

Draft



**Modern City Hotel
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INCEPTION WORKSHOP ON THE LAUNCH OF ADAPTATION FUND PROJECT



Compiled by

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List of Acronyms

AC	Adaptation Committees
AF	Adaptation Fund
CEMC	Community Environmental Management Committee
CCA	Climate Change Adaptation
CREMA	Community Resources Management Area
CWSA	Community Water and Sanitation Agency
DEMC	District Environmental Management Committee
DCEs/MCEs	District/ Municipal Chief Executives
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
FC	Forestry Commission
GEMP	Ghana Environmental Management Project
MDGs	Millennium Development Goals
GoG	Government of Ghana
MESTI	Ministry of Environment, Science, Technology and Innovation
MoFA	Ministry of Food and Agriculture
M&E	Monitoring and Evaluation
MTDPs	Medium Term Development Plans
NCCAS	National Climate Change Adaptation Strategy
NEA	Northern Empowerment Association
NR	Northern Region
PEGEV	Project for Improving Water Governance in the Volta basin
RCC	Regional Coordinating Council
SADA	Savannah Accelerated Development Authority
SLWMP	Sustainable Land and Water Management Project
ToR	Terms of Reference
UER	Upper East region
UWR	Upper West Region
UNDP	United Nations Development Programme
VSLA	Village Savings and Loans Association

1.0 Introduction

Managing freshwater bodies in Ghana is an urgent and significant development issue, since most rivers and streams are drying up due climate change, among others. Recognizing the importance of improving of water access, increase institutional capacity and coordination for integrated water management to climate change resilience and diversification of livelihoods, among others uses in Ghana, the Ministry of Environment, Science, Technology and Innovation (MESTI), through funding from the Adaptation Fund Board and in partnership with the United Nations Development Programme (UNDP) has initiated the Adaptation Fund (AF) Project “*Increased Resilience to Climate Change in Northern Ghana through the Management of Water Resources and Diversification of Livelihoods*”. It is a four year project (2016 to 2020) which aims at building resilience and adaptive capacity of rural livelihoods to climate variability through improved management of water resources in ten (10) districts of the three (3) Northern Regions (NRs) of Ghana.

In order to formally inform and launch the Adaptation Fund (AF) Project, a two-day inception workshop was organised between 23rd and 24th May 2016 at Modern City Hotel in Tamale to introduce the AF project to the key stakeholders in the ten (10) beneficiary districts of the 3 NRs of Ghana and build partnership with institutions in water resource management. The meeting was articulated around key activities of the project and implementation processes. At the end of the meeting, the group discussed reviewed activities and timelines of the project (see Appendix 8), that guided finalization of the project work plan (Appendix 9), shared relevant experience with the project team, provided guidelines for setting up an effective adaptation committees at regional, district and community levels, and proposed criteria for selection buffer zone communities of the beneficiary districts (Appendix 10).

This report represents the proceedings and discussions of the 2-day High level and Technical Sessions held at the launch of the project in an inception workshop.

1.1 The Workshop Objectives

This inception workshop was designed to achieve the following objectives at both the high level and the technical sessions

1.1.1 High level session

- To officially inform and launch the project to the key stakeholders of the 3 NRs;
- Foster high-level commitment and leadership to support the Project;
- Show case and commend AF Board in supporting the Project;
- Create opportunity for the key stakeholders and actors to deliberate on the project activities;
- Share experience of similar initiatives from northern Ghana;
- Build public interest around the issue of climate change and water resource management practices.

1.1.2 Technical Workshop

- Gather information regarding recent climate change adaptation on water resource management activities in Northern Ghana to ensure coordination/collaboration and avoid duplication of efforts;
- Explore technical methodologies and background information in regard to monitoring and evaluation (M&E) and selection of pilot site in the beneficiary communities of the project;
- Get practical feedback to the project document and work plan.

1.2 Deliverables

The workshops contributed in producing the following deliverables:

- Final comments to project output and core activities (refer to annex 4);
- Final project work plan;
- List of possible functional actions and institutional arrangement the could support the implementation of the project;
- Discussions on experience from similar project in Northern Ghana;

- Revision of project document reflecting comments and suggestions from the workshop;
- Guideline for selection of climate change adaptation (CCA) committees at regional, district and community levels;
- Guidance to terms of reference (ToR) for selection of pilot project site.

2.0 Day One - High Level Session

2.1 Workshop Opening

The workshop started at 9:15am with an opening prayer from Pastor John Manu, the Regional Director of Ministry of Food and Agriculture (MoFA), Upper East region. This was followed by introduction of dignitaries and participants as shown in Figures 1 and 2 below.



Figure 1: Dignitaries at the Launch of the Adaptation Fund Project in Tamale:
 From L to R: Mr Diouf Henry Rene, Regional Technical Adviser, UNDP GEF, Addis Ababa Regional Service Center; Ms. Christine Evans-Klock, UN Resident Coordinator for the Republic of Ghana; Hon. Mahama Ayariga, Minister for Environment, Science, Technology and Innovation; Mr John Pwamang, Deputy Executive Director, Operations, Environmental Protection Agency (EPA) and Alhaji Issahaku Alhassan, Chief Director representing the Regional Coordinating Director of the Northern Regional Coordinating Council (RCC)

2.2 Participation

Over 80 participants from national institutions, development partners and regions of the beneficiary districts attended the workshop. These include Traditional Authorities, Regional Coordinating Directors, Economic Planning Officers, Civil Society Organizations, Media and

Regional Directors of related government departments. In addition to the above District level stakeholders including District/ Municipal Chief Executives (MCEs/DCEs) and representatives of Community Resources Management Areas (CREMAs) from communities where similar initiatives are going on were present to share their experiences (Fig 2). The list of all the participants of the AF project Inception workshop and agenda are provided in Appendices 1 and 2.



Figure 2: Participants at the Launch of the Adaptation Fund Project at Tamale in Ghana

2.3 Statements and Formal Launch of the Adaptation Fund Project

– Welcome address by Alhaji Issahaku Alhassan

The Chief Director, Alhaji Issahaku Alhassan, presenting the welcome address of the Regional Coordinating Director of the Northern Regional Coordinating Council (RCC) indicated that climate variability and change is a major concern in the 3 NRs. The interventions of AF project which is going to enhance adaptive capacity of rural communities, improve management of water resources and diversify livelihoods is timely. He declared that most communities in Northern Ghana have suffered a lot from extreme events of flood and drought, for instance in Chereponi and West Gonja districts.



He therefore urged the participants to contribute positively to the discussions in order to help achieve the objectives of the project. In his conclusion statement, he hoped that the implementation of the adaption fund project will enable vulnerable communities to effectively adapt to climate change impacts.

- Statement by the UN Resident Coordinator, Ms. Christine Evans-Klock



The UN Resident Coordinator, Ms. Christine Evans-Klock described climate change as one of the major threat to Ghana’s growth and development. Climate change impacts she noted affected negatively on the economic activities and livelihoods of Ghanaians. Additionally, she noted that 35% of Ghana’s land is prone to desertification making the country most vulnerable to climate change impacts.

She also indicated that, Ghana is expected to be water stressed by the year 2020, changing from the marginally vulnerable category in the 1990s. Madam Christine assured participants that the UNDP will continue to provide technical direction and funds to the country and MESTI in the implementation of the project. The full statement is presented as Appendix 3.

Statement by the Deputy Executive Director of the Environmental Protection Agency, Mr. John Pwamang

On behalf of the Executive Director of EPA, Mr. John Pwamang appreciated the collective support of UNDP to EPA and the Ghana government for the development, approval and implementation of the Adaption Fund Project. He reiterated the need for the country to protect river basins in Ghana and managed them as productive resources. He highlighted on some of the major environmental issues including land degradation through bushfires, illegal mining and chain saw operations resulting



in the already fragile environment with sparse vegetative currently covering streams and river basins.

He suggested options for mitigating the environmental issues, highlighting on protection of buffer zones, tree planting, community woodlot development, good agricultural practices. He ended up his statement by thanking all stakeholders including the UNDP and Adaptation Fund Board for providing technical and financial support for the implementation of the project in Ghana. The full statement is presented as Appendix 4.

– Keynote Address and Launching of the Adaptation Fund Project by the Hon Minister Ministry of Environment, Science, Technology and Innovation, Hon. Mahama Ayariga

The Honourable Minister of Environment Science, Technology and Innovation (MESTI) and Member of Parliament of Bawku Central, Hon. Mahama Ayariga addressed participants of the inception workshop and launched the Adaptation Fund Project. He stated that, protecting fresh water bodies is really an urgent and significant issue in Ghana, since major rivers and streams are all drying up due to climate change. Hon Ayariga reiterated the need for the country to use integrated water resource management to enhance accessing water and to achieve the Millennium Development goals (MDGs).



He stressed on the objective of the Adaption Fund to increase resilience to climate change in the three Northern Regions of Ghana through management of water resources and diversification of livelihoods. He called for the need to take opportunity of the project activities to translate the national climate change policies into action, in order to override the challenges of climate change through livelihood enhancement, livelihood diversification, ecosystem protection and enhancement and community level water infrastructure planning.

He stated that the project will build up financial, natural, physical and social capital of the communities for about 60,000 people to have direct benefit on the project. He also added that, over 8 million indirect number of beneficiaries covering the entire population in the Volta River Basin would also benefit on the project. He therefore thanked Adaptation Fund Board and UNDP for providing both technical and financial support for this project. He called on everyone present to support in the implementation of the project to enable them adapt effectively to climate change impacts and reduce poverty. The full statement is presented as Appendix 5.

3.0 Technical Presentations

- **Presentation on the Overview of the Adaptation Fund project by the Project Technical Officer, Dr. Emmanuel Tachie Obeng**



The main presentation on the project was done by Dr. Emmanuel Tachie Obeng, the Technical Officer of the project. He gave an overview of the AF project which including the major components, outcomes, core activities and implementation framework of the project. He aligned the project to implementation of the priority areas of the National Climate Change Adaptation Strategy (NCCAS).

According to him, more than 85% of the project funds has been allocated to community level climate resilient activities, diversification of livelihoods and management and planning of water resources. The project execution budget, which constitute only 6.4% of the entire project cost is presented as Appendix 6.

He elaborated on the significance of the AF project in the implementation of the riparian buffer zone policy to ensure protection of river basin through livelihoods support programmes in 10 beneficiary districts of the 3 NRs. He ended his presentation by elaborating on key objectives of the workshop with MESTI/EPA responsible for implementation of the project and United Nations Development Programme (UNDP) as Multilateral Implementing Entity.

The full presentation is presented as Appendix 7.



Figure 3: The Project Coordinator, Mr Peter Dery facilitating the plenary of the inception workshop in Tamale, Ghana

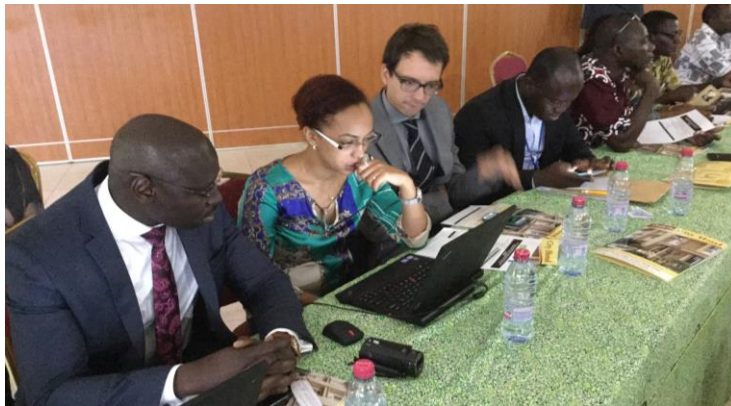


Figure 4: Cross section of participants at the AF Inception workshop in Tamale, Ghana

3.1 Lessons from similar project in Northern Ghana

Two (2) presentations were made from similar projects that have been implemented in Northern Ghana by the following project managers (see Appendix 2a):

1. Project for Improving Water Governance in the Volta basin, Maxwell Boateng–Gyimah
2. Ghana Environmental Management Project, Isaac Acquah

Key lessons and experiences revealed by the project managers are as follow:

- A good understanding of the socio-economic and cultural contexts of the beneficiary population helps in the community entry and mobilization process;
- Communities are willing to participate in water and other natural resources conservation when the benefits are directly linked to their local livelihoods;
- Encourage facilitating experience sharing across borders and motivating performance among communities;
- Managing community expectations/demands at all levels require creation of a balance for demand accountability from duty bearers. This has proven to be effective.
- Learning should be strengthened across regional/district/community technical structures in terms of annual review meetings to support effective planning and management of project actions.

