Ministry of Environment, Science, Technology and Innovation (MESTI)	Mission Report Summary (*)
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Mission : Monitoring visit on the Rehabilitation of Nabugaan, Tarso Kulfou, Welembelle, Bong-Dua and Kpelewega Dams.	AF Project Management Unit

Mission Dates: 3-12 February 2021

Background

The Government of Ghana (GoG), through the Adaptation Fund financed Program titled "Increased resilience to climate change in northern Ghana through the management of water resources and diversification of livelihoods" aims at addressing climate change-induced decreases in the availability and increasing unpredictability of water resources, and the associated negative impacts of these trends on the livelihoods of rural communities. The main objective of the program is to enhance the resilience and adaptive capacity of rural livelihoods to climate impacts and risks on water resources in Northern Ghana.

Following the procurement of Contractors by the MESTI, based on the feasibility study reports with details of the status of the dams in the selected communities submitted by the Consultants, coupled with the advent of the rainy season, it is imperative that an Inception meeting be held and sites officially handed over to awarded contractors. The site handing over would be done by a team from MESTI, the Supervising Consultants, the Regional Minister and representatives from their respective Municipal/District Assemblies, EPA regional representatives, Chiefs and opinion leaders of each community.

Below is the list of proposed sites for rehabilitation:

Region	District	Communities
Upper West	Nandom	Nabugajan
	Sissala East	Tarso-Kulfour
Northern	Sissala East	Wellembele
Upper East	Bongo	Dua
	Bawku Municipal	Kpelewega

Objectives of the Field Trip

- Hold site meetings with Contractors, Supervising Consultants and Site Engineers
- * Resolve any issues that could impede progress of work
- Get the Contractors to speed up work in order to meet the March 2021 retirement of funds deadline from the UNDP
- Ensure community ownership of the project by interacting with the chiefs and opinion leaders as a follow up of the inception meeting with them.

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1. Nabugaan Dam: The rehabilitation is undertaken by Astee Company Ltd

At the time of our visit the Contractor had executed substantive works on the dam. The following were key achievements:

- The embarkments had been completed
- Fencing of the irrigable are had been completed
- Laying of protective boulder had been completed
- Conduit pipes laid and connected from dam to irrigable land/vegetable farms

Outstanding works were:

- Spillway under construction
- Remaining tree trunks to be removed
- Inlet and Outlet valves to be fixed
- Grassing along the embarkments
- Backfilling to constructed channels/laterals

Additional Observation:

- The activities of cattle (crossing over to the embarkment into the dam for water) is a big threat to the dam. According to the site engineer, their weight and foot tracks along the embarkment could weaken it over time and could damage the dam.
- The Project Coordinator entreated the Assembly man, who was present, to educate the owners and caretakers of the cattle of the implication of their activities along the dam embarkment on the sustainability of the dam for the use by both human and Livestock.

Pictures:





- The Contractor to remove remaining tree stumps from the reservoir
- Inlet and Outlet valve should be fixed
- Laterals must be constructed for the distribution of water to the irrigable area
- The construction of the spillway must be completed before the rains set in
- Contractor to comply with Consultant's directives to avoid unnecessary delays in approvals.
- Regular MEST/UNDP visit to sites could help speed up work.

2. Welembelle Dam- The rehabilitation is undertaken by Memphis Metropolitan Limited

At the time of our visit, not much work has been done by the Contractor. The reason given was that it was due to the late start of the works as a result of the revocation of the initial contract and change of site from Savelugu in to Welemebelle. The following were the key achievements:

- Erection of chain link fence around the 3-hector irrigable land had commenced.
- Laying of PVC pipes from the area marked for the outlet chamber to the irrigable land was far advanced.
- Almost all the materials required for the assignment had been procured and stored.

Outstanding Works were:

- Actual construction of the embarkment
- Actual construction of the Spillway
- Laying of protective boulders
- Construction of the In-let and Out-let chambers
- Laying of in-let and out-let pipes and laterals
- Fixing of conduit inlet and out-let valves
- Gravelling, laying of black soil etc.

Picture:





- The Contractor must be pushed by the PMU to commence works immediately, as enough funds (advance mobilization) has been paid to him.
- The Contractor must hire a private security for the warehouse where the materials and other equipment for the works are stored. The closeness of the warehouse to the Police Station does not necessarily constitute adequate security.
- Contractor to comply with Consultant's directives to avoid unnecessary delays in approvals.
- Regular MEST/UNDP visit to sites could help speed up work.

