 | Theory: Module 4 – Strategies for Fisheries Management: Socio-Economic and Political Factors (Continuation) | Prof. Aggrey-Fynn |
| 13:00 – 14:00 | Lunch | |
| 14:00 – 14:45 | Theory/Exercise: Module 4 – Strategies for Fisheries Management: Socio-Economic and Political Factors (Continuation) | Prof. Aggrey-Fynn |
| | Exercise: Module 1 – Introduction to Fisheries Management (Continuation) | |
| 14:45 – 15:00 | Questions and Evaluations | Cynthia Okine/Sheila Fynn-Korsah |
| 15:00 – 17:00 | Campus Tour | Sheila Fynn-Korsah |
| Day 3: Wednesday, 21 st November, 2018 | | |
| Time | Activities | Responsibilities/Resource Person |
| 07:30 – 11:30 | Field Trip | Sheila Fynn-Korsah/Mr. Atobrah |
| 11:30 – 13:00 | Theory: Module 3 - Scope and Approaches of Fisheries Management | Mr. Atobrah |
| 13:00 – 14:00 | Lunch | |
| 14:05 – 15:30 | Theory: Module 3 - Scope and Approaches of Fisheries Management (Continuation) | Mr. Atobrah |
| 15:30 – 15:40 | Ice Breaker Exercise/Short Break | |
| 15:40 – 16:40 | Theory/Exercise: Module 3 - Scope and Approaches of Fisheries Management (Continuation) | Mr. Atobrah |
| 16:40 – 17:00 | Closing Round (Questions and Evaluation) | Cynthia Okine Sheila Fynn-Korsah |

Day 4: Thursday, 22nd November, 2018

| Time | Activities | Responsibilities/Resource Person |
|---------------|--|---|
| 08:30 – 09:00 | Review of Day 3 (Scope and Approaches of Fisheries Management) | Mr. Atobrah / Sheila Fynn-Korsah |
| 09:05 – 10:30 | Theory: Module 2 – Fisheries Management - Need, Process and Data Requirements | Prof. Denis Aheto |
| 10:35 – 11:00 | Coffee/Tea Break | |
| 11:05 – 13:00 | Theory: Module 2 – Fisheries Management - Need, Process and Data Requirements (Continuation) | Prof. Denis Aheto |
| 13:00 – 14:00 | Lunch | |
| 14:05 – 14:30 | Ice Breaker Exercise/Short Break | Cynthia Okine |
| 14:35 – 16:30 | Theory/Exercise: Module 2 – Fisheries Management - Need, Process and Data Requirements (Continuation) | Prof. Denis Aheto |
| 16:35 – 17:00 | Closing Round (Questions and Evaluation) | Cynthia Okine Sheila Fynn-Korsah |

Day 5: Friday, 23rd November, 2018

| Time | Activities | Responsibilities/Resource Person |
|---------------|---|---|
| 08:30 – 09:00 | Review of Day 4 (Fisheries Management Planning, Regulations and Institutions) | Prof. Denis Aheto/ Sheila Fynn-Korsah |
| 09:05 - 10:30 | Theory: Module 5 - Fisheries Management Planning, Regulations and Institutions | Prof. John Blay |
| 10:35 – 11:00 | Coffee/Tea Break | |
| 11:05 – 12:00 | Theory/Exercise: Module 5 - Fisheries Management Planning, Regulations and Institutions (Continuation) | Prof. John Blay |
| 12:05 – 13:00 | Evaluation Closing Session & Presentation of certificates | Sheila Fynn-Korsah A representative from CCM |
| 13:00 – 13:45 | Lunch | |
| 13:45 | Departure | |

Appendix 3: Fisheries Management Short Course Participants List




FISHERIES MANAGEMENT SHORT COURSE
 Centre for Coastal Management
 University of Cape Coast (UCC)
 19th - 23rd November 2018

