

# INSTITUTIONAL PROJECTS OF THE CENTRE FOR COASTAL MANAGEMENT OF THE UNIVERSITY OF CAPE COAST

### CURRENT / ONGOING ACTIVITIES

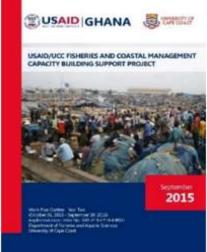
UNIVERSITY OF CAPE COAST

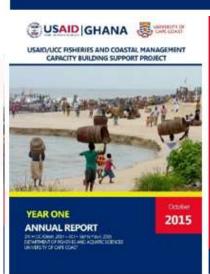






- I. USAID funded Fisheries and Coastal Support Project (Operationalization of the Centre)
- II. DANIDA funded Research-based management of Gulf of Guinea
- III. World Bank funded Africa Centre of Excellence in Coastal Resilience (ACECoR)
- NATGEO/TWAS/FRENCH EMBASSY Beach Dynamics through Video Monitoring (BEACHMON)
- GOG/SDF Aquaculture Project Phase 2
- African Union Safe Fish Project
- UPCOMING AU Centre of Excellence in Fisheries and Aquaculture collaborate with University



















### USAID/UCC FISHERIES AND COASTAL MANAGEMENT CAPACITY BUILDING SUPPORT PROJECT

**Funding Organisation**: USAID

Lead Implementer: Department of

Fisheries and Aquatic

Sciences, UCC

**Amount:** 5.5 Million USD

**Period:** 5 Years (2014 – 2019)

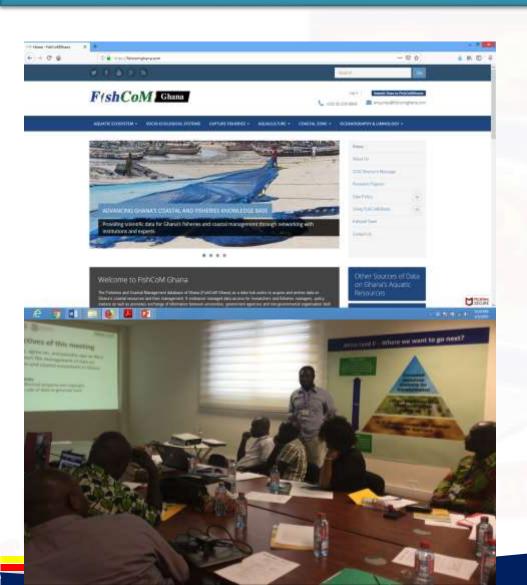


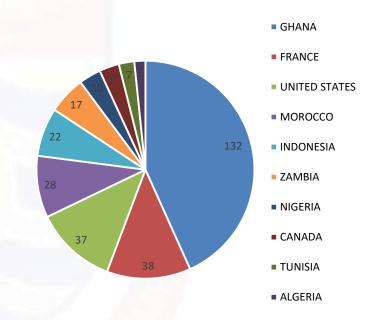
## USAID - CRITICAL ACTIVITIES funded through the Department of Fisheries and Aquatic Sciences

- Market CCM as a focal point for research in fisheries and coastal zone issues in Africa – FishCoMGhana & JFCoM
- Identify partners for sustained funding
- Strengthen fisheries and ICM library
- Awareness campaigns in ICM, fisheries management and climate change
- Engage policy makers & stakeholders
- Occasional briefs for public consumption
- Established a laboratory for with equipment for aquatic environmental testing
- Assist communities with complementary income generation activities
- Business plan for EIA and SIA services



## FishComGhana: Advancing Ghana's coastal and fisheries knowledge base

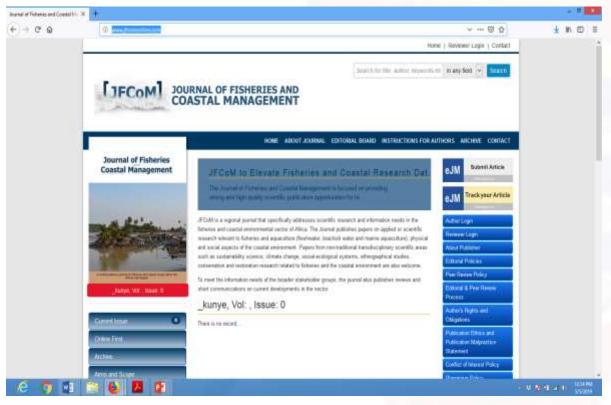




N = 374; Marine= 198; Coastal 84; Freshwater= 92; Page referrals = 848; Visits = 79,000;

