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CAPE COAST**

USAID/UCC FISHERIES AND COASTAL MANAGEMENT CAPACITY BUILDING SUPPORT PROJECT



YEAR TWO

SECOND QUARTER REPORT

1ST JANUARY – 31ST MARCH, 2015
DEPARTMENT OF FISHERIES AND AQUATIC SCIENCES
UNIVERSITY OF CAPE COAST

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LIST OF ABBREVIATIONS

CCM	Centre for Coastal Management
DFAS	Department of Fisheries and Aquatic Sciences
EMMP	Environmental Monitoring and Mitigation Plan
FtF	Feed the Future
GIS	Geographic Information System
GoG	Government of Ghana
ICM	Integrated Coastal Management
M & E	Monitoring and Evaluation
MoFAD	Ministry of Fisheries and Aquaculture Development
UCC	University of Cape Coast
URI	University of Rhode Island
USAID	US Agency for International Development
USG	United States Government
PMP	Performance Monitoring Plan
PIRS	Performance Indicator Reference Sheets
SFMP	Sustainable Fisheries Management Project

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Cover Photo: Prof. D. D Kuupole (Vice-Chancellor, University of Cape Coast) and Dr. David Dooley (President, University of Rhode Island) [Centre in back row] in a group photograph with UCC delegation and members of URI during UCC's high delegation visit to the URI in January, 2016.

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EXECUTIVE SUMMARY

The Fisheries and Coastal Management Capacity Building Support Project was awarded by the United States Agency for International Development (USAID) to the Department of Fisheries and Aquatic Sciences (DFAS) of the University of Cape Coast (UCC) on the 24th October 2014. As per the agreement, UCC/DFAS is expected to submit a quarterly progress report to USAID within 30 days after the end of each quarter. This report refers to the period from 1st January, 2016- 31st March, 2016 (hereafter referred to as Second Quarter Yr2). It provides updates on progress with second quarter activities under Year 2 implementation timeline as spelt out in the annual work plan. Principal activities undertaken during the period include high level visit of the Vice-Chancellor of the University of Cape Coast to the University of Rhode Island as part of strengthening collaborative activities under the grant, award of short-term contracts for specific technical assistance programs such as lagoon monitoring and fish stock assessment including an award a service contract for the development of a business plan for the Centre for Coastal Management. The procurement of laboratory and field equipment including a Ford Pick-up truck was completed in this quarter. Renovation of office spaces for academic staff commenced, and public tendering for the procurement of some additional laboratory equipment and software was initiated. The period was also used to advertise for new candidates for postgraduate scholarships (MPhil and PhD category) and the recruitment of a research assistant was made to replace one another who obtained a scholarship to pursue a PhD program of study at the University of Rhode Island, USA.

1.0 INTRODUCTION

1.1 The USAID Fisheries and Coastal Management Capacity Building Support Project

The Fisheries and Coastal Management Capacity Building Support Project operates on a partnership agreement signed on 24th October, 2014 between the United States Agency for International Development (USAID) and the University of Cape Coast (UCC). The project adds value to the work of the Department of Fisheries and Aquatic Sciences (DFAS) of the University in terms of administrative, technical and financial assistance. USAID's total contribution to this Project is up to the tune of US\$5,500,000, which will be 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 programmed under the US Government's Feed the Future Initiative¹ and subject to the terms and conditions of the Agreement signed with the University of Cape Coast (PIL No.: 641-A18-FY14-IL#007).

Therefore the project activities contribute to USAID's development strategy for Ghana as outlined in its Country Development Cooperation Strategy (CDCS), directly in support of the Development Objective Two: Sustainable and Broadly Shared Economic Growth². It is expected that by the end of the project, capacity building for sustainable marine fisheries management in Ghana can be quantitatively proven and demonstrable management outcomes for the country's coastal-marine space and resources will be evident.

These achievements will come on the back of a strengthened local scientific capacity in specific areas of emphasis such as quality and relevant educational programs, practical research, extension and advisory services that will support the management of Ghana's fisheries and coastal resources to enhance the country's social and economic development. One of the key objectives to deliver this vision is to build sustainable partnerships 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 Departments at the University of Rhode Island (URI).

This project has also enabled targeted collaborations with relevant partners including the Ministry of Fisheries and Aquaculture Development (MoFAD) and the Fisheries Commission of Ghana, libraries and research institutions with the idea to promote increased use of science and applied research for decision making, law enforcement,



Figure 1: Map shows geographical areas where project implementation is focused

¹ Is US Government-led initiative for food security in developing countries

² To obtain the full report, please visit

http://www.usaid.gov/sites/default/files/documents/1860/Ghana_CDCS_fy2013-17.pdf

climate change adaptation and biodiversity conservation for poverty alleviation.

An add-on effect of this project will be the upgrade of skills of academic and technical staff in the use of new technologies and scientific equipment, 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 creation of fisheries and coastal management database working with other international data sources and host centers.

These improvements coupled with award of student scholarships will facilitate the training of 10 PhD, 20 masters and 150 undergraduate students. The package also includes financing of short courses on climate change adaptation, fisheries and coastal management for other relevant professionals over the course of five years. The short courses will be run under the ambit of the Centre for Coastal Management (CCM)³ as part of its operationalization. The project will also support the implementation of its strategic plan, develop business plans for the Centre, enhance roundtable policy dialogues, and undertake critical research with the help of its newly refurbished Fisheries and Coastal Research Laboratory within DFAS.

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

The University of Cape Coast (UCC) is located close to the ocean making the Department of Fisheries and Aquatic Sciences (DFAS) one of the leading institutions in the area of Fisheries and Marine Sciences in Ghana. Indeed, the Department since its inception in 2002 has the vision to become unique and an innovative partner in advancing healthy aquatic ecosystems for sustained provision of goods and services, in collaboration with public and private institutions, both local and international.

This vision is beginning to see the light of the day through the USAID multi-year funding to the tune of US\$ 5.5 million. Through this grant, the capacity of the Department to deliver this vision is enhanced through the provision of adequate logistics and teaching infrastructure, increasing student numbers largely due to new knowledge about the capacity of the Department, possible job opportunities, enhanced sensitization about the Department and deepening relationships with related institutions. With this project coming on board, a lot of issues have been largely addressed. The USAID funds has enabled the Centre for Coastal Management to effectively take off its operations and received formal institutional recognition.

The Department and the Centre now have a state-of-the-art laboratory with relevant and modern laboratory and field equipment which allow hands-on practical based training of students. The Department offers undergraduate (BSc) degree in Fisheries and Aquatic Sciences and postgraduate (MPhil and PhD) degrees that expose students to:

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

With the USAID grant, several opportunities exist for DFAS students. For instance:

³ CCM was established in December 2013 by the Academic Board of the University of Cape Coast.

- i. Funding for undergraduate project work in the final year is guaranteed under the multi-year USAID/UCC Fisheries and Coastal Management Capacity Building Support Project (2014-2019).
- ii. Students could benefit from the J-TERM Student Exchange Program with the University of Rhode Island in the United States of America.
- iii. Graduate and Post-graduate studies - The Department offers MPhil and PhD programs in the fields of Integrated Coastal Zone Management, Aquaculture, Fisheries Science, and Oceanography and Limnology. This presents our undergraduate students with future academic prospects.