3.2 Administrative guidance from UNDP Regional Technical Advisor

This session was meant to inform participants on the administrative procedures of the Adaptation fund Project. According to Mr Diouf Henry Rene, the Regional Technical Adviser at the UNDP Regional Service Center, the goals of his presentation is to provide administrative direction to guide implementation of the project. The main points of the presentation were based on the following:

- A. Roles, responsibilities and requirements of the key project stakeholders (see Appendix 6)
 - i. Project Implementation Responsibilities
 - ii. UNDP-GEF Project Cycle
 - iii. Reporting Requirements of UNDP & AF

B. Monitoring & Evaluation Milestones and Requirements

- i. Inception Workshop
- ii. Project Midterm
- iii. Project Closure
- iv. Other M&E tools (Social and Environmental Screening Procedure, Project Performance Report, Adaptation Funds Tracking Tools, Gender Analysis)
- v. Project monitoring and evaluation plan and budget

C. Tools and tips for project results-based management

- i. Adaptive Management
- ii. Project Results Framework and
- iii. Risk Management

3.3 Contributions from participants

Subsequently participants were asked to discuss the presentations and share their experiences to reflect objectives of the AF project as follows:

- The Honourable Minister requested that, participants critically review the project work plan of the project, so that some of the field interventions could take place in the first year;
- Participants reiterated the need to integrate the Adaption Fund project to on-going climate change projects and medium-term development plans (MTDPs) of district assemblies;
- Most participants expressed the need to create a learning platform to share project implementation activities, knowledge and experiences to avoid the duplication of resources and efforts;
- Participants expressed concern of the sustainability of the project by developing a sustainability or exit strategy for the project at the beginning of the project;
- Participants also urged the project team to adopt best practices, good experiences and lessons from other projects into the adaptation fund project;

- Participants recommended that tree growing activities of the adaption fund project should include economic trees. Tree species should be carefully selected such that they are adaptable to local conditions of the project area;
- Inventory of all the project beneficiary districts should be carried out to collaborate, build on and complement on existing project activities;
- Continuous sensitization of beneficiary communities is very important to ensure behavioral change in communities;
- The need to dedicate resources and time to field activities during the implementation of the project to attain results;
- There is the need to promote growing of indigenous tree species and to ensure that indigenous trees are maintained in the project communities;
- Other key stakeholders such as Community Water and Sanitation Agency (CWSA), Academia and Forestry Commission (FC) and SADA should be included in the implementation structure of the project;
- Core activities of the adaption fund project should be mainstreamed into activities of regional programmes of EPA to ensure sustainability of the project;
- Participants also recommended considering adoption of the implementation structure of GEMP to avoid formation of new governance structure for the adaptation fund project.
- The project should consider developing and/or enforcing by-laws as one of the outcomes;
- There is the need to promote natural regeneration of indigenous trees species along the buffer zones;
- Development of tree nursery and tree planting should be considered from the first year of the project. Other field activities like, creation of buffer zone, and development of woodlot, fodder banks and fires belts, supply of equipment for dry season farming and construction of boreholes should start from the first year;
- During project implementation, key national institutions should be assigned to specific activities of the project;
- There is the need to develop criteria for selection of beneficiary communities at the district level;
- Environmental and social assessment need be considered in the project implementation;

- The project should consider active involvement of the various district and metropolitan assemblies to facilitate the implementation and monitoring of the project;
- The Village Savings and Loans Association (VSLA) concept should be used as tool to mobilize funds within the community members as part of the livelihood support programme;
- Conscious efforts should be made to mainstream gender activities; especially women in the project since women-led activities have been found to be successful;
- There is the need to collaborate with the research division Ghana Cocoa Board to incorporate shea nut as an economic trees in the project and
- Participants revealed the importance of incorporating cultural values in the buffer zone protection processes and proposed to the project team for adoption.

4.0 Day Two

4.1 Group Work on Project Outcomes

The objective of the group work is to review the core activities of the project outcomes. Participants at the workshop were put into three groups under the following categories of the project:

1. Improving planning and management of water resources taking into account climate change impacts on surface and ground water resources water resources
2. Ensuring climate resilient management of water resources by committees
3. Enhancing diversification of livelihoods of communities in Northern Ghana.

Tables 1, 2 and 3 summarize the comments given by the various groups on the project outcomes

The full presentation is presented as Appendix 8.



Figure 5: Participants at the AF project inception workshop in their various groups

Table 1: Comments of group 1 on the project work plan

OUTPUTS	CORE ACTIVITIES	COMMENTS
1.1	Conduct trend/historical analysis of the impact of climate variability on the White, Black and Oti River basins.	<ul style="list-style-type: none"> • Possible in year one
	Generate climate change projections for the White, Black Volta and the Oti River basins	<ul style="list-style-type: none"> • Develop (replaces generate) climate change projection models for the Volta Basin • Possible in year one
	Volta Conduct a vulnerability analysis of communities along the White and Black as well as the Oti River basins	<ul style="list-style-type: none"> • Possible in year one
1.2	Review White Volta management & investment plans	<ul style="list-style-type: none"> • Review White Volta Management plan • Complete the development of the White Volta investment plan
	Develop Black Volta & Oti River management & investment plans	<ul style="list-style-type: none"> • Move this to Output 1.3
1.3	Carry out an assessment of existing water management activities along the rivers	<ul style="list-style-type: none"> • Output 1.3 should read climate smart water management and investment plans instead.
	Develop/review community/district based water management plans to include tributaries	<ul style="list-style-type: none"> • Development of sub-basin/watershed plans rather than district plans to take care of the Black Volta and Oti plans
	Identify/form and train water management committees in the various districts and communities.	<ul style="list-style-type: none"> • Can be started in year one, but will carry through to the second year.
1.4	Identify/form and train water management committees in the various districts and communities.	<ul style="list-style-type: none"> • Possible in year one

	Expand existing Ghana Environmental Management Project regional committees to be more inclusive of relevant institutions	<ul style="list-style-type: none"> • Possible in year one • Maintain existing (DEMC) name of the committees and expand if need be
	Identify existing/establish district and community adaptation monitoring committees	<ul style="list-style-type: none"> • Possible in year one • Maintain existing (DEMC) name of the committees and expand if need be
	Build capacity of district and community adaptation monitoring committees on Disaster Preparedness, Management and Coordination	<ul style="list-style-type: none"> • Possible in year one • Capacity building should include the REMCs • Capacity building should be throughout the project period

Table 2: Comments of group 2 on the project work plan

OUTPUTS	CORE ACTIVITIES	COMMENT
2.1	Conduct an inventory/feasibility study of existing water resources and vulnerabilities	<ul style="list-style-type: none"> • We need baseline information to inform the project layout.
	Design water supply systems suitable for 30 communities	<ul style="list-style-type: none"> • Secondary data is already available. • It provides the framework for the execution of project activities
	Form/ train existing water management committees	<ul style="list-style-type: none"> • The management committees are essential in the entire project life span
2.2	Construct/rehabilitate existing dugouts	<ul style="list-style-type: none"> • The activity will not be feasible in year one • We need baseline information before construction can be done.
	Construct/Repair broken gravel (earth) dams	<ul style="list-style-type: none"> • physical construction cannot be done in the first year
	Desilt dams/dug outs etc.	<ul style="list-style-type: none"> • Some feasibility studies should be first carried out
	Construct sand dams	<ul style="list-style-type: none"> • The first year is occupied with feasibility studies and project designs
	Support rain water harvesting	<ul style="list-style-type: none"> • The construction of reservoirs precede the water harvesting
	Incorporate water harvesting into (existing) roads / roads under construction. (weirs)	<ul style="list-style-type: none"> • Technical information required in the construction of weirs
	Drill boreholes	<ul style="list-style-type: none"> • The best time to construct boreholes is after the feasibility studies
2.3	Mechanize high yielding boreholes/dugouts for irrigation	<ul style="list-style-type: none"> • The second year will be used for the construction and testing of boreholes whiles the third year will be used for

		mechanization
	Supply pipes, diesel generators, sprinklers, watering cans for irrigation	<ul style="list-style-type: none"> • Availability of existing data and dams (Ghana Social Opportunity Projects)
	Construct reservoirs and supply materials for drip irrigation	<ul style="list-style-type: none"> • Feasibility studies preceding the construction of the reservoirs
	Install solar irrigation systems	No comment
2.4	Establish tree nurseries for catchment/river bank re-afforestation schemes.	<ul style="list-style-type: none"> • To ensure effective induction of seedlings for onward transplanting
	Create buffer zones	<ul style="list-style-type: none"> • Ok
	Plant vertiva grass/ and other cover crops	<ul style="list-style-type: none"> • Ok
	Support District Assemblies & Traditional Authorities to promulgate/enforce bye-laws to protect water bodies and their catchment areas.	<ul style="list-style-type: none"> • Ok
	Introduce terracing and plant fodder such as albezies along river banks	<ul style="list-style-type: none"> • Ok
	Support ongoing advocacy of DAs & TAs to curb illegal mining within catchment of water bodies	<ul style="list-style-type: none"> • Ok
2.5	Institute district/community award schemes & study tours	<ul style="list-style-type: none"> • Some activity must be done on the ground before awards can be given
	Hold reflection and annual review meetings & learning festivals	<ul style="list-style-type: none"> • Some activity must be done before reflection
	Embark on media outreach	<ul style="list-style-type: none"> • Communication is one of the means for the spread of information to the people
	Organize participatory scenario planning sessions	<ul style="list-style-type: none"> • Water resource planning is participatory from beginning to the end
	Create websites	<ul style="list-style-type: none"> • Capture project data from the commencement of the project to the completion
	Radio and TV broadcast	<ul style="list-style-type: none"> • People need information about the project from the beginning to the end
	Institutionalize best practices	<ul style="list-style-type: none"> • Helps to inform project planning implementation and evaluation.