REGISTRATION SHEET FOR TRAINING PARTICIPANTS

| No. | First Name | Surname | Gender (M/F) | Email | Organization | Position | Telephone | Signature | | | | |
|-----|------------|----------|--------------|--------------------|----------------------|------------------|--------------|-------------|-------------|-------------|-------------|-------------|
| | | | | | | | | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| 1 | PROMISE | GAVRY | M | gavry@yafall.com | F.C | Zonal officer | 024477232456 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 2 | JOSEPH | ANTHONY | M | antony@yafall.com | Marine Police | Deputy Director | 0244687597 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 3 | FRANCIS | ARTHUR | M | arthur@yafall.com | FC | Submarine Tonn | 0245990630 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 4 | OLIVIA | HARVEY | F | olivia@yafall.com | FC | Zonal officer | 0208088261 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 5 | MARTHA | CRENSIL | F | martha@yafall.com | Multimedia group Ltd | News Editor | 0248349783 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 6 | Kenneth | LILBERTH | M | kenneth@yafall.com | F.C | Zonal Officer | 024450744 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 7 | Michael | KODIE | M | michael@yafall.com | F.C | Zonal officer | 0244937685 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 8 | Isaac | ARTHUR | M | isaac@yafall.com | FC | Environmtn | 0248236198 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 9 | CHARLES | DARKO | M | charles@yafall.com | FC | Asst. F.M | 02430244 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 10 | ISAAC | ASSETUAL | M | isaac@yafall.com | FC | District officer | 024206077 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |

| No. | First Name | Surname | Gender (M/F) | Email | Organization | Position | Telephone | Signature | | | | |
|-----|------------|---------------|--------------|----------------------|---------------|--------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| | | | | | | | | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| 11 | Patrick | Lawiah | M | patrick@yafall.com | F.C | Dist. A officer | 024440124 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 12 | Philomena | OSE-BENTY | F | philomena@yafall.com | F.C | ZONAL | 024463120 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 13 | David A.J. | SACKAY | M | david@yafall.com | F.C | ZONAL DIRECTOR | 024485305 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 14 | Prisca | OPARI-BEATING | M | prisca@yafall.com | NIPDA | MIS officer - DoA | 054218340 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 15 | Mhoda | OBENG | F | mhoda@yafall.com | F.C | S.T.P. | 054225856 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 16 | Sebastian | APPRON | M | sebastian@yafall.com | F.C | Zonal officer | 024351282 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 17 | Freda | TAFUA | F | freda@yafall.com | F.C | Zonal officer | 024249037 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 18 | Agnes | SAM | F | agnes@yafall.com | F.C | Zonal officer | 05562422 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 19 | Isaac | MENSAH | M | isaac@yafall.com | Marine Police | Asst. / Deputy Inspector | 024266120 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 20 | Thomas | CANA | M | thomas@yafall.com | TVS | Asst. Insp | 024609300 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 21 | MARSHAL | ARTHUR | F | marsh@yafall.com | F.C | Zonal officer | 0244770755 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 22 | FRANCIS | ARTHUR | M | francis@yafall.com | FC | CRIME PATROL | 0245990630 | [Signature] | [Signature] | [Signature] | [Signature] | [Signature] |
| 23 | Sebastian | APPRON | M | sebastian@yafall.com | | | | | | | | |

Appendix 4: R Training Evaluation Form

Rate your skills: How would you rate yourself **before and after** the training?

1. Basic Knowledge in the concepts of Fisheries Management (1=No knowledge about 2=somewhat Knowledgeable about, 3= moderately Knowledgeable about, 4= Very knowledgeable about)

| | 1 | 2 | 3 | 4 |
|--------|--------------------------|--------------------------|--------------------------|--------------------------|
| Before | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| After | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Skills in using Fisheries Management Concepts and knowledge (1 = No skills, 2=Fair, 3=Good, 4 = Very good skills)

| | 1 | 2 | 3 | 4 |
|--------|--------------------------|--------------------------|--------------------------|--------------------------|
| Before | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| After | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Application of learning

3. How confident do you feel about applying what you have learnt in your position, work or job role? (1 = Not confident, 2=slight confident, 3=moderately confident, 4= Very confident)

| | 1 | 2 | 3 | 4 |
|--------|--------------------------|--------------------------|--------------------------|--------------------------|
| Rating | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

4. How often do you expect to be able to apply your learning in your job role? (1 = Not at all, 2=rarely. 3=sometimes, 4=Very often, 5=always)

| | 1 | 2 | 3 | 4 | 5 |
|--------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Rating | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

5. What things (eg. software, equipment, data) might you need to help you use your learning in your job?

Training content

6. How did you find the content of the training? (1 = Very poor, 2=poor, 3=good, 4 = Very good, 5=excellent)

| | 1 | 2 | 3 | 4 | 5 |
|--------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Rating | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

If you have any further comments about the content of the training, please add them here.