Staff and students also benefit from interactive teaching and learning alongside field visits and real-time laboratory exposure for practical experience. It is anticipated that the graduates could engage in research work in Institutions (including Council for Scientific and Industrial Research-Water Research Institute (CSIR-WRI), Ministries (Fisheries and Aquaculture Development; Environment, Science and Technology; Agriculture), Environmental sector, Financial institutions, Oil and Gas industry, NGOs (local and international), Managers of Aquaculture Facilities, Navy, Academia, or become Entrepreneurs among others. The Department strives to communicate with its students and stakeholders through staff blogs, Departmental websites and social interactive platforms such as Facebook. For further information, please see:

<https://dfas.ucc.edu.gh/>

<https://www.facebook.com/dfas.ucc.edu.gh>

1.3 Monitoring and evaluation (M&E)

During the first quarter of FY 2016, the Project M&E Coordinator and the Project M&E Support participated in a USAID Economic Growth Office M&E Specialist Working Group meeting in Accra which was organized by METSS. The main purpose of the meeting was to discuss the USAID Feed-the-Future Monitoring System (FTFMS), its reporting procedures and requirements, data collection and how IPs can collectively improve performance management. Also in the first quarter, USAID and METSS conducted a joint project review together with DFAS to have an overview of the overall project performance and Year One activities that touched on the activities planned and implemented in Year One, performance indicators and knowledge management. The review team also conducted a Data Quality Assessment (DQA) of the project's M&E systems to offer an opportunity for learning and improvement in Year Two. As part of the review exercise, more appropriate indicators for the project were selected and agreed upon where project indicator baselines and targets for Year Two were also set. The project Performance Management Plan (PMP) was reviewed and amended after the joint project review.



M&E Team from DFAS meeting with consultants (Short-term technical assistants) currently undertaking various activities of the DFAS/UCC FCMCBS Project

During the quarter under review, the project M&E team organized a meeting to bring all academic members of DFAS and other project staff up to speed with what was learned at the M&E Specialist working group meeting in Accra and the joint project review exercise in Cape Coast since all of these people are project activity team leaders and members who have responsibilities to make sure project activities are implemented and reported as part of project M&E. This was an opportunity to update all academic staff and other project staff members on the overall project M&E system and also to remind them of their responsibilities and their contributions to data and information gathering and reporting as far as project M&E is concerned. To achieve results, it was also decided that monthly meetings will be organized once a month for project activity team leaders and their members to update others on the progress of their activities in the past months and what they plan to carry out in the months ahead. This will go a long way to ensure efficiency and timely implementation and reporting of planned project activities.

A number of Year Two activities have been outsourced to consultants who are currently working in the field to support the project to achieve its Year Two deliverables. These activities

are all designed to generate data and information to feed the project's performance indicators that are used to report on progress to the USAID. In this regard, project management had to equip all project consultants with relevant monitoring tools and the necessary skills they need to collect data and generate relevant information for reporting. During the quarter under review, the project invited all project consultants to attend a workshop in Cape Coast to discuss the responsibilities of consultants in contributing to the projects M&E system as spelt out in their consultancy contracts and to show them how to carry out those responsibilities. During the workshop, the consultants were introduced to the project's M&E system, details of the project Performance Monitoring Plan, project indicators, data collection methods and reporting. The consultants were reminded of their responsibilities in the timely implementation of their activities and in contributing data to support the M&E systems and were also provided with the tools to collect the data. This was a very important meeting to bring all consultants on the same level as far as monitoring and reporting of project activities were concerned.

Table 1: List of indicators and second quarter 2016 results

Indicator No.	Title of Indicator	Second quarter results and comments
1	Quantities and/or sizes of fish landed by selected canoe fishermen in the Central and Western Regions of Ghana	During the quarter under review, work started on the collection of daily fish catch per canoe, fish size distribution, maturity stages and length-weight relationships by the project's fish stock assessment consultant. The work is scheduled to continue until the end of the 2016 fiscal year after which averages will be calculated to have a baseline for quantities and/or sizes of fish landed by canoe fishermen.
2	Fishing Mortality at MSY (F_{msy})	Work is still ongoing by the project's fish stock assessment consultant which will enable analysis of fish catch and effort data for establishment of MSY and F_{msy} . Results will be compared with that of the SFMP project.
3	Biomass to produce MSY (B_{msy})	Establishment of B_{msy} will be determined from fish catch and effort data from targeted commercially important fish stocks through the work of the fisheries stock assessment consultant. Results will be compared with that of the SFMP project.
4	Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance	Work is currently ongoing with the project's biodiversity and ecosystems health consultant to determine the number of hectares of a closed lagoon in Half Assini (Western Region) to be put under improved natural resource management.
		Water quality analysis and biodiversity assessments have already been undertaken.

Indicator No.	Title of Indicator	Second quarter results and comments
5	Number of hectares in areas of biological significance and/or natural resource showing improved biophysical conditions as a result of USG assistance	Work is currently ongoing with the project's biodiversity and ecosystems health consultant to determine the number of hectares of a closed lagoon in Half Assini (Western Region) showing improved biophysical conditions. Water quality analysis and biodiversity assessments have already been undertaken.
6	Number of training and capacity building activities conducted with USG assistance	One (1) training activity took place in the quarter under review; community facilitators' training for community mobilization exercise which was organized by the project's capacity strengthening of CBOs consultant. Six (6) people (4 males, 2 females) participated in the meeting.
7	Number of people receiving USG supported training in natural resources management and/or biodiversity conservation	During the quarter under review no training in natural resources management and/or biodiversity took place.
8	Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance	During the quarter under review no training in natural resources management and/or biodiversity took place.
9	Number of individuals who have received USG supported long-term agricultural sector productivity or food security training	The project currently supports 6 PhD students (4 females, 2 male), 10 MPhil students (5 males, 5 females) and 31 Level 400 Undergraduate students (10 females and 21 males).
10	Number of individuals who have received USG supported short-term agricultural sector productivity or food security training	During the quarter under review no short-term agricultural sector productivity or food security training took place.
11	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	Preliminary work has been conducted by the project's capacity strengthening of CBOs consultant to identify existing groups, associations and organizations in selected coastal communities and the possible formation of new ones. A needs assessment was also conducted to identify forms of assistance to be provided. Numbers will be counted after the groups have received assistance.

Indicator No.	Title of Indicator	Second quarter results and comments
12	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	Preliminary work has been conducted by the project's capacity strengthening of CBOs consultant to identify existing groups, associations and organizations in selected coastal communities and the possible formation of new ones. A needs assessment was also conducted to identify forms of assistance to be provided. Numbers will be counted after the groups have applied new technologies or management practices
13	Number of members of producer organizations and community based organizations receiving USG assistance	Preliminary work has been conducted by the project's capacity strengthening of CBOs consultant to identify existing groups, associations and organizations in selected coastal communities and the possible formation of new ones. A needs assessment was also conducted to identify forms of assistance to be provided. Numbers will be counted after the groups have received assistance.
14	Number of farmers and others who have applied new technologies or management practices as a result of USG assistance	Preliminary work has been conducted by the project's capacity strengthening of CBOs consultant to identify existing groups, associations and organizations in selected coastal communities and the possible formation of new ones. A needs assessment was also conducted to identify forms of assistance to be provided. Numbers will be counted after the groups have received assistance and have applied new technologies or management practices
15	Number of rural households benefiting directly from USG interventions	Preliminary work has been conducted by the project's capacity strengthening of CBOs consultant to identify existing groups, associations and organizations in selected coastal communities and the possible formation of new ones. A needs assessment was also conducted to identify forms of assistance to be provided. Number of rural households benefiting will be counted after the interventions

Indicator No.	Title of Indicator	Second quarter results and comments
16	Number of vulnerable households benefiting directly from USG interventions	Preliminary work has been conducted by the project's capacity strengthening of CBOs consultant to identify existing groups, associations and organizations in selected coastal communities and the possible formation of new ones. A needs assessment was also conducted to identify forms of assistance to be provided. Number of vulnerable households benefiting will be counted after the interventions
17	Score, in percent, of combined key areas of organization capacity amongst USG direct and indirect local implementing partners	AfricaLead has agreed to conduct an organizational capacity strengthening assessment for DFAS which has been included in the project's second year budget. DFAS has to decide with AfricaLead when this will be done
18	Number of beneficiaries receiving improved infrastructure services due to USG assistance	Eight (8) members of Academic Staff, 8 Research Assistants, 2 Supporting Staff, 3 Administrative Staff and 75 students in DFAS (96 in total) are beneficiaries of refurbished library, the fisheries and coastal management research laboratory, project vehicles and the premises of the Centre for Coastal Management.
19	Number of new research collaborations established between USG-supported beneficiaries and other institutions	Three (3) new research collaborations have been established with the University of Energy and Natural Resources to collaborate in fisheries management research, Hen Mpoano and Friends of the Nation on Wetlands Ecological Monitoring
20	Number of scientific studies published or conference presentations given as a result of USG assistance for research	No Scientific studies were published and no conference presentations were given during this reporting period
21	Number of dialogues and stakeholder consultations held on fisheries and coastal management	Preliminary discussions have been held with fisheries and coastal management stakeholders at different levels where dialogues have been planned to take place in the next quarter
22	Percentage of graduates from USG-supported tertiary education programs employed	No DFAS graduates were employed during this reporting period

Indicator No.	Title of Indicator	Second quarter results and comments
23	Number of CSOs and government agencies strengthened	CSOs have been identified through the capacity building needs assessment conducted by a project consultant to be strengthened as well as government agencies to take part in structured short courses to be delivered by the project in the next two quarters. Numbers will be counted and reported after the activities have been conducted.
24	Total number of direct beneficiary	One hundred and two (102) people – 96 DFAS students and academic staff and 6 training participants - benefitted directly from the project during the current reporting period.

