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# SAP008 "Extended Community Climate Change Project-Flood (ECCCP-Flood)"

Quarterly Environmental & Social Safeguards Monitoring Report

January 2022-March 2022





## Quarterly ESS Monitoring Report (January-March 2022)

### ECCCP-Flood



#### BASIC INFORMATION OF THE PROJECT

|                                       |  |                                  |                  |
|---------------------------------------|--|----------------------------------|------------------|
| <b>Project ID / OutputID</b>          | <b>SAP 008</b>   |                                  |                  |
| <b>Full Title:</b>                    | <b>Extended Community Climate Change Project-Flood (ECCCP-Flood)</b>                   |                                  |                  |
| <b>Targeted Areas</b>                 | <b>Nilphamari, Lalmonirhat, Gaibandha, Kurigram &amp; Jamalpur</b>                     |                                  |                  |
| <b>Start Date</b>                     | 27 April 2020  | <b>Completion date:</b>          | 26 April 2024    |
| <b>Total Project Fund:</b>            | <b>USD 13.33 million</b>   | <b>Budgeted allocation</b>       |                  |
| GCF (Grant):                          | USD 9.68 million   | <b>1st year</b>                  | USD 2.94 Million |
| PKSF (Co-financing):                  | USD 3.65 million   | <b>2nd year</b>                  | USD 3.88 Million |
|                                       |  | <b>Total disbursement by GCF</b> | USD 4.97 Million |
| <b>National Designated Authority:</b> | Economic Relations Division, Ministry of Finance, The People's Republic of Bangladesh. |                                  |                  |
| <b>Accredited Entity:</b>             | Palli Karma-Sahayak Foundation (PKSF)  |                                  |                  |
| <b>Country:</b>                       | Bangladesh   |                                  |                  |



## Contents

|    | Subject  | Page |
|----|--|------|
|    | Acronyms   | i    |
|    | Executive Summary  | ii   |
| A. | Background & Description of the Project                    | 1    |
| B. | Purpose of the Report                                      | 1    |
| C. | Environment and Social Safeguard Standards (ESSSs)         | 2    |
| D. | Environmental and Social Safeguards Monitoring Report      | 2    |
| E. | Conclusion   | 17   |
|    | Annex-I: Environmental & Social Safeguard Screening Format | 18   |
|    | Annex-II: Grievance Mechanism Monitoring Report            | 24   |
|    | Annex-III: Arsenic and Iron Concentration Test Report      | 25   |



## Quarterly ESS Monitoring Report (January-March 2022)

### ECCCP-Flood



## Acronyms

|       |   |
|-------|---|
| DPHE  | Department of Public Health Engineering       |
| ECCCP | Extended Community Climate Change Project     |
| EC    | Executive Committee                           |
| ECA   | Environmental Conservation Act (1995)         |
| ECR   | Environment Conservation Rules (1997)         |
| ESAP  | Environment and Social Action Plan            |
| ESMF  | Environmental and Social Management Framework |
| ESSS  | Environment and Social Safeguard Standard     |
| ESS   | Environment and Social Safeguard              |
| FGD   | Focus Group Discussion                        |
| GCF   | Green Climate Fund                            |
| GHG   | Greenhouse Gas                                |
| GRM   | Grievance Redress Mechanism                   |
| IEs   | Implementing Entities                         |
| IEE   | Initial Environmental Examination             |
| IFC   | International Finance Corporation             |
| PHC   | Primary Health Care                           |
| PKSF  | Palli Karma-Sahayak Foundation                |
| PMU   | Project Management Unit                       |
| PO    | Partner Organization                          |
| PPE   | Personal Protective Equipment                 |
| PS    | Performance Standard                          |



## Executive Summary

Palli Karma-Sahayak Foundation (PKSF) has been implementing the project titled “Extended Community Climate Change Project-Flood (ECCCP-Flood)” with grants financed by Green Climate Fund (GCF). The project aims to assist targeted project participants to increase the resilience of the poor, marginalized, and climate-vulnerable communities from the adverse effects of climate change in the flood-prone areas of Bangladesh. ECCCP-Flood also aims to provide climate-resilient shelters, livelihoods, drinking water sources, and sanitation systems for these people. The ECCCP-Flood project is under Environment and Social Safeguard Category ‘C’ as per GCF’s Environmental and Social Safeguard Standards which means the project is likely to have minimal or no adverse environmental and social impacts. So, the Project Management Unit (PMU) developed an Environment and Social Action Plan (ESAP) for the sustainable adaptation measures of the project which is aligned with GCF’s Environmental and Social Safeguard (ESS) policies and country’s rules and regulations e.g., Bangladesh Labour Law, Environmental Law and Policy along with PKSF’s Environmental and Social Management Framework (ESMF). This report will cover the progress that has been achieved between January 2022 to March 2022. Various activities have been performed by the Implementing Entities (IEs) during this period. Among those activities, protection of homesteads from adverse effects of flood, increase access to safe water and sanitation, and access to flood-resilient livelihoods are the main ones. Various workshops had been conducted at the local level. Initially, all the IEs were visited by the PMU at different locations to identify potential environmental and social impacts of their activities. Visiting project locations helped to reveal a few common environmental impacts that have occurred due to project activities. Among those waste water generation, air pollution, dust pollution, lack of waste management practice, lack of awareness on occupational health and safety, and land use pattern change were found as the most significant environmental impacts. No such activities regarding natural habitat loss, activities among ecologically critical areas, or conservation areas have been found. No unresolved community grievances were found during the field visit and Implementing Entity (IE)-level activity except for some local political influence.