Training methods

7. How useful did you find the following in helping you to learn? (1 = Not at all useful, 2=not very useful, 3=somewhat useful, 4 = Very useful)

| | 1 | 2 | 3 | 4 |
|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Lectures/Teaching | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Course Materials | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| PowerPoint | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Teamwork/Group discussions | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Practical exercises | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

If you have any further comments about the training methods, please add them here.

Facilities and administration

8. Please rate the following aspects of the event facilities and administration (1 = Very poor, 2=poor, 3=good, 4 = Very good, 5=excellent):

| | 1 | 2 | 3 | 4 | 5 |
|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Administration & enrolment | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Room/venue | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Convenience of location | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Technical support | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Meals/Catering | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

If you have any further comments about the event facilities or administration, please add them here.

Final comments

9. What do you like about training?

10. What do you dislike about training?

11. Would you recommend this training to your work colleagues?

- Yes
- No
- Not sure

Appendix 6:

Minutes of Meeting: **Planning Committee for National Symposium on USAID's 5-Year Support to UCC/CCM and SFMP – DRAFT FOR COMMENTS**

Date: December 6, 2018

Attendees: Dr. Benjamin Campion, UCC/KNUST, Nafisa Antaru, SFMP; Ni Odenkey Abbey, SFMP; Sika Abrokwah, UCC/CCM; Ernest Obeng Chuku, UCC/CCM; Maurice Knight, SFMP

Location: SFMP Office/East Legon

- I. The meeting was convened and started with a brainstorming session on meeting objectives. The following list of items/tasks was created to guide discussions.
 - Discuss big picture objectives
 - Identify a potential venue(s), number of participants, press room, breakout rooms, etc.
 - Set the organizing and planning structure for the National Symposium and draft initial responsibilities of each unit
 - Discuss letter to Minister asking for appointment of 2 representatives to the Planning Committee (to be complete by Maurice by Monday, December 10)
 - Develop target budget
 - Discuss structure of the symposium from the perspective of co-benefits between UCC/CCM and SFMP
 - Discuss potential tracks/program arrangements for the symposium
 - Set sub-committees and members
 - Set a fee structure for attendees and how to secure payments in terms of direct off-set of symposium costs
 - Discuss field trips related to the symposium
 - Discuss briefing schedule for officials during the symposium
 - Decide on website
 - Make arrangements to engage government early to ensure support, participation, and guidance
 - Set theme for the symposium
 - Set schedule for media engagement, MC/facilitator training, etc.
 - Discuss parallel sessions in local languages by region

- II. Big Picture Objectives
 - Position and expose the contributions of the USAID and US government to Ghana over the past 5 years through UCC/CMM and SFMP
 - Showcase results, accomplishments, challenges and future areas of work
 - Possibly bring in regional issues that relate directly to Ghana
 - Attract a limited number of academics or government officials from the sub-region to discuss and contribute to the discussion on regional cooperation needs/progress

