Annex 5 – Final Progress Report

   1. Identification:

Partners Name: Wildlife Division

Budget line: BAC [*SSFA/2023/5995*]

POW 2018-2019 Sub-programme: [*2019-32EAP-11267-SB-00676-14AC0004*]

Expected Accomplishment(s):

   1. Train and equip wildlife staff and local communities in appropriate HEC approaches;

   2. Increase awareness on forest elephant conservation and management among key stakeholders including local communities;

   3. Reduce human wildlife conflicts.

Output(s):

   1. OUTPUT 1: Identify key areas of HEC

   2. OUTPUT 2: Carry out sensitization on HEC

   3. OUTPUT 3: Assess cropping patterns and other land use practices

   4. OUTPUT 4: Map and inventorize the small-holder farmers within the target area

   5. OUTPUT 5: Identify innovative local practices that are effective HEC

   6. OUTPUT 6: Assess appropriateness of other applicable techniques for HEC

   7. OUTPUT 7: Train Target Groups on HEC Mitigation techniques

   8. OUTPUT 8: Project Evaluation

[Title of the approved PRC project: [*Mitigating Human-Wildlife Conflict around Bia Conservation Area through Community Participation*]

SSFA starting date: **16/02/2023**

Completion date: **31/09/2023**

2. **Summary of Status:**

Main Achievements

a. Community engagements, sensitization, awareness and education done at all levels to build trust and cooperation, and dispel wrong notions build up over time to ensure a successful implementation of HEC measures

b. Hotspot communities identified through analysis of both historical data and field monitoring

c. Innovative local practices compiled and listed for each of the hotspot

d. Coordinates of 11 hotspot communities taken and mapped

e. Coordinates of 150 farms within the 11 hotspot communities taken and mapped

f. The 150 farms monitored to access, understand and access the level of destruction

g. Satellite imageries of the area and the sites obtained

h. Cropping patterns identified with cashew being one of the new delicacies for the elephants

i. Staff trained on SMART and the use of GPS to effectively monitor elephant activity in and around BCA

j. Staff trained on assessment of raided farms and to pick relevant information to continually enrich the HEC database system of the park

k. Community Volunteer Squads of 12 people each in all the 11 hotspot communities formed with each of them having at least 2 females with a female as the assistant leader of a squad

l. Implements like blasters, torchlights, cutlasses, raincoats, wellington books given to the volunteers, farmers and community members to fight off elephant raids

m. Volunteers trained on HEC control measures and implementation of the control measures.

Main Implementation Challenges

a. The late start of the project meant a late implementation of engagement and intervention measures

b. The lack of trust in the control measures because they have used some previously and it did not give a lasting solution. For them the only solution is to kill the leader of the head of elephants. Convincing them that will not give a lasting solution was a major challenge

c. The believe that they are entitled to compensations anytime their farms are raided

d. Farming activities are now close to the park, increasing elephants raid on farms

e. The belief that the Wildlife Division has all the solutions to elephant raids

f. Introduction of cashew as a new cash crops by farmers in the fringes of the park which are debarked by the elephant.

g. Erasing the erroneous belief that elimination of the leaders of the groups of elephants will bring the problem of farm invasions to or an or at least prevent them from coming for some years

h. The inability to introduce alternative livelihoods which was something all the hotspot communities called for

i. The inability to develop the capacities of the volunteers to develop skills in farm raid reporting, farm inventory and GPS use. This would have gone a long way to strengthen the group and improve the collaboration and coordination between the park and the volunteers

j. Availability of chilli pepper for the "pepper grease" method was a major challenge. The introduction of chilli pepper farming at boundaries of farms will not only serve the purpose of serving as a barrier to prevent elephant invasions but will also be a source of chilli pepper for the implementation of the "pepper grease" techniques even by the farmers themselves when the effectiveness goes down