https://fishcomghana.com/

# Journal of Fisheries and Coastal Management (JFCoM)



Regional scientific journal providing information needs in the fisheries and coastal environmental sector of Africa. The Journal also publishes papers on applied or scientific research relevant to fisheries and aquaculture (freshwater, brackish water and marine aquaculture), physical and social aspects of the coastal environment.

https://fishcomghana.com/

### Biannual Conference on Fisheries and Coastal Environment (CFCE)



Accepted abstracts will be published in a Book of Abstracts. Outcomes of the conference will be published as a Communique and resulting scientific papers accepted will be published in the peer reviewed Journal of Fisheries and the Coastal Management.

https://fishcomghana.com/

### Professional short courses







### **US**AID Project Achievements (2014-2019)

2



Fig. 1 Student training (BSc., MPhil & PhD) (2014-2019)

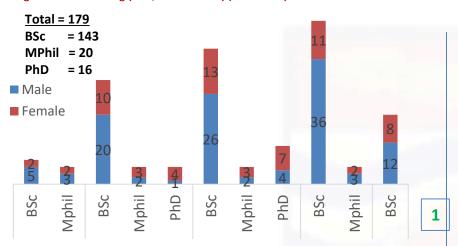
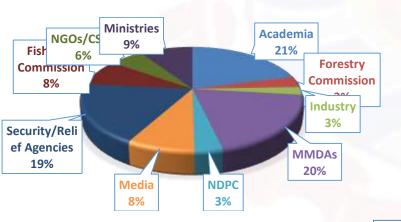


Fig. 2 Short Professional Courses by Institutions (2014-2019)



N = 256; Climate Change= 98; GIS (Intro & Intermediate = 70; ICM =42; Fisheries Management = 46

Fig. 3 Supplementary livelihoods in Communities (2014-2019)

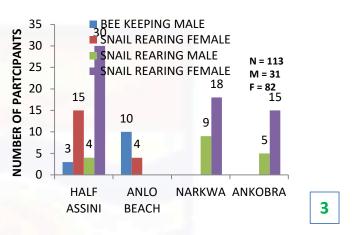
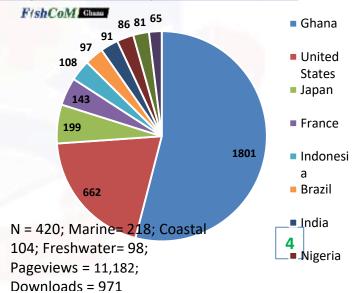


Fig. 4. FishCoMGhana: Acquisitions & Visitation (2016-2019)



### **US**AID Project Achievements (2014-2019)







Fisheries and Coastal Research Lab

### Wetlab





# Drone (UAV) Pilot Certification by the Ghana Civil Aviation Authority



P29.CA 000

#### REMOTELY PILOTED AIRCRAFT SYSTEM (RPAS) PILOTING LICENCE #

- The holder of this licence has met the requirements of Ghana Civil Aviation Authority for the issuance of an RPAS Piloting Licence;
  - a) Name: Bernard EKUMAH
- b) Date of Birth: 04 / 06 / 1987
- c) Nationality: GHANA
- d) Sex: M
- e) Address: Cape Coast
- Is restricted to operating or flying only the type(s) of Remotely Piloted Aircraft System (RPAS) or drone under the following Conditions and Limitations attached.
- Any other RPAS activity, apart from those stated in this licence, shall constitute a violation of the Ghana Civil Aviation Flight Standards Directives and the holder may be liable to fine, imprisonment or both.
- 4. This licence is invalid without the attached Conditions and Limitations.
- The validity of the licence is 5 years but must be renewed every year to allow the holder to continue operating or flying the type(s) of RPAS or drone under the conditions and limitations stated herein.
- This licence allows the holder to fly his/her RPAS within Visual Line of Sight, below four hundred (400) feet above ground level and only during daytime unless otherwise stated in the attached Conditions and Limitations.
- Notwithstanding the above, the holder is required to adhere to all the provisions of the Ghana Civil Aviation Flight Standards Directives as well as all local and national laws as applicable when operating or flying RPAS approved for his/her use.
- The Holder shall have this licence in his/her possession when operating an RPAS and shall make it available upon request to any relevant authority.
- 9. Signature of Holder:



