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SUSTAINABLE FISHERIES MANAGEMENT PROJECT (SFMP)

DAA Training Center Environmental Compliance Review



THE
UNIVERSITY
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SNV SMART
DEVELOPMENT
WORKS



Development
Action Association

The Coastal Resources Center

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<https://ghanalinks.org/elibrary> search term: SFMP

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ACRONYMS

CCM	Centre for Coastal Management
CEWEFIA	Central and Western Region Fishmongers Improvement Association
CRC	Coastal Resource Center
CSLP	Coastal Sustainable Landscape Project
DAA	Development Action Association
DQF	Daasgift Quality Foundation
FtF	Feed the Future
HM	Hen Mpoano
MOFAD	Ministry of Fisheries and Aquaculture Development
NGOs	Non-Governmental Organizations
SFMP	Sustainable Fisheries Management Project
SNV	Netherlands Development Organization
SSG	SSG Advisors
UCC	University of Cape Coast
URI	University of Rhode Island
USAID	United States Agency for International Development

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INTRODUCTION

Awarded on October 22, 2014, the USAID Ghana Sustainable Fisheries Management Project (SFMP) is a five-year program aimed at rebuilding Ghana's marine fisheries stocks and catches through the adoption of responsible fishing practices. The project contributes to the Government of Ghana's fisheries development objectives and USAID's Feed the Future Initiative goals of improved food security, economic growth and poverty alleviation. Working closely with the Ministry of Fisheries and Aquaculture Development and the Fisheries Commission, USAID/Ghana SFMP aims to end overfishing of key stocks important to local food security through a multi-pronged approach:

- Improved legal enabling conditions for co-management, use rights and effort-reduction strategies
- Strengthened information systems and science-informed decision-making
- Increased constituencies that provide the political and public support needed to rebuild fish stocks
- Implementation of applied management initiatives for several target fisheries ecosystems

As part of the project objectives, the project intends to promote ecosystem-based and adaptive management approaches and improve the value chain of smoked fish, and support tens of thousands of women fish processors and marketers along the coast.

In view of this, the Development Action Association (DAA) requested to have a fisheries training center to serve as a formal center where fish processors in the association can have best practice trainings to improve upon their productivity. The center will also serve as an educational facility for all fisheries based workers countrywide and also build the capacities of fishers in their businesses and fisheries related livelihoods to improve upon production and increase disposable income whilst sustainably managing Ghana's Fisheries stock. SNV plays a supporting role to Development Action Association (DAA) with the establishment and operation of the Fisheries Training Center to ensure its sustainability even after the project period.

DESCRIPTION OF ACTIVITY

The training center which will be a green building, will be located at Kokrobitey in the Ga South Municipality of the Greater Accra region on a piece of land owned by DAA. The size of the land is 0.20acre or 807.5m² (skewed 99.8x84.3ft). Electricity supply is available but water needs to be connected. The proposed main building of the center is 280.3 m². The training facility will be made up of one conference hall or training room measuring 126.3m² and a demonstration area 82.3m². There will also be an accommodation unit of four rooms with three beds in each room and therefore can house 12 participants at a time.



Figure 1 DAA Training center

The training hall will comprise an office unit, kitchen, washroom and a training /conference hall which can be divided into four training rooms at a time and can accommodate 100 people maximum for any event and 30 participants for any training programme. Part of the complex will be a demonstration center which will be a well-built shed separated into five working rooms comprising the Receiving area, Processing room, Smoking room, Storage room and Packaging room. It also has a washroom attached to serve as a changing and cleaning area for participants. The third unit is an accommodation unit made up of four rooms, which has three beds each, thus it can accommodate 12 people at a time. Each accommodation unit has washrooms, a kitchen and a common room.

As a start up to this process a detailed needs assessment was carried out to understand the dynamics of needs fishers have for a training center and the kind of opportunities that are available for such a center. The assessment covered the various target groups, the existing competition, learning needs, standards and regulations, financing, income generating options etc. The needs assessment report was used to develop a business plan for running the center.