Lessons Learnt

a. One of the lessons leant was that the elephants now have a new taste for cashew crop and so it might not be advisable to go into cashew planting in elephant prone areas

b. From the comments and reactions during the community engagements it came out that the park needs to research into the elephant population in the park, water availability, food availability in the park and seasons for crop raiding to see if they are in line with their observations

c. The inclusion of women representatives and executives from the CREMA and HIA/HMB made the local people more receptive and accommodative

d. The use of the media and community leaders like chiefs and Assembly men improved greatly visibility and acceptance

e. Employing multiple techniques will be a more effective way in HEC measures than a single technique which makes it easy for the elephants to overcome them

f. Because of the multiple techniques covering 150 farms, it meant a lot of resources was needed in the implementation and demonstration stage to cover a lot of the farms identified

3. **Activity delivery status**

Activity	Description of work undertaken during reporting period	Deliverables	Delivery date	Status of Activity (completed or not completed	If activity not completed, please describe the reason why and indicate mitigation actions that were taken.
Activity 1: Identify key areas of HEC					
1.1: Community engagement	Based on historical data of reported cases of elephant farm raids in the last 5 years, Communities in the southern part of the park were visited and the communities and identified stakeholders (chiefs, community elders, opinion leaders, women groups, COCOBOD etc) engaged in a meeting to get the current situation of	Southern part of the park visited and the

Communities engaged on farm raids | 24/02/23 | Completed | |

	elephant raids and a general view of crop raids in the area.				
	A meeting was also scheduled at the District Assembly were all Assembly members in the district were met to inform them to prepare their communities in their electoral areas to ready themselves for the project	Assembly members met to inform them of project and encouraged to prepare their communities for maximum cooperation			
1.2: Desk study	Armed with the work done in activity 1.1, and with the parks own historical data among other relevant data available to the park, an analysis was done of the different communities identified. The analysis came out with 11 communities as the hotspots where the most crop raids are experienced.	11 communities selected as the hotspot areas	15/03/23	Completed	
	Further analysis was conducted to establish the frequency and period of these raids to establish a certain pattern among the 11 communities selected.	Frequency and patterns established among the 11 communities			
	A questionnaire was then designed to help gather more indebt information				

	during the next two stages (1.3 and 1.4)	Questionnaire designed			
1.3: Field monitoring	The farms within the 11 selected communities were visited to get firsthand on farm information on the affected farms. It is at this stage that the designed questionnaires were used to get detailed information on the farms. Information like the size of farm, the last time the farm was raided, estimated cost of raids, frequency of raids in the last 5 years, maturity stage at which farms are mostly raided, group that raided among others.	Farms visited and several parameters and responses recorded using designed questionnaires	31/03/23	Completed	
1.4: Map of key areas (hotspots) around the park with HEC	Coordinates of the 11 key hotspot communities identified taken.	Coordinates of 11 hotspot communities taken.	07/04/23	Completed	
Activity 2: Carry out sensitization of HEC					
2.1: Select target groups for sensitization on HEC	Visits were made to the 11 hotspot communities for sensitization and education on HEC	11 hotspot communities sensitized on HEC	23/04/23	Completed	
2.2: Organize community sensitization durbars on HEC	Community durbars were then held after educating and sensitizing farmers on HEC	Durbars held in 11 hotspot communities	29/04/23	Completed	

Activity 3: Access cropping patterns and other land use practices					
3.1 Obtain satellite imagery for the site	Satellite image for the site was obtained in March	Satellite image obtained	31/03/23	completed	
3.2 Classification and ground truthing	Image was classified and ground truthing at the hotspots through field visits and interaction with farmers.	Image classified and ground truthing at site			
3.3 Map cropping patterns and other land use practices	Cropping pattern and detailed gathered from farm visits.	Crops on one hundred and twenty-four farms visited by elephants compiled and mapped	30/05/23	Completed	
Activity 4: Map and inventorize the smallholder farmers within the target areas					
4.1: Visit and pick GPS points of small holder farms and owners at target area	The team took GPS points in 150 farms within the 11 hotspot communities	Coordinates of 150 farms in the hotspot communities taken	09/05/23	Completed	
Activity 4.2: Compile data and map smallholder farms at target area	GPS coordinates picked from the 150 farms were compiled, analyzed and mapped	Mapping, compilation and analyses of coordinates achieved	12/05/23	Completed	
Activity 5: Identify innovative local practices that are effective HEC					

