

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



2015













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

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SNV:	http://www.snvworld.org/en/countries/ghana
SSG Advisors:	http://ssg-advisors.com/
Spatial Solutions:	http://www.spatialsolutions.co/id1.html

ACRONYMS

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

	Responsible	M	onitoring Scheme		Estimated		Monitoring Log			
Mitigation Measure	Party	Indicators	Data source/ method	How often	cost	Date	Result	Follow-up		
Activity 2.5 Understandin	g Fisheries Sup	ply Chain from Net	to Plate:							
Activity 2.5 Understandin IEE Section 3.3 Fisheries Extension/3a. Institutional strengthening, training/TA IEE Section 3.3 Fisheries Extension / 3b-Fisheries: 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</i> <i>Environmental</i> <i>Guidelines</i> ((http://www.usaidgems.o rg/sectorGuidelines.htm).	<u>g Fisheries Sup</u> SNV	Ply Chain from Net 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	to Plate: 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 2.5 Understanding Fisheries Supply Chain from Net to Plate

	Responsible	M	onitoring Scheme		Estimated	8	Monitoring Log	
Mitigation Measure	Party	Indicators	Data source/ method	How often	cost	Date	Result	Follow-up
		on Fishing Commun				ost-harvest Im	provements	
Activity 4.8.1 Post Harv		ng Knowledge Develo	opment, Dissemina	tion and Consens	us Building			
IEE Section 3.3	SNV	Review and	Review and	Quarterly	NA	18/07/2015	The characterization study	Reports
Fisheries Extension/3a.		screening of all	screening of	*(When			report on fish processing	submitted
Institutional		documents,	materials	trainings are			reflects environmental and	
strengthening,		advocacy		provided and			health risks during fish	
training/TA		materials, and		as to when			processing and presents a	
3b-Fisheries:		training curricula		documents,			number of	
During training activities,		to ensure that		advocacy			recommendations on	
there should be integration		they are		materials and			healthy ways of processing.	
and promotion of general		environmentally		training				
awareness of the		sound and follow		curricula are		5/08/2015	The validation workshop	
environmental, health and		the points		developed)			did not express the	
safety risks presented by		outlined in the					environmental and safety	
unsustainable use of		mitigation					risks explicitly, neither did	
woodlots, reforestation,		measures					the workshop report but	
tree plantations, fishing							upon review inputs were	
and coastal economic							made.	
activities, and appropriate								
choices and measures to								
manage these risks as								
rooted in appropriate land								
management plans.								
Fisheries chapter of								
USAID's Sector								
Environmental								
Guidelines								
((<u>http://www.usaidgems.o</u>								
rg/sectorGuidelines.htm).								

Activity 4.8.1 Post Harvesting Processing Knowledge Development, Dissemination and Consensus Building

		Monit	oring Scheme			Monitoring Log			
Mitigation Measure	Responsible Party	Indicators	Data source/ method	How often	Estimated cost	Date	Result	Follow- up	
Activity 4.8 Central and V	Vestern Region	Fishing Community Live	elihood Develop	oment Value Chair	n and Post-ha	rvest Improve	ements		
Activity 4.8.2 DQF-led Fish	eries Value Cha	in Improvements and Live	elihoods in Ank	obra Estuary, and	Shama				
IEE Section 3.3 Fisheries Extension/3a. Institutional strengthening, training/TA / 3b- Fisheries: 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</i> <i>Environmental Guidelines</i> ((http://www.usaidgems.or g/sectorGuidelines.htm).	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 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.		

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

		Monit	oring Scheme				Monitoring Log	
Mitigation Measure	Responsible Party	Indicators	Data source/ method	How often	Estimated cost	Date	Result	Follow- up
Activity 4.8.(b) Construction a		of drying sheds and smoke	ers					
 Activity 4.8.(b) Construction a IEE Section 3.5 Infrastructure: Agricultural plots and nurseries/6.1 rehabilitation or new facilities less than 1000M2. 1. Site Selection 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 Construction 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 	nd renovation DQF	of drying sheds and smoke Field reports during and after construction by the Environmental Compliance Officer.		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.	up The constructi on is still on-going at Shama- Apo and will continue at Axim and Ankobra
 a construction must be managed so that no standing water on the site persists more than 4 days; 3. Refurbishments of drying shed and the 								