Table 3: Comments of group 3 on the project work plan

OUTPUTS	CORE ACTIVITIES	COMMENT
3.1	Construct/repair irrigation canals Conduct feasibility studies	<ul style="list-style-type: none"> • Construction would have to be done in the dry season and we are already in the raining season • Promote sinking of shallow wells along river beds that dry up e.g. Mognori river in Bawku municipal
	Install small scale solar pumps	<ul style="list-style-type: none"> • In the dry season of the second year in October and November
	Install/supply diesel generator water pumps	<ul style="list-style-type: none"> • Water pumps needed • Should be started as soon as possible following the procurement process by November then it takes off • Identification of beneficiaries
	Lay pipes for irrigation	<ul style="list-style-type: none"> • January second year during the dry season
	Install community based reservoirs for drip irrigation systems	<ul style="list-style-type: none"> • Pre-feasibility studies should start November 2016
3.2	Supply inputs for dry season gardening e.g. Seeds, small water pumping machines, water horses etc.	<ul style="list-style-type: none"> • Sensitization of farmers towards the end of 2016
	Support community based bee keeping with hives and training	<ul style="list-style-type: none"> • This will start in October after the rains • Introduce bushfire trainings by October 2016
	Introduction of village saving associations	<ul style="list-style-type: none"> • Around October this year
	Train charcoal producers on efficient methods of production	<ul style="list-style-type: none"> • Next year
	Build capacity of women groups in shea butter/groundnut oil extraction	<ul style="list-style-type: none"> • Procurement of equipment for shea butter and groundnut extraction • Including Shea nut picking • Processing of Dawadawa and baobab fruits • Capacity building of women groups
	Provide support for small ruminants production for women and youth groups	<ul style="list-style-type: none"> • Procurement of equipment in Jan 2017 • Identification of groups • Should be linked to tree growing not just planting them.
	Introduction of village saving associations	<ul style="list-style-type: none"> • Around October this year
	Train charcoal producers on efficient methods of production	<ul style="list-style-type: none"> • Next year 2017
Build capacity of women groups in shea	<ul style="list-style-type: none"> • Procurement of equipments for Shea 	

	butter/groundnut oil extraction	<p>butter and groundnut extraction</p> <ul style="list-style-type: none"> • Including Shea nut picking • Processing of Dawadawa and baobab fruits • Capacity building of women groups
	Provide support for small ruminants production for women and youth groups	<ul style="list-style-type: none"> • Procurement of equipments in Jan 2017 • Identification of groups • Should be linked to tree growing not just planting them.
	Provide support for poultry/guinea fowl production	<ul style="list-style-type: none"> • Almost every household has something doing in that direction • Provision of hatchery for farmers • New knowledge by bringing farmers together to share knowledge • Support to areas with comparative advantage in guinea fowl/poultry production
	Capacity building of women groups in improved rice processing eg. Bolga rice technology	<ul style="list-style-type: none"> • Identification of groups and also procurement of equipment
3.3	Establish/adapt community nurseries for seedling production. Not need to establish new ones.	<ul style="list-style-type: none"> • Use of GEMP strategic nurseries rather than establishing new ones. • Support those nurseries with no water to get water e.g. borehole
	Plant economic trees in river catchment areas	<ul style="list-style-type: none"> • Planting of mixture of trees that are conducive to the local conditions • Tree planting must start this year by June • Create fire belts and train fire volunteers in October 2016
	Protection of scared groves	<ul style="list-style-type: none"> • Around October 2016
	Protect all trees in water catchment areas	<ul style="list-style-type: none"> • Fencing should start by October this year
	Establish community woodlots	<ul style="list-style-type: none"> • Need to start by June 2016 • Introduce natural regeneration and in October 2016 • Undertake enrichment planting in July 2016 onwards
3.4	Introduce cage fishing in constructed/rehabilitated water bodies	<ul style="list-style-type: none"> • But then small dams /dugouts might have been rehabilitated
	Support the establishment of community based fish ponds	Okay with that
	Encourage and regulate wild fishing	Self-safe guarding since they know the benefit

	Supply inputs such as fingerlings and nets for wild fishing and cage fishing	<ul style="list-style-type: none"> • Okay with that • Support/rely on NEA at carpenter in the Bole district for fingerlings if possible
3.5	Produce and disseminate brochures, maps, video documentaries	<ul style="list-style-type: none"> • Educate people using good practice and therefore should start in the first year
	Create website	<ul style="list-style-type: none"> • Is okay in the second year
	Radio and TV broadcast	
	Institutionalize best practices	

5.0 Recommendations

On recommendations, the participants made the following suggestions:

- Sensitization programmes/workshops should be taken a step further to the districts to the door steps of the direct beneficiaries;
- The UNDP should make the release of funds timely according to the action plan;
- Suggestions and recommendations made at the inception workshop should be given attention for a successful implementation of the project;
- Each region adopt a strategy to plant and nature tree seedlings not only at the buffer zone of rivers and dams, but also in schools of the beneficially communities;
- Introduce the Village Savings and Loans association (VSLA) concept in communities to add value to peoples livelihoods and to divert their attention from exploitation of fuel wood and other environmental public goods within the beneficiary project communities
- Payment for environmental services scheme in project area be encouraged to offset investment made in project implementation. This model should be implemented in year two.

6.0 Conclusion

The inception workshop provided a good platform for participants from key stakeholders of particular interest in climate change and the environment in general. The rich experience of the participants was shown in the submissions, suggestions and contributions they made at the inception workshop. The interest and zeal in which participants participated indicated their readiness for a successful implementation of the Adaptation Fund Project in the three (3) Northern regions.

Evaluation

As part of the workshop, participants were asked to complete a structured questionnaire (attached as Appendix 10) which touched on all aspects of the workshop. Participants of the workshop came from various institutions, with about half (46%) of them from national government and the least from the private sector (Table 4).

Table 4: Sector composition of participants in the inception workshop

Sector	National government	District/ Municipal Assembly	Traditional Authority	Development Partner	Civil Society	Private sector	Academia
Frequency	22	9	4	2	6	1	4
Percent (%)	46	19	8	4	13	2	8

With regards to the objectives of the workshop, majority of the respondents (70%) were of the view that the objective of the workshop is mostly met, with 34% and 64% describing their understanding of the content as completely and mostly clear respectively. Again 65% described the information they have acquire as useful, with 60% indicating that it is relevant to their job (60%). On coordination arrangement, 62% of the respondents indicated that the arrangement was mostly clear, while 13% indicated a more or less clarity (Fig 6).

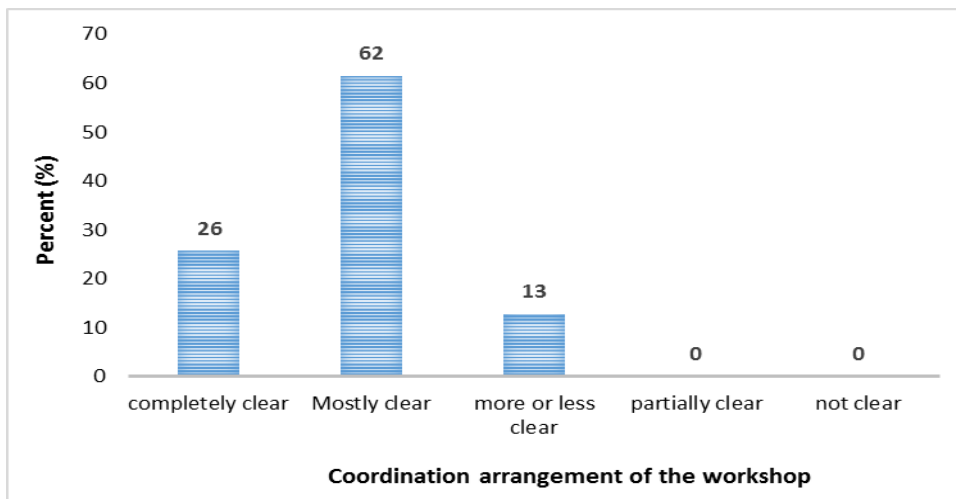


Fig 6: Coordination arrangement of the workshop

From the analysis of the response, 72% of the respondents rated the workshop as completely useful (Fig.7) with the following comments:

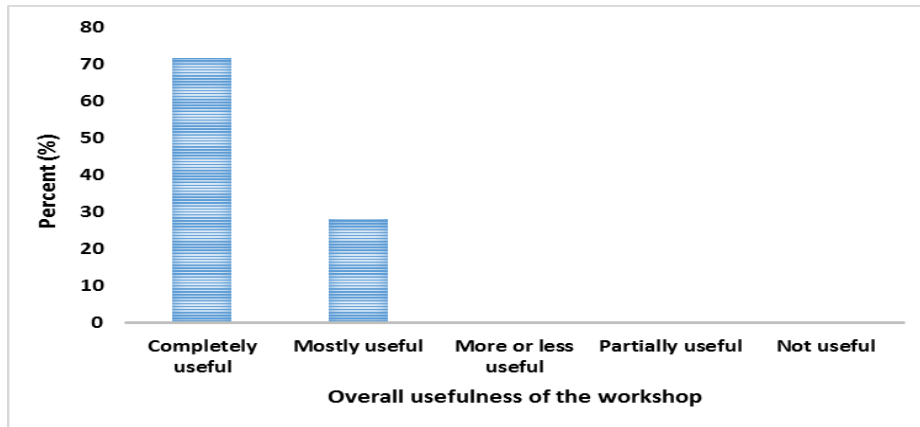


Fig 7: Overall usefulness of the workshop

- It is well organized and facilitated;
- The different roles that each partner has to play not very clear;
- Climate Change is a big development challenge and so the project came at the right time;
- The inputs should be reconciled as soon as possible to pave way for the commencement of the project;
- Environmental science is my area of specialization and I think we were on point;
- I think a lot of relevant inputs were made if incorporated I think we would be achieving something at the end;
- The work shop has meet its objective as what has been learnt will be put to practice;
- Clear expression and excellent presentation skills;
- It is a good project that will reduce poverty in the three northern regions, if delivered properly;
- Behavior change is a critical essence in this project since climate change is cause by the activities of man;
- More capacities need to be developed for effective implementation of environmental issues at the district and community levels;
- As a traditional leader and advocate of climate change, it will strengthen my activities;
- I suggest a workshop is organized for each of the 3NRs to assist in fighting galamsey activities (illegal mining) in the White and Black Volta and its tributaries in order to save their water bodies from pollution;
- The discussion seems to be focused on only one of the several issues raised;
- When people are not part of the planning process and you want to take them through a plan, you need more time;

- As a development planning officer, the environment is a key component of my work and therefore is strongly relevant;
- Presentations were simple and straight forward support by evidence and experience on the field;
- The workshop has been educative and practical and thus, the stakeholders involved should implement such projects to curb climate change;
- The meeting with the district actors should follow same as indicated and
- Some activities must be discussed further and agreed on. For instance, the selection of beneficiary communities within the districts. The criteria for the selection of the pilot site in the community was developed

In all, these responses and mean ranks suggest that the workshop has achieved its overall objective of developing a common understanding of the objectives and main activities of the project and soliciting their inputs.

List of appendices
Annex 1: List of Participant

NO	NAME OF PARTICIPANT	NAME OF ORGANZATION	CONTACT NOS.
1	John Bosco Bomansaan	NADOWLI KALIO	0243 810708
2	Issah Ibrahim	EPA-TAMALE	0246 029015
3	Nii Adjaye Laryea	UPPER WEST-RCC	0244 704082
4	Gerard Quarcoo	CSIR-WRI	020 6575442
5	Ben Ampomah	WRC	0244 874138
6	Sulemana Shamhuna	BAWKU WEST DISRICT	0247 776688
7	Joseph Bempah	FORESTRY	0244 804624
8	Chief of Duko	CHIEF OF DOKU	020 8179079
9	Zenabu Wasai-King	EPA-UPPER WEST	050 1301367
10	Emmanuel Tia Nabila	SADA	0244 969531
11	Chief Alhassan I Amadu	NPC	0246 232947
12	Musah Adam Jafaru	EPA-WULENSI ZONALOFFICE	050 1301601
13	Asher Nkegbe	EPA- BOLGA	020 8294658
14	Eddy Telly	PAPADEV-	0244 723498
15	Ben Bawa	NRCC	
16	Philomina Ahiekpor	EPA-TAMALE	020 1378437
17	Augustine Akuffo	EPA-TAMALE	0243 1317031
18	Diouf Henry Rene	UNDP RSC-ADDIS ABABA	251 312503321
19	Adey Tesfaye	UNDP RSC-ADDIS ABABA	251 912503363
20	Emmanuel Abeliwine	SADA-UER	020 7138139
21	Sulemana Oteng	GIDA- WA	020 8380410
22	Dimah Shaibu Joseph	CREMER	055 4422882
23	Abdulai Fuseini	LANDS COMMISION- UER	0244 179286
24	Alhassan Bushira	DEPT. OF GENDER	0244 538527
25	Abdul -Aziz Toyibu	BOLE DISTRICT	0244 967316
26	Abdul Washed	UTV	0243 766305
27	Agnes Yaboah	UTV	026 7033797
28	Saeed Musah	UTV	020 5453000
29	Edmond Gyebi	TV AFRICA	020 6105453
30	Vida Afriyie	TV AFRICA	054 1560112
31	Zakaria Mushah	MESTI	0244 501553
32	John Adukeye	CWSA	0243 710244
33	Dosoo Florence	EPA-TAMALE	0245 405944
34	Emmanuel Abereluga	SADA	050 1329534
35	Abubakari Mumuni Kaara	CWSA- WER	0248 454216
36	Paolo Dalla Stella	UNDP –GHANA	0546 260994
37	Salifu Hafiz	EPA-TAMALE	020 7145169