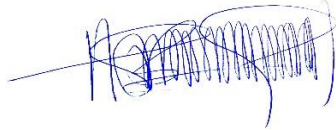|					
5.1: Identify key stakeholders for engagement on local practices	A desk study was done to identify the different key stakeholders on local practices.	A list of different stakeholders compiled for their responses on some of the local practices	16/05/23	Completed	
5.2 Engage stakeholders on innovative local practices for HEC	A questionnaire was designed for responses on different local practices used Visits to the 11 communities to engage them on local practices for HEC Radio, FM and local information centre programmes organized to receive responses from different sources and people within the district on local practices for HEC	Questionnaire designed Communities engaged on local practices for HEC programmes held on radio, FM and information centres for responses from diverse sources on local practices for HEC	26/05/23	Completed	
5.3 Compile local practices that are effective for HEC	A compilation of local practices listed and the effective ones filtered based on the engagements and activities in 5.2	A compiled list of effective local practices for HEC archived	28/05/23	Completed	
Activity 6 – Assess appropriateness of other applicable techniques for HEC					
6.1: Identify other HEC techniques used at other sites	Different sites were visited to identify HEC techniques used in those sites	HEC techniques in other sites identified	11/06/23	Completed	

6.2: Evaluate appropriateness of techniques for HEC	The different techniques identified in 6.1 were analysed to understand their effectiveness in the areas used and their suitability in employing them in the 11 hotspot areas.	Different HEC techniques in other sites analyzed and their suitability in the hotspot areas understood	20/06/23	Completed	
6.3: Compile appropriate techniques for HEC	After a careful analysis of the different HEC mitigating techniques in 6.2, a list of the mechanisms identified as appropriate in the hotspot areas were compiled based on suitability of the local conditions	A compilation made of appropriate techniques for HEC in the hotspot areas	26/06/23	Completed	
Activity 7 – Train target groups on HEC mitigation techniques					
7.1: Prepare training and capacity building modules	SMART and GPS training and capacity building modules were developed for park staff	SMART and GPS training and capacity building modules developed for staff.	04/07/23	Completed	
7.2: Train target group and park staff on HEC and monitoring	9 Park staff made up of 4 management staff and 4 field staff were trained in the use of SMART and GPS for HEC monitoring and reporting. Community Volunteer Squads were formed in each of the 11 hotspot communities. Each community Volunteer Squad formed was made up of twelve (12) community members with at least two (2) out of the 12 members being	9 Park staff trained in the use of SMART and GPS for monitoring and reporting of HECs. Community Volunteer Squads formed in the 11 hotspot communities	25/07/23	Completed	

	women. A leader was chosen for each of the groups with a woman being an automatic assistant to each group if the leader chosen was not female. They were trained on their responsibilities and duties in preventing and controlling HECs in their respective communities	Volunteer squads trained in preventing and responding to HEC situations			
7.3: Support target group to implement control	Each community volunteer squad was supported with 4 blasters, wellington boots, raincoats, flash/torch lights, cutlasses to support in their HEC control activities. They were then taken through on-the-field and practical HEC mitigating techniques with emphasis on multiple application of techniques like the pepper grease technique, chilli bomb and use of the blasters	Community Volunteer Squads supported with HEC mitigating implements. Volunteer Squads taken trough practical and on-the-field training on HEC mitigating techniques	17/08/23	Completed	
7.4: Set up monitoring of elephant and HEC database at Park	A database has been developed to monitor elephant and HECs around the Park.	A database setup at the Park for monitoring HECs	23/08/23	Completed	
Activity 8 – Project evaluation	Inception meeting				
8.1: Evaluation	Inception meeting on project outputs and activities. Technical support and quality control of project interventions. Reporting	Quality control of project interventions, Interim monitoring and report, Final evaluation and report	07/09/23	Completed	

List of Attachments:

I.   Full Final Report on Mitigating Human-Wildlife Conflict around Bia Conservation Area through Community Participation

Date: 18th September, 2023

Name of signing officer:

Bernard Asamoah Boateng