2.0 PROGRAM COMPONENTS, MANAGEMENT AND ACTIVITIES IN THE SECOND QUARTER OF YEAR TWO

Summary of accomplishments in the second quarter

During the second quarter, key programmatic actions completed include:

- As part of the ongoing collaboration between the University of Rhode Island (URI) and the University of Cape Coast (UCC), the URI hosted a high level delegation of five people from the UCC led by the Vice-Chancellor (VC). The purpose of the visit was to further expand the development of the existing formal partnership between the URI and the UCC in areas of marine fisheries, aquaculture and coastal resources. The specific objective of the trip was to promote the implementation of the Memorandum of Understanding (MoU) signed between the URI and the UCC.
- Acquisition of a 4X4 multi-purpose Ford pick-up vehicle (F150) to support field research and the day-to-day running of project activities and other local travels.
- Following a request by Project Management to the University librarian, a librarian was appointed by the University on a full-time basis to manage the recently refurbished Integrated Coastal Zone Management (ICZM) library at DFAS.
- Call for applications for the next round of PhD and MPhil scholarships were advertised in the daily newspapers and other electronic media to select eligible candidates to receive funding for full-time postgraduate studies at DFAS beginning 2016/17 academic year. Selection of applicants will take place in the next quarter.
- The Project Management Board met to decide on the award of contracts for the provision of Technical Assistance in support of project activities in various capacities. Some of the applications considered and contracts awarded included the procurement of the services of an Information Technology Specialist to develop application software for fisheries and coastal management relational database, the procurement of the services of experts in Integrated Coastal Management (ICM) and Geographic Information Systems (GIS) towards operationalization of the Centre for Coastal Management.



Developed sample of the Coastal Resources Database (www.fishcomghana.com) displayed at the Project Management Board Meeting



Project Management Board meeting at the Pempamsie Hotel, Cape Coast

- An MoU was signed between DFAS and the DFWR of UENR to frame collaboration between both parties on the development of joint research activities and professional training programs particularly in fisheries management
- MoUs were signed between DFAS and Friends of the Nation and also between DFAS and Hen Mpoano to collaborate on issues related to the conservation, restoration and monitoring of coastal wetlands in Ghana.
- The project participated in the Annual USAID Feed-the-Future Implementing Partners meeting at the Alisa Hotel in Accra.
- The project also participated in a joint program with the University of Ghana and other USAID project Implementing Partners which was organized by AfricaLead for Implementing Partners to network and share experiences across program areas.

3.0 PROJECT OUTPUT 1.1: IMPROVED INFRASTRUCTURE

Activity 1.1.1: Renovating and Equipping Fisheries and Coastal Research Laboratory

Renovation works on the fisheries and coastal management laboratory have almost come to a conclusion with the laboratory now being used for academic work. However, what remains to be done now is equipping the laboratory with all the instruments, tools and accessories as well

as chemical reagents to enable the place to function to the maximum. Most of the equipment to be placed in the laboratory were ordered from abroad, all of which have arrived in the country. Two (2) of the three (3) containers have been cleared from the harbor and have been brought to the UCC. The last container which arrived later is now in the process of being cleared from the port in Tema to be brought to the UCC. University authorities together with project staff have taken inventory of all the equipment that have arrived and are undergoing administrative formalities for them to be released to DFAS and be placed in the laboratory for use.



DFAS team, UCC Central Stores management and Audit section taking inventory of the laboratory equipment from the second of container successfully received by DFAS, UCC

One major concern is that the equipment are yet to be placed in the laboratory in order to begin full operations of the laboratory. Another is the establishment of health and safety procedures, development of a maintenance schedule and the appointment of a competent person to have an oversight responsibility for managing the affairs of the lab. DFAS members of academic staff have met to have a discussion on these and have nominated people to be responsible for these tasks.



Laboratory equipment from the second of container successfully received by DFAS, UCC



DFAS team, UCC Central Stores management and Audit section inspecting equipment in the second container

On the issue of the person to have oversight responsibility, DFAS is of the view that somebody other than a member of academic staff be employed on a full-time basis to manage the laboratory. A Business Plan for DFAS and the CCM is currently under preparation to assess the feasibility of using the lab for income generating activities. This means the laboratory is going to be used for other things other than for teaching purposes. This presents more work for the person who is going to manage the laboratory and because members of academic staff are already overloaded with work, it would be better for someone else to be appointed to man the laboratory. Discussions are still ongoing and that decision will very much depend on the outcome and recommendations which will be given in the Business Plan.

Activity 1.1.2: Refurbishing and Equipping Office/Lecture/Computer Rooms and Library

As part of the ongoing works to refurbish and equip existing offices at DFAS to facilitate and improve work efficiency of academic staff members, three (3) of the seven (7) offices earmarked to be refurbished were selected to be completed during the quarter under review. Refurbishment work on the three (3) which is currently ongoing include floor tiling and carpeting, provision of overhead cabinetry, installation of glazed aluminum windows, electrical and data points re-installation, provision of new door locks as well as painting of walls and doors.



Offices being refurbished for DFAS lecturers to enhance teaching and learning

It must be emphasized that refurbishment work on the offices has seen some delays on the part of the contractor who promised to finish the work within just a couple of weeks. The slow progress of work has impacted negatively on the smooth operations of members of academic staff who had to pack out of their offices to find temporary work places somewhere at DFAS but project management is working tirelessly to get the contractor to speed up to get the offices ready in no time to ensure that academic work is not disrupted.

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

The project planned to procure three (3) project vehicles (1 4X4 cross-country vehicle, 1 4X4 multi-purpose pick-up truck and a bus) in the first year to support all program activities including the day-to-day operations of both academic and administrative staff of DFAS, transport of equipment, student travels related to academic work, field research and all other local travels. However due to administrative difficulties, only one vehicle (the 4X4 cross-country) could be procured in the first year. Project management still continued to work very hard after the first year to ensure the arrival of the two additional vehicles since the absence of those vehicles hindered the progress of planned project activities. The project is happy to report the arrival also of the 4X4 multi-purpose pick-up in the current reporting period which has been duly registered and already in use. The last vehicle (the project bus) is still yet to arrive. Information gathered from the University Procurement section indicated that contract for the supply of the bus has been cancelled because the supplier could not deliver on time as expected and that a new supplier has been identified and contracted to do so. The bus is therefore likely to arrive in the coming month.



4.0 PROJECT OUTPUT 1.2 INCREASED TECHNICAL AND SCIENTIFIC KNOWLEDGE

Activity 1.2.1: Academic and Technical Staff Capacity Strengthening

It is planned that 4 members of academic staff and 2 technicians at DFAS will embark on a study tour to Florida Gulf Coast University in September this year. Planning for the trip regarding places to be visited, hosts and accommodation facilities as well as all administrative steps to be undertaken started in the quarter under review. DFAS has a MoU with Florida Gulf Coast University and therefore a contact faculty member at the University with whom DFAS is planning the proposed trip. The contact has so far done enquiries about possible places to stay and has provided prices for staying at a marine Research Lab (Vester Lab) which is close to the Florida Gulf Coast University campus and are likely to cost about \$75 each but the contact has promised to negotiate with the University to see if they could provide a discount. The contact has suggested renting a vehicle to get back and forth from the University and the

Vester Lab which is only a few minutes away. The contact also promised to look for other hotels close by that may not be too expensive. Members of faculty at Florida Gulf Coast University who use the kind of equipment technicians want to study about have been identified by the contact. Members of academic staff of DFAS are also scheduled to research talks at the University during the stay.