3. Tarso Kulfou Dam: The rehabilitation is undertaken by Steppower Limited

Overall, the Contractor had done substantial works. Key achievement include:

- Dam body enlarged to designed angle, length, width and height
- Water reservoir flow control established
- Dam body Tree, bushes, roots and stamps cleared
- Planting of vertiva grass along embarkment ongoing
- Construction of Spillway in progress
- 3-hector land earmarked for irrigation farming cleared

Outstanding works were:

- Erection of chain-link fence around 3-hector irrigable land
- Smoothing of the walkway by topping up soil to get the required level per the Consultant's estimates
- Laying of boulders
- Laying of pipes from the outlet chamber to the irrigable farm
- Dressing of dyke
- Construction of spillway beam

Additional observation

- The contractor had destroyed a vegetable farm established by one of the NGOs engaged the project under the Alternative livelihood project. The portion of land was within the 3-hector land allocated by the community. It was evident the contractor did not consult the NGOs or the beneficiaries. The Project Coordinator requested a meeting between the Contractor, the NGO, the beneficiaries and community leaders for an amicable solution to the problem

Comment by Site Engineer-Mr. Gaspard

- The site Engineer indicated that the rehabilitation works on the dam was very timely and laudable. According to him, but for the timely intervention by the project there would have been serious trouble in the community as there only source of water for both humans and livestock in that particular community is the dam, which had dried up due to the severe dry season. The Contractor, realizing the situation immediately created a mini pond within the dam for use by both humans and livestock.

- The Contractor has to complete the filling up of the walkway with additional sand to level up
- Issues relating to the destruction of an existing vegetable garden within the 3-hector land must be resolved amicably with the NGO (FORG) and the existing beneficiaries as well as the new ones.
- Contractor to comply with Consultant's directives to avoid unnecessary delays in approvals.
- Regular MEST/UNDP visit to sites could help speed up work.

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4. Bongo-Dua Dam: The rehabilitation is undertaken by TA Tanko Limited

Apart from the chain link fence which was under construction, there were no actuals works going on at the dam was site. However, some activities that had been done before or visit include:

- Water reservoir de-watered
- Dam area cleared of trees, tree stumps etc
- Some level of work has been done on the existing embarkment and walkway
- Walkway breached to pave way for the construction of base for PVC in-let and out-let pipes
- Old boulders gathered
- Erection of Chain Link fence on-going

Outstanding Works were:

- Actual construction of the embarkment and walkway
- Actual construction of laterals
- Actual construction of the Spillway and other related works
- Laying of protective boulders
- Construction of the In-let and Out-let chambers
- Fixing of conduit inlet and out-let valves
- Gravelling, laying of black soil etc.
- Completion of the erection of the Chain link fence
- Connecting distribution pipes from the Outlet valve to the irrigable land

Additional observation

- We observed that the main cause of delay in the works was the rental of faulty machinery and equipment, some of which are not fit-for-purpose.
- The Chief and community members visited us at the site complained about the Contractor not engaging them periodically to discuss progress of work, challenges, as well as incorporate their concerns in the overall works, that they believe would benefit them.

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- The Contractor, as a matter of urgency needs rent/hire equipment and machinery that are in good working condition and also fit for purpose
- The Contractor needs to provide financial resources regularly to the technical team for prompt acquisition of critical materials for the assignment
- Contractor to comply with Consultant's directives to avoid unnecessary delays in approvals.
- Regular MEST/UNDP visit to sites could help speed up work.

5. Kpelewega Dam- The rehabilitation is undertaken by B.Y. Sumouso Limited.

The only completed activity as at the time of our visit was the chain link fence that had been completely erected. Works on the actual rehabilitation had stalled due to the non-cooperative attitude of the Chief, elders and community members. The reservoir had been de-watered but not completely. The reason was to give human and livestock access to some water while part of the rehabilitation works would be going on.

The PMU team, the Consultants, the Contractor and the Chief and some opinion leaders in the Community had a meeting to address their concerns. Some of which were:

- Issues relating to the construction of the laterals, the dimensions, and how it would distribute water evenly across the irrigable area, as the beneficiaries are from different clans with varied expectations.
- Inability of the Consultant to engage the beneficiaries in periodic meetings to update them on progress of work, challenges and also incorporate their inputs/concerns into the overall work
- The refusal of the Contractor to provide substantial resources(funds) to be used to pacify the deity of the land

After a long deliberation, the Project Coordinator was able to help the two parties come to a common ground on all the issues. The Project Site Engineer was able to provide clarity on the issues related to the laterals and plans put in place to ensure water is evenly distributed using some methods suggested by the community members.

The Project Coordinator was equally able to negotiate with the Chief and elders on the quantum of the funds to be provided for the pacification of the deity. The Contractor was very relieved and happy with the truce and released the negotiated amount immediately to the chief and Elders. The Chief and elders were very happy about the development and promised to cooperate with the Contractor going forward.

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- The Contractor, as a matter of urgency needs rent/hire equipment and machinery that are in good working condition and also fit for purpose
- Now that issues with the Chief and Community have been resolved, the Contractor needs to provide financial resources regularly to the technical team for prompt acquisition of critical materials for the assignment
- Contractor to comply with Consultant's directives to avoid unnecessary delays in approvals.
- Regular MEST/UNDP visit to sites could help speed up work.