38	Huriatu Moro	EPA-TAMALE	050 1301598
39	Stephen Kanbuk	UNDP	020 4757972
40	Akuffo Augustine	EPA-TAMALE	02413 17031
41	Fred Mbillia	MESTI	0244 362101
45	Mohammed Fugu	GBC	050 8397009
46	Damma Mumuni	NRCC	0249 8604224
47	Yakubu A. Majeed	GHANAIAN TIMES	020 8389872
48	Zadok K. Gyesei	DAILY GRAPHIC	0243 526660
49	Abebe Hankore	UNWFP	054 114756
50	Isaac C.Acquah	EPA-ACCRA	0243 004082
51	Alhaji Ben Bawa	FOREST FORUM	02444 07973
52	Stephen Adegle	GIDA-TAMALE	024 5870325
53	Joachim Aisuwgba	WRC	020 24380539
54	Sulemana Mula	SISSALA EAST	0245 474457
55	S.M. Ansah	GIDA-BOLGA	0244 1425602
56	Comfort Sena Fetrie	GHANA NEWS AGENCY	020 7604512
57	Mahama A. Silimboma	NADMO	0548 187677
58	Aron Aduna	WRC	020 8234442
59	Pastor John Manu	REG. DIRECTOR, MoFA-UER	0244 533921
60	Hon. Vo-Naa M.B Bawaah	TRAD. LEADER AND MEMBER OF COU.	0244 764559
61	Mohammed Addul Bashara	ZABZUGU DISTRICT	0242 377316
62	Eric Baba	TV AFRICA	0240 0243593
63	Baba Tuahiru	GAC CANADA-PSU	
64	Abubakari Sadiq	NORTH STAR RADIO	020 9962500
64	Karim Nantogmah	CITI FM	020 8254494
66	Dauda Yahaya	EPA	020 978989
67	Yahuza Ibrahim	ZAA RADIO	0543 312902
68	Cuthbert Baba Kuupiel	NANDOM DISTRICT	020 8042990
69	Longkuul Festus Aron	DEPT. OF AGRIC	020 9379825
70	Jimah Loury	EPA-TAMALE	050 1301600
71	Alhaji Baba Seidu	NADMO-BOLGA	0244 710734
72	Saawug Alfred	NADMO-BOLA	020 6661117
73	Alhasan Iddrisu	ELDER OF DOKU	054 8490928
74	Ataaya Synchetia	BONGO DISTRICT	0244 759390
75	Alhassan Ahmed Amin	TV3	020 7443001
76	Dr. Yahuza M Gemda	MESTI	0244 89771
77	Nana Kodjo Korang	FSD-TAMALE	020 7196064
78	James Ware K.	FSA-UER-BOLGA	0244 75691
79	Matilda Quarcoe	UNDP	0244 696129
80	Samuel Amaning Gyekye	GMet, WA	020 6330183
81	Bob Alfa	WRC ACCRA	0243 210645

82	Abu Iddrisu	EPA-TAMALE	050 1301388
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Appendix 2a: Agenda - High Level Session



**INCEPTION WORKSHOP FOR ADAPTATION FUND PROJECT
MODERN CITY HOTEL - MONDAY 23RD MAY 2016
AGENDA**

DAY 1 - High Level Session	
08:30- 09:00	Registration of participants
Session 1: Workshop Opening	
09:00-10:00	<p style="text-align: center;">Opening Remarks and Formal Lunch of the Adaptation Fund Project</p> <ul style="list-style-type: none"> • Regional Minister, Northern Region, Welcome Address • Ms. Christine Evans-Klock, UN Resident Coordinator and UNDP Resident Representative for the Republic of Ghana • Executive Director, Environmental Protection Agency • Hon. Mahama Ayariga, Minister of Environment, Science, Technology and Innovation
Group Photographs	
10:00-10:30	Tea/ Coffee Break
10:30 -12:30	<p style="text-align: center;">Presentation and Plenary Discussions:</p> <ul style="list-style-type: none"> • Introduction of Adaptation Fund Project - Project objectives, activities and work plan MESTI/ EPA <p style="text-align: center;">Questions, Comments and Contribution</p>
12:30-13:00	<p style="text-align: center;">Session 2: Experience Sharing</p> <ul style="list-style-type: none"> • Presentations on success stories, challenges, experience, lessons learnt and practical initiatives on recent Climate Change Adaptation/Water Resource management activities in Northern Ghana: <ul style="list-style-type: none"> ○ GEMP/SLWM – Project Manager ○ IUCN PAGEV - Project Manager <p style="text-align: center;">Questions, Comments and Contribution</p>
13:00-14:00	Lunch
14:00-16:00	<p style="text-align: center;">Session 3: Administrative guidance</p> <ul style="list-style-type: none"> • Administrative guidance and recommendation from AF Board and UNDP–RTA <p style="text-align: center;">Questions, Comments and Contribution</p>
16:00-17:00	<p style="text-align: center;">Closing Remarks</p> <p style="text-align: center;">Director of Environment - MESTI</p>

Appendix 2b: Agenda-Technical Session

INCEPTION WORKSHOP FOR ADAPTATION FUND PROJECT MODERN CITY HOTEL - TUESDAY 24 TH MAY 2016 AGENDA	
	DAY 2 - TECHNICAL WORKSHOP
08:30- 09:00	Registration of participants
	Workshop Opening
09:00-10:00	Session 1: Opening Remarks: <ul style="list-style-type: none">- RCC, Northern Region- UNDP Representative- Executive Director, Environmental Protection Agency- Director of Environment, Minister of Environment, Science, Technology and Innovation<ul style="list-style-type: none">• Recap from Day 1• Breaking into technical groups
10:00-10:30	Tea/ Coffee Break
10:30-12:00	Group Work on Project Outcomes <ol style="list-style-type: none">1. Improving planning and management of water resources taking into account climate change impacts on surface and groundwater sources2. Ensuring climate resilient management of water resources by communities3. Enhancing diversification of livelihoods of communities in northern Ghana
12:00-13:30	– Presentations from working groups in plenary Questions, Comments and Contributions
13:30	Closing Remarks and workshop evaluation, Director of Environment - MESTI Lunch

Appendix 3: Statement by Ms. Christine Evans-Klock, UN Resident Coordinator and UNDP Resident Representative for the Republic of Ghana

Project Inception Workshop

“Increased Resilience to Climate Change in Northern Ghana through the Management of Water Resources and Diversification of Livelihoods”

Tamale, 23 May 2016

Protocols...

- *Regional Minister for the Northern Region*
- *Honorable Minister of Environment, Science, Technology and Innovation*
- *Executive Director, Environmental Protection Agency*
- *Representative of the Adaptation Fund Board Secretariat*
- *Traditional leaders?*

- *UNDP colleagues from the Regional Office in Addis Ababa and from the Country Office in Accra*
- *Press?*
- *Representatives of government, partners, ladies and gentlemen...*

Good morning colleagues, I am delighted to join you this morning for the launch of this important project on climate change and water resource management.

As we are aware, one of the biggest long-term threats for Ghana's sustainable and inclusive growth is climate change.

This will affect economic activities and livelihoods of Ghanaians in multiple ways.

Notably, the current climate change scenarios predict that decreasing annual rainfall and increasingly erratic rainfall patterns will adversely affect rural livelihoods, especially agricultural and pastoral practices.

Ghana's mean temperature has increased by about one degree Celsius since 1960s, an average of 0.21 Degrees Celsius per decade. This rate of increase has generally been more rapid in the northern regions of the country than in the south. Here, in the northern regions, is where we expect to experience the widest range of temperature variability.

One of the most severe influences of climate change on the environment has been desertification. According to the Environment Protection Agency of Ghana, out of the 35% (~83,489 km²) of Ghana's total land area prone to desertification, or about 83,500 square kilometers, 33% is in the northern regions. Desertification is expected to increase further, based on assessments that show diminishing rainfall.

Ghana, and the Northern Region of Ghana, are not alone in recognizing and reacting to these risks. These are shared weather-induced changes happening across the Region. And many other places in the world are also facing increasingly severe and extreme weather incidents. In recognition of a state of great urgency, last week, UN Secretary General Ban Ki-Moon appointed two Special Envoys on Climate. They are Mr. Macharia Kamau, the Permanent Representative of Kenya to the United Nations and Ms. Mary Robinson, former President of Ireland and former UN High Commissioner for Human Rights.

He explained these appointments as motivated by concern over risks of drought in some places and flooding in others associated with the upcoming El Niño. He recognized that these weather incidents are already causing droughts elsewhere in the Africa region which have led to increasingly worrisome indicators of malnourishment among children.

These appointments are just the latest steps in a long-term strategy to build resilience of the most vulnerable. This concern will no doubt be high on the agenda in the upcoming World Humanitarian Summit of Heads of States gathering in Istanbul this week to scale up humanitarian responses.

Against this global backdrop, there is evidence of the pronounced vulnerability to drought in the three northern regions in Ghana. For example, a recent study by the Water Resource Commission reveals that the White Volta basin's situation has deteriorated from "marginally vulnerable" 25 years ago, back in 1990, to "water stressed" in 2020, and is expected to deteriorate still further, by 2050, to a situation of "water scarcity".

The adaptive capacity of the three northern regions to climate change has not yet matched the growing need. As pointed out in Ghana's 2015 MDG Report and elsewhere, the North has the lowest levels of socioeconomic development. The local economies and livelihoods remain largely dependent on rain-fed agriculture and forestry. Much of the agriculture is still at subsistence scale, with food crops cultivated mostly in only one season. Rain dependence means that farmers suffer significant losses when the rains fail. The potential for water storage and irrigation systems are high in northern Ghana, but this potential has not yet been turned to the advantage of agricultural productivity and resilience.

Ladies and gentlemen,

It is against this backdrop, that the Government of Ghana has developed this project. Turning to good use the resources from the Adaptation Fund and technical assistance from UNDP, this project has been designed to address the decrease in water availability and the increasingly unpredictability of water resources that have been induced by climate change and that are increasingly putting in jeopardy current livelihoods of rural communities in this Region.

The project will target the principal causes of vulnerability identified in three northern regions, and it will deliver support in three ways:

First, through improved water resource management planning, that takes into account the impacts of climate change;

Second, through grassroots participation in water management planning and implementation of water resource management activities at community and district level; and

Third, through diversification of livelihoods within local communities as safety nets to climate change impacts.

I am glad to highlight that this project is expected to be an important means of supporting the implementation of the National Climate Change Policy Strategy and Ghana's international commitments on climate change.

These international climate change commitments are directly linked to achieving the Global Sustainable Agenda 2030. As the UN has said in every opportunity, Agenda 2030 is one unified global commitment, where social development, economic development, and environmental objectives are mutually dependent. As we have pointed out, failure to address climate change and environmental degradation jeopardizes livelihoods, undermines progress made in improving nutrition, and boosting economic transformation. This project should contribute to Ghana's

achievement not only of SDG 13 on climate change, but also to achieving the SDGs related to combatting poverty and hunger and to improving access to clean water and improved sanitation.

The implementation of this project will be fully owned and led by the Government. I can assure you that UNDP will be ready to provide technical support, based on several years of experience working with the Ministry and other partners on climate change policy and on practical interventions in both climate change mitigation and adaptation.

Wearing my UN Resident Coordinator's hat, I am also glad to express my clear expectations that other UN Agencies working in this field, in particular FAO, will be contributing to the implementation of this project.

I am also glad to note that we will have the opportunity today to learn some lessons from similar projects that have been implemented in Northern Ghana with the support of other development partners.

I will conclude by congratulating the Government once again for embarking on this initiative. I appreciate the leadership and commitment of MESTI and all key partners at national, regional, district and community levels throughout the design stages of this project. It will be of enormous importance to maintain these partnerships in the implementation stage. It will be of enormous importance to integrate the work carried out under this project with SADA's coordinated support for the economic transformation of this entire Region.