Activity 1.2.2: Operationalization of the Centre for Coastal Management

- Procure software, books, journals and online subscription to relevant journals
- Business and strategic plans for the CCM
- Administrative support staff for CCM
- Centre for Coastal Management website
- Training of personnel to support operations of the Centre in critical areas is underway
- The Centre is in collaboration with the Coastal Resources Centre (CRC) of University of Rhode Island (USA) which is contributing significantly to developing CCM's strategic plan.
- Preliminary agreements have been reached to establish relations with ECOWAS Coastal and Marine Resources Management Centre (University of Ghana). The two Centres are currently undertaking a joint project in the monitoring of canoes and semi-industrial boats fitted with transponders to track their fishing grounds, species caught, catch per vessel to assess fish stocks. Two DFAS MPhil students in Integrated Coastal Management are undertaking this project.
- Planning was initiated by the CCM to host Prof. Rick Burroughs, the coastal management specialist from the University of Rhode Island in May to support the Centre in developing its community outreach and extension programs, strategic and business plans.

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

As part of the project's long-term training activities, applications were invited from suitably qualified candidates for the award of five (5) full scholarships to pursue PhD and five (5) full scholarships to pursue MPhil degrees respectively in Fisheries Science, Aquaculture, Limnology and Oceanography and Integrated Coastal Zone Management. The PhD study will cover a period of three (3) years while the MPhil study will cover a period of two years beginning 2016/17 academic year. The scholarships cover tuition, monthly stipends, and field research grants as well as other material and technical support. A major requirement for admission was that all applicants must generally qualify for admission into a PhD or MPhil program at the University of Cape Coast.

30 VISIT WWW.DAILYGRAPHIC.COM GHANA Daily Graphic, Tuesday, February 2, 2016

UNIVERSITY OF CAPE COAST **USAID | GHANA**
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Call for Applications for Scholarships – Doctor of Philosophy (PhD) and Master of Philosophy (MPhil) Degrees for the 2016/2017 Academic Year at the University of Cape Coast

Background

In support of the Government of Ghana's (GoG) initiatives on food security, the United States Government (USG) through the United States Agency for International Development (USAID) is supporting a five-year capacity building programme for fisheries and coastal management in Ghana. The project contributes to GoG's overall grand fisheries and coastal development programme and USAID's Feed the Future (FFf) Initiative, the USG led global hunger and food security project designed to enhance economic growth in beneficiary countries. In this context, the Department of Fisheries and Aquatic Sciences (DFAS) at the University of Cape Coast is presently leading the USAID Capacity Building Support Programme for the Fisheries and Coastal Management sub-component in collaboration with coastal research institutes at the University of Rhode Island, USA.

(i) Doctor of Philosophy (PhD) Degree

Applications are hereby invited from suitably qualified candidates for the award of five (5) full scholarships to pursue PhD degrees at the Department of Fisheries and Aquatic Sciences of the University of Cape Coast in the following areas:

- Fisheries Science – One (1) Candidate
- Aquaculture – One (1) Candidate
- Limnology and Oceanography – One (1) Candidate
- Integrated Coastal Zone Management – Two (2) Candidates

The PhD study will cover a period of three (3) years, beginning the 2016/17 academic year. The scholarships cover tuition, monthly stipends, and field research grants as well as other material and technical support. Successful candidates will spend a maximum of 6 months at the University of Rhode Island in the United States to cover part of their studies.

General Requirement: Applicants must generally qualify for admission into a PhD programme at the University of Cape Coast.

Specific Requirements: In addition, all applicants must satisfy the following specific requirements:

- 1) Must hold a good master's degree (Grade: B+ or A would be an advantage) from a recognized university in a relevant field of study namely:
 - Fisheries Science, Oceanography, Limnology, Aquatic Ecology, Integrated Coastal Zone Management, Coastal Resources Management, Aquaculture, Environmental Science, Environmental Governance, Marine Policy, Conservation Science or Natural Resource Management.
- 2) All candidates must submit:
 - an application letter
 - Curriculum Vitae (CV)
 - Motivation letter
 - Two letters of recommendation
- 3) Successful candidates will be expected to conduct research in one of the following thematic areas in either the Western or Central Region of Ghana. Therefore, all applicants MUST in addition to the above (i.e. 1 & 2), submit a 5-page research proposal on one of the following areas of emphasis:
 1. **Fisheries Stock Assessment**
Studies will be conducted to assess the status of commercially important marine fish stocks.
 2. **Marine Fisheries Governance Issues**
Studies will be conducted to assess the status of marine fisheries governance issues in the Western and Central Regions of Ghana.
 3. **Research on Fish and Shellfish of Commercial Value**
Studies will be conducted to assess the status of commercial value of fish and shellfish in the Western and Central Regions of Ghana.
 4. **Analysis of Value Chains of Fish Trade**
This activity will investigate the different phases of production, processing and marketing of the different commercial fish species in the country. Factors affecting the various stages in the chain will be investigated.
 5. **Assessment of Biodiversity and Health of Coastal Ecosystems**
This work will involve examination of aspects of biodiversity of fish, benthic invertebrates, and mangrove communities in lagoons and estuaries to establish the scientific basis for future monitoring in view of the ongoing offshore oil and gas exploration and production. Aquatic environmental factors, occurrence of algal blooms and invasive species will also be investigated.

4) In addition to all of the above (1-3), all candidates seeking for scholarships must separately apply for admission to one of the four academic programmes offered in the Department and MUST meet the admission requirements of the University of Cape Coast.

(ii) Master of Philosophy (MPhil) Degree

Applications are invited from suitably qualified candidates for the award of five (5) full scholarships tenable at the University of Cape Coast. The Master of Philosophy Degree study will cover a period of two academic years beginning 2016/17 academic year. The scholarships cover tuition, monthly stipends, and field research grants as well as other material and technical support to successful candidates to pursue any of the following programmes of study:

- Fisheries Science
- Integrated Coastal Zone Management
- Oceanography and Limnology
- Aquaculture

Requirements:

- i. Applicants must generally qualify for admission to masters' programme at the University of Cape Coast. In addition, all applicants must satisfy the following specific requirements/prerequisites:
- ii. Must hold a Bachelors' degree preferably Second Class Honours (Upper Division) from a recognized university in a relevant field of study notably Fisheries and Aquatic Sciences, Integrated Coastal Zone Management, Coastal Resources Management, Aquaculture, Environmental Science, Environmental Governance, Marine Policy, Conservation Science, Natural Resource Management among others.
- iii. All candidates must submit the following:
 - an application letter
 - Curriculum Vitae (CV)
 - Motivation letter
 - Two letters of recommendation

Contact:

Only shortlisted applicants will be invited for an interview after the closing date. Females are particularly encouraged to apply.

All applications must be delivered by regular mail/ courier to:

The Project Manager
USAID/UCF Fisheries and Coastal Management Capacity Building Support Project
Department of Fisheries and Aquatic Sciences
University of Cape Coast
Cape Coast, Ghana

Deadline: 31st March, 2016.

REGISTRAR

Call for application for scholarships for PhD and MPhil degrees for the 2016/2017 academic year as it appeared in the Daily Graphic on Friday, February 2, 2016

Women were particularly encouraged to apply in accordance with the project's gender strategy. Successful candidates would be expected to conduct research in one of the following thematic areas in either the Western or Central Region of Ghana: Fisheries Stock Assessment, Studies on Marine Fisheries Governance Issues, Research on Fish and Shellfish of Commercial Value, Analysis of Value Chains of Fish Trade, Assessment of Biodiversity and Health of Coastal Ecosystems. All applications received will undergo thorough scrutiny in the coming quarter to select the best suitable candidates to begin their studies in August, 2016.