- III. Discussion on Venue, participants, fee structure, etc.
- The planning committee settled on the number of participants at 300.
 - i. Public, CSOs, traditional authorities: 100
 - ii. Government: 50
 - iii. Academics: 50
 - iv. Students (who will also help with the symposium): 50
 - This number can be revised based on availability of funds.
 - Several venues were discussed including the Physician’s College and various hotels.
 - The Physicians College would be ideal because of the theater seating arrangement but logistics in terms of transportation to and from hotels in the area, plus costs of hotels in that area, ruled out this as a venue.
 - Other hotels that were discussed (Holiday Inn, others) that could provide close to the number of rooms required were deemed too expensive for USAID rates.
 - Mensvic Hotel was deemed the most appropriate because SFMP has an existing relationship, it has nearly the number of rooms that will be required with other hotels (MJ Grand, Tomreik, and others) within close proximity to simplify transportation costs, most of which SFMP already has relationships with.
 - The symposium is planned for participants to arrive on Sunday, June 2
 - Symposium dates will be June 3-5 (3 days)
 - Lodging will be provided for 4 nights for a reduced number (TBD) to allow the symposium to run for 3 full days and people from long distances to leave early Thursday morning, Thursday, June 6
 - Nafisa will generate the initial conference package, lodging and transportation costs estimates but initial figures are that this will be in the range of US\$117,000
 - Total costs for the symposium are expected to run higher to perhaps US\$150,000 with printing, additional audio/visual rentals, etc.
 - The fee structure for the symposium will be as follows:
 - i. Ghanaian Academics – Ghc200
 - ii. Foreign Participants – US\$50
 - iii. Students – Free
 - There is an outstanding question of how to track and directly connect fees to cost deferment. This needs to be resolved in future meetings.
- IV. Planning/Organizing Committee and Sub-Committee Structure
- The Planning Committee will consist of the core members working to deliver the symposium. These include the following:
 - i. Prof. Denis Aheto
 - ii. Dr. Benjamin Champion
 - iii. Dr. Brian Crawford (as ex officio advisor from CRC)
 - iv. Nafisa Antaru
 - v. Esinam Attipoe
 - vi. Sika Abrokwah
 - vii. Ernest Chuku

- viii. Nii Odenkey Abbey
- ix. Maurice Knight
- Program Sub-Committee
 - i. Prof. Denis Aheto
 - ii. Dr. Benjamin Campion (will take a first cut at a consolidated draft program with inputs from Maurice and referencing last year's symposium. This will be for review and revision, and later a media engagement/briefing schedule for officials will be inserted)
 - iii. Dr. Brian Crawford
 - iv. Maurice Knight
- Logistics and Administration Sub-Committee
 - i. Nafisa Antaru
 - ii. Esinam Attipoe
- Communications, Publications, Media Materials Sub-Committee
 - i. Nii Odenkey Abbey
 - ii. Ernest Chuku
 - iii. Fanny Ampon
- Funding Raising Sub-Committee
 - i. Prof. Denis Aheto
 - ii. Maurice Knight
 - iii. USAID Representative
 - iv. MOFAD/FC Representative
 - v. Possible CEOs (Oil and Gas, Telcom, Insurance, Banks, etc.)
- Additional members to each sub-committee may be identified as preparations progress
- Programs that need to be highlighted from SFMP side include:
 - i. Child Labour and Trafficking Results and Progress including budgeting by local governments
 - ii. Post-Harvest Value Chain Improvements including Ahotor Oven Technology and related Micro-Financing, and ice box findings
 - iii. Fishers Future Program Micro-Insurance and Savings Program
 - iv. Canoe Registration, Moratorium, Canoe Identify Cards and Linkages to Premix Program
 - v. Closed Season including socio-economic baselines, ecological/biological baselines, national policy development and content, etc.
 - vi. Scientific and Technical Working Group Findings and related stock assessments and recommendations
 - vii. Legal Reform including amendment of national fisheries act
 - viii. Improving FC Data Systems and Stock Assessment Capacity (presented by FC)
 - ix. GoG and CSO Capacity Building (Organizational Capacity Assessments, capacity building of CSOs, community organizing, DAA and CEWEFIA Training and Demonstration Centers, community organizing in Densu, Pra, Ankobra, Engagement of DAs, etc.
 - x. Creating Constituencies/Communications Engagement

- xi. Gender Mainstreaming results and next steps/needs
- xii. Tigo Fishers Telecommunications Network?
- xiii. Lessons Learned that inform future efforts?
- xiv. Government Discussion on accomplishments and future direction

V. Field Trips

- Due to costs, field trips were tabled and not discussed at this meeting. It is possible that these can be reconsidered in the future but these add cost and logistical challenges that may exceed capacity to meet.

VI. Website

- A draft website landing page will be developed by CCM and circulated to the Planning Committee for review and comment. The page will be launched by the end of December and CRC will put an announcement on its webpage with a link to the landing page of the symposium.

