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## SUSTAINABLE FISHERIES MANAGEMENT PROJECT (SFMP) Environmental Mitigation and Monitoring Report



2015



Hen Mpoano



SNV SMART DEVELOPMENT WORKS



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**Cover photo:** Construction of a Fish Smoking Oven in Winneba, Central Region  
(Credit: HEN MPOANO)

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## **ACRONYMS**

<b>CEWEFIA</b>	Central and Western Region Fishmongers Improvement Association
<b>CFR</b>	Code of Federal Regulations
<b>IEE</b>	Initial Environmental Evaluation
<b>EMMP</b>	Environmental Monitoring and Mitigation Plan
<b>SFMP</b>	Sustainable Fisheries Management Program
<b>SNV</b>	Netherlands Development Organization
<b>USAID</b>	United States Agency for International Development
<b>WR</b>	Western Region

## **ENVIRONMENTAL MITIGATION AND MONITORING REPORT**

During the FY 2015 of the USAID/Ghana Sustainable Fisheries Management Project (SFMP), an Environmental Monitoring and Mitigation Plan (EMMP) was prepared and approved by USAID. The EMMP complies with 22 CFR 216 and was prepared based on the revised USAID's Ghana Economic Growth Portfolio Initial Environmental Evaluation (IEE) which was already in place for the (SFMP).

The EMMP describes how the SFMP will, in specific terms, implement all IEE conditions that apply to proposed project activities within the scope of the award. It specifies mitigation actions as needed for different activities, outlines how implementation of activities will be monitored to ensure compliance with required conditions and their effectiveness and specify timelines and responsible parties for monitoring of the mitigation measures. This is to ensure no significant environmental impacts are occurring for those actions identified in the IEE with a negative determination subject to conditions.

To avoid environmental failure and safeguard the good name and reputation of USAID, all implementing partners were oriented on environmental compliance monitoring and reporting. Environmental Compliance Point Persons were selected from each partner organization and trained on how to monitor and report on activities they are implementing with negative determination with conditions.

Monitoring of activities started in the last quarter of the year due to the time the EMMP was approved (May, 2015). Prior to that, activities that partners were implementing had no negative determination with conditions.

Activities conducted in FY 2015 that had conditions and require monitoring and/or mitigation plans are included in the table below.

Activity 2.5 Understanding Fisheries Supply Chain from Net to Plate

Mitigation Measure	Responsible Party	Monitoring Scheme			Estimated cost	Monitoring Log		
		Indicators	Data source/ method	How often		Date	Result	Follow-up
<b>Activity 2.5 Understanding Fisheries Supply Chain from Net to Plate:</b>								
<b>IEE Section 3.3 Fisheries Extension/3a. Institutional strengthening, training/TA</b> <b>IEE Section 3.3 Fisheries Extension / 3b-Fisheries:</b> During training activities, there should be integration and promotion of general awareness of the environmental, health and safety risks presented by fishing and coastal economic activities, and appropriate choices and measures to manage these risks as rooted in appropriate land management plans. <i>Fisheries chapter of USAID's Sector Environmental Guidelines</i> (( <a href="http://www.usaidgems.org/sectorGuidelines.htm">http://www.usaidgems.org/sectorGuidelines.htm</a> )).	SNV	Review and screening of all documents, advocacy materials, and training curricula to ensure that they are environmentally sound and follow the points outlined in the mitigation measures	Review and screening of materials	Quarterly *(When trainings are provided and as to when documents, advocacy materials and training curricula are developed)	NA	01/09/2015  03/09/2015 04/09/2015	Inputs on determining environmental, health and safety risks along the fisheries value chain were made into the draft report. This will therefore be represented in the final reports; the Sardinella value chain study and the fuelwood value chain study.  At the validation workshop for the fuelwood study, and the Sardinella study; environmental, health and safety risks were not adequately represented in the presentation. It was recommended that the report should be improved in this direction	Both reports will be revised again to ensure compliance.