We are looking forward to hearing valuable opinions and feedback during today's inception meeting, which will lead to the finalization of the project work plans and implementation schedule. I wish you all very fruitful deliberations and effective partnerships going forward.

Thank you.

Appendix 4: Statement by Mr John A. Pwamang Deputy Executive Director, Operations Environmental Protection Agency

Adaptation Fund Project Inception Workshop
Modern City Hotel, Tamale
Monday 23rd May 2016

Mr Chairman
Honourable Ministers of State
UNDP Residential Coordinator
Honourable Members of Parliament
Paramount Chiefs present
Honourable District Chief Executives
Heads of Department and Agencies
Distinguished Guests

Friends of the Media
Ladies and Gentlemen:

I have the honour to deliver this statement on behalf of the Executive Director of Environmental Protection Agency, Ghana.

At the outset, allow me to congratulate the Government of Ghana, UNDP and all the stakeholders here present, for the Award of the Adaptation Project by the Adaptation Fund Board Secretariat and express our appreciation for the work you have already done. The Environmental Protection Agency, and our mother Ministry, MESTI and all the stakeholders stand ready in collaboration with our Multilateral Implementing Entity (UNDP) to commence our project and to work closely with you at this workshop as well as in the upcoming years of implementation.

The Adaptation fund Project is a result of collective and tireless efforts of all Stakeholders working constructively in a spirit of hope and nation building for our efforts on climate change, through enhancing the implementation of the Climate Change Adaptation Strategy and the National Climate Change Policy, including its master plan. As we move into the implementation phase, the delicate balance of all activities which we have planned in the project document as well as the guidance from the UNPD and the Adaptation Fund Board must be adhere to. We also expect the Climate Change Adaptation Committees at various levels of the project (national, regional, district and community) to take the lead role in addressing climate change, particular the project outcome, in accordance with their responsibilities entrusted in them.

Mr Chairman, as we move forward, we reiterate the urgent need of protecting river basins of Northern Ghana to ensure that resources within the buffer zone are managed as productive resources, which will provide a strong basis for our livelihood, our future and continues survival in our communities. We therefore need to support in addressing challenges along our basins such as bushfires, illegal mining, farming, use of chemical, dumping of waste, among others. EPA cannot do it alone, we need to protect our dams, dug outs, buffers of streams and rivers to reduce emissions of greenhouse gases and effective adaptation to climate change impacts.

The buffer zone Policy for managing river basins in Ghana has **design** standards for Riparian Buffer Zones with recommended buffer widths as follows:

- Large dams: 60 to 90 meters (e.g. Weija Dam, Lake Bosomtwe)
- Major perennial rivers/streams: 10 to 60 meters (e.g. White Volta, Oti),
- Minor perennial streams: 10 to 15 meters;
- Important intermittent streams: 10 to 20 meters; and
- Streams within forest reserves: 10 to 50 meters.

Mr Chairman, the focus is now on the Adaptation Fund Project to implement the buffer zone policy to ensure “Environmental Security and Livelihoods” through an **Ecosystem Approach for Community Resources Management Areas (CREMAs)**. The CREMA seeks to address the problems of ecosystem degradation in the buffer zones of river basins, which is a priority biodiversity area and bode for the gods and ancestral spirits. Biodiversity and ecosystem goods and services of the river basins range are disappearing at alarming rates and the benefits

associated with natural resources are gradually eroding due to overexploitation and the absence of mechanisms for community supported management.

The aim of the project is to secure ecosystem benefits and livelihoods of the dependent communities in a participatory manner; by building capacity building and creating awareness on integrated water resource management, engaging in livelihood projects, rehabilitation dams, encouraging drying season farmer outside the buffer zones, supporting in fish farming in the protected river basins, bee keeping and honey production, sustainable woodlots production, among others.

Over the years, EPA/MEST has implemented the Ghana Environmental Management Project (GEMP) and Sustainable Land and Water Management Project (SLWMP), among others, which have reduce land degradation, enhance agricultural productivity and improve spatial planning through integration of watershed management in development plans. The Adaptation Fund Project is going to build on these successes and use lessons and experiences to improve its performance.

In order to prepare for our Adaptation Fund assignment, we need to identify relevant opportunities that are already existing in our districts management plants and community by-laws that reflect the project objectives, so that we can consider them in our community implementation plans, for us to enjoy maximum benefit from the project.

Mr Chairman, I encourage all stakeholders to feel part of the project. As I have already stated, we stands ready and eager to commence our work as soon as possible. Nonetheless, in order to ensure effective implementation of the project, we need to stay committed and support the project objective with our mandate as national institution.

Finally, I would like to thank UNDP and Adaptation Fund Board for their support to the implementation of the project and to our national stakeholders for their consistent interest in the Support. I wish you all, colleagues, partners and friends, an excellent Lunch and Technical discussions

Thank you.

Appendix 5: Statement by Hon. Mahama Ayariga, Minister Ministry of Environment Science, Technology and Innovation

At

Adaptation Fund Project Inception Workshop

Modern City Hotel, Tamale

Monday 23rd May 2016

Mr Chairman

Paramount Chiefs present

Honourable Chief Executives

Heads of Department and Agencies

Distinguished Guests

Friends of the Media

Ladies and Gentlemen:

Today, The Government of Ghana is joining hands with UNDP to launch the Adaptation Fund Project, which aim to protect major river basins in Northern Ghana.

Mr Chairman, managing freshwater bodies in Ghana is currently an urgent and significant development issue, since most rivers and streams are drying up due climate change, among others. Recognizing the importance of improving of protecting buffer zones of river basins, enhance water access and increase institutional capacity and coordination for integrated water management in Ghana, the Ministry of Environment, Science, Technology and Innovation (MESTI), through funding from the Adaptation Fund Board Secretariat and in partnership with the UNDP has initiated the The Adaptation Fund (AF) Project “Increased Resilience to Climate Change in Northern Ghana through the Management of Water Resources and Diversification of Livelihoods”. It is a four year project, 2016 to 2020 which aims at building resilience and adaptive capacity of rural livelihoods to climate variability through improved management of water resources and diversify livelihoods in rural communities ten (10) districts of the three Northern Regions of Ghana.

These ten districts/ metropolitans are:

- | | |
|------------------|-------------------|
| 1. Savelugu | Northern Region |
| 2. Bole | Northern Region |
| 3. Zabzagu | Northern Region |
| 4. Bawku | Upper East Region |
| 5. Bongo | Upper East Region |
| 6. Builsa South | Upper East Region |
| 7. Bawku West | Upper East Region |
| 8. Nandom | Upper West Region |
| 9. Nadowli | Upper West Region |
| 10. Sissala East | Upper West Region |

Over the years, climate change has been recognized as priority in the President’s transformation agenda and the Ghana Sheared Growth and Development Agenda. In 2014, the National Climate Change Policy (NCCP) was launched by the President. Currently, the Climate Change Master Plan has been developed and approved by Ministry of Environment, Science, Technology and Innovations (MESTI). The National Climate Change Policy Implementation Committee has been set up at MESTI to oversee implementation of national policy. MESTI has also facilitated the development of a National Climate and Green Economy Strategy, which are all framework to support the implementation of this Project.

During the implementation of the project, Climate Change Adaptation Monitoring Committees based at National, Regional, District and Community based will be established in each project district to support the implementation and monitor success of the project in their respective target communities.

Mr Chairman, the Committees are expected to delineate project communities along river basin of major roads (for demonstration purposes), support to protect them from bushfires, restore and

manage them as community natural resources for livelihood (medicinal value, food, honey, tourism) and enhancement of ecological functions of the buffer zone (enhance rainfall, access to water, etc.). It will also intensify capacity building, education and training of all stakeholders and ensure their commitment to the conservation of the buffer zones. In addition to these, the project will develop comprehensive management and investment plans for the White, Black and Oti river basins to take into account climate change impacts and needed interventions.

Mr Chairman, combination of these individual components of the project will contribute to:

- Increase climate resilient management of water resources in 50 communities in Northern Ghana;
- Improve basin level management and planning of water resources taking into account climate change impacts on surface and groundwater sources;
- Provide climate responsive community water supply systems for multiple uses and users (new or rehabilitation of bore hole, dams and dug outs)
- Establish small-scale irrigation systems to enhance dry season farming;
- Create opportunities for community resources management for diversifying livelihoods *schemes for women, fish farms among others*;
- *Enhance agricultural product processing schemes (shea butter or honey etc.)*
- Establish woodlots for climate risk management and rehabilitation of sacred groves
- *Create platform to share knowledge, experience of best practices for adaptation and lesson learned from the implemented actions*

Mr Chairman, the project will promote four types of adaptation intervention:

1. Livelihood enhancement;
2. Livelihood diversification;
3. Ecosystem protection and enhancement; and
4. Community-level water infrastructure planning.

These approaches will build up financial, natural, physical and social capital of the communities. About 60,000 people are expected to have direct benefit of the project. The indirect number of beneficiaries is the entire population in the Volta River Basin which is estimated over 8 million. The project is expected increase access to water and diversification of livelihood activities and income generation by 30% of households in the communities.

On this day of the launch of this project, I encourage all stakeholders to fully support the programme. I am therefore grateful to traditional Authorities, private sector, civil society and government organization, who are all here in persons to support this launching. I also wish to thank the UNDP, especially the Regional Technical Advisory Team, for generously providing the technical and financial support for this project.

Thank you

Appendix 6: Execution Cost and functions of the Project Officers - December 2015

A. Execution Cost

Cost item	Year 1	Year 2	Year 3	Year 4	TOTAL
Procurement and Finance Officer	16,000	16,000	16,000	16,000	64,000
Project Monitoring and Evaluation Officer	25,000	25,000	25,000	25,000	100,000
Project Technical Assistant	16,000	16,000	16,000	16,000	64,000
Office Furniture	16,000	2,000	2,000	3,000	23,000
Computers/IT equipment	12,000	5,000	5,000	4759	26,759
Stationary and supplies	6,750	4,750	4,750	4,750	21,000
Vehicle and maintenance	127,500	6,500	7,500	8,500	150,000
Monitoring, Evaluation, and Audit	23,000	20,000	20,000	21,000	84,000
TOTAL	242,250	95,250	96,250	99,009	532,759

B. Functions of the Project Officers

1. Project Coordination Officer (A government official to be appointed: salary not charged from the project)

- Under the overall strategic guidance of the Chief Director, oversee and manage the project on day-to-day basis
- Collaborate with the project team (Project technical officers, support staff, consultants) and ensure timely implementation for project results;
- Lead the development of annual programme/project delivery targets and guide the team to achieve the targets;
- Set direction for the team including roles and responsibilities, accountability and reporting ensuring that the work of the team is conducted in accordance with Government of Ghana (GoG) and UNDP's relevant business processes and that high – quality outputs are delivered on time;
- Guide the project staff to perform project oversight, quality assurance, monitoring, reporting, field missions, audits, evaluations, formulations and project support services providing day-to-day guidance by enhancing team work within the project;
- Monitor the progress on agreed results framework and performance indicators and take action/decision and/or provide timely support to project staff;
- Undertake performance management of staff including establishment of annual results, on-going feedback and mid-term and final assessments in line with GoG and UNDP Rules and Regulations;
- Provide intellectual and strategic guidance in the area of economic empowerment and private sector development, prompting gender equality and inclusion of marginalized populations ensuring conflict – sensitivity and compliance with GoG and UNDP's Social and Environmental standards and other rules and regulations;
- Ensure project meets expectations with respect to quality, budget, delivery timelines, and strategy;

- Brief and consult with Chief Director on project progress and provide information and advice as required to contribute to the project initiatives;
- Identify areas of improvement by applying best practices/lessons learnt using GoG and UNDP corporate monitoring tools and corporate reports;
- Manage project budgets and ensure timely and accurate reporting,
- Establishes strong ties to and with national programmes, and relevant government ministries;
- Ensure close financial and procurement oversight and monitoring of all activities of the project;
- Ensure regular assessment of implementation and action plans identifying areas of emphasis to guide project improvements and future plans and;
- Undertake and supervise financial and administrative tasks of the project.