Table 2: Table showing the progress of PhD students who started their studies beginning 2015/2016 academic year

Name of PhD Student	Title of PhD Thesis	Progress to date
Jemimah Etonam Kassah	Assessment of the fishery and nutrient value of Atlantic chub mackerel (<i>Scomber colias</i> Gmelin, 1789) in Ghana	<ul style="list-style-type: none"> • First round of sampling for growth and biological parameters carried out • Laboratory work involving the measurements of length and weight, identification of gonadal stages, otolith extraction carried out • Data input started
Lawrence Armah Ahiah	Culture potential of selected populations of black-chinned Tilapia (<i>Sarotherodon melanotheron</i>) in Ghana	<ul style="list-style-type: none"> • Project proposal development and preliminary literature review conducted • Project materials purchased • Hapas mounted • Experiments started
Margaret Fafa Awushie Dzakpasu	Ecological assessment of some coastal lagoons and estuaries in Ghana: a bio-indicator approach	<ul style="list-style-type: none"> • Study areas selected • Research proposal drafted and submitted • Preliminary literature review conducted
Michelle Naa Kordei Clottey	Assessment of the seabream (sparidae) fisheries from the coastal waters of Ghana	<ul style="list-style-type: none"> • Preliminary surveys conducted • Data collection started • Fish samples collected and analysed
Rebecca Kyerewa Essamuah	Developing a decision support system for prioritizing conservation of marine spaces in urban areas of Ghana: A case study of the Fosu Lagoon, Cape Coast	<ul style="list-style-type: none"> • Preliminary literature review conducted • Concept developed • Objectives of the research defined • Expected outcomes of the research defined

Activity 1.2.4: Undergraduate Research Grants

In addition to technical training offered undergraduate students through teaching and other advisory services, DFAS also provides financial assistance, paid through the project, to final year undergraduate students to conduct fieldwork and other academic activities for their dissertations in partial fulfillment for the award of BSc. degrees by the University. Currently, the department provides such support to 31 final year undergraduate students who are studying in the final semester of their undergraduate course. For the efficient use of the funds and good accountability, the undergraduate students are required to prepare and submit budgets which cover all expected expenditures to the project management authorities for consideration in consultation with their academic advisors. The budgets are discussed with the students and their academic advisors until such time that project management is convinced that the budgets are justified. Project management then disburses the funds directly to the students through their bank accounts with the notice of their academic advisors in order to track the use of the funds for their intended objectives. All 31 final year undergraduate students have since received their funding.

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

Activity 2.1.1: Conducting Fisheries Stock Assessment

After a competitive tendering process, a contract was awarded to a consultant to provide a short-term technical assistance for research on fisheries stock assessment of some selected commercially important marine fish stocks in Ghana. The purpose of the contract was to conduct fish stock assessment to evaluate the status of some selected commercially important marine fish stocks in Ghana to predict the response of the stocks to various exploitation and management scenarios. Targeted species include cuttlefish (*Sepia officinalis*), shrimp species, carangidae (e.g. *Caranx hippos*, *Caranx chrysos*, *Trachurus spp.*, *Decapturus spp.*), Sparidae (e.g. *Pagellus spp.*, *Dentex spp.*, *Pagrus spp.*). Major events and accomplishments to date under the Terms of Reference of the contract as well as upcoming key activities include:

- Literature review on past fisheries stock assessment studies
- Reconnaissance survey undertaken at the 6 designated fish landing ports, namely, Elmina, Sekondi, Half Assini, Apam, Tema and Keta for data on selected stocks belonging to the Carangidae, Sparidae, shrimps, and the cuttlefish, *Sepia officinalis*
- Collection of on daily catch (kg) per canoe, semi-industrial boat and industrial boat; Size distribution, maturity stages; length-weight relationships from beach seine and offshore catches; salinity and surface temperatures for monitoring upwelling indices
- Collection and storage of specimens, fish stomachs, gonads and otoliths
- Continuation of catch and stock assessment survey at 6 designated sampling stations (Elmina, Sekondi, Half-Assini, Apam, Tema and Keta) for relevant data on selected fish stocks still needs to be done
- Stomach content analysis and fecundity studies in the laboratory

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

Project activities related to research and assessment on marine fisheries governance issues in the current fiscal year were given to a consultant who is actively working to unearth the critical issues at all levels. The consultant has so far provided a comprehensive plan detailing all activities to be carried out and the timelines within which they will be completed. The consultant has also conducted a desktop review of literature on marine fisheries governance issues and has made initial field visits to some of the fish landing sites and communities in the Western and Central Regions of Ghana to familiarize himself with the issues on the ground and to prioritize those that require immediate attention. More data and information are expected to be gathered through interviews, workshops, interactions and discussions with stakeholders at different levels in the coming months.

Activity 2.1.3: Research on Fish and Shellfish of Commercial Value

Shellfish aquaculture has been identified as one of the project's supplementary livelihood interventions in some selected coastal communities. This will be done on pilot basis and will be scaled up to include other communities following the successful implementation of such an activity. Research needs to be carried out to identify specific aquatic environments in the selected communities that will be suitable for shellfish aquaculture and also research on the species of shellfish to be cultured. The project has identified an expert in shellfish aquaculture who is currently working with a supplementary livelihoods consultant to carry out research into shellfish aquaculture in the selected communities. The shellfish aquaculture expert has met with project management to discuss his plans about the pilot activities, submitted a detailed budget to carry out those activities and to train local people who are interested in engaging in shellfish farming as a supplementary livelihood. Demonstration farms are currently being set up in the selected communities which will be used as sites to carry out more research into shellfish farming and equip people with the needed skills to set up and manage their private farms.

Activity 2.1.4: Analysis of Value Chains of Fish Trade

Activity 2.1.5: Monitor the Biodiversity and Health of Coastal Ecosystems

During the period under review, the project also hired the services of a consultant to conduct baseline ecological research on a closed lagoon in Half Assini, locally referred to as Awiane Aluonu, which is under serious threat of extinction due to pollution and other forms of degradation. The wetland provides significant ecosystem services and its sustainable management is key to achieving the objectives of the USAID/UCC Fisheries and Coastal Management Project. The results from these studies will help DFAS/CCM collaborate with local Government Agencies and other key stakeholders in advocating for committed community engagement for restoration of the lagoon and the creation of necessary bye-laws for its wise use and management.



Singing of contract agreement between DFAS and the team from KNUST

According to the surveys conducted so far, initial observations indicated that the lagoon has multiple uses such as bathing, drinking, laundry, fishing and recreation. It is surrounded by a local community, whose activities have had a negative impact on the health and status of the lagoon. The major problem with the lagoon is the high load of solid waste dumped into the water because the surrounding fishing community has no facility to handle solid waste. Measuring turbidity levels using a Secchi disk indicated that the water was clear. The Secchi disc could still be seen beyond the 1m mark.

Before the start of the ecological studies, a team comprising members of DFAS and the Department of Fisheries And Watershed Management, Kwame Nkrumah University of Science and Technology (KNUST), who are the consultants, conducted site visits to the lagoon in Half Assini to familiarize themselves with the lagoon and the surrounding community and to collect water samples for analysis.



Field activities by the team monitoring biodiversity and the ecological health of a lagoon in the Western Region of Ghana

Preliminary samples (water quality and macro-invertebrates) were collected as well as a photo documentation of the lagoon and surrounding areas. Fish samples were also purchased to be later analysed in the laboratory. Dissolved oxygen concentration, pH, conductivity, total dissolved solid, salinity, alkalinity, nutrients (nitrate, nitrite and phosphate), chlorophyll a, Secchi depth, macro-invertebrate samples were collected for organic matter and to help determine soil type. Partial results are shown the Table below. The following are still yet to be done; processing the rest of the samples already collected, collection of more samples during subsequent visits, doing desktop literature study and generating an accurate map of the lagoon.