The training center shall operate under the business name of DAA Fisheries Training Center (DFTC). The center will be registered as a company limited by guarantees or by shares under the Companies Code, 1963 (Act 179). The training institution and trainers will be certified by the Council for Technical and Vocational Education Training (COTVET). The programs, manuals and materials for the training will be approved by COTVET before use and the proposed training delivery will be carried out based on the CBT approach. SNV will manage the center on behalf of SFMP and DAA for the project period, and to ensure that, DAA is able to manage the center effectively after the 5 years, DAA will second a staff member to under study the training center Manager during the period. The Center will serve as a training of trainers' educational center for various fishers (fish processors, fishermen, fisheries officers and other fisheries related workers) and will also serve as a meeting area for association programs. To bring in additional income, the conference room will be made available for rental services.



Figure 2 Pictures showing the site for the construction of the training center

Photo credit: SNV

The main purpose of the SFMP is to increase small pelagic stock in Ghana's coastal waters; which feeds into the Feed the future programme under USAID. The DFTC will provide a learning platform for the capacity development of fishers at all levels especially for small scale fishermen and fish processors who are still used to small scale, unhealthy and illegal methods of fishing which contributes to the depletion of the fish stock. The DFTC will therefore target capacity building at all levels for small scale fishers and value addition to their products for increased disposable income to improve their livelihoods. Beneficiaries will receive training in best practices in fishing and fish processing, hygiene, health and safety, entrepreneurship and marketing, literacy and numeracy etc.



Figure 3 A 3D representation of the DAA Fisheries Training Center

ENVIRONMENTAL SITUATION & HOST COUNTRY ENVIRONMENTAL REQUIREMENTS.

The main environmental laws and policies of Ghana and responsible institutions for their implementation were summarized in the IEE of the USAID/Ghana DO2 Economic Growth (EG) Sector Portfolio. These are described below.

Ghana has a relatively well-developed set of environmental, guidelines, and standards. These laws include the Wild Animals Preservation Ordinance (1901), Rivers Ordinance (1903), Mining Rights and Regulations Ordinance (1925), Land Planning and Soil Erosion Ordinance (1953), which were amended upon independence in 1957. In the late 1990s, Ghana passed additional regulations related to the environment, the Environmental Protection Agency Act (1994), the Pesticides Control and Management Act (1996), and the Environmental Assessment Regulation (LI 1652, 1999). The Environmental Protection Agency Act formed Ghana's EPA in 1994, which broadened the objectives and responsibilities of the agency.

As part of EPA's mandate to guide development to prevent, reduce, and as far as possible eliminate pollution and actions that lower the quality of life, there will be the need for an environmental review of the site by EPA. Before the construction work begins, SNV and DAA will consult EPA to conduct Environmental review of the site before building permit approval will be obtained.

EVALUATION OF ACTIVITIES AND ISSUES WITH RESPECT TO ENVIRONMENTAL IMPACT POTENTIAL.

The site for the center is located in an already developed area with electricity supply and road networks. The pipelines within this area have been destroyed and there will be the need to dig a bore hole or put the necessary structures in place to harvest rain water. The average slope of the site is less than 5% and is not heavily forested.

The construction activities will require some mitigation measures and monitoring due to some potential adverse impacts envisaged during the construction activities. Some of the potential impacts include:

Noise and Dust pollution

Construction activity might disturb dwellings located close by, through creating noise and dust from the construction activities

Digging of pits for construction purposes

Standing water in burrowed pits during construction of the water and sanitary facilities could become breeding grounds for mosquitos

Soil and Water Contamination (Poor Handling)

The dumping of toxic materials often used in construction works such as solvents, paints, may contaminate ground water supplies. This may be a health hazard to the surrounding community and also put workers at risk from exposure to hazardous materials.

Use of heavy equipment

This could result in the compaction of soil, changing surface and groundwater flows and damaging future use for agriculture; contaminate ground or surface water when machinery repairs result in spills or dumping of hydraulic oil, motor oil or other harmful mechanical fluids.

Source of building materials

Materials not sourced from right vendors could damage aquatic ecosystems through erosion and siltation; unsustainable use of renewable natural resources; possibility of harvesting wetland plant materials and; over-harvesting of valuable forest species

Water supply improvement (Digging of borehole)

Poison users with natural or man-made chemical contaminants such as arsenic

Improper solid waste disposal

Waste material could accumulate from proposed construction works.