2. Project Technical Officer (*A government official to be appointed: salary not charged from the project*)

- Support to Project Coordination Unit in planning and management of the project activities on the field and within the areas assigned;
- Support Project Coordination Unit in project implementation with project team individual consultants, contracted companies and implementing partners;
- Organize and coordinates project's activities with and among key stakeholders at the national, regional and community/ zonal management committees levels;
- Take part in development of technical and non-technical guidance documents for all studies and assessment undertaken as part of the project;
- Participate in mobilization of communities in the implementation in intervention plans;
- Identify training needs, organize and oversee trainings;
- Support development and implementation of community based action plans of the programmes.
- Design and formulate work plans, financial and procurement plans within the area of responsibility;
- Organise adaptation forums for education, training and creation awareness on project programme and actions;
- Support in publishing project output with Coordination and publication team
- Ensure financial and substantive monitoring and evaluation of the project activities, identify risks and problems and develop solutions;
- Provide support in organization and implementation of external evaluation of the project;
- Monitor and analyse the project environment and timely adjustments if identified;
- Assists in evaluation of the project impact.
- Ensures efficiency in the provision of support to local stakeholders at community/zonal level;
- Support in developing partnership with all government levels, private sector, civil society in the specific thematic areas based on project needs and donors' priorities.
- Ensure gender is effectively mainstreamed throughout the project activities, work plans, budgets, reports, researches and analyses

3. Procurement and Finance Officer

- Manage project cash controls as well as maintain book keeping up-to-date;

- Ensure maintenance of the general and subsidiary ledgers;
- Track expenditure and maintain relevant cash reserves;
- Ensure all expenses of the project are within assigned project budget;
- Oversee the preparation of all financial statements, invoices, proposals, etc., of the project as required;
- Ensure account receivables and payables activities are performed accurately and timely;
- Ensure that financial transactions of the project are properly updated and recorded;
- Manage the preparation of balance sheets, income statements, expense reports, etc.;
- Ensure data integrity in all financial reporting;
- Update financial records of the project with recent transactions and changes;
- Perform finance analysis, reporting and management tasks of the project;
- Identify and resolve invoicing issues, accounting discrepancies and other financial related issues;
- Review financial paperwork and procedures and make appropriate changes;
- Ensures the timely delivery of quality project products at the lowest possible cost;
- Ensure full compliance of procurement activities with GOG and UNDP rules, procedures and regulations;
- Elaborate proposals and implementation of cost saving and reduction strategies in consultation with Project Coordination Unit;
- Conduct a comparative analysis on supplier prices;
- Review and evaluates the performance of the suppliers;
- Carry out all necessary procurement activities and ensure proper processing of assigned customer orders;
- Verifies that the required quantity of order is within the agreed budget;
- Collaborate with Project Coordination Unit when processing the orders;
- Submits final invoices to the Project Coordination Unit;
- Perform other duties as required;

4. Project Monitoring and Evaluation Officer

- Develop and strengthen monitoring, inspection and evaluation procedures of the project;
- Monitor all project activities and progress towards achieving the project output;
- Recommend further improvement of the logical framework;
- Develop monitoring and impact indicator for the project success;
- Monitor and evaluate overall progress on achievement of results;
- Monitor the sustainability of the project's results;
- Provide feedback to the Project Coordination Unit on project strategies and activities;
- Suggest strategies to the Project Coordination Unit for improving the efficiency and effectiveness of the project by identifying bottlenecks in completing project activities and developing plans to minimize or eliminate such bottlenecks;
- Report monthly, quarterly, half-yearly and annual progress on all project activities to the Project Coordination Unit;
- Conduct capacity assessment on existing monitoring and evaluation system;
- Develop indicators and a monitoring strategy for the project;

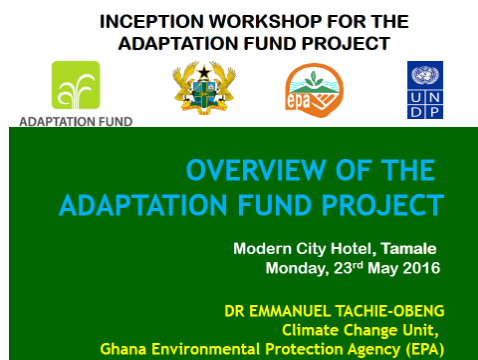
- Provide inputs, information and statistics for quarterly, annual and other reports to Project Coordination Unit;
- Participate in annual project reviews and planning workshops and assist the Project Technical Officer and Coordinator in preparing relevant reports;
- Support monitoring and evaluation of the effects and impact of the project;
- Assist in coordinating across the available components of the project to ensure effective implementation of M&E;
- Assist the Project Officers with M&E tools and in supporting them in their use and
- Perform other duties as required;

5. Project Technical Assistant

- Ensure effective logistical arrangements and coordination between all the actors in the Project for the prompt and effective implementation of the program activities;
- Assist in the overall administrative matters of the project, such as registry and maintenance of project files and records;
- Ensure collection and disseminating of information pertaining project's dynamics along the operational management PCU;
- Prepare routine correspondence and maintain project correspondence and communication, as well as receive, screen and distribute correspondence;
- Assist in logistical organization of meetings, site visit, and working groups and workshops, by preparing agendas, appointments and meetings both internal and external relations and write minutes from the meetings;
- Monitor project activities, budgets and financial expenditures.
- Support knowledge management and information sharing among project staffs and stakeholders;
- Collect, register and maintain all data on project activities through proper filing and e-filing system;
- Assist in gathering knowledge and data from surveys in relation to scientific research based on the project objectives;
- Assist in dissemination of project information reports to and responding to queries from concerned stakeholders;
- Participate in site visits to understand the ground situation and prepare field reports, if required;
- Assist in identifying and evaluation of future training needs, for project staffs and workers and prepare monitoring evaluation reports;
- Assist the project team to conduct post-completion evaluation of the project.
- Provide administrative support to the members of the PCU, Technical Working Groups and other consultants in the implementation of their tasks for the achievement of project results;
- Maintain records on all project personnel and local consultants and their respective status in accordance with accepted policies and procedures;
- Determine need for procurement and supply of office supplies, equipment and establish and maintain office files, logs, index, control index or other information concerning the work under the supervisor's control, and maintain inventory for repair and maintenance services;;

- Assist the Project Technical Officer in the preparation of TORs, EoI and in the recruitment processes and agreements/ MoUs with partner organisations;
- Assist in prepare requests for advance of funds and/or direct payments and follow-up on timely disbursements, and submit expenditure and program budget status reports;
- Assist in responding to queries from the GoG, stakeholders and UNDP with respect to implementation of the project programmes;
- Assist in the preparation and timely submission of quarterly, progress and annual project implementation review reports and other monitoring reports as may be required;
- Perform as secretary to meetings with partners and stakeholders and to monitor follow up actions on decisions taken;
- Prepare routine correspondence and memoranda for Project Coordination Officer signature.

Appendix 7: Overview of Adaptation Fund project



BACKGROUND OF ADAPTATION FUND PROJECT (AFP)

- **Title:** Increased Resilience to Climate Change in Northern Ghana through the Management of Water Resources and Diversification of Livelihoods
- **Focus:** Supporting Climate Change Adaptation in the 3 Northern Regions of Ghana
- **Main Implementing Partner:** Ministry of Environment, Science, Technology and Innovation (MESTI)
- **Multilateral Implementing Entity:** United Nations Development Programme (UNDP)
- **Funds:** US\$ 8,293,972.19
- **Duration:** 4 years (2016-2020)
- **Donor:** Adaptation Fund Board

LIST OF CONTENT

- Project background
- Project objectives
- Project & NCCAS priorities
- Major components & outcomes
- Fund allocation
- Project implementation framework
- Workshop objectives

ADAPTATION FUND PROJECT & NATIONAL ADAPTATION PRIORITIES

Designed to support implementation of priority adaptation actions outlined in the National Climate Change Adaptation Strategy (NCCAS), particularly:

Priority 2: Alternative livelihoods: minimizing impacts of climate change for the poor and vulnerable

Priority 3: Enhancing national capacity to adapt to climate change through improved land use management

Priority 6: Managing water resources as climate change adaptation to enhance productivity and livelihoods

MAIN PROJECT OBJECTIVES

To enhance the **resilience** and **adaptive capacity** of **rural livelihoods** to climate impacts and risks on water resources in the 3 Northern Regions of Ghana. through:

- Improvement of water access
- Increase institutional capacity and coordination for integrated water resource management
- Support other uses of water resources for the diversification of livelihoods by rural communities.

PROJECT DISTRICTS

- 1) Savelugu Northern Region
- 2) Bole Northern Region
- 3) Zabzugu Northern Region
- 4) Bawku Upper East Region
- 5) Bongo Upper East Region
- 6) Builsa South Upper East Region
- 7) Bawku West Upper East Region
- 8) Nandom Upper West Region
- 9) Nadowli Upper West Region
- 10) Sissala East Upper West Region

PROJECT DISTRICTS



MAJOR COMPONENT & OUTCOME

COMPONENT 1: Water Resource Management Planning
Outcome 1: Improved planning and management of water resources taking into account climate change impacts on surface and groundwater sources

COMPONENT 2: Community Level Implementation of Water Resource Management Activities
Outcome 2: Climate resilient management of water resources by communities in Northern Ghana

COMPONENT 3: Diversification of Livelihoods of Rural Communities
Outcome 3: Enhanced diversification of livelihoods of communities in northern Ghana

ACTION PLANS & BUDGET

OUTCOME 1: IMPROVED BASIN LEVEL MANAGEMENT AND PLANNING

Output 1.1: Historical and projected climate projections generated for the White Volta, Black Volta and Oti basins	Year 1	\$117,000
Output 1.2: White Volta management plan reviewed and updated to take into account climate change impacts	Year 1	\$59,000
Output 1.3: Water management plans are developed and adopted by the GoG for the Black Volta and for 5 sub-basins in the White Volta and the Oti basins, to take into account climate change impacts	Year 1	\$74,000
Output 1.4: National, Regional, District and Community Climate Change Adaptation Monitoring Committees established in the target operational areas- Expand GEMIP + Capacity Building	Year 1	\$114,000

COMPONENT 3

OUTCOME 3: ENHANCED DIVERSIFICATION OF LIVELIHOODS UNDER CLIMATE CHANGE

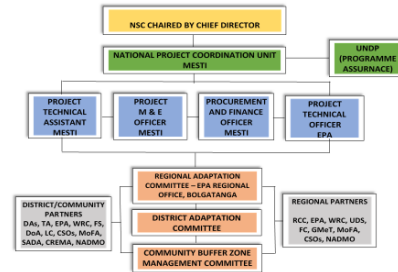
Output 3.1: Infrastructure for water distribution (e.g. canals, pipes etc.) and use in agricultural systems installed/improved in 10 districts.	Year 2	\$551,000
Output 3.2: Dry-season gardening, bee keeping and agricultural processing schemes (shea butter or honey) by women improved for CCA in 50 communities	Year 2	\$546,000
Output 3.3: Tree nurseries, woodlots, fodder banks for climate risks management (rehabilitating floodplains, hillsides, watersheds) established and managed by 40 communities	Year 2	\$656,000
Output 3.4: Fish farms are established and supported in 20 communities	Year 2	\$440,000
Output 3.5: Best practices for adaptation and lessons learned from the implemented actions and related policy processes are recorded and disseminated (Adaptation website, Newsletters, Brochures, radio, TV etc.)	Year 2	\$56,000