Table 3: Summary of water quality variables (mean \pm SD) monitored from the two sampling points; February, 2016 (n=3)

Sampl ing Point	*pH	Conductiv ity μ S/cm	TDS mg/L	Salinit y PSU	DO (mg/L)	Alkalinit y mg/LCa CO ₃	Phospha te mg/L	Nitrate (as N) mg/L	Nitrate (as NO ₃) mg/L
Beach	6.00- 6.52	273.3 \pm 4.5	136.7 \pm 2 .5	0.3 \pm 0. 0	1.9 \pm 0. 1	103.3 \pm 10 .4	4.8 \pm 1.0	1.2 \pm 0.3	5.4 \pm 1.4
Bridge	6.88 - 6.98	299.3 \pm 3.8	149.7 \pm 2 .3	0.3 \pm 0. 0	1.2 \pm 0. 0	36.7 \pm 11. 5	5.3 \pm 3.3	2.2 \pm 1.0	9.6 \pm 4.5

* *Range given*

Activity 2.1.6: Developing Marine and Coastal Fisheries Database

As part of project activities, DFAS plans to develop a database on marine and coastal fisheries in Ghana with the view to organizing historical scientific data, new field observations and experimental results on the marine/coastal environment and fisheries in Ghana into a comprehensive database that can easily be accessed by researchers, students, marine and coastal environmentalists as well as fisheries managers in the country and elsewhere.

08 Visit www.dailygraphic.com.gh Daily Graphic, Friday, January 29, 2016

UNIVERSITY OF CAPE COAST USAID/UCC Fisheries and Coastal Management Capacity Building Support Project USAID GHANA

CALL FOR PROPOSALS FOR SHORT-TERM TECHNICAL ASSISTANCE TOWARDS THE DEVELOPMENT OF A RELATIONAL DATABASE ON FISHERIES AND COASTAL MANAGEMENT IN GHANA.

BACKGROUND TO THE ASSIGNMENT
 The United States Agency for International Development (USAID) is supporting the Department of Fisheries and Aquatic Sciences (DFAS), University of Cape Coast, to develop a database on marine and coastal fisheries in Ghana. The goal of the project is to organize historical scientific data, new field observations and experimental results on the marine/coastal environment and fisheries in Ghana into a comprehensive database that can easily be accessed by researchers, students, marine and coastal environmental as well as fisheries managers in the country and elsewhere.

OBJECTIVE FOR THIS CALL
 This call aims to procure the services of an IT specialist to develop an application software for relational database for the management and online distribution of critical scientific data to support fisheries and coastal resource management and research in Ghana.

The consultant specialist is therefore expected to assist DFAS

- Secure a domain name for hosting the database and website
- Secure a server for the proposed database and website
- Develop a safe and secure website and database with security features for the management of fisheries and coastal research data
- Establish a front-end of a website that will interface with the database
- Develop a user-friendly website with navigation system that allow for privileged access to the public, decision-makers, and other scientists
- Export data to excel and other formats for additional analysis
- Create a back-end of the database by customizing a Drupal or WordPress content management application
- Staff easily and cost effectively update content and modify site design after launch
- Easily update and expand the platform as the case may be

EXPECTED OUTCOMES
 The following outputs are expected at the end of the assignment:

- A domain name for hosting the proposed database and website registered
- A server for the proposed database and website secured
- A user-friendly website and database for the management of fisheries and coastal research data developed

The assignment is expected to be completed between 4-6 months from inception. The proposed inception date is February 15, 2016.

MINIMUM QUALIFICATIONS AND EXPERIENCE REQUIRED

- An IT expert with proven abilities in application software development
- Excellent understanding of web-based database design, development and management
- Proven ability to translate technical needs into database specifications
- Proven ability to develop a fully functional and user friendly database application
- Knowledge and experience with Web-based applications development and languages
- Excellent communications skills

SUPERVISION AND REPORTING
 The consultant will report to the Manager of the USAID/UCC Fisheries and Coastal Management Capacity Building Support Project, with direct supervision by the leader of DFAS marine and coastal fisheries database team.

OWNERSHIP AND FUNDING
 All database tools and information products and applications will belong to the Department of Fisheries and Aquatic Sciences of the University of Cape Coast funded by the United States Agency for International Development (USAID).

APPLICATION
 Proposals detailing how a project of interest will be undertaken with clear goals, activity timelines, methods to achieve the set targets, a budget and curriculum vitae must be submitted alongside the application. Applications MUST be delivered via email or courier by close of work Friday 5th February, 2016 to:

The Project Manager
 USAID/UCC Fisheries and Coastal Management Capacity Building Support Project
 Department of Fisheries and Aquatic Sciences
 University of Cape Coast, University Post Office, Cape Coast, Ghana.
 Email: daheto@ucc.edu.gh

Advertisement for short term technical assistance towards the development of a relational database on fisheries and coastal management in Ghana as it appeared in the Daily Graphic on Friday, January 29, 2016

The project advertised calls for proposals from eligible consultants, preferably Information Technology specialists, to provide technical assistance towards the development of application software for an online relational database on fisheries and coastal management in Ghana. In all, three applications were received for consideration by a selection committee set up by the Project Management Board which has selected a successful applicant for the job. Working contracts were developed and signed by both parties for the consultant to immediately start work. Work on development of the online relational database is therefore expected to progress steadily in the next quarter.

- Procure equipment for marine fisheries database
- Establish contacts with relevant data sources and host centers
- Data gathering mechanisms established
- Establish links with relevant government agencies, universities and research institutions
- Create a platform for regular interactions with government agencies and universities both local and foreign
- Organize researcher and stakeholder conference

6.0 PROJECT OUTPUT 2.2: COMMUNICATION, EXTENSION AND OUTREACH IMPROVED

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

The need to train relevant personnel and other stakeholders in ICM cannot be overemphasized if Ghana's coastal ecosystems and resources are to be managed sustainably for the benefit of communities and future generations. A training manual in ICM would represent a major step towards realizing this goal. Developing a manual and conducting training on Integrated Coastal Management has the broad aim of building the capacity of stakeholders in governmental and non-governmental agencies, and fishing communities to better understand the nature of the coastal zone, be able to identify challenges, and learn basic skills for addressing problems.

Specifically, this activity is aimed at developing a five-day training manual in ICM for governmental and non-governmental officers whose mandate relate to the coastal zone and community-based groups highlighting the coastal environments found in Ghana, methods of assessing the condition of coastal environments and their resources, integrated management approaches, and coastal management instruments, prepare an instructor's guide (including field and laboratory work) as an Annex of the training manual, organize ICM materials including PowerPoint presentations, videos, charts and other relevant material as well as testing the manual developed on a stakeholder group in the Central and Western Regions of Ghana.

The project has identified and signed a working contract with an expert to provide technical assistance in developing a training manual and materials and conducting training on Integrated Coastal Management. This is targeted towards spatial planners, disaster managers, District, Municipal and Metropolitan Assemblies, environmental and fisheries officers, fishermen/fishmongers, and community-based fisheries and coastal management groups.

Developing Material and Conducting Training on Fisheries Management

DFAS has signed an MoU with the Department of Fisheries and Water Resources (DFWR), University of Energy and Natural Resources (UENR), Sunyani. The purpose of the MOU is to frame collaboration between DFAS and DFWR of the (UENR) on the development of joint research activities and professional training programs within the context and objectives of the project. Both institutions will collaborate on the following activities:

- Curriculum development on fisheries management, notably practical field exercises for students and professionals,
- Targeted student data collection on coastal zone and fisheries; and
- Field research projects involving scientists on relevant fisheries monitoring programs in inland and coastal areas of Ghana.

In relation to curriculum development in fisheries management, the following processes will be applied:

The two institutions will develop a training manual on fisheries management that targets lower and middle level governmental and non-governmental officials working in the fisheries sector as well as community-based fisheries management groups. The preparation of instructor's

guide (including field and laboratory work) on the training manual as an Annex spelling out what is expected of the trainer will be the hallmark of this activity. The program will also produce fisheries management materials including PowerPoint presentations of the modules, videos, charts and other relevant material and test the manual on a stakeholder group in the Western and Central Regions.