- Signature and stamp of approving Inspector:
- Date of Issue: [16/04/2019]
  Date of Expiry: [15/04/2020]



## RESEARCH-BASED MANAGEMENT OF GULF OF GUINEA (HOTSPOT)



**Funding Organisation**: DANIDA

Lead Implementer: Centre for Coastal Management, University of

Cape Coast & Technical University of Denmark (DTU Aqua)

**Amount:** 5 Million DKK

**Period:** 3 Years (2018 – 2020)









#### **FOCUS**

Promote the sustainable management of Ghana's coastal waters and facilitate the implementation of the International Maritime Organization (IMO) regulations in Ghana through sound research









#### **EXPECTED OUTCOMES**

- Mechanistic understanding of the cumulative effects of maritime stressors (Heavy metals, plastics, oil, etc.) on tropical marine organisms.
- 2. Linking observational studies on multiple stressors to synthesis and predictive models and management





### AFRICA CENTRE OF EXCELLENCE IN COASTAL **RESILIENCE (ACECOR) PROJECT**

**Funding Organisation: WORLD BANK** 

Lead Implementer: University of Cape Coast (Centre

for Coastal Management)

Amount: 6.4 Million USD (Performance-based

funding mechanisms)

**Period:** 5 Years (2019 – 2023)









## AFRICA CENTRE OF EXCELLENCE IN COASTAL RESILIENCE (ACECOR) PROJECT



### **AIM:**

Build capacity and conduct research to address coastal degradation in West and Central Africa

#### **EXPECTED IMPACT**

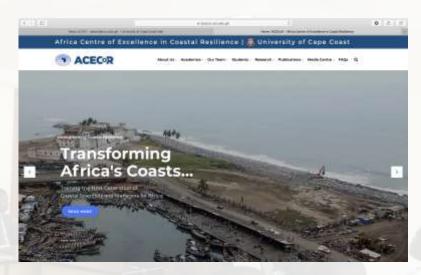
To engender economic development through sustainable coastal and marine resources utilisation in West and Central Africa



## AFRICA CENTRE OF EXCELLENCE IN COASTAL RESILIENCE (ACECOR) PROJECT

### KEY DELIVERABLES

- Train 120 postgraduate students (30 PhDs; 90 MPhil) and 260 professionals; 5 Post Doctoral Fellows
- 2. Obtain International Accreditation of Programmes
- Provide state-of-the art infrastructure to include smart classrooms, laboratories with equipment to promote research and delivery of trainings;
- Provide opportunities for faculty and students
   engage in internships and professional exchanges
   Produce high quality research outputs through
   publications
- 5. Generate external additional revenue





# Beach dynamics through video monitoring to improve coastal management strategies in West Africa (BEACHMON)

Funding Organisation: National Geographic Society, The World Academy of Sciences & French Embassy

Lead Implementer: Centre for Coastal Management, UCC

**Amount:** 60, 000 USD

**Period:** 3 Years (2018 – 2020)

# Beach dynamics through video monitoring to improve coastal management strategies in West Africa (BEACHMON)

### **FOCUS**

- Install video cameras along the beaches of Ghana and Benin
- Forecast coastal erosion rates on selected beaches
- Establish coastal pollution sources and perceptions
- Measurement of water levels and wave conditions from video







# Beach dynamics through video monitoring to improve coastal management strategies in West Africa (BEACHMON)

### KEY DELIVERABLES

- Three video stations established at Dzita, Elmina and Grand Popo Benin
- Preliminary shoreline recession rate estimated
- Socio-economic factors affecting the beach quality at Elmina analysed
- Other activities in progress: wave parameter extraction

- **Key Thrust 1:** Promote active and reflective teaching and learning environment that seeks to improve students' life and produce graduates with strong ethics and commitment to society.
- 1. Modular-based approach to the study of programmes
- 2. The use of problem-based learning (PBL)
- 3. Compulsory internship and industrial attachments for students
- 4. Improved laboratory facilities for both practical teaching and student research works



**Key Thrust 2:** Strengthen and improve ICT infrastructure and facilities that enhance usability

- 1. State-of-the-art smart classrooms
- 2. Delivering lectures through online platforms
- 3. Computer laboratories
- 4. Subscription to online Journals
- 5. Online database (FishCoMGhana) and journal (JFCoM)
- 6. Use of online platform for student interview process



**Key Thrust 3:** Improve upon physical infrastructure and municipal services that support conducive working and learning environment.