COMPONENT 2

OUTCOME 2: CLIMATE RESILIENT MANAGEMENT OF WATER RESOURCES BY 50 COMMUNITIES

Output 2.1: Community water supply and management plans developed for 10 districts to incorporate climate change-related risks	Year 2	\$217,000
Output 2.2: Water supply increased for multiple uses and users in 50 communities during period of shortages under climate impacts e.g. droughts, heat stress etc.	Year 2	\$2,600,000
Output 2.3: Small scale irrigation systems installed/upgraded in 50 communities and water users associations to manage irrigation systems established and/or strengthened	Year 2	\$1,000,000
Output 2.4: Measures for water conservation under climate impacts e.g. catchment/river bank re-afforestation schemes implemented in 25 communities	Year 2	\$422,000
Output 2.5: Adaptation Learning platforms and systems for integrating climate change-related risks into community management of water resources and livelihood activities established (national, regional & community levels) – media out reach, etc.	Year 2	\$117,000

PROJECT IMPLEMENTATION FRAMEWORK



Workshop Objective 1

High Level Workshop to launch the Project:

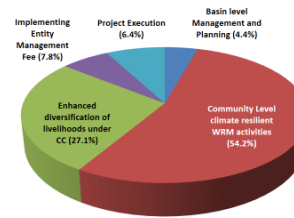
- **Formally introduce** and **inform** the general public regarding the **Adaptation fund Project**
- **Build public interest** around the **issue** of **Climate Change and Water Resource Management** practices
- **Foster high-level commitment and leadership** to support the Project
- **Show case and commend AF Board and GoG** in support of the Project

Workshop Objective 2

Technical Workshop is to:

- **Formally introduce and inform key stakeholders** regarding the Adaptation fund Project
- **Build partnership** amongst **key stakeholders** to **enhance the implementation** of the Project
- **Gather information** regarding recent **Climate Change Adaptation /Water Resource management** activities in **Northern Ghana** to **ensure coordination/collaboration** and **avoid duplication** of efforts
- **Explore technical methodologies** and **background information** in regard to **M&E** and **pilot site selection** of the beneficiary communities under the project.
- **Get practical feedback** to the **Project Document** and **Work Plan**
- **Inform and strategize** how to **set up an effective CCA Committees**

FUND ALLOCATION BY PROJECT COMPONENT & MANAGEMENT



Thank you for your attention!

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Appendix 8: Programme Component	CORE ACTIVITIES	SCHEDULE				COMMENT
		YR 1	YR2	YR 3	YR 4	
		EXPECTED CONCRETE OUTPUTS				
Output 1.1: Climate change historical data and future projections generated for the White Volta, Black Volta and Oti basins	Conduct trend/historical analysis of the impact of climate variability on the White, Black and Oti River basins.					Possible in year one
	Generate climate change projections for the White, Black Volta and the Oti River basins					Develop (Replaces Generate) climate change projection models for the Volta Basin Possible in year one
	Volta Conduct a vulnerability analysis of communities along the White and Black as well as the Oti River basins					Possible in year one
Output 1.2: White Volta management and investment plans comprehensively reviewed to take into account climate change impacts	Review White Volta management & investment plans					Review White Volta Management plan Complete the development of the White Volta investment plan
	Develop Black Volta & Oti River management & investment plans					Move this to Output 1.3
Output 1.3: Climate smart water management plans designed for the Black Volta and the Oti River basins	<ul style="list-style-type: none"> Carry out an assessment of existing water management activities along the rivers 					<ul style="list-style-type: none"> Output 1.3 should read Climate Smart Water Management and Investment plans instead.
	<ul style="list-style-type: none"> Develop/review community/district based water management plans to include tributaries 					<ul style="list-style-type: none"> Development of sub-basin/watershed plans rather than district plans to take care of the Black Volta and Oti plans

	<ul style="list-style-type: none"> Identify/form and train water management committees in the various districts and communities. 					<ul style="list-style-type: none"> Can be started in year one but will carry through to the second year.
<p>Output 1.4: National, Regional, District and Community based Climate Change Adaptation Monitoring Committee established/adopted and strengthened (as envisioned by the National Climate Change Adaptation Strategy) in the three target regions</p>	<ul style="list-style-type: none"> Identify/form and train water management committees in the various districts and communities. 					<ul style="list-style-type: none"> Possible in year one
	<ul style="list-style-type: none"> Expand existing Ghana Environmental Management Project regional committees to be more inclusive of relevant institutions 					<ul style="list-style-type: none"> Possible in year one Maintain existing (DEMC) name of the committees and expand if need be.
	<ul style="list-style-type: none"> Identify existing/establish district and community adaptation monitoring committees 					<ul style="list-style-type: none"> Possible in year one Maintain existing (DEMC) name of the committees and expand if need be
	<ul style="list-style-type: none"> Build capacity of district and community adaptation monitoring committees on Disaster Preparedness, Management and Coordination 					<ul style="list-style-type: none"> Possible in year one Capacity building should include the REMCs Capacity building should be throughout the project period
	<ul style="list-style-type: none"> Create website 					
	<ul style="list-style-type: none"> Radio and TV broadcast 					

EXPECTED CONCRETE OUTPUTS	CORE ACTIVITIES	SCHEDULE				COMMENT
		YR 1	YR2	YR 3	YR 4	
OUTPUT 2.1: CLIMATE RESPONSIVE COMMUNITY WATER SUPPLY AND MANAGEMENT PLANS DESIGNED FOR 10 DISTRICTS IN NORTHERN GHANA	Conduct an inventory/feasibility study of existing water resources and vulnerabilities.	√	√	√	√	<ul style="list-style-type: none"> We need baseline information to inform the project layout.
		√	√	√	√	
	Design water supply systems suitable for 30 communities	√	√	√	√	Secondary data is already available. It provides the framework for the execution of project activities
	Form/ train existing water management committees		√	√	√	The management committees are essential in the entire project life span
Output 2.2: Climate smart community based water supply systems provided for multiple uses and users in 30 communities in northern Ghana	<ul style="list-style-type: none"> Construct/rehabilitate existing dugouts 		√	√	√	<ul style="list-style-type: none"> The activity will not be feasible in year one We need baseline information before construction can be done.
	<ul style="list-style-type: none"> Construct/Repair broken gravel (earth) dams 		√	√	√	<ul style="list-style-type: none"> physical construction cannot be done in the first year
	<ul style="list-style-type: none"> Desilt dams/dug outs etc. 		√	√	√	<ul style="list-style-type: none"> Some feasibility studies should be first carried out
	<ul style="list-style-type: none"> Construct sand dams 		√	√	√	<ul style="list-style-type: none"> The first year is occupied with feasibility studies and project designs.
	<ul style="list-style-type: none"> Support rain water harvesting 		√	√	√	<ul style="list-style-type: none"> The construction of reservoirs precede the water harvesting.
	<ul style="list-style-type: none"> Incorporate water harvesting into (existing) roads / roads 		√	√	√	<ul style="list-style-type: none"> Technical information required in the construction of weirs.

	under construction. (weirs)					
	• Drill boreholes	√	√	√	√	• The best time to construct boreholes is year two after the feasibility studies.
Output 2.3: Small scale irrigation systems installed in 30 communities and water users associations to manage irrigation systems established and/or strengthened to improve efficiency and effectiveness of	• Mechanize high yielding boreholes/dugouts for irrigation		√	√	√	• The second year will be used for the construction and testing of boreholes while the third year will be used for mechanization.
	• Supply pipes, diesel generators, sprinklers, watering cans for irrigation	√	√	√	√	• Availability of existing data and dams (Ghana Social Opportunity Projects)
	• Construct reservoirs and supply materials for drip irrigation		√	√	√	• Feasibility studies preceding the construction of the reservoirs
	• Install solar irrigation systems	√	√	√	√	
Output 2.4: Measures for water conservation under climate impacts implemented in 25 communities	• Establish tree nurseries for catchment/river bank re-afforestation schemes.	√	√	√	√	• To ensure effective induction of seedlings for onward transplanting
	Create buffer zones	√	√	√	√	Okay
	Plant vertiva grass/ and other cover crops	√	√	√	√	Okay
	Support District Assemblies & Traditional Authorities to promulgate/enforce bye-laws to protect water bodies and their catchment areas.	√	√	√	√	Okay
	Introduce terracing and plant fodder plants such as albezie along river banks	√	√	√	√	Okay
	Support ongoing advocacy of DAs & TAs to curb illegal mining within catchment of water bodies	√	√	√	√	Okay

Output 2.5: Learning platforms on systems for integrating climate change-related risks into community management of water resources and livelihood activities in northern Ghana institutionalized in 10 districts	<ul style="list-style-type: none"> Institute district/community award schemes & study tours 		√	√	√	<ul style="list-style-type: none"> some activity must be done on the ground before awards can be given.
	Hold reflection and annual review meetings & learning festivals		√	√	√	some activity must be done before reflection.
	Embark on media outreach	√	√	√	√	communication is one of the means for the spread of information to the people
	<ul style="list-style-type: none"> Organize participatory scenario planning sessions 	√	√	√	√	<ul style="list-style-type: none"> water resource planning is participatory from beginning to the end.
	<ul style="list-style-type: none"> Create websites 	√	√	√	√	<ul style="list-style-type: none"> to capture project data from the commencement of the project to the completion .
	<ul style="list-style-type: none"> Radio and TV broadcast 	√	√	√	√	<ul style="list-style-type: none"> people need information about the project from the beginning to the end.
	<ul style="list-style-type: none"> Institutionalize best practices 	√	√	√	√	<ul style="list-style-type: none"> to inform project planning, implementation and evaluation.

EXPECTED CONCRETE OUTPUTS	CORE ACTIVITIES	SCHEDULE				COMMENT
		YR 1	YR2	YR 3	YR 4	
Output 3.1: Improved infrastructure for water distribution for CCA and agricultural use installed in 10 districts	<ul style="list-style-type: none"> Construct/repair irrigation canals Conduct feasibility studies Start implementation in November 2016, 	✓				<ul style="list-style-type: none"> Construction would have to be done in the dry season and we are already in the raining season Promote sinking of shallow wells along river beds that dry up e.g Mognori river in Bawku municipal
	Install small scale solar pumps					In the dry season of the second year in October and November
	Install/supply diesel generator water pumps					<ul style="list-style-type: none"> Water pumps needed Should be started as soon as possible following the procurement process by November then it takes off /Identification of beneficiaries
	Lay pipes for irrigation					January second year during the dry season
	Install community based reservoirs for drip irrigation systems					Pre feasibility studies should start November 2016.
Output 3.2: Livelihoods diversification for improved adaptation to climate change in 50 communities.	<ul style="list-style-type: none"> Supply inputs for dry season gardening e.g. Seeds, small water pumping machines, water horses etc. 		✓			<ul style="list-style-type: none"> Sensitization of farmers towards the end of 2016
	Support community based bee keeping with hives and training					<ul style="list-style-type: none"> This will start in October after the rains Introduce bushfire trainings by October 2016
	<ul style="list-style-type: none"> Introduction of village saving associations 	✓				<ul style="list-style-type: none"> Around October this year