## Quarterly Environmental and Social Safeguards Monitoring Report (January 2022 to March 2022)

### A. Background and Description of the Project

The impacts of climate change in Bangladesh are becoming increasingly evident. It has already been reflected in natural disasters like floods, flash floods, salinity ingress, tidal surge, and drought. The frequency and intensity of these disasters are ever-increasing. The poor are at the highest risk. Women and children will be affected worse than any other group in the community due to their low capacity to cope with shocks. The poor and marginalized communities living in flood-prone areas generally depend on agriculture for their livelihoods, which are highly sensitive to climate change. These climate-induced disasters affect habitation, availability of water, and sanitation systems. ECCCP-Flood aims to provide climate-resilient shelters, livelihoods, drinking water sources, and sanitation systems for these people.

The project sought grant finance from the Green Climate Fund (GCF) in the reality that the people living in the riverine char areas are highly vulnerable to climate change fallout, particularly floods. Their homesteads frequently inundated by flood water. Their livelihoods depend on subsistence agriculture and agriculture wage labour which are also very sensitive to flooding. They lose their crops almost every alternative year. The women in the char areas are particularly vulnerable to floods because they have to look after children and old members of the households in addition to collecting drinking water, cooking food, looking after poultry and livestock, and other household activities. Adolescent girls and women are also vulnerable to sexual harassment during a flood because they have to stay on embankments or flood shelters. These poor communities always struggle to meet their daily necessary commodities and have the least capacity to address additional threats.

### B. Purpose of the Report

As per GCF's Environmental and Social Safeguard Policy, the ECCCP-Flood project is under Environment and Social Safeguard Category 'C' which means the project is likely to have minimal or no adverse environmental impacts. PKSF monitors ESS-related issues due to the activities under the 'ECCCP-Flood' project using ESAP developed by themselves. The ESAP



has been developed for the sustainable adaptation measures of the project which is aligned with GCF's ESS policies and country's rules and regulations which is aligned with Bangladesh Labour Law, Environmental Law and Policy along with PKSF's ESMF. The purpose of the report is to document the impacts of community-level adaptation interventions on the environment and society. The reports also capture lessons learned on environmental and social impacts at the field level and use them for further improvement of the quality of project implementations. The report will be shared through PKSF's website to make it public.

### **C. Environment and Social Safeguard Standards (ESSs)**

There are ten established ESSs that PKSF (including IE), and the project will meet through the project life cycle. They are as follows:

- Environmental and Social Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
- Environmental and Social Standard 2: Labour and Working Conditions
- Environmental and Social Standard 3: Resource Efficiency and Pollution Prevention and Management
- Environmental and Social Standard 4: Community Health, Safety and Security
- Environmental and Social Standard 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement
- Environmental and Social Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
- Environmental and Social Standard 7: Indigenous Peoples/Traditional Local Communities
- Environmental and Social Standard 8: Cultural Heritage
- Environmental and Social Standard 9: Financial Intermediaries
- Environmental and Social Standard 10: Stakeholder Engagement and Information Disclosure

### **D. Environmental and Social Safeguards Monitoring Report**

The report was prepared based on the findings from the field visits in the project areas where attached checklists were used (attached in Annex-1 and Annex-2). The findings are described below:





## **1.1 Environmental and Social Standard 1: Assessment and Management of Environmental and Social Risks and Impacts**

Initially, the environmental and social risks of the project were assessed during the design phase of the project. However, new risks may arise during the implementation period. Hence, PMU tries to assess ESS risks throughout the project cycle to mitigate those effectively.

There are very limited environmental and social risks and impacts that have been identified during the environmental and social screening of the project. The PMU also developed a mitigation plan through developing an ESAP.

In the field, it was found that most of the activities were performed considering environmental and social safeguard policy and as per the ESAP prepared by PKSf. There were no visible water and noise pollution found in the project areas. But air and soil pollution were found in the Lalmonirhat district. Due to sanitary latrine installations, wastewater has been generated in the project areas but it was managed through constructing soak wells and safety tanks to protect ground and surface water from contamination. In Lalmonirhat district, water congestion was found due to project interventions. Dust management is a challenging issue in the project areas and proper dust management has not been found in a few places in the Nilphamari district.

Grievance Redress Mechanism (GRM) is established in the project areas, but it was moderately up to the mark. There is an ongoing grievance record system where different types of complaints are written down. And in most cases, the complaints were resolved with the help of local leaders or IEs staff. There were no unsolved grievance issues that have been found during this reporting period (The recorded facts related to the grievance are given on page no.-12).

## **1.2 Environmental and Social Standard 2: Labour and Working Conditions**

It was found that all the labours were treated equally in the field and no gender discrimination issues have been found. All of them are getting equal opportunities to work. It was found that there is a good relationship between workers and management. Besides, no negative issues were found in any of the project locations. National employment and labour laws have been followed strictly in the field and the labours were found as well-known regarding their hours of work, wages, overtime, compensation and benefits. But no written Labour Management procedure has been found except in Jamalpur and Lalmonirhat districts.