*Activity 4.8.2 DQF-led Fisheries Value Chain Improvements and Livelihoods in Ankobra Estuary, and Shama*

Mitigation Measure	Responsible Party	Monitoring Scheme			Estimated cost	Monitoring Log		
		Indicators	Data source/ method	How often		Date	Result	Follow-up
<b>Activity 4.8 Central and Western Region Fishing Community Livelihood Development Value Chain and Post-harvest Improvements</b>								
<i>Activity 4.8.2 DQF-led Fisheries Value Chain Improvements and Livelihoods in Ankobra Estuary, and Shama</i>								
<p><b>IEE Section 3.3 Fisheries Extension/3a. Institutional strengthening, training/TA / 3b- Fisheries:</b></p> <p>During training activities, there should be integration and promotion of general awareness of the environmental, health and safety risks presented by unsustainable use of woodlots, reforestation, tree plantations, fishing and coastal economic activities, and appropriate choices and measures to manage these risks as rooted in appropriate land management plans.</p> <p><i>Fisheries chapter of USAID's Sector Environmental Guidelines (<a href="http://www.usaidgems.org/sectorGuidelines.htm">http://www.usaidgems.org/sectorGuidelines.htm</a>).</i></p>	DQF	Review and screening of all documents, advocacy materials, and training curricula to ensure that they are environmentally sound and follow the points outlined in the mitigation measures	Review and screening of materials	Quarterly *(When trainings are provided and as to when documents, advocacy materials and training curricula are developed)	NA	04/08/15 05/08/15 06/08/15 11/08/15 12/08/15 25/08/15 26/08/15 27/08/15 01/09/15 02/09/15 03/09/15 08/09/15 09/09/15 10/09/15 15/09/15 16/09/15 17/09/15	During these training activities, sustainable resource management and some best environmental practices were communicated to the fisher folks.	



Mitigation Measure	Responsible Party	Monitoring Scheme			Estimated cost	Monitoring Log		
		Indicators	Data source/ method	How often		Date	Result	Follow-up
<b>Activity 4.8.(b) Construction and renovation of drying sheds and smokers</b>								
<p><b>IEE Section 3.5</b> Infrastructure: Agricultural plots and nurseries/6.1 rehabilitation or new facilities less than 1000M2.</p> <p>1. Site Selection</p> <ul style="list-style-type: none"> <li>• Average slope of less than 5% and is not heavily forested, in an otherwise undisturbed local ecosystem, or in a protected area.</li> <li>• The site is not within 30m of a permanent or seasonal stream or water body</li> </ul> <p>2. Construction</p> <ul style="list-style-type: none"> <li>• IPs must desist from extracting fill, sand or gravel from waterways or ecologically sensitive areas</li> <li>• IPs must identify and implement any feasible measures to increase the probability that forest products like timber are procured from legal, well-managed sources.</li> <li>• Construction must be managed so that no standing water on the site persists more than 4 days;</li> </ul> <p>3. Refurbishments of drying shed and the</p>	DQF	Field reports during and after construction by the Environmental Compliance Officer.	Regular field visits during construction period	During construction activities		21/08/15  26/08/15  02/09/15  18/09/15	During the construction of the improved stoves, the site was inspected by the environmental compliance officer to ensure the site was suitable for construction.  All the mitigation measures listed were taken into consideration and followed during construction activities.	The construction is still on-going at Shama-Apo and will continue at Axim and Ankobra

Mitigation Measure	Responsible Party	Monitoring Scheme			Estimated cost	Monitoring Log		
		Indicators	Data source/ method	How often		Date	Result	Follow-up
<p>training on use and maintenance of the smoking ovens</p> <ul style="list-style-type: none"> <li>• IP shall create awareness among users on the environmental damage of unsustainable use of grown woodlots</li> </ul> <p>4. Safety and health</p> <ul style="list-style-type: none"> <li>• The contractor will:</li> <li>• Be required to have a Health and Safety Plan.</li> <li>• Be required to train the construction staff on the Health and Safety Plan.</li> <li>• Provide training on proper use of equipment.</li> <li>• Provide personal safety equipment to all workers (i.e. hard hats, goggles, steel-toed boots, gloves, dust masks).</li> <li>• Provide firefighting equipment/measures.</li> <li>• Provide medical services (access to a first aid kit).</li> </ul>								

**Activity 4.8.3 CEWEFIA-led Fisheries value chain improvements and livelihoods Pra River estuary (Anlo) and Elmina and Moree, Central Region**