VII. Theme for the Symposium: **Fisheries Management in the Modern Age**

- Accepted papers will be published in UCC Journal of Fisheries and Coastal Management
- Draft Blurb for Symposium Announcement:
 - i. Fisheries management is required to ensure that the food security needs of current generations can be met without compromising meeting the food security needs of future generations. Fisheries management has been practiced in many places for hundreds of years through traditional practices. However, as population and internal migration increased, traditional practices have broken down. Technology now enables extraction of fisheries resources far beyond the natural production capacity of the ocean. What is required of governments, traditional authorities and communities to make decisions in this modern age? How do we create a modern integrated process of information gathering, analysis, planning, consultation, decision-making, allocation of resources and development of appropriate regulations, rules and enforcement regimes to govern fisheries in order to ensure the continued productivity of the resources? Importantly, what progress has already been made and what are the urgent actions needed to avert potential collapse of fisheries stocks. For the past five years, USAID and other development partners have been supporting Ghana government, universities, and civil society partners to address and take action exactly on these issues. The results of these efforts have regional linkages. In some cases, partners in Ghana have learned from other models. In many areas, activities in Ghana are providing lessons and models for other countries in the region. This Symposium entitled *Fisheries Management in the Modern Age* seeks to provide a forum to highlight the progress made in Ghana with support through USAID Global Feed The Future program, as well as progress made under other development partner programs and government initiatives in Ghana and the West Africa Region.
 - ii. **Note: The above blurb is a draft and needs to be reviewed and edited by the planning committee, then reviewed by USAID for their comment. This last step is important. We need to be sure this wording is ok with USAID as the funding source for the symposium.**

- iii. Please send your revisions to the full planning committee but Dr. Campion and Maurice will be responsible for finalizing. Maurice will be responsible for getting USAID signoff.

VIII. Potential Collaborators

- FCWC on regional issues/topics/session
- Oil and Gas Industry
- Fishing Companies
- EU, Norway (to be facilitated by USAID)
- Zenith Bank (Prof. Aheto)
- Ecobank, MAZLOC (Maurice, Enoch and Doris)
- STAR Ghana
- Petroleum Commission (Possible marine spatial planning link/session TBD)
- FAO on legal reform, closed seasons in other countries, etc. (USAID to lead?)

IX. Draft Milestone Schedule for the Symposium (for comments and revision)

| TASK | DATE | COMMENTS |
|--|-------------------|---|
| First Planning Ctte Meeting and Minutes of Meeting | December 6, 2018 | |
| Joint letter to Minister requesting 2 representatives from MOFAD/FC for Planning Committee | December 10, 2018 | To be drafted by Maurice for Prof. Aheto review and sent to Minister by December 12, 2018 copying as per protocol Dep Min, Chief Director, Director |
| Draft Symposium Announcement and Call for Papers w/ draft thematic areas | December 15, 2018 | To be developed by Dr. Campion |
| Final venue selected and booked | December 24, 2018 | Logistics and admin sub-committee led by Nafisa |
| First Draft of Symposium Agenda | December 31, 2018 | To be developed by Dr. Campion including ½ day of parallel local language sessions organized by region followed by plenary |
| Final Symposium Announcement | December 31, 2018 | After review by planning committee to be finalized by Dr. Campion and uploaded to website and sent out through channels |
| Briefing with Minister and MOFAD/FC team | January 25, 2019 | Planning Committee with request coming through jointly signed letter CCM/SFMP |
| Final Agenda and Final Thematic Areas Announcement published, including deadline of March 31, 2019 for final submission of abstracts | February 15, 2018 | Planning Committee |
| Final Publications and Communications List for Symposium | March 3, 2019 | Communications, Publications, Materials Sub-Committee |
| Final Participant List | March 15, 2019 | Planning Committee |

| | | |
|---|----------|--|
| Facilitator and MC training | Mid-May | To be set/organized by Communications, Publications and Materials Sub-Committee |
| Media Engagement on Symposium to highlight importance of key issues | Mid-May | To be set/organized by Communications, Publications and Materials Sub-Committee |
| Conduct of Symposium | June 2-6 | Arrival on Sunday, June 2; Symposium June 3-5; Morning Departure on Thursday, June 6 |