There were limited harmful activities in the field, and the implementing entities have ensured gloves, gumboots, and face masks for workers' safety. IEs have ensured safe drinking water for workers. It should be mentioned that no issues have been found with slipping or falling or major injuries. And there were no cases of sexual harassment. Moreover, no past fire incidents were recorded in the project areas.

The labours have been found well-oriented about their health and safety by the implementing entities and there are Primary Health Care (PHC) facilities in the field except for a few places of Nilphamari and Kurigram districts where fast aid facility was missing. As the project is running during the Covid-19 situation so in most of the cases (except in a few places in the Kurigram district) it has ensured that the labours are working using masks and maintaining social distancing and other health protocols to protect themselves from Covid-19 and dust also. Similar to group meetings, participants have found using the mask as well as maintaining social distance. It has been found that few workers in Kurigram district reluctant in using mask while working as they feel it is an obstacle. Moreover, workers' health and safety sessions were conducted in most of the places except a few places in Jamalpur, Kurigram, and Lalmonirhat districts.

No labour has been found under the age of 18 (Child Labour). It has been found that few labours are working forcefully in the Lalmonirhat district. Moreover, no external labour has been found in the implementation process. All the activities have been performed through the local people and project participants.

### **1.3 Environmental and Social Standard 3: Resource Efficiency and Pollution Prevention and Management**

Earlier, it is mentioned that some air pollution issues have been found in the Lalmonirhat district but that is not for the project-relevant activities. And there was no such soil degradation issue except in a few places in Lalmonirhat district due to plantation activities in the raised plinth that have already been implemented. Moreover, there is no such intervention till now

that can produce hazardous waste to contaminate ground or surface water. There were no such water congestion issues except in a few places in the Lalmonirhat district due to plinth elevation.

It was ensured that the resources have been used with care and there were a few issues related to groundwater use in the project areas as groundwater is up-taken using tubewells for drinking purposes. Moreover, for plinth raising in most cases alluvial sand was not used except in a few places of Gaibandha, Jamalpur, Kurigram, and Lalmonirhat districts. And there was no use of fertile topsoil in plinth raising.



*Figure 1: Plantation in the slope of the raised plinth*

There are no activities in the project that can emit Greenhouse Gas (GHG). Though some GHG sources (like- transportation, industry etc.) were found in the project areas specially in Kurigram, Lalmonirhat and Nilphamari districts those were not due to project activities.

Though the project participants have been found using chemical fertilizer and insecticides, the promotion of using organic fertilizer and an integrated pest management system is going on except in a few places of Nilphamari, Kurigram and Lalmonirhat districts. Pheromone trap used in few areas of Jamalpur, Gaibandha and Lalmonirhat districts. Crop residues are being used as fertilizer except in a few places of Lalmonirhat and Nilphamari districts.

#### **1.4 Environmental and Social Standard 4: Community Health, Safety & Security**

A significant number of tubewells and latrines have already been installed and they are generating waste water, but it has been managed well through soak well construction. So, no major community health, safety, or security problems have been found so far. Moreover, project participants were found to be well aware of using shoes while using the toilets. In most cases, for tubewell installation, advice has been taken from Department of Public Health Engineering (DPHE). A minimum 30 feet distance has been maintained between tubewells and latrines except for a few areas of Kurigram and Nilphamari districts. Few installed tubewells water samples are under testing process in the laboratory and few have already been tested. Arsenic was not found (as per Bangladesh standards) in the water samples of the project areas

but in a few places of Gaibandha, Iron concentration was higher (as per Bangladesh standard) than the standard limit. So, they were re-boring to find a better water layer. Few tubewell platforms have already been constructed in Jamalpur, Kurigram, Gaibandha, Nilphamari, and Lalmonirhat after getting results of water quality. In most of the areas, tubewell platform slopes were



Figure 2: Tubewell use

found enough to drain the water except in a few places of Lalmonirhat and Nilphamari districts. So, they are going to be reconstructed to drain the water smoothly. To ensure hygiene water tanks and soaps were found in Lalmonirhat, and in a few places of Jamalpur, Gaibandha, Kurigram and Nilphamari districts beside constructed latrines. And the latrine surroundings were found neat and clean except in a few places of Nilphamari district.

Solid waste management has been found as a challenging task in the project areas and there is no such waste treatment method in those areas. Rather the community is practicing pit/vermi-composting in Gaibandha, Jamalpur, and Lalmonirhat districts using organic wastes. In a few areas in Lalmonirhat district, household waste disposal in open places has been found. To mitigate the issues, regular sessions are being conducted to make them aware and motivated toward organic composting. Till now, no risk of ground or surface water contamination has been found. Moreover, there are no activities in the project design that could cause harm to private or personal property.

### **1.5 Environmental and Social Standard 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**

Minimal land use pattern change has been found in the Nilphamari, district. But no damage to agricultural land has been found. Moreover, no displacement issue was found. And there is no proper alternative land use plan or compensation plan has been set till now as no displacement issue has arisen. Moreover, there is no incident of forced eviction or forced resettlement.