	Monit	oring Scheme	-			Monitoring Log	
Responsible Party	Indicators	Data source/ method	How often	Estimated cost	Date	Result	Follow- up
		Responsible	Party Indicators source/	Responsible Party Data Indicators Data	ResponsibleDataEstimatedPartyIndicatorssource/How oftencost	ResponsibleDataEstimatedPartyIndicatorssource/How oftencostDate	Responsible Party Data Indicators Data source/ Estimated How often Date

,	Responsible	Monitoring Schem			Estimate	Monitoring	Log			
Mitigation Measures	Party	Indicators	Data source/ method	How often	d cost	Date	Result	Follow-up		
Activity 4.8 Central and We	stern Region Fis	shing Community Liv	elihood Developm	ent Value Chain a	nd Post-harve	st Improvemen	nts			
Activity 4.8.3 CEWEFIA-le	Activity 4.8.3 CEWEFIA-led Fisheries value chain improvements and livelihoods Pra River estuary (Anlo) and Elmina and Moree, Central Region									
IEE Section 3.3 Fisheries	CEWEFIA	Review and	Review of	Quarterly	NA	Moree	All training documents and	Follow-up		
Extension/3a. Institutional		screening of all	materials	*(When		24th -29th	training curricula reviewed.	visits will be		
strengthening, training/TA		documents,		trainings are		August	The documents are	carried out		
/ 3b-Fisheries:		advocacy		provided and		2015	environmentally sound and	to the		
		materials, and		as to when			follow the points outlined in	MSMEs to		
During training activities,		training curricula		documents,		Elmina	the mitigation measures.	monitor		
there should be integration		to ensure that they		advocacy		17th-22nd		their		
and promotion of general		are		materials and		August		progress of		
awareness of the		environmentally		training		2015		work.		
environmental, health and		sound and follow		curricula are		. 1				
safety risks presented by		the points outlined		developed)		Anlo				
unsustainable use of		in the mitigation				10-15th				
woodlots, reforestation,		measures				August 2015				
tree plantations, fishing and coastal economic						2013				
activities, and appropriate choices and measures to										
manage these risks as										
rooted in appropriate land										
management plans.										
Fisheries chapter of										
USAID's Sector										
Environmental Guidelines										
((http://www.usaidgems.or										
g/sectorGuidelines.htm).										

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

	D	Monitoring Schem	e		E attace a ta	Monitoring	Log	
Mitigation Measures	Responsible Party	Indicators	Data source/ method	How often	- Estimate d cost	Date	Result	Follow-up
Activity 4.8.(b) Construction	n and renovation	n of drying sheds and	smokers		·			
 Activity 4.8.(b) Construction IEE Section 3.5 Infrastructure: Agricultural plots and nurseries/6.1 rehabilitation or new facilities less than 1000M2. 1. Site Selection 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 2. Construction 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; 	CEWEFIA	Field reports during and after construction by the Environmental Compliance Officer.	Regular field visits during construction period	During construction activities		Moree 5th September 2015 Elmina 31st August 2015 Anlo 31st August 2015	The Moree site not environmentally compliant Elmina and Anlo sites meet the site selection criteria and have been approved by the Environmental Compliance Officer.	A new site being looked for at Moree. Demarcation of spots for the construction of ovens Construction of the ovens have not started yet. The compliance officer will see to it that all safety and health measures will be followed.

	Responsible	Monitoring Schem	e		Estimate	Monitoring	Log	
Mitigation Measures	Party	Indicators	Data source/ method	How often	d cost	Date	Result	Follow-up
3. Refurbishments of								
drying shed and the								
training on use and								
maintenance of the								
smoking ovens								
IP shall create awareness								
among users on the								
environmental damage of								
unsustainable use of								
grown woodlots								
4. Safety and health								
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).								