Appendix 5: List of Project Performance Indicators and FY 2019 First Quarter Results

| No. | Indicator | Baseline | Life of Project (LOP) target | Annual target | Performance achieved in reporting period (actual) | Performance achieved in reporting period (%) | On target? Yes/No |
|--|--|----------|------------------------------|---------------|---|--|-------------------|
| 1 | Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance | 0 | 6.9 | 6.9 | 0 | 0 | No |
| <p>Comments: In Year 3, the project concluded research on the ecological conditions and the overall health status of the <i>Awiane</i> lagoon at Half Assini in the Western Region in order to acquire a more comprehensive baseline data on the lagoon for improved management. Discussions have been initiated with an external facilitator to lead the work with the community and their traditional authorities as well as the District Assembly to put the lagoon and its associated wetland area under improved management.</p> | | | | | | | |
| 2 | Number of hectares in areas of biological significance and/or natural resource showing improved biophysical conditions as a result of USG assistance | 0 | 6.9 | 6.9 | 0 | 0 | No |

| No. | Indicator | Baseline | Life of Project (LOP) target | Annual target | Performance achieved in reporting period (actual) | Performance achieved in reporting period (%) | On target? Yes/No |
|--|--|----------|------------------------------|---------------|---|--|-------------------|
| <p>Comments: In Year 3, the project concluded research on the ecological conditions and the overall health status of the <i>Awiane</i> lagoon at Half Assini in the Western Region in order to acquire a more comprehensive baseline data on the lagoon for improved management. Discussions have been initiated with an external facilitator to lead the work with the community and their traditional authorities as well as the District Assembly to put the lagoon and its associated wetland area under improved management. Areas in hectares of the lagoon and wetlands showing improved biophysical conditions will be determined as work progresses.</p> | | | | | | | |
| 3 | Number of training and capacity building activities conducted with USG assistance | 18 | 40 | 5 | 1 | 20% | Yes |
| <p>Comments: A training session on Fisheries Management was organized in the quarter under review. Three more training activities in this regard have been planned for subsequent quarters. Considering the cost implication and the rate of recruitment of professionals for the short courses, only five (5) training sessions have been planned for FY 19. At the current rate, it is likely the life of project target for short courses, will not be achieved.</p> | | | | | | | |
| 4 | Number of people receiving USG supported training in natural resources management and/or biodiversity conservation | 223 | 250 | 50 | 0 | 0 | Yes |
| <p>Comments: Fifty (50) training participants have been targeted to benefit from natural resources management and/or biodiversity conservation training in FY 2019. In this quarter, 14 individuals (8 females and 6 males) were trained in statistical analyses of natural resource data.</p> | | | | | | | |

| No. | Indicator | Baseline | Life of Project (LOP) target | Annual target | Performance achieved in reporting period (actual) | Performance achieved in reporting period (%) | On target? Yes/No |
|---|---|----------|------------------------------|---------------|---|--|-------------------|
| 5 | Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance | 2676 | 15000 | 3000 | 840 | 28 | Yes |
| <p>Comments: 3000 hours of training in natural resources management and/or biodiversity conservation has been targeted for FY 2019 on the basis that no training activities occurred in FY 18. In this quarter, one short course training in Fisheries Management was conducted for twenty-one (21) participants for an average of 8 hours daily for a period of five (5) days.</p> | | | | | | | |
| 6 | Number of individuals who have received USG supported long-term agricultural sector productivity or food security training | 36 | 40 | 10 | 26 | - | Yes |
| <p>Comments: A total of thirty-six (36) postgraduate students have been supported since the inception of the project. So far, only five (5) students have graduated. The project, in this quarter, project provided financial and technical support to sixteen (16) students comprising eleven (11) Ph.D students and five (5) MPhil students. There are currently five (5) Ph.D and five (5) MPhil students who are at various stages of submitting their theses and therefore are not supported financially. Technically, nine (9) MPhil students have completed their studies whereas one student was withdrawn. Funding support will be made available to the sixteen(16) students for the next three quarters till September, 2019.</p> | | | | | | | |