As the project participants are getting the house on high raised plinths so their standards of living are getting better gradually. Moreover, it has been found that they are practicing homestead gardening, which is helping to meet the need of their daily needs and nutrition.

### **1.6 Environmental and Social Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources**

At present, no such threat to biodiversity has been found. Most of the project areas have no such endangered species except in the Lalmonirhat district. So, protecting those endangered species has been taken as a prime concern during project implementation. Moreover, the project does not have any plans to implant alien invasive species.

Plantation on the raised plinth around the raised homesteads are increasing the number of natural resources. Few trees have been cut due to plinth raising activities in the Kurigram district but five more trees have been planted instead of one tree cutting to integrate conservation and development activities. Turfing on the slope of the raised plinth has also been ensured. Moreover, homestead gardening is also being practiced by the project participants except in a few areas of Jamalpur and Nilphamari districts.



*Figure 3: Homestead Gardening*

### **1.7 Environmental and Social Standard 7: Indigenous Peoples/ Traditional Local Communities**

There is no indigenous community in the project areas. There is no such negative impact on the traditional local community.

### **1.8 Environmental and Social Standard 8: Cultural Heritage**

The project intervention places have no such cultural heritage site.

### 1.9 Environmental and Social Standard 10: Stakeholder Engagement and Information Disclosure

All the information has been shared with the relevant stakeholders for ensuring sustainability along with their active participation in the project. Information and the project progress reports were also shared on the PKSf website as a part of information disclosure.

### 1.10 Major Identified Impacts found and Mitigation Measures were taken at the Field Level

| Identified Impacts based on Field Visit           | Mitigation Measures taken  |
|---|--|
| Air Pollution in a few places in the project area | It has been found that the air pollution was not caused due to project activities rather than other activities like- transportation.   |
| Dust Pollution                                    | Considering weather conditions like wind flow, wind speed, the labours have used musk and sprayed water.   |
| Greenhouse Gas (GHG) emission                     | It has been found that the emission of GHG was not emitted due to the project activities rather than other activities like transportation.   |
| Unavailability of sand/soil for plinth raising    | <ul style="list-style-type: none"> <li>a) Alternative sand/soil sources like- pond/canal were used;</li> <li>b) Used fallow land for earthwork;</li> <li>c) The soil was taken mostly from sandy char land. So, it will be covered again during the flood through sedimentation;</li> <li>d) Sometimes the project participants purchased soil at a low price from a distant place.</li> </ul> |
| Soil Pollution and Degradation                    | More plantation work and turfing are going on to prevent soil erosion.   |
| Generation of waste water                         | Managed through soak well construction   |
| Lack of proper Solid Waste Management             | Promotion of organic composting (pit/ vermi-composting) is going on and regular sessions are   |

|   |  |
|---|--|
|   | conducted to motivate the project participants to avoid open disposal of wastes.   |
| Tree cutting or clear felling   | Motivation is ongoing not to cut trees. If needed, five more saplings were planted for one tree logging. If needed, a plantation program will be designed. Project participants planted trees by their own contributions.  |
| Unavailability of quality/flood-tolerant rice and vegetable seeds in the project area | a) Ensured consultation with the local Department of Agricultural Extension (DAE) and Bangladesh Agricultural Development Corporation (BADC) regarding quality seed collection and seed-related problems solutions;<br>b) Invited DAE for providing training to selected farmers;<br>c) Project participants preserved seeds in their own initiatives. |
| Environmental pollution due to the use of pesticides and chemical fertilizers         | a) Encouraged the community to use organic manure, and organic fertilizer like vermi-compost for soil fertility;<br>b) Promoted Integrated Pest Management (IPM);<br>c) Ensured banned pesticides are not used.  |
| Water stagnation/ drainage congestion/ water logging                                  | Constructed drain/s ensuring properly maintained natural slope.  |
| Impact on surface water quality due to throwing wastes here and there                 | Trying to introduce proper solid waste management, and water quality management.   |
| Community health and safety   | a) Encouraged the community to dump the organic waste into a pit to produce organic fertilizer as well as proper solid waste management;<br>b) Used shoes while using latrine;   |



|  |  |
|--|--|
|  | <ul style="list-style-type: none"> <li>c) Tested Arsenic and Iron concentration for the drinking water sources of the installed tubewells;</li> <li>d) Community keeps their toilet neat and clean by themselves;</li> <li>e) Ensured twin-pit soak well under the sanitary latrines;</li> <li>f) Ensured soap and water sources besides the latrine to maintain proper hygiene;</li> <li>g) Ensured hygiene-related sessions during the group meeting discussions;</li> <li>h) Ensured handle inside the latrine so that aged and pregnant women can smoothly use the latrine.</li> </ul> |
| Viral and bacterial diseases may transmit from the slatted houses of Goats/Sheep | <ul style="list-style-type: none"> <li>a) Ensured proper waste and urine management;</li> <li>b) Ensured periodic vaccination;</li> <li>c) Ensured proper disposal of the dead goats/sheep (if any).</li> </ul>  |
| Land use pattern change  | As there is no eviction or displacement issue, so no alternative plan till now.  |
| Equal opportunity for workers  | As it is due to some social constraints, so encouraged the community people to break this taboo.   |
| Gender discrimination from poorest households including marginalized people      | <ul style="list-style-type: none"> <li>a) The project participant selection procedure was the same for all. There was no discrimination during the beneficiary selection process. The Project Management Unit (PMU) verified the beneficiary list physically to ensure that there was no discrimination;</li> </ul>  |