	Responsible	Monitoring Schem		Estimate	Monitoring Log			
Mitigation Measures	Party	Indicators	Data source/ method	How often	d cost	Date	Result	Follow-up
		on Fishing Commun				ost-harvest Im	provements	
Activity 4.8.4 Fisheries val		vements and liveliho	ods in Apam and	Winneba, Central		-		
Activity 4.8.4 Fisheries val IEE Section 3.3 Fisheries Extension/3a. Institutional strengthening, training/TA 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. Fisheries chapter of USAID's Sector Environmental Guidelines ((http://www.usaidgems.o rg/sectorGuidelines.htm).	<i>lue chain impro</i> SNV	wements and liveliho 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	ods in Apam and Review and screening of materials	Winneba, Central Quarterly *(When trainings are provided and as to when documents, advocacy materials and training curricula are developed)	<u>Region</u> NA	28/07/2015	Training of artisans was carried out using a manual that incorporated issues on environmental, health and safety ethics in their work field. Training manual for training women groups on the use of Morrison stoves has been modified to incorporate environmental, health and safety issue. About 80 women have been empowered in this direction.	22/09/2015 Monitor stove construction to ensure compliance. 22/09/2015 Site selection for constructing new stoves

Activity 4.8.4 Fisheries value chain improvements and livelihoods in Apam and Winneba, Central Region

	Responsible	Monitoring Schem	ie	*	Estimate	Monitoring	Log	
Mitigation Measures	Party	Indicators	Data source/ method	How often	d cost	Date	Result	Follow-up
Activity 4.8 Central and W	Vestern Region	Fishing Community	Livelihood Devel	opment Value Ch	nain and Post	-harvest Impr	ovements	
Activity 4.8.5 Central and	Western Region	n Women's Fisheries	Training Center f	or Value Chain a	nd Post-harve	est Improvemen	nts	
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</i> <i>USAID's Sector</i> <i>Environmental</i> <i>Guidelines</i> ((http://www.usaidgems.o rg/sectorGuidelines.htm).	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 ² 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%.	

Activity 4.8.5 Central and Western Region Women's Fisheries Training Center for Value Chain and Post-harvest Improve	ovements
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Mitigation Measures	Responsible Party	Monitoring Scheme			Estimate	Monitoring Log				
		Indicators	Data source/ method	How often	d cost	Date	Result	Follow-up		
Activity 4.8.(b) Construction and renovation of drying sheds and smokers										
IEE Section 3.5	SNV	Field reports	Regular field	During		19/09/2015	Seven demonstration stoves	Monitoring		
Infrastructure:		during and after	visits during	construction			have been constructed so	for the		
Agricultural plots and		construction by	construction	activities			far. 2 at Apam and 5 at	construction		
nurseries/6.1		the Environmental	period				Winneba.	of 50		
rehabilitation or new		Compliance						additional		
facilities less than		Officer.					All seven stoves are	stoves in		
1000M2.							constructed on sites within	October.		
1. Site Selection							5% slope standard. Two			
 Average slope of less 							stoves have been	Site		
than 5% and is not							constructed on rocks, one at	selection		
heavily forested, in an							Apam and one at Winneba.	will be		
otherwise undisturbed							One of the stoves is within	discussed		
local ecosystem, or in a							30 meters to a wetland at	further as the		
protected area.							Woarawobeba. This stove	beneficiaries		
• The site is not within							was constructed to replace	usually		
30m of a permanent or							an existing stove and	decide where they want to		
seasonal stream or							therefore no real impact. We have reinforced with	situate their		
water body							partners the need to strictly	stoves, thus		
2. Construction							comply with selection	we have		
• IPs must desist from							criteria as stated in the	started		
extracting fill, sand or							EMMP.	educating		
gravel from waterways								them on the		
or ecologically sensitive							Clay dug out areas are	need to		
areas							leveled to avoid gullies. The	situate their		
• IPs must identify and							area being dug is a few	stoves in an		
implement any feasible							meters away from a	appropriate		
measures to increase the							mangrove vegetation	manner to		
probability that forest							landscape. A better location	reduce		
products like timber are							is currently being sought.	environment		
procured from legal, well-managed sources.								al risks.		
 Construction must be 							Wood for the trays are			
							acquired from wood sellers			
managed so that no							in Winneba and Swedru.			
standing water on the							Source is yet to be			
site persists more than 4							identified.			
days; 3. Refurbishments							230 women were trained on			
5. Kelurdishinents										

Mitigation Measures	Demosth	Monitoring Scheme				Monitoring Log		
	Responsible Party	Indicators	Data source/ method	How often	Estimate d cost	Date	Result	Follow-up
 of drying shed and the training on use and maintenance of the smoking ovens IP shall create awareness among users on the environmental damage of unsustainable use of grown woodlots 4. Safety and health 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). 							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. 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. Issues on safety gears and the need for a first aid kit are being discussed.	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.