- A multi-purpose building with smart classrooms,
  conference room, laboratories and other facilities
- 2. USAID Fisheries and Coastal Research Laboratory
- 3. Small Marine Research Vessel
- 4. Field and laboratory Equipment
- 5. Unmanned Aerial Vehicles (UAVs) for field research
- 6. Vehicles for field work





Proposed site for ACECoR Multipurpose Building SITE



**Key Thrust 4:** Attract, recruit, develop and retain high calibre and motivated staff who are innovative and globally competitive.

- Collaborate with professionals and lecturers from different organizations and universities worldwide who are available to teach on ACECoR programmes
- 2. Recruitment of Professorial Fellows
- 3. International Scientific Advisory Board (ISAB)
- Sectoral Advisory Board (SAB)



**Key Thrust 5:** Strengthen research capacity and output to position the University as a centre of excellence.

- Multi- and Inter-disciplinary as well as cross-cutting research being pursued
- 2. Collaborators include experts in various academic fields worldwide
- 3. An amount of 15,000 USD and 5,000 USD allocated to each PhD and MPhil candidate respectively for research
- 4. Adoption of Article-based theses by ACECoR with implication for high quality and quantity of research publications by students and faculty
- 5. Well established research collaboration between DTU, Denmark, France,



**Key Thrust 6:** Embark on internationalization drive that seeks to enhance the visibility of the University

- 1. International accreditation of Academic Programmes
- 2. Recruitment of regional students (i.e. 30 % of enrolment)
- 3. Internationalization through Staff and Students Exchange
  - Workshop hosted in UCC for students from Denmark, Spain and Ghana
  - Two MPhil students from DFAS-UCC participate in training workshop hosted by DTU, Denmark
  - 12 international students use facilities and technical support of DFAS-UCC to conduct various research works
  - J-Term for Undergraduate Students at URI





4. Institution of Dual Degrees for PhD Students



**Key Thrust 7:** Improve revenue generation and enforce fiscal discipline to achieve operational and financial sustainability.

- 1. Diversification of funding sources through grantsmanship
- 2. Internally generated incomes through fee-paying students (postgraduate and short courses) and commercialization of GIS/RS, UAV activities
- 3. Developing alumni relations office to seek their support to the Centre
- 4. HOTSPOT project has brought in external donor funds with the potential to bring in additional funding in the second phase of the project (2021-2022)



**Key Thrust 8:** Improve upon institutional governance system that provides leadership for equal opportunity, teamwork, efficiency, discipline and commitment.

- Over USD 500,000 of ACECoR funding will be allocated to support University Management's on the basis of adoption of merit-based appointment of leaders
- 2. We recommend that 20-30% of the money should be given to support DRIC for its research endowment



**Key Thrust 9:** Create an organisation capable of continuously learning, transforming itself and responding to change

### Our Sustainability Plan:

- 1. Institutionalization of academic programmes by UCC after the life-span of the ACE Impact project
- Internally generated incomes through fee-paying students (postgraduate and short courses) and privatization of GIS/RS, UAV activities
- 3. Strengthening industry and sectoral linkages to support research



### **CHALLENGES AND WAY FORWARD**

- i. Financial administration constraints
- ii. Procurement delays
- iii. Space
- iv. Inefficiencies with Development Office
- v. Human resource constraints



### **CHALLENGES AND WAY FORWARD**

### Management support required

- More dedication and commitment on the part of management
- Motivation for project staff (Promotions, recognitions and awards; financial motivation, etc.)
- Dedicated accountant to the Centre
- Sensitize Development Office and other relevant units about the performance-based nature of the project
- Address bottlenecks in procurement processes



### THANK YOU