## Quarterly ESS Monitoring Report (January-March 2022)

### ECCCP-Flood



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|---------------------|--|
|                     | b) Developed and promoted a Grievance Redress Mechanism (GRM) to find out the discrimination aspects.  |
| Political influence | Mitigated the problem through proper disclosure of the project-related information with the relevant stakeholders and time-to-time communication with the local leaders and local government institutions. |



## 2. Grievance Redress Mechanism (GRM)

Several grievance issues have been found in the field, while most of them are resolved with the help of local leaders or IEs. And most of the community people (except a few people in Gaibandha, Kurigram and Lalmonirhat districts) are well known regarding the grievance issue or mechanism and no complaints have been found that remain unsolved. All the complaints found verbally. But the practice of GRM is not up to the mark in Gaibandha, Kurigram, and Lalmonirhat districts. A few complaints and the action taken to resolve the issues have been discussed below:

| Complains/Grievance  | Types of complain<br>(written/verbal) | Action taken   | Acceptance by the aggrieved person<br>(Yes/No.) |
|--|---------------------------------------|--|---|
| A female project participant in the <i>Jamalpur</i> district claimed that financial contribution for the installation of latrines is unethical and demanded all costs should be provided by the project. | Verbal                                | Project personnel of the IE and CCAG leaders communicated with her and shared project opportunities and modalities of the financial contribution for the toilet. IE staff tried to clarify the role and responsibilities of beneficiaries and the project. | Yes   |
| In the <i>Jamalpur</i> district, Local representatives (Chairman and Members) of Union Perished (UPs) tried to impose or control project financial-related interventions.                                | Verbal                                | IE staff has improved communication and rapport building with Chairman, members, and civil society through addressing details of project goals objectives, and implementation procedure.   | Yes   |



## Quarterly ESS Monitoring Report (January-March 2022)

### ECCCP-Flood



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| In the <i>Jamalpur</i> district, a female project participant strongly disagreed with the additional contribution amount for the slatted house for goats.        | Verbal | For durability of the slatted house for goats, the IE staff explained and discussed project support and opportunities with her. CCAG Leaders also played a vital role to make the issue understandable to the beneficiary. | Yes |
| In the <i>Jamalpur</i> district, a female project participant complained that why not she got all the IGA support from the project.                              | Verbal | IE staff and respective CCAG leaders discussed the project implementation guidelines with the aggrieved participant to convince her and to handle the issue smoothly.  | Yes |
| Some project participants in the <i>Lalmonirhat</i> district complained that NGOs should provide all the expenses of plinth raising, specially the cost of soil. | Verbal | IE staff convinced them that project participants were supposed to manage soil by themselves. NGO will provide only labor costs for raising the plinth.  | Yes |
| In the <i>Lalmonirhat</i> district, some unfilled grain was found in panicle in the wheat field (BARI Gom-30 ).  | Verbal | IE staff Communicated with the Department of Agricultural Extension (DAE) and DAE explained that it was the consequence of high temperature and late cultivation of wheat.   | Yes |
| In Kurigram and <i>Nilphamari</i> districts, a few project participants complained   | Verbal | IE staff convinced them that according to the project design and implementation guidelines there is no instruction to provide latrines to single or two families.  | Yes |



## Quarterly ESS Monitoring Report (January-March 2022)

### ECCCP-Flood



|  |        |  |  |
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| about why a single-family was not being given a latrine.   |        |  |  |
| In the <i>Kurigram</i> district, a few project participants complained about why single and two houses are not being raised.   | Verbal | IE staff convinced them that according to the project design and implementation guidelines there is no scope to raise plinth for a single or two families.   | Yes                                      |
| In the <i>Lalmonirhat</i> district, some community people complained that Wheat disease was found in the fields.   | Verbal | IE staff Communicated with DAE and visited the wheat field and found the BLB disease. DAE recommended using Potash fertilizer.   | Yes                                      |
| In the <i>Jamalpur</i> district, the IE faced challenges and obstacles to work in Goalardoba village due to rural politics. Such as- those who have their own land are reluctant to give soil from their land to others; someone demands compensation of about five thousand for house repairs if their homestead raised; those who have already raised homestead they discourage others (if their homestead goes down); someone indicates if the soil is removed from | Verbal | IE staff discussed with the local chairman, members, elite persons, and aggrieved persons to address the grievance. It could not be managed. So, the IE change the village to avoid negative consequences. | No (project intervention area relocated) |