Mitigation Measures	Responsible Party	Monitoring Scheme			Estimated cost	Monitoring Log		
		Indicators	Data source/method	How often		Date	Result	Follow-up
Activity 4.8 Central and Western Region Fishing Community Livelihood Development Value Chain and Post-harvest Improvements								
<b>Activity 4.8.3 CEWEFIA-led Fisheries value chain improvements and livelihoods Pra River estuary (Anlo) and Elmina and Moree, Central Region</b>								
<p>IEE Section 3.3 Fisheries Extension/3a. Institutional strengthening, training/TA / 3b-Fisheries:</p> <p>During training activities, there should be integration and promotion of general awareness of the environmental, health and safety risks presented by unsustainable use of woodlots, reforestation, tree plantations, fishing and coastal economic activities, and appropriate choices and measures to manage these risks as rooted in appropriate land management plans.</p> <p><i>Fisheries chapter of USAID's Sector Environmental Guidelines</i> (<a href="http://www.usaidgems.org/sectorGuidelines.htm">http://www.usaidgems.org/sectorGuidelines.htm</a>).</p>	CEWEFIA	Review and screening of all documents, advocacy materials, and training curricula to ensure that they are environmentally sound and follow the points outlined in the mitigation measures	Review of materials	Quarterly *(When trainings are provided and as to when documents, advocacy materials and training curricula are developed)	NA	<p>Moree 24th -29th August 2015</p> <p>Elmina 17th-22nd August 2015</p> <p>Anlo 10-15th August 2015</p>	All training documents and training curricula reviewed. The documents are environmentally sound and follow the points outlined in the mitigation measures.	Follow-up visits will be carried out to the MSMEs to monitor their progress of work.

Mitigation Measures	Responsible Party	Monitoring Scheme			Estimated cost	Monitoring Log		
		Indicators	Data source/method	How often		Date	Result	Follow-up
<i>Activity 4.8.(b) Construction and renovation of drying sheds and smokers</i>								
<p>IEE Section 3.5 Infrastructure: Agricultural plots and nurseries/6.1 rehabilitation or new facilities less than 1000M2.</p> <p><b>1. Site Selection</b> Average slope of less than 5% and is not heavily forested, in an otherwise undisturbed local ecosystem, or in a protected area. The site is not within 30m of a permanent or seasonal stream or water body</p> <p><b>2. Construction</b> IPs must desist from extracting fill, sand or gravel from waterways or ecologically sensitive areas IPs must identify and implement any feasible measures to increase the probability that forest products like timber are procured from legal, well-managed sources. Construction must be managed so that no standing water on the site persists more than 4 days;</p>	CEWEFIA	Field reports during and after construction by the Environmental Compliance Officer.	Regular field visits during construction period	During construction activities		<p>Moree 5th September 2015</p> <p>Elmina 31st August 2015</p> <p>Anlo 31st August 2015</p>	<p>The Moree site not environmentally compliant</p> <p>Elmina and Anlo sites meet the site selection criteria and have been approved by the Environmental Compliance Officer.</p>	<p>A new site being looked for at Moree.</p> <p>Demarcation of spots for the construction of ovens</p> <p>Construction of the ovens have not started yet. The compliance officer will see to it that all safety and health measures will be followed.</p>

Mitigation Measures	Responsible Party	Monitoring Scheme			Estimated cost	Monitoring Log		
		Indicators	Data source/method	How often		Date	Result	Follow-up
<p><b>3. Refurbishments of drying shed and the training on use and maintenance of the smoking ovens</b>  IP shall create awareness among users on the environmental damage of unsustainable use of grown woodlots</p> <p><b>4. Safety and health</b>  The contractor will:  Be required to have a Health and Safety Plan.  Be required to train the construction staff on the Health and Safety Plan.  Provide training on proper use of equipment.  Provide personal safety equipment to all workers (i.e. hard hats, goggles, steel-toed boots, gloves, dust masks).  Provide firefighting equipment/measures.  Provide medical services (access to a first aid kit).</p>								



**Activity 4.8.5 Central and Western Region Women’s Fisheries Training Center for Value Chain and Post-harvest Improvements**