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

A short course on climate change adaptation and mitigation is planned to take place in the third quarter of the second year. A training manual and other materials have already been developed by DFAS which were used for previous training programs including that of last year. Three members of academic staff of DFAS had the opportunity to attend a training program in Climate change and adaptation at the University of Rhode Island last year. New knowledge and special skills acquired will be used to update the existing manual and training materials on climate change. DFAS has advertised for experts in climate change to apply for a short-term technical assistance to work with the academic staff who attended the training at URI last year to update the training materials and conduct the training this year.

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

DFAS advertised for GIS experts to apply to be considered for a short-term technical assistance to provide services related to the application of GIS to fisheries and coastal management. The GIS expert is expected to work in close collaboration with the Department of Geography and Regional Planning of the University of Cape Coast with whom DFAS has already had extensive discussions to assess opportunities to work together in the area of GIS in fisheries and coastal management. Only one application was received during the advertisement period which therefore was not reviewed in accordance with procurement regulations. The Project Management Board therefore requested for its re-advertisement which has been done awaiting the receipt of more applications to be considered.

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

Policy and research dialogue consultant has formally written to the local radio station on UCC campus, Atlantic FM, through DFAS to collaborate with the radio station on their weekly fisheries programme, Ajanom Afarefu, which is broadcast on air every Tuesday. The consultant, through DFAS, expressed interest to collaborate with Atlantic FM by providing technical and some financial assistance to move the Ajanom Afarefu programme a step further. This will serve to dialogue with community-based fisheries management groups.

- Two (2) research briefs on fisheries & coastal management issues and best practices emanating from previous dialogues have been drafted awaiting comments from DFAS. Final copies of the briefs will be published online at the UCC website while hard copies will be distributed as well.
- Round table meetings with policy makers and the Fisheries Commission of Ghana for discussions on fisheries and coastal management issues have been planned to take place after final drafts of policy briefs. This will foster dialogue between research and policy makers.

- Discussions have been held with fisheries and coastal management stakeholders to have a conference of researchers to discuss sustainable fisheries and coastal management issues in Ghana.
- There have been discussions with Daily Graphic to publish articles prepared as examples of best practices in fisheries and coastal management in Africa and share with stakeholders.

Activity 2.2.6: Building Institutional Partnerships and Collaboration

High level visit by the UCC to URI

As part of the ongoing collaboration between UCC and URI, in January 2016 URI hosted a high level delegation of five people from UCC led by the Vice-Chancellor of the University. The purpose of the visit was to further expand the development of the existing formal partnership between UCC and URI in areas of marine fisheries, aquaculture and coastal resources. This offered an opportunity for collaboration and exchange of expertise. The specific objective of the trip was to promote the implementation of the MoU signed between UCC and URI in March 2015 and the subsequent MoU between the URI-Coastal Resources Center (CRC) and the UCC-DFAS under review and considerations.



The Vice-Chancellor of UCC, Prof. D. D. Kuupole and the President of the University of Rhode, Dr. Dooley
Island exchange pleasantries

The delegation discussed avenues of implementation in the following areas:

- Development of a short term students exchange program between UCC and URI. The program will allow UCC graduate students currently enrolled in MSc and PhD programs in marine fisheries, aquaculture and coastal resources to spend up to one semester at URI to audit classes and/or conduct research in special projects in areas of studies. Similarly, a sister program will be developed for URI graduate students to do the same at UCC.
- Development of an undergraduate exchange program (J-term). The program will allow URI students to visit Ghana and learn about the African culture and its environment. The program, hosted by UCC and facilitated by CRC-SFMP, will allow URI students to explore marine fisheries and coastal management issues in West Africa to better understand the challenges of sustainable resources management in developing countries.



UCC delegation viewing under water activities at the Coastal Resources Center (CRC), University of Rhode Island (URI), USA



Group photograph of UCC delegation and members of the Coastal Resources Center (CRC), University of Rhode Island (URI), USA

- Development of a short-term training for professional development of UCC faculty and staff. The professors and research scholars from UCC can attend short-term trainings offered by URI.
- Development of joint research development and extension programs and exchange of information and access to peer-reviewed scientific material.
- Other areas of cooperation in the field of marine fisheries, aquaculture and costal resources.



Designated group from SBS, DFAS and SGSR pay a courtesy call on the Vice-Chancellor, UCC, to schedule for a return visit to Ghana by the President of URI, Dr. Dooley

USAID Coastal Implementing Partners Meeting

The meeting took place at B-Bovid Farms at Apowa in the Western Region where the Project Manager and M&E Support attended. It was the first of such meetings in 2016 and the theme for discussion was Aquaculture Production and Processing. The meeting started with a review of all 2015 meetings and activities conducted. After the review of 2015 meetings, one major issue arose about how to add value to the monthly Implementing Partners meeting to make them useful to all partners as knowledge sharing by IPs helps projects not to reinvent what other partners are already doing. As partners learn from one another, it helps them avoid making mistakes others have made. One major value addition on the part of USAID/UCC project was the fact that the project has gained knowledge on what other projects are doing in the Western Region particularly in the area of fish and fisheries. The project also expressed appreciation of the fact that many good linkages have been established with some of the implementing partners such as the Western Regional Coastal Foundation (WRCF).

The following themes were proposed for discussions in 2016: Fish value chain (healthy fish handling), vegetable production (opportunities and challenges), tensions between fishermen and oil and gas industry, livestock rearing, managing community expectations, land tenure system.

About the main discussion for the day, one fish farmer from the Western Region made a presentation on the practices he is using for his fish farming. He reported he integrates fish farming with poultry using chicken droppings as feed for the fish. This enabled him to diversify his livelihood by having fish and poultry farms. He had a small fish hatchery in addition.

Following his presentation, there were concerns on his farming techniques as people thought it was not a good practice. The Sustainable Fisheries Management Project (SFMP) reported they are working with farmers to reduce the amount of bird droppings used as fish feed. B-Bovid Farms also reported that they are building capacity of farmers on good farming practices to increase their fish yield and also teaches farmers to add value to their fish production through smoking. B-Bovid is also in the process of producing smokeless briquettes for fish smoking to reduce wood use. Daasgift also reported they were working with fish processors to use good processing techniques.

The USAID/UCC project reported on the collaboration DFAS has with Ainoo-Ansah Farms in the Central Region to support the development of aquaculture production in Ghana. Through the collaboration, DFAS has developed a training manual on tilapia production which will be published this year. Some topics covered in the manual are using good quality fingerlings, feeding and marketing. DFAS plans to provide training to people who want to engage in aquaculture. The WRCF reported on the work they are doing in the Western Region to support the development of aquaculture, mainly the growing of catfish. One possible area to collaborate was for the WRCF to identify and support fish farmers who have existing ponds or have already acquired lands for ponds to receive training from DFAS.