| No. | Indicator | Baseline | Life of Project (LOP) target | Annual target | Performance achieved in reporting period (actual) | Performance achieved in reporting period (%) | On target? Yes/No |
|--|---|----------|------------------------------|---------------|---|--|-------------------|
| 7 | Number of individuals who have received USG supported short-term agricultural sector productivity or food security training | 178 | 250 | 80 | 21 | 26.25 | Yes |
| <p>Comments: Eighty (80) people have been targeted to receive USG supported short-term agricultural sector productivity or food security training in FY 2019. One short course training in Fisheries Management was conducted for twenty-one (21) participants in this quarter.</p> | | | | | | | |
| 8 | Number of food security private enterprises (for profit), producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) receiving USG assistance | 18 | 10 | 5 | 0 | 0 | Yes |

| No. | Indicator | Baseline | Life of Project (LOP) target | Annual target | Performance achieved in reporting period (actual) | Performance achieved in reporting period (%) | On target? Yes/No |
|--|--|----------|------------------------------|---------------|---|--|-------------------|
| <p>Comments: None of the four (4) community-based organizations (CBOs) received technical assistance in supplementary livelihood activities (snail farming and bee-keeping) in 4 selected coastal communities in the Western and Central region of Ghana in this reporting period.</p> | | | | | | | |
| 9 | Number of private enterprises (for profit), producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) that applied new technologies or management practices as a result of USG assistance | 5 | 10 | 4 | 0 | 0 | No |
| <p>Comments: None of the four (4) Community-Based Organizations (CBOs) that received technical assistance in supplementary livelihood activities applied new management practices in bee-keeping and snail farming in previous quarters were supported in this reporting period. Project management is reviewing the status of the livelihood activities to inform implementation in the subsequent quarters.</p> | | | | | | | |

| No. | Indicator | Baseline | Life of Project (LOP) target | Annual target | Performance achieved in reporting period (actual) | Performance achieved in reporting period (%) | On target? Yes/No |
|--|--|----------|------------------------------|---------------|---|--|-------------------|
| 10 | Number of members of producer organizations and community based organizations receiving USG assistance | 196 | 200 | 80 | 0 | 0 | Yes |
| <p>Comments: Eighty (80) members have been targeted to receive assistance in FY 2019. Eighty (80) members in total belonging to the 4 Community-Based Fisheries Management Groups (CBFMGs) formed in 4 selected fishing communities received technical assistance in supplementary livelihoods activities (snail farming and bee-keeping) by the project. However, no member of these groups or associations received USG assistance in the quarter under review because the supplementary livelihood activities were suspended due to technical challenges. It is expected to new strategies will be adopted to implement the activities in subsequent quarters.</p> | | | | | | | |
| 11 | Number of farmers and others who have applied new technologies or management practices as a result of USG assistance | 87 | 200 | 80 | 0 | 0 | No |

| No. | Indicator | Baseline | Life of Project (LOP) target | Annual target | Performance achieved in reporting period (actual) | Performance achieved in reporting period (%) | On target? Yes/No |
|--|---|----------|------------------------------|---------------|---|--|-------------------|
| <p>Comments: No member of the 4 Community-Based Fisheries Management Groups (CBFMGs) formed in 4 selected fishing communities applied new management practices in snail farming and bee-keeping in the quarter under review. This is because the snail farming and bee-keeping activities were on halt in the first quarter and no USG assistance was provided to these communities. Project management is reviewing the status of the livelihood activities to inform implementation in the subsequent quarters.</p> | | | | | | | |
| 12 | Number of rural households benefiting directly from USG interventions | 196 | 200 | 80 | 0 | 80 | Yes |
| <p>Comments: In the quarter under review, no household benefited directly from USG interventions particularly snail farming and bee-keeping as supplementary livelihood activities because the activities were suspended due to technical challenges. Project management is reviewing the status of the livelihood activities to inform implementation in the subsequent quarters.</p> | | | | | | | |
| 13 | Score, in percent, of combined key areas of organization capacity amongst USG direct and indirect local implementing partners | 80.13 | 95 | - | | 80.13 | Yes |

