USAID | GHANA
FROM THE AMERICAN PEOPLE

SUSTAINABLE FISHERIES MANAGEMENT PROJECT (SFMP)

Fisheries Management Operational Committee (FMOC) – Monitoring the Performance of the National Fisheries Management Plan (Ghana)

Terms Of Reference for Establishing an FMOC

2016

THE UNIVERSITY OF RHODE ISLAND GRADUATE SCHOOL OF OCEANOGRAPHY | CRC COASTAL RESOURCES CENTER

Hɛn Mpoano

DO THE RIGHT THING
Friends of the Nation

SNV SMART DEVELOPMENT WORKS

SSG ADVISORS
Catalyzing Development Through Partnership

HELPING WOMEN DAASGIFT QUALITY FOUNDATION HELP THEMSELVES
Daasgift

DEVELOPMENT ACTION ASSOCIATION "NGYAA KPEE"
Development Action Association

CEWEFIA UNITY & PROGRESS

SpS | SPATIAL SOLUTIONS

This publication is available electronically on the Coastal Resources Center's website at

http://www.crc.uri.edu/projects_page/ghanasfmp/

For more information on the Ghana Sustainable Fisheries Management Project, contact:
USAID/Ghana Sustainable Fisheries Management Project
Coastal Resources Center
Graduate School of Oceanography
University of Rhode Island
220 South Ferry Rd.
Narragansett, RI 02882 USA
Tel: 401-874-6224 Fax: 401-874-6920 Email: info@crc.uri.edu

Citation: Lazar N. (2016) Fisheries Management Operational Committee (FMOC) Monitoring the Performance of the National Fisheries Management Plan (Ghana). Terms of Reference for Establishing an FMOC. USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014_ACT056_CRC 7 pp.

Authority/Disclaimer:

Prepared for USAID/Ghana under Cooperative Agreement (AID-641-A-15-00001), awarded on October 22, 2014 to the University of Rhode Island, and entitled the USAID/Ghana Sustainable Fisheries Management Project (SFMP).

This document is made possible by the support of the American People through the United States Agency for International Development (USAID). The views expressed and opinions contained in this report are those of the SFMP team and are not intended as statements of policy of either USAID or the cooperating organizations. As such, the contents of this report are the sole responsibility of the SFMP team and do not necessarily reflect the views of USAID or the United States Government.

Detailed Partner Contact Information:

USAID/Ghana Sustainable Fisheries Management Project (SFMP)
10 Obodai St., Mempeasem, East Legon, Accra, Ghana

Telephone: +233 0302 542497 Fax: +233 0302 542498

Brian Crawford	Chief of Party brian@crc.uri.edu
Najih Lazar	Senior Fisheries Advisor nlazar@crc.uri.edu
Patricia Mensah	Communications Officer patricia.sfmp@crcuri.org
Bakari Nyari	Monitoring and Evaluation Specialist hardinyari.sfmp@crcuri.org
Don Robadue, Jr.	Project Manager, CRC don@crc.uri.edu
Justice Odoi	USAID Administrative Officer Representative Jodoi@usaid.gov

Kofi.Agbogah
kagbogah@henmpoano.org
Stephen Kankam
skankam@henmpoano.org
Hen Mpoano
38 J. Cross Cole St. Windy Ridge
Takoradi, Ghana
233 312 020 701

Andre de Jager
adejager@snvworld.org
SNV Netherlands Development Oganization
#161, 10 Maseru Road,
E. Legon, Accra, Ghana
233 30 701 2440

Donkris Mevuta
Kyei Yamoah
info@fonghana.org
Friends of the Nation
Parks and Gardens
Adiembra-Sekondi, Ghana
233 312 046 180

Peter Owusu Donkor
Spatial Solutions
powusu-donkor@spatialdimension.net
#3 Third Nautical Close,
Nungua, Accra, Ghana
233 020 463 4488

Thomas Buck
tom@ssg-advisors.com
SSG Advisors
182 Main Street
Burlington, VT 05401
(802) 735-1162

Victoria C. Koomson
cewefia@gmail.com
CEWEFIA
B342 Bronyibima Estate
Elmina, Ghana
233 024 427 8377

Lydia Sasu
daawomen@daawomen.org
DAA
Darkuman Junction, Kaneshie Odokor Highway
Accra, Ghana
233 302 315894

Gifty Asmah
giftyasmah@Daasgift.org
Daasgift Quality Foundation
Headmaster residence, Sekondi College
Sekondi, Western Region, Ghana
233 243 326 178

For additional information on partner activities:

CRC/URI:	http://www.crc.uri.edu
CEWEFIA:	http://cewefia.weebly.com/
DAA:	http://womenthrive.org/development-action-association-daa
Daasgift:	https://www.facebook.com/pages/Daasgift-Quality-Foundation-FNGO/135372649846101
Friends of the Nation:	http://www.fonghana.org
Hen Mpoano:	http://www.henmpoano.org
SNV:	http://www.snvworld.org/en/countries/ghana
SSG Advisors:	http://ssg-advisors.com/
Spatial Solutions:	http://www.spatialsolutions.co/id1.html