Safety and health

Safety and health risks are expected during the construction period. This is particularly true in relation to the construction workers who will undertake the site preparation. Workers will be exposed to dust, heat from the sun, injurious building materials, dehydration and other potential hazards associated with construction of buildings and smokers.

CONCLUSION

In conclusion, after careful environmental review of the DAA Fisheries Training Center (DFTC), the proposed construction activity can be classified as “No significant adverse impacts with condition”. The potential impacts have been elaborated and mitigation measures presented to address the potential impacts identified. This will be clearly stated in the construction company’s contract and Terms of Reference to achieve compliance.

To ensure that the construction firm adheres to the mitigation measures outlined in the table above, there will be regular (monthly) field inspections by the Environmental Compliance representatives for SNV and DAA who will further report to the SFMP Environmental Compliance Officer (ECO) during the construction period. The ECO supported by the SNV and DAA representatives will also produce field reports during and after construction. The Responsible Parties for environmental compliance oversight of the project are therefore; SFMP, SNV and DAA Environmental Compliance Officer

ENVIRONMENTAL MITIGATION ACTIONS

The following measures will be adopted during construction activities to mitigate/minimize the above adverse impacts

Table 1 Environmental Mitigation Measures

Mitigation Measures	Responsible Party	Monitoring Scheme			Estimated cost	Monitoring Log		
		Indicators	Data source/method	How often		Date	Result	Follow-up
Activity : DAA FISHERIES TRAINING CENTER								
<p>IEE Section 3.5 Infrastructure: Agricultural plots and nurseries/6.1 rehabilitation or new facilities less than 1000M2</p> <p>During construction, IPs must ensure that contractors:</p> <p>Desist from extracting fill, sand or gravel from waterways or ecologically sensitive areas</p> <p>Identify and implement any feasible measures to increase the probability that forest products like timber are procured from legal, well-managed sources.</p> <p>Minimize the use of heavy machines</p> <p>Construction must be managed so that no standing water on the site persists more than 4 days;</p> <p>Prevent dumping of hazardous materials.</p> <p>Burn waste materials that are not reusable/readily recyclable, do not contain heavy metals and are flammable</p>	SNV & DAA	<p>Completed review and screening form to ensure that the construction activity is environmentally sound and follow the points outlined in the mitigation measures in the IEE/EMMP</p> <p>Approval memo by USAID to proceed with construction based on ER documentation provided.</p>	<p>Environmental review form for the construction of the DAA Fisheries Training Center</p> <p>Field Reports during and immediately following construction</p>	During construction activities	NA			

Mitigation Measures	Responsible Party	Monitoring Scheme			Estimated cost	Monitoring Log		
		Indicators	Data source/method	How often		Date	Result	Follow-up
<p>Concentrate noisiest types of work into as short a period as possible, and during least disruptive times of the day. Take measures to keep dust to a minimum</p> <p>Bore hole to be dug for domestic use should be tested for arsenic, coliform, nitrates and nitrites.</p> <p>Environmental review by EPA before construction activities</p> <p>No lead-based paint shall be used, when lead-free paint is used, it will be stored properly so as to avoid accidental spills or consumption by children; empty cans will be disposed of in an environmentally safe manner away from areas where contamination of water sources might occur; and the empty cans will be broken or punctured so that they cannot be reused as drinking or food containers.</p>		Field reports of physical inspection during and after construction by the Env. Comp. Officer						
<p>Waste handling equipment and infrastructure. USAID intervention must result in the facilities' possessing adequate provision for handling the wastes they may generate; including human wastes.</p>								

Mitigation measures	Responsible Party	Indicators	Data source/ method	How often	Estimated cost	Date	Result	Follow-up
<p>In terms of safety and health risks;</p> <p>The contractor that will be responsible for the rehabilitation works will be required to have a Health & Safety Plan.</p> <p>The contractor will train the construction staff on the Health & Safety Plan.</p> <p>The contractor will be required to provide training on proper use of equipment.</p> <p>The contractor will provide personal safety equipment to all workers (i.e. hard hats, goggles, steel-toed boots, gloves, dust masks).</p> <p>The contractor will provide firefighting equipment/measures.</p> <p>The contractor will ensure proper storage of building materials.</p> <p>The contractor provides medical services (access to a first aid kit).</p> <p>Prevent access to site at all times by unauthorized persons</p>								