| No. | Indicator | Baseline | Life of Project (LOP) target | Annual target | Performance achieved in reporting period (actual) | Performance achieved in reporting period (%) | On target? Yes/No |
|---|--|----------|------------------------------|---------------|---|--|-------------------|
| <p>Comments: AfricaLead conducted an Organizational Capacity Assessment for DFAS and CCM. The assessment covered 8 major areas; 1) Governance 2) Administration 3) Human Resources 4) Financial Management 5) Organizational Management 6) Program Management 7) Network Capacities and 8) Policy Analysis and Advocacy and arrived at a total score of 80.13% as the combined key areas of organization capacity. Future scores will be determined after the next Organizational Capacity Assessment is conducted.</p> | | | | | | | |
| 14 | Number of beneficiaries receiving improved infrastructure services due to USG assistance | 136 | 150 | 150 | 88 | 58.67 | Yes |
| <p>Comments: Eighty-eight (88; 49 males and 39 females) people made up of 12 senior staff members, 6 Research Assistants, 7 Administrative staff, 8 Technical staff, 28 post-graduate students and 25 undergraduate students were beneficiaries of refurbished library, fisheries and coastal management laboratory, project vehicles and the premises of DFAS and the Center for Coastal Management in this reporting period. Five (5) new individuals benefit directly from the refurbished infrastructure in this reporting period. These include a female intern at CCM, a postgraduate student admitted to DFAS, a new lecturer at DFAS and two students from Denmark who used the refurbished laboratory for their research.</p> | | | | | | | |
| 18 | Number of new research collaborations established between USG-supported beneficiaries and other institutions | 15 | 10 | 5 | 0 | 0 | No |
| <p>Comments: No new collaborations were established in this reporting period.</p> | | | | | | | |

| No. | Indicator | Baseline | Life of Project (LOP) target | Annual target | Performance achieved in reporting period (actual) | Performance achieved in reporting period (%) | On target? Yes/No |
|---|--|----------|------------------------------|---------------|---|--|-------------------|
| 19 | Number of scientific studies published or conference presentations given as a result of USG assistance for research programs | 52 | 10 | 5 | 0 | 0 | No |
| Comments: No scientific studies were published or conference presentations given as a result of USG assistance for research programs in this reporting period. | | | | | | | |
| 20 | Number of dialogues and stakeholder consultations held on fisheries and coastal management | 8 | 20 | 3 | 0 | 0 | No |
| Comments: No dialogues and stakeholder consultations were held on fisheries and coastal management in this reporting quarter. | | | | | | | |
| 21 | Percentage of graduates from USG-supported tertiary education programs employed | 3 | 50 | 5 | 0 | 0 | No |

| No. | Indicator | Baseline | Life of Project (LOP) target | Annual target | Performance achieved in reporting period (actual) | Performance achieved in reporting period (%) | On target? Yes/No |
|--|---|----------|------------------------------|---------------|---|--|-------------------|
| <p>Comments: So far, only three (3) students who graduated with MPhil in various disciplines have been successfully employed although none has been employed in this reporting period. Similarly, four other students supported by the project graduated with master's degrees but no PhD student has yet graduated. This presents an opportunity for some of the graduates to be employed either by the Centre for Coastal Management or DFAS or by other organizations.</p> | | | | | | | |
| 22 | Number of CSOs and government agencies strengthened | 28 | 25 | 25 | 0 | 0 | Yes |
| <p>Comments: Representatives of CSOs and government agencies are strengthened through their participation in the GIS, Fisheries Management, Climate Change and Integrated Coastal Management short courses. Although one short courses took place in this reporting period, the participants were invited from organisations and institutions which have already been strengthened from previous trainings.</p> | | | | | | | |
| 23 | Total number of direct beneficiary | 612 | 800 | 200 | 109 | 54.5 | Yes |
| <p>Comments: In this reporting period, 109 individuals benefited directly from the Project intervention. Five (5) new individuals benefit directly from the refurbished infrastructure. These include a female intern at CCM, a postgraduate student admitted to DFAS, a new lecturer at DFAS and two students from Denmark who used the refurbished laboratory for their research.</p> | | | | | | | |