FISHERIES MANAGEMENT OPERATIONAL COMMITTEE (FMOC)

CONTEXT

The fisheries industry in Ghana is regulated by the Fisheries Act of 2002, Fisheries Regulation 2010 (LI 1968), Fisheries (Amendment) Act 880 (2014), Fisheries (Amendment) Regulation (2014) and all other Acts, Decrees, Laws, Legislative Instruments relating to the sector and Customary Laws that are consistent with the Constitutional laws. The purpose of the governing legislation is to provide for the sustainable exploitation of fishery resources and the sustainable development of fishing industry under the auspices of the Ministry of Fisheries and Aquaculture Development (MoFAD) with guidance and technical support of the Fisheries Commission (FC).

The MoFAD developed a five-year National Fisheries Management Plan (NFMP 2015-2019) to end overfishing, protect marine habitat and meet the regional and international fisheries management obligations. The Plan sets out a five-year strategy for the fishery and provides direction for the formulation of management actions in the context of existing legislation. The Fisheries Commission is responsible for the implementation of the Plan through the establishment of a Fisheries Management Operational Committee (FMOC).

ROLE AND RESPONSIBILITIES

The role of the FMOC, as stated in the Plan, is to monitor and review the performance of the fisheries management actions and provide recommendations to the Fisheries Commission.

The FMOC is assigned the following responsibilities under the directions of the FC:

- Develop an annual implementation plan relative to the management actions directed by MoFAD.
- Monitor and review the performance of the Plan.
- Develop the capacity of staff of the FC for effective implementation of the Plan.

OPERATIONAL FRAMEWORK OF THE FMOC

The FMOC shall be appointed by the Fisheries Commission in consultation with the Ministry of Fisheries and Aquaculture Development. Members should be knowledgeable concerning fisheries management issues or active participants in the fishing sector. The FMOC shall generally be kept to a maximum of 11 persons with both men and women.

Designation of membership should at minimum include one representative from:

- MOFAD (2 representatives)
- Fisheries Commission (2 representatives)
- Office of the Attorney General (1 representatives)
- Fisheries Enforcement Units (1 representatives)
- Universities (1 representative)
- Fishermen associations (2 representatives)
- Non-Governmental Organizations (1 representatives)
- Women processor associations (1 representatives)

The Director of the FC will solicit nominations to the FMOC from the above listed institutions. Selected members will serve for 2 years and may be renewed by approval of the Director of the FC. Members shall continue to serve in the absence of a newly approved membership.

The chair and co-chair of the FMOC will be elected by its nominated members during its first inaugural meeting.

The OC shall meet **every two months** to carry out the following tasks:

- Prepare an implementation plan and timeline for the actions contained in the plan.
- Develop performance indicators and assess the impact of actions taken on the fisheries.
- Develop a communication strategy and feedback mechanism to fisheries stakeholders and relevant authorities.
- Review of the performance of the actions against all performance indicators in accordance with the implementation time frame specified in the Plan.
- Make recommendations to the FC in accordance with the adaptive fisheries management framework of the Plan.
- Establish relevant sub-committees as needed such as:
- Scientific and technical sub-committee
- Legal affairs and Enforcement sub-committee
- Communication sub-committee

Each sub-committee shall be chaired by a FMOC member. Individuals from outside of the FMOC membership may be invited to participate in any of the sub-committees activities or deliberations.

REPORTING

The FMOC will report to the Director of the FC quarterly on the actions of the committee by the chair and co-chair. As and when needed, the chair may convene a meeting with the FC for relevant matters of the FMOC.

The FMOC shall report all findings in writing to the Director of the FC for appropriate action. Compliance review shall be consistent with the requirements of the Act-625, its amendments and the 2010 fisheries regulations and the respective NFMP requirements.

GUIDING PRINCIPLES

The FMOC serves under the direction and guidance of the Fisheries Commission. It shall report directly to the Director of the Fisheries Commission. The functions and rules of operations are vested in the authorities of the Chair and co-chair of the FMOC.

The annual implementation plan shall be the guiding arms for the FMOC on which agendas for the bi-monthly meetings can be established. The implementation plan will address, at a minimum, the following topics:

- Adequacy and achievement of the fisheries management actions (Directives) against the NFMP targets and schedules and the biological and socio-economic impacts.
- Status of state implementation and compliance.
- Research activities relative to the management action.
- Recommendations for any relevant changes in accordance with the adaptive management framework.

BUDGET

In carrying out its activities, the FMOC shall prepare an annual budget to the Fisheries Commission. The USAID/Sustainable Fisheries Management Project is committed to assist with providing adequate funding for the operation of the FMOC and with fisheries management technical expertise.