Mitigation Measures	Responsible Party	Monitoring Scheme			Estimated cost	Monitoring Log		
		Indicators	Data source/ method	How often		Date	Result	Follow-up
<b>Activity 4.8 Central and Western Region Fishing Community Livelihood Development Value Chain and Post-harvest Improvements</b>								
<b>Activity 4.8.5 Central and Western Region Women’s Fisheries Training Center for Value Chain and Post-harvest Improvements</b>								
During training activities, there should be integration and promotion of general awareness of the environmental, health and safety risks presented by unsustainable use of woodlots, reforestation, tree plantations, fishing and coastal economic activities, and appropriate choices and measures to manage these risks as rooted in appropriate land management plans. <i>Fisheries chapter of USAID’s Sector Environmental Guidelines</i> <a href="http://www.usaidgems.org/sectorGuidelines.htm">((http://www.usaidgems.org/sectorGuidelines.htm))</a> .	SNV	Review and screening of all documents, advocacy materials, and training curricula to ensure that they are environmentally sound and follow the points outlined in the mitigation measures	Review and screening of materials	Quarterly *(When trainings are provided and as to when documents, advocacy materials and training curricula are developed)	NA	4/07/2015	Site selection for the DAA Fisheries Training Center. The land is within an area of 1000m <sup>2</sup> and may not have significant impact on the existing environment, as it is within a residential area a reasonable distance away from the coast and the slope is less than 5%.	

Mitigation Measures	Responsible Party	Monitoring Scheme			Estimated cost	Monitoring Log		
		Indicators	Data source/method	How often		Date	Result	Follow-up
<b>Activity 4.8.(b) Construction and renovation of drying sheds and smokers</b>								
<p><b>IEE Section 3.5</b> Infrastructure: Agricultural plots and nurseries/6.1 rehabilitation or new facilities less than 1000M2.</p> <p>1. Site Selection</p> <ul style="list-style-type: none"> <li>• Average slope of less than 5% and is not heavily forested, in an otherwise undisturbed local ecosystem, or in a protected area.</li> <li>• The site is not within 30m of a permanent or seasonal stream or water body</li> </ul> <p>2. Construction</p> <ul style="list-style-type: none"> <li>• IPs must desist from extracting fill, sand or gravel from waterways or ecologically sensitive areas</li> <li>• IPs must identify and implement any feasible measures to increase the probability that forest products like timber are procured from legal, well-managed sources.</li> <li>• Construction must be managed so that no standing water on the site persists more than 4 days;</li> </ul> <p>3. Refurbishments</p>	SNV	Field reports during and after construction by the Environmental Compliance Officer.	Regular field visits during construction period	During construction activities		19/09/2015	<p>Seven demonstration stoves have been constructed so far. 2 at Apam and 5 at Winneba.</p> <p>All seven stoves are constructed on sites within 5% slope standard. Two stoves have been constructed on rocks, one at Apam and one at Winneba. One of the stoves is within 30 meters to a wetland at Woarawobeba. This stove was constructed to replace an existing stove and therefore no real impact. We have reinforced with partners the need to strictly comply with selection criteria as stated in the EMMP.</p> <p>Clay dug out areas are leveled to avoid gullies. The area being dug is a few meters away from a mangrove vegetation landscape. A better location is currently being sought.</p> <p>Wood for the trays are acquired from wood sellers in Winneba and Swedru. Source is yet to be identified. 230 women were trained on</p>	<p>Monitoring for the construction of 50 additional stoves in October.</p> <p>Site selection will be discussed further as the beneficiaries usually decide where they want to situate their stoves, thus we have started educating them on the need to situate their stoves in an appropriate manner to reduce environmental risks.</p>



Mitigation Measures	Responsible Party	Monitoring Scheme			Estimated cost	Monitoring Log		
		Indicators	Data source/method	How often		Date	Result	Follow-up
<p>of drying shed and the training on use and maintenance of the smoking ovens</p> <ul style="list-style-type: none"> <li>• IP shall create awareness among users on the environmental damage of unsustainable use of grown woodlots</li> <li>4. Safety and health</li> <li>• The contractor will:</li> <li>• Be required to have a Health and Safety Plan.</li> <li>• Be required to train the construction staff on the Health and Safety Plan.</li> <li>• Provide training on proper use of equipment.</li> <li>• Provide personal safety equipment to all workers (i.e. hard hats, goggles, steel-toed boots, gloves, dust masks).</li> <li>• Provide firefighting equipment/measures.</li> <li>• Provide medical services (access to a first aid kit).</li> </ul>						<p>how to use the Morrison stoves, as part of the training, the women were provided information on potential health risks and the need to establish plantations and use wood wisely.</p> <p>SNV has some information on health and safety in our artisan training manual. Some artisans have been trained on this already but SNV will request for the plan from all stove constructing organizations.</p> <p>Issues on safety gears and the need for a first aid kit are being discussed.</p>	<p>Companies will be assisted to develop the health and safety plan and practice the standards, such as supplying safety gears and first aid kits for artisans.</p>	