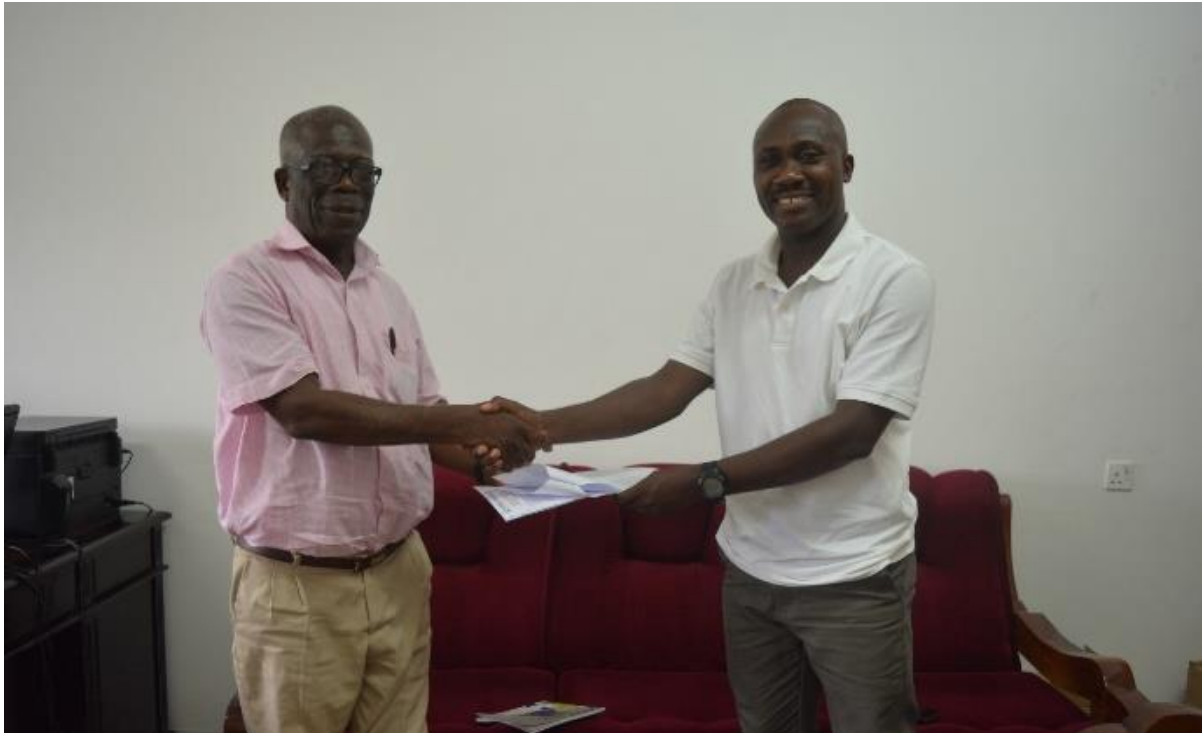
There were concerns about the availability of land for fish farming where people suggested that projects should begin to look into cage culture on the rivers in the coastal districts of the Western Region.

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

Memoranda of Understanding (MoUs) were signed between DFAS and Friends of the Nation and between DFAS and Hen Mpoano, all local NGOs, to frame collaboration between DFAS and the two NGOs focused on fisheries and coastal governance issues in Ghana. The intention is to develop joint outreach, research and professional training activities. The purpose of this contract is to contribute to the conservation, restoration and monitoring of coastal wetlands in Ghana. DFAS and both institutions will collaborate on the development of wetland monitoring programs in coastal communities of Ghana.



Signing of Memorandum of Understanding (MoU) between DFAS and Friends of the Nation



Signing of Memorandum of Understanding (MoU) between DFAS and Dr. Kofi Abban, formerly of Water Research, on the development of a coastal management training manual

In relation to the wetland monitoring program, the following process will be applied: DFAS has developed a coastal zone wetlands educational curricula made up of teacher's guide, students' manuals, visual presentations, outdoor classroom and field data monitoring sheets and test questions as well as competitive scorecards for monitoring wetlands' ecological health status, governance issues and threats to the wetlands. It is expected that Friends of the Nation and Hen Mpoano, working with undergraduate students of DFAS, will use these resources to train selected junior and high school students and communities in the Western and Central Regions to monitor the ecological health, governance issues and threats of selected coastal habitats in those regions. DFAS will strengthen the technical and institutional capacities of Friends of the Nation and Hen Mpoano to pursue this outreach/educational program and use the curricula to educate and sensitize the selected schools and communities for a concerted effort towards ecosystem restoration and conservation of the wetlands.

Activity 2.2.8: Strengthening Community-based Groups

Activities Undertaken⁴

For the month of February 2016, the planned activities mainly consisted of preparatory meetings and activities that set the tone for the delivery of the planned project activities in subsequent months. These included:

- Initial visit to project communities with Project Management Team (PMT) and the selected Trainers for the supplementary Livelihood activities This trip is part of the re engagement

⁴ Some of the activities may overlap due to the strategy being adopted for the two components of the project. For instance, stakeholder engagement meeting was for both the Capacity Strengthening and Supplementary Livelihood activities. The consultant will however try to state the outputs and results achieved under each component as much as possible

process for the second phase of the project and it was to engage community leaders on the various components of the project and to solicit their support.

- Stakeholder Consultative Meeting with Fisheries Commission, District Assemblies and DFAS



Stakeholder Consultative Meeting with Fisheries Commission, District Assemblies and DFAS

Recorded Output/Results

Among the outputs recorded during the period under review are:

- Community leaders engaged on expected activities on the Capacity Strengthening and supplementary Livelihood activities. The visit afforded the consultant and DFAS the opportunity to explain activities in the second phase and how both the supplementary Livelihood and capacity strengthening activities would work together to ensure the sustainability of the expected results.
- Stakeholder meeting to solicit the support of the District/municipal assemblies, Fisheries Commission staff and other stakeholders within the target communities. The support of the various stakeholders will also ensure the sustainability of the outcomes of the project in the communities. At the end of the meeting, a list of activities that would require the support of the stakeholders were outlined and the type of support communicated and agreed on. All stakeholders understood the purpose of the USAID/UCC Capacity support project and their various roles in the project. The DAs and FC staff also understood and made commitments to support the capacity building and Supplementary Livelihood project in their various communities and to ensure the sustainability of the results to be achieved in the project.

Planned Activities for March 2016

- Training for Community Facilitators for remobilization exercise
- Remobilization and sensitization of communities towards the capacity building and educational campaigns towards sustainable coastal resource management
- Facilitate community based groups formation
- Orientation of committee members and leaders for Coastal resource management
- Development of Information and Practice Handbook
- Development of management training modules and training Development of Training Manual and Guide

Activity 2.2.9: Promoting Supplementary Livelihoods in Coastal Communities

Activities Undertaken⁵

Planned activities for the period under review consisted of preparatory meetings and activities that set the tone for the delivery of activities under the contract. The highlights were:

- Identification and engagement of Trainers for Supplementary Livelihood (SL) activities;
- Community familiarization visit with PMT and SL Trainers for orientation and initial meeting with community leaders to orient them on second phase of the project;
- Follow up Meeting with SL Trainers and PMT to determine SL activities for the various target communities. Selected communities and SL activities are: 1. Narkwa – Oyster Farming and Snail rearing, 2. Anlo Beach – Bee Keeping, 3. Ankobra – Snail Rearing, 4. Half Assini – Bee Keeping and Snail Rearing;
- Stakeholder Consultative Meeting with Fisheries Commission, District Assemblies and DFAS to solicit support for planned activities and to ensure sustainability of results to be achieved within the project. At the end of the meeting, a list of activities that would require the support of the stakeholders were outlined and the type of support communicated and agreed on. All stakeholders understood the purpose of the USAID/UCC Capacity support project and their various roles in the project. The DAs and FC staff also understood and made commitments to support the capacity building and Supplementary Livelihood project in their various communities and to ensure the sustainability of the results to be achieved in the project.

Recorded Output/Results

Among the outputs recorded during the period under review are:

- All target communities sensitized for second phase of project
- Trainers for SL activities identified, oriented and contracts signed for setting up of pilot projects and delivery of training
- Community leaders oriented on SL activities
- Sites identified for SL activities in the communities
- District level stakeholders oriented on project plans, activities and expected results and their support solicited for the successful implementation of the activities and sustaining results achieved.

Planned Activities for March 2016⁶

For the month of March 2016, the following activities have been planned:

- Mobilization and orientation for SL activities
- Facilitate community based groups formation to support pilot livelihood activities
- Orientation and identification of sites for SL activities
- Development of Technical manuals for SL Training.

⁵ Some of the activities may overlap due to the strategy being adopted for the two components of the project

⁶ According to the workplan the consultant shared with DFAS, the SL activities will begin in April 2016. The information we have from the SL trainers however is that for bee keeping, the bees do not colonize the hives until around June and so the training has been shifted to that time. Snail rearing will also begin in mid-May according to the Trainer. Mobilization will however begin for all SL activities