	<ul style="list-style-type: none"> • Train charcoal producers on efficient methods of production 	✓	✓			<ul style="list-style-type: none"> • Next year
	<ul style="list-style-type: none"> • Build capacity of women groups in shea butter/groundnut oil extraction 		✓			<ul style="list-style-type: none"> • Procurement of equipments for shea butter and groundnut extraction • Including Shea nut picking • Processing of Dawadawa and baobab fruits • Capacity building of women groups
	<ul style="list-style-type: none"> • Provide support for small ruminants production for women and youth groups 		✓			<ul style="list-style-type: none"> • Procurement of equipments in Jan 2017 • Identification of groups • Should be linked to tree growing not just planting them.
	<ul style="list-style-type: none"> • Introduction of village saving associations 	✓				<ul style="list-style-type: none"> • Around October this year
	<ul style="list-style-type: none"> • Train charcoal producers on efficient methods of production 	✓	✓			<ul style="list-style-type: none"> • Next year 2017
	<ul style="list-style-type: none"> • Build capacity of women groups in shea butter/groundnut oil extraction 		✓			<ul style="list-style-type: none"> • Procurement of equipments for Shea butter and groundnut extraction • Including Shea nut picking • Processing of dawadawa and baobab fruits • Capacity building of women groups
	<ul style="list-style-type: none"> • Provide support for small ruminants production for women and youth groups 		✓			<ul style="list-style-type: none"> • Procurement of equipments in Jan 2017 • Identification of groups • Should be linked to tree growing not just planting them.
	<ul style="list-style-type: none"> • Provide support for 		✓			<ul style="list-style-type: none"> • Almost every household has

	poultry/guinea fowl production					<ul style="list-style-type: none"> something doing in that direction Provision of hatchery for farmers New knowledge by bringing farmers together to share knowledge Support to areas with comparative advantage in guinea fowl/poultry production
	<ul style="list-style-type: none"> Capacity building of women groups in improved rice processing eg. Bolga rice technology 		✓			<ul style="list-style-type: none"> Identification of groups and also procurement of equipment
Output 3.3: Community tree nurseries and wood lots established for climate risk management in 40 communities.	<ul style="list-style-type: none"> Establish/adapt community nurseries for seedling production. Not need to establish new ones. 	✓				<ul style="list-style-type: none"> Use of GEMP strategic nurseries rather than establishing new ones. Support those nurseries with no water to get water e.g borehole
	Plant economic trees in river catchment areas					<ul style="list-style-type: none"> Planting of mixture of trees that are conducive to the local conditions Tree planting must start this year by June <p>Create fire belts and train fire volunteers in October 2016</p>
	<ul style="list-style-type: none"> Protection of scared groves 	✓				<ul style="list-style-type: none"> Around October 2016
	<ul style="list-style-type: none"> Protect all trees in water catchment areas 	✓				<ul style="list-style-type: none"> Fencing should start by October this year
	<ul style="list-style-type: none"> Establish community woodlots 	✓				<ul style="list-style-type: none"> Need to start by June 2016 Introduce natural regeneration and in October 2016 Undertake enrichment planting in July 2016 onwards
Output 3.4: Fish farms are established and supported in	<ul style="list-style-type: none"> Introduce cage fishing in constructed/rehabilitated water 		✓			<ul style="list-style-type: none"> But then small dams /dugouts might have been rehabilitated

20 communities	bodies					
	Support the establishment of community based fish ponds					Okay with that
	Encourage and regulate wild fishing					Self safe guarding since they know the benefit
	Supply inputs such as fingerlings and nets for wild fishing and cage fishing					<ul style="list-style-type: none"> Okay with that Support/rely on NEA at carpenter in the Bole district for fingerlings if possible
Output 3.5: Best practices for adaptation and lessons learned from the implemented actions and related policy processes are recorded and disseminated to all 38 districts in northern Ghana through appropriate mechanisms	<ul style="list-style-type: none"> Produce and disseminate brochures, maps, video documentaries 	✓	✓			<ul style="list-style-type: none"> Educate people using good practice and therefore should start in the first year
	Create website					Is okay in the second year
	Radio and TV broadcast					
	Institutionalize best practices					

Appendix 10: Evaluation form



**INCEPTION WORKSHOP
FOR THE ADAPTATION FUND PROJECT, MODERN CITY HOTEL**

Tamale, Tuesday 24 May 2016

Feedback Form

Dear participant, we hope that you have found the Inception Workshop to be informative and useful. In this regard, EPA, MESTI and the UNDP would be most grateful if you could provide feedback on the event. Please answer the following questions and add comments to elaborate on your response if needed. The questionnaire is anonymous; please do not include your name. Thank you!

1. Please tick the sector in which you work.

Sector	
National government	
District/ Municipal Assembly	
Traditional authorities	
Development Partner/ International organization	
NGO or civil society	
Private sector	
Academia	
Other: [Please specify]	

2. Workshop Objectives

The objectives of this workshop were the following:

- Develop a common understanding of the objectives and main activities of the Adaptation Fund Project
- Obtain technical inputs from the stakeholders
- Share experience and recommendation on similar initiatives from the north.

To what extent were objectives of the workshop clear?

5 <input type="checkbox"/>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>
Completely clear	Mostly clear	More or less clear	Partially clear	Not clear

To what extent did the workshop meet the objectives?

5 <input type="checkbox"/>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>
Completely met	Mostly met	More or less met	Partially met	Not met

Comments:.....

3. Please rate your understanding of the following items after having participated in the workshop:

Objectives of the Adaptation Fund (AF) project	5 <input type="checkbox"/> Completely clear	4 <input type="checkbox"/> Mostly clear	3 <input type="checkbox"/> More or less clear	2 <input type="checkbox"/> Partially clear	1 <input type="checkbox"/> Not clear
Methodology for implementation of the (AF) project	5 <input type="checkbox"/> Completely clear	4 <input type="checkbox"/> Mostly clear	3 <input type="checkbox"/> More or less clear	2 <input type="checkbox"/> Partially clear	1 <input type="checkbox"/> Not clear
Coordination arrangements for developing the workshop/AF project	5 <input type="checkbox"/> Completely clear	4 <input type="checkbox"/> Mostly clear	3 <input type="checkbox"/> More or less clear	2 <input type="checkbox"/> Partially clear	1 <input type="checkbox"/> Not clear

Please indicate any issues that were difficult to understand and/or any other comments:.....

4. Please rate the following statements using the numerical scale from strongly agree (5) to strongly disagree (1).

The information presented at the workshop was new to me.	5 <input type="checkbox"/> Strongly agree	4 <input type="checkbox"/> Agree	3 <input type="checkbox"/> Neutral	2 <input type="checkbox"/> Disagree	1 <input type="checkbox"/> Strongly disagree
It is likely that I will use the acquired information.	5 <input type="checkbox"/> Strongly agree	4 <input type="checkbox"/> Agree	3 <input type="checkbox"/> Neutral	2 <input type="checkbox"/> Disagree	1 <input type="checkbox"/> Strongly disagree
The content of the workshop was relevant to my job.	5 <input type="checkbox"/> Strongly agree	4 <input type="checkbox"/> Agree	3 <input type="checkbox"/> Neutral	2 <input type="checkbox"/> Disagree	1 <input type="checkbox"/> Strongly disagree

Comments:

5. Overall, how would you rate the usefulness of the workshop?

5 <input type="checkbox"/> Completely useful	4 <input type="checkbox"/> Mostly useful	3 <input type="checkbox"/> More or less useful	2 <input type="checkbox"/> Partially useful	1 <input type="checkbox"/> Not useful
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6. Do you have any other comments on the workshop, suggestions for improvement, etc.?

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Appendix 11: Criteria for Selecting buffer Zone Communities



ADAPTATION FUND PROJECT BUFFER ZONE COMMUNITY SELECTION CRITERIA

Introduction

The Adaptation Fund Project “**Increased Resilience to Climate Change in Northern Ghana through the Management of Water Resources and Diversification of Livelihoods**” aims at building resilience and adaptive capacity of rural livelihoods to climate variability through improved management of water resources in the three (3) Northern Regions of Ghana.

The main objective of the programme is to enhance the resilience and adaptive capacity of rural livelihoods to climate impacts and risks on water resources in Northern Ghana. The objective will be achieved through key results centered on the improvement of water access and also increase institutional capacity and coordination for integrated water management to support other uses of water resources especially for the diversification of livelihoods by rural communities. This will be done so by delivering the following three complementary outcomes:

The programme is focus to enhance the resilience and adaptive capacity of rural livelihoods to climate impacts and risks on water resources in Northern Ghana. This will be achieved through key results centered on the improvement of water access and also increase institutional capacity and coordination for integrated water management to support other uses of water resources especially for the diversification of livelihoods by rural communities. This will be done so by delivering the following three complementary outcomes:

- **Outcome 1:** Improved planning and management of water resources taking into account climate change impacts on surface and groundwater sources
- **Outcome 2:** Climate resilient management of water resources by communities in Northern Ghana
- **Outcome 3:** Enhanced diversification of livelihoods of communities in northern Ghana

The programme will target the following ten districts: Savelugu, Bole Zabzagu, Bawku Municipal, Bongo, Builsa South, Bawku West, Nandom, Nadowli and Sissala East.

Building on local consultations of community groups, civil society, local government institutions, NGOs etc. in the three northern regions, the project will adopt a buffer zone restoration approach for managing rivers basins in Ghana. The following proposed criteria are to assist Regional and District Adaptation Committees list and rank communities for approval by project management for phasing into the project.

Selection of buffer zone communities

Definition: Riparian buffer zone generally encompasses undisturbed native strip of vegetation either original or established that borders streams and rivers, ponds, lakes and wetlands and is therefore the interface between terrestrial and aquatic ecosystems. It may include trees, shrubs, herbaceous plants and grasses extending from the defined edge of a stream, river or shoreline. To conserve these resources of considerable importance, require ,that buffer zones are designated to the maximum extent practicable and include best management practices that will ensure the maintenance and integrity of the waterway, biota, and habitats and reduce pollution that would result in water quality improvement and fresh water supply at low cost from well preserved water bodies.

List at most five (5) buffer zone communities of the beneficiary district (please provide a clear description of the community and the name of the tributary forming the buffer zone; indicate the location of the buffer zone relative to the main river or stream, major challenges, importance to the communities, current status and propose solutions to environmental sustainability of the selected buffer zone community, etc.)

Based on the descriptions above, rank the buffer zone community by allocating numbers 1 to 5 with the most important receiving 5

Community selection

For each of the buffer zone community listed, list and rank not less than ten (10) communities according to the following criteria:

1. Community willingness to ensure Environmental Security and Livelihoods through ecosystem service approach for Community Resources Management Areas (CREMAs) - **15 points**
2. Ensure sustainability of the protected resources as alternative livelihood - **15 points**
3. Located on river basin - **15 points**
4. Well established and functional community governance structures - **10 points**
5. Absence of potential and real land and social conflicts – **10 points**
6. Experience with CREMA or ecosystem service and land restoration concepts e.g, sacred groves, non-burning - **15 points**
7. Accessibility - **10 points**
8. Level of awareness of environmental protection, resource sustainability and livelihoods security - **10 points**

Methodology

A. The identification and the listing of community buffer zones should mainly be done as desk work based on informed knowledge of the area. Ground truthing will only be undertaken to confirm information e.g. names etc.

B. The listing and ranking of communities will be undertaken using a combination of desk and field work as follow:

- Form a team of not more than 13 including; District Forest Manager, District Wildlife Manager, Basin Managers, CREMA Managers, District Director of Agriculture, District Planning Officer, Forest/Wildlife Supervisor (responsible for the area) and two Extension field staff (working within the area)
- List five contiguous communities within the watershed
- Conduct a rapid appraisal of each community using
 - ✓ interview of key informants,
 - ✓ focus group interview (chief and community leaders)
 - ✓ transect walk
- team should prepare not more one page report on the appraisal of each community and rank them using marks awarded

The appraisal of each community if well planned should take not more 2 – 3 hours. It is important to start the community appraisal exercise with the first ranked buffer zone.

Proposed sample questions

1. Confirm the name of the community
2. Ask the name and status (perennial or seasonal) of the nearest stream and where it flows to
3. What are major economic activities in the community (least 3 and rank)
4. Traditional authority existing in the community and power relations within and outside
5. Are there any local level structures within the community for NR governance, if yes mention name and role
6. What is land tenure arrangements within the community (estimate percentage of tenant farmers within the community)
7. What is the perception of the community about the status of their natural resources especially, for restoration, protecting and conserving for livelihood and climate resilience;
8. Has the community or individuals undertaken any activities towards land restoration if yes mention activities and lessons learnt
9. Has the community participated in any community-based rural development in the last five years; if yes, list and provide any experiences
10. Trans-walk is to afford members of the team make individual observations of proposed buffer zone

Scoring and ranking

- Each member of the team should score each community individually
- Team members after appraisal exercise in each community should meet to present and discuss individual scores and calculate the average score for the community. *Where an individual score falls outside the average by more than 20 per cent it should be discarded and the average calculated on scores of the remaining members.*
- The average scores for the individual communities should be used to rank/priorities the communities for phasing into the project