PROPOSED ACTIONS AND SCHEDULE:

Action	Date	Person responsible	Signing authority
Approval of ToR	August 18, 2016	Thomas Insaidoo	Director
Letters of solicitations	August 22, 2016	Najih Lazar/SFMP	Director
First meeting	September 8-9, 2016	Najih Lazar/SFMP	Director
Bi-monthly meeting	November 10-11, 2016	Chair FMOC	Director
Bi-monthly meeting	January 19-20, 2017	Chair FMOC	Director
Bi-monthly meeting	March 30-31, 2016	Chair FMOC	Director
Bi-monthly meeting	May 25-26, 2017	Chair FMOC	Director

PROCESS FOR REBUILDING SMALL PELAGIC FISHERIES

Establish the Fisheries Rebuilding Indicators:

Indicators of stock sustainability: $\mathbf{F_{max}}$ and $\mathbf{B_{max}}$

Maximum Fishing Mortality ($\mathbf{F_{max}}$): is a Management Reference Point referring to the maximum level of harvest rate allowed in order to produce MSY and which maintains the biological sustainability of the stock.

Biomass to produce MSY ($\mathbf{B_{max}}$): is a Management Reference Point referring to the level of biomass (by weight) necessary in the natural environment to produce MSY and maintains the longterm sustainability of the stock.

Monitor the Fisheries Rebuilding Indicators Through an Annual Stock Assessment

Indicators of stock sustainability: $\mathbf{F_{current}}$ and $\mathbf{B_{current}}$

Monitoring the performance of fisheries management requires an assessment of the status of the stock in relation to one or more targets or biological reference points to support effective decision- making. Methods used to estimate status of the stock vary considerably and depends on the quality and quantity of data available.

The Rebuilding the small pelagic stock for coastal Ghana is a two-step process:

- The first step to is to control effort (freeze license and vessel registration) and improve data collection to cap and end overfishing (Fcurrent → Fmax).
- The second step is to reduce fishing pressure on the stock to allow fish population to grow and produce enough recruits (young) to replace fish lost to excessive fishing and natural causes (Bcurrent → Bmax).

Rebuilding strategy requires that fishing mortality is reduced to the level of F_{max} for a period of time to permit the accumulation of surplus production by increasing total biomass (B).

This means that the fishing industry must accept a short-term loss in revenue in return for the expectation of higher yields-per-unit effort in the long term. Appropriate targets levels of fishing mortality (F) will depend on the extent of overexploitation and on the economic impacts of the action, but may need to be considerably lower than those which can be sustained at long-term target stock sizes. Since stock rebuilding generally requires several years based on the reproductive capacity and longevity of the stock. For small pelagics, if fishing intensity is reduced to the required level ($F_{current} < F_{max}$), the rebuilding time is likely to be shorter. However, the rate at which rebuilding occurs also depends on ecological and environmental conditions that aren't under fisheries management control.

Fishery managers use a set of monitoring parameters to evaluate the adequacy and achievement of management measures in reference to the sustainable standards. An annual stock assessment will provide measures of fishing mortality and current biomass by single or multiple species ($F_{current}$ and $B_{current}$). These two parameters will be monitored annually vis a vis the sustainability targets (F_{max} and B_{max}). Each stock has its own sustainability target F_{max} and B_{max} based on species life history and population dynamics. However, monitoring the performance of management measures vis a vis the target is measures using a standardized frame of reference, based on a ratio of $F_{current}/F_{max}$ and $B_{current}/B_{max}$. The rebuilding target is achieved when $F_{current}/F_{max} < 1$ and $B_{current}/B_{max} > 1$.

DEFINITIONS

Stock: a functionally discrete population of one or multiple species that is largely distinct from other populations of the same species. Such a population may be regarded as a separate entity for management or assessment purposes.

Maximum Sustainable Yield (MSY): is a fisheries management term to describe the highest average catch (by weight) that can be safely taken from a single species stock without reducing its abundance overtime while taking into account the stock's reproductive and growth rates under prevailing environmental conditions.

Maximum Fishing Mortality (F_{max}): is a Management Reference Point referring to the maximum level of harvest rate allowed in order to produce MSY and which maintains the biological sustainability of the stock.

Biomass to produce MSY (B_{max}): is a Management Reference Point referring to the level of biomass (by weight) necessary in the natural environment to produce MSY and maintains the longterm sustainability of the stock.

Overfished: A stock is overfished when a rate or level of fishing mortality (F) is higher than the Management Reference Point (F_{max}) that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis ($F > F_{max}$).

Depleted: A stock is considered depleted when its biomass (B) is below the Management Reference Point (B_{max}) which is necessary to produce the maximum sustainable yield (MSY) on a continuing basis ($B > B_{max}$).