## Quarterly ESS Monitoring Report (January-March 2022)

### ECCCP-Flood



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| the char the bank may be broken and the village may disappear.   |        |   |     |
| In the <i>Jamalpur</i> district, a project participant complained that why they do not get maize seed instead of wheat seed.   | Verbal | IE staff convinced him that the project will be extended heat-tolerant wheat cultivation for better yield under stress conditions but in the future, we can take the decision on maize. However, maize cultivation needs more irrigation. | Yes |
| In the <i>Jamalpur</i> district, a female project participant complained that water is not uplifting through the tubewell.   | Verbal | IE's technical officer suspected that there is a leak somewhere in the tubewell. The technical officer called the technician to resolve the complaint.  | Yes |
| In the <i>Nilphamari</i> district, a project participant complained that the financial contribution of latrines is not adequate.   | Verbal | As per project design/guideline project participants is supposed to share a portion of the financial contribution for a latrine. The IE staff discussed this modality with the project participant and convinced him.                     | Yes |
| In the <i>Gaibandha</i> district, some local leaders/Elite persons (UP members) interfered with the work such as latrine establishment. They demanded to establish the latrine work without processing any documents or do not | Verbal | IE staff convinced them that the project had some implementation guidelines and they are bound to follow those guidelines.  | Yes |



Quarterly ESS Monitoring Report (January-March 2022)

ECCCP-Flood



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| maintain tender procedures. Sometimes they make obstacles to carrying out the work and said the IE not to work in that union  |        |   |     |
| In the <i>Lalmonirhat</i> district, few project participants were not willing to reconstruct their house maintaining a 3 ft. distance from the slope after the plinth raise | Verbal | IE staff convinced them and motivated them to reconstruct their house as per project implementation guidelines. Moreover, IE staff made them understand that it is important for the sustainability of the raised plinth. | Yes |

## E. Conclusion

During the reporting period, based on the screening results, it has been shown that the project is categorized as 'C' i.e., no or minimum environmental and social impacts on the project area. Moreover, it was found that the Implementing Entities (IEs) of the ECCCP-Flood project increased their capacity on understanding the ESS compliance. But they have lack in skill for implementing the guidelines. However, the PMU is continuously putting efforts to increase the skill of the IE staff. It was found that IEs have consulted with the project participants and local community in line with the ESS, and ESAP and have used prescribed formats for Environmental Screening and GRM. Moreover, in group discussions (e.g., FGD) the programme participants and workers have been instructed to adopt environmentally sustainable practices. No activities were taken without resolving the community grievance.



Annex- I

**Environmental and Social Safeguard Screening Format**

**Extended Community Climate Change Project-Flood (ECCCP-Flood)**

Name of IE:.....

Date of Screening: .....

Name of the Union: .....

Name of Upazila: .....

Name of the District: .....

**Section 1: Environmental Risk Factors**

| Exclusion criteria  | YES                      | NO                       | Comments |
|---|--------------------------|--------------------------|----------|
| Will the activities involve associated facilities and require further due diligence of such associated facilities?  | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Will the activities involve trans-boundary impacts including those that would require further due diligence and notification to downstream riparian states?   | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Will the activities adversely affect working conditions and health and safety of workers or potentially employ vulnerable categories of workers including women, child labour?  | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Will the activities potentially generate hazardous waste and pollutants including pesticides and contaminate lands that would require further studies on management, minimization and control and compliance to the country and applicable international environmental quality standards? | <input type="checkbox"/> | <input type="checkbox"/> |          |
| Will the activities involve the construction, maintenance, and rehabilitation of critical infrastructure (like dams, water impoundments, coastal and river bank   | <input type="checkbox"/> | <input type="checkbox"/> |          |

|   |                          |                          |  |
|---|--------------------------|--------------------------|--|
| infrastructure) that would require further technical assessment and safety studies?   |                          |                          |  |
| Will the proposed activities potentially involve resettlement and dispossession, land acquisition, and economic displacement of persons and communities?  | <input type="checkbox"/> | <input type="checkbox"/> |  |
| Will the activities be located in protected areas and areas of ecological significance including critical habitats, key biodiversity areas and internationally recognized conservation sites?   | <input type="checkbox"/> | <input type="checkbox"/> |  |
| Will the activities affect indigenous peoples that would require further due diligence, free, prior and informed consent (FPIC) and documentation of development plans?   | <input type="checkbox"/> | <input type="checkbox"/> |  |
| Will the activities be located in areas that are considered to have archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values or contain features considered as critical cultural heritage? | <input type="checkbox"/> | <input type="checkbox"/> |  |

## Section 2: Specific Environmental Impacts

| SL No.  | General intervention issues   | Yes                      | No                       | N/A                      | Comments |
|---|---|--------------------------|--------------------------|--------------------------|----------|
| <b>1. Issues related to Environment &amp; Pollution</b> |   |                          |                          |                          |          |
| 1.1   | Is there any visible Water Pollution?                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| 1.2   | Is there any visible Air Pollution?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| 1.3   | Is there any issue related to Soil Degradation and Soil pollution?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| 1.4   | Is there any issue that causes Noise Pollution?                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| 1.5   | Are there any interventions that cause Liquid Waste or Waste-water? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| 1.6   | Are there any interventions that cause Hazardous Waste?             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |

|   |   |                          |                          |                          |  |
|---|---|--------------------------|--------------------------|--------------------------|--|
| 1.7   | Does any intervention change the Land use pattern?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 1.8   | Is there any source that causes GHG (Greenhouse Gas) emissions?                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| <b>2. Issues related to Labour, Working Condition, Occupational Health &amp; Safety</b> |   |                          |                          |                          |  |
| 2.1   | Does everyone get Equal opportunity for working?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.2   | Is there any Negative incident between workers and management?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.3   | Is there any Child labour (age <18)?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.4   | Is there any Labour working forcefully?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.5   | Is there any written Labour Management procedure?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.6   | Does the Labour are well known about their hours of work, wages, overtime, compensation and benefits? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.7   | Are there any Covid-19 precautions measures?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.8   | Is there any preparedness for Fire incidents?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.9   | Is there any past incident of slips and falling and major injuries?                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.10  | Is there any protective measure for Dust management?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.11  | Is there any source of drinking water in the workplace?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.12  | Is there any session regarding works safety and health?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.13  | Is there any case regarding sexual harassment in the workplace?                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 2.14  | Is there any PHC (Primary Health Care)/ First Aid facility available in the workplace?                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| <b>3. Issues related to Resource &amp; Energy</b>                                       |   |                          |                          |                          |  |
| 3.1   | Does the intervention use Groundwater?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |

|   |   |                          |                          |                          |  |
|---|---|--------------------------|--------------------------|--------------------------|--|
| 3.2   | Does the intervention use Surface-water?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| <b>4. Issues related to Community Health &amp; Safety</b> |   |                          |                          |                          |  |
| 4.1   | Is there any available Waste Treatment method?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.2   | Is there any open Waste Disposal issue?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.3   | Is the Goat Manure used as Fertilizer?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.4   | Is there any promotion of Composting from waste?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.5   | Is there any Vermicomposting/ Pit Composting unit?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.6   | Is it maintaining 30 feet distance between Tubewell (TW) and Latrine?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.7   | Is any advice taken from DPHE regarding TW installation and Latrine construction?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.8   | Is there any concrete made TW platform?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.9   | Does the TW platform have enough slope to drain water effectively?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.10  | Are any TW water supply options, tested positive for Arsenic?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.11  | Is there any possibility to affect the quality or quantity of Surface water?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.12  | Is there any water congestion or a waterlogging issue?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.13  | Is the Latrine designed considering Pregnant Women, Children and Elderly people?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.14  | Is there any chance of Groundwater discharge/ Contamination of Drinking water or spreading water-borne diseases due to project intervention/ Latrine pit? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.15  | Is Soak well available below the TW/Latrine?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.16  | Is there are available water tank beside the Latrine?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |

|  |   |                          |                          |                          |  |
|--|---|--------------------------|--------------------------|--------------------------|--|
| 4.17   | Are the Latrine and its surroundings neat and clean?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 4.18   | Is there any Hygiene Promotion Session?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| <b>5. Issues related to Land</b>                                 |   |                          |                          |                          |  |
| 5.1  | Is there any forced resettlement issue?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 5.2  | Is there any issue of displacement both physically and economically?                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 5.3  | Is there any issue regarding forced eviction?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 5.4  | Is there any alternative land use plan?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 5.5  | Is there any compensation plan for the loss of assets?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 5.6  | Does project intervention affect any private homesteads (vita with houses & other assets)?      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| <b>6. Issues related to Habitat, Wildlife &amp; Biodiversity</b> |   |                          |                          |                          |  |
| 6.1  | Is there any Endangered Species?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 6.2  | Is there any issue relevant to an intervention of Alien invasive species?                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 6.3  | Is there any deforestation or tree cutting or land clearing issue?                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 6.4  | Is there tree plantation around the intervention places or slopes of the plinth?                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| <b>7. Issues related to Raised Homestead</b>                     |   |                          |                          |                          |  |
| 7.1  | Has the plinth been raised with Alluvial sand?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 7.2  | Is it maintained at least 1 (one) feet height of the plinth more than the previous flood level? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 7.3  | Is there any damage to the plinth slope?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 7.4  | Is there any use of fertile topsoil?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 7.5  | Is there any run-off/surface water congestion issue due to plinth raising?                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| <b>8. Issues related to Agriculture &amp; Livelihood</b>         |   |                          |                          |                          |  |
| 8.1  | Are there any practices of vegetable cultivation on Sand-bars?                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |

|     |   |                          |                          |                          |  |
|-----|---|--------------------------|--------------------------|--------------------------|--|
| 8.2 | Is there any training session for Integrated Pest Management (IPM)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 8.3 | Is the Pheromone trap available in the cultivation plot?            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 8.4 | Does the Crop residues be used as fertilizers?                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 8.5 | Is there any use of banned pesticides/pest management methods?      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| 8.6 | Is there any damage to the Agricultural land?                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |

### Section 3: Social Grievance Issues

| 1. Issues related to Grievance |  |                          |                          |                          |          |
|--------------------------------|--|--------------------------|--------------------------|--------------------------|----------|
| SL No.                         | General intervention issues  | Yes                      | No                       | N/A                      | Comments |
| 1.1                            | Is there any record of Social Grievance  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| 1.2                            | Is there any practice of Grievance Redress Mechanism (GRM)?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |
| 1.3                            | Is project interventions affect mosques, temples, graveyards, cremation grounds, and other places/objects that are of religious and cultural significance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          |

## Annex- II

**Grievance Mechanism Monitoring Report****Extended Community Climate Change Project- Flood (ECCCP- Flood)**

Name of IE:

Working Area:



Reporting Period:

**Table 1: Grievance Mechanism**

| Sl. No. | Date of Receipt | Complains/ Grievance | Types of complain (written/verbal) | Action taken | Acceptance by the aggrieved person (yes or no.) | Narratives about the issue/Remarks |
|---------|-----------------|----------------------|------------------------------------|--------------|---|------------------------------------|
|         |                 |                      |                                    |              |   |                                    |
|         |                 |                      |                                    |              |   |                                    |
|         |                 |                      |                                    |              |   |                                    |
|         |                 |                      |                                    |              |   |                                    |



**Annex- III**  
**Arsenic & Iron Concentration Test Report**

|   |  |   |
|---|--|---|
|  | <p><b>Government of the People's Republic of Bangladesh</b><br/><b>Office of the Senior Chemist</b><br/><b>Department of Public Health Engineering (DPHE)</b><br/><b>Bogra Zonal Lab, Šeojgari, Jamtola, Bogura.</b><br/>Phone: 051-78295, Fax: , Email: wqmsc_bograzonallab@yahoo.com</p> |  |
|---|--|---|

Memo:46.03.1000.106.16.01.22.436

Date:01/03/2022

**Physical/Chemical/Bacteriological Analysis of Water Sample**



|   |   |
|---|---|
| Sample ID: BOG2022030162 to BOG2022030187 Total : 26            | District: Kurigram                        |
| Sent by: Executive Director, NDP                                | Sample Source: STW-Others Pump            |
| Ref. Memo No:NDP/Admin/Office Order-2022/965(2),Date:27/02/2022 | Date of Testing: 27/02/2022 to 28/02/2022 |
| Collection date: Not Mentioned                                  | Receiving date: 27/02/2022                |

**LABORATORY TEST RESULTS:**



| Sample ID     | Caretaker Name | Village/ Ward      | Union/<br>Paurashava | Upazila/ City<br>Corp. | Arsenic (mg/L)               |        | Iron (mg/L)                 |        |
|---------------|----------------|--------------------|----------------------|------------------------|------------------------------|--------|-----------------------------|--------|
|               |                |                    |                      |                        | LOQ:0.001, BDS:0.05<br>Conc. | Method | LOQ:0.1, BDS:0.3-1<br>Conc. | Method |
| BOG2022030162 | Mohila         | Kheruar Char       | Noyer hat            | Chilmari               | 0.011                        | AAS    | 0.1                         | AAS    |
| BOG2022030163 | Ashma          | Kheruar Char       | Noyer hat            | Chilmari               | 0.008                        | AAS    | 0.1                         | AAS    |
| BOG2022030164 | Rongbhanu      | Kheruar Char       | Noyer hat            | Chilmari               | 0.012                        | AAS    | 0.2                         | AAS    |
| BOG2022030165 | Majida         | Dakshin Khawria    | Noyer hat            | Chilmari               | 0.010                        | AAS    | 0.2                         | AAS    |
| BOG2022030166 | Mollika        | Dakshin Khawria    | Noyer hat            | Chilmari               | 0.012                        | AAS    | 0.1                         | AAS    |
| BOG2022030167 | Rupbhanu       | Dakshin Khawria    | Noyer hat            | Chilmari               | 0.010                        | AAS    | 0.1                         | AAS    |
| BOG2022030168 | Sahida         | Dakshin Khawria    | Noyer hat            | Chilmari               | 0.008                        | AAS    | 0.2                         | AAS    |
| BOG2022030169 | Rohima         | Dakshin Khawria    | Noyer hat            | Chilmari               | 0.013                        | AAS    | 0.1                         | AAS    |
| BOG2022030170 | Halima         | Uttar Fechka       | Noyer hat            | Chilmari               | 0.009                        | AAS    | 0.2                         | AAS    |
| BOG2022030171 | Faziron        | Uttar Fechka       | Noyer hat            | Chilmari               | 0.012                        | AAS    | 0.1                         | AAS    |
| BOG2022030172 | Sabina         | Uttar Fechka       | Noyer hat            | Chilmari               | 0.010                        | AAS    | 0.2                         | AAS    |
| BOG2022030173 | Surja          | Dush mara          | Chilmari             | Chilmari               | 0.009                        | AAS    | 0.1                         | AAS    |
| BOG2022030174 | Jahinur        | Dush mara          | Chilmari             | Chilmari               | 0.010                        | AAS    | 0.2                         | AAS    |
| BOG2022030175 | Obiron         | Dush mara          | Chilmari             | Chilmari               | 0.008                        | AAS    | 0.1                         | AAS    |
| BOG2022030176 | Layli          | Dush mara          | Chilmari             | Chilmari               | 0.013                        | AAS    | 0.2                         | AAS    |
| BOG2022030177 | Joshna         | Dush mara          | Chilmari             | Chilmari               | 0.010                        | AAS    | 0.1                         | AAS    |
| BOG2022030178 | Sabia          | Dush mara          | Chilmari             | Chilmari               | 0.012                        | AAS    | 0.1                         | AAS    |
| BOG2022030179 | Khuki          | Lenggu Bepari para | Romna                | Chilmari               | 0.014                        | AAS    | 0.2                         | AAS    |
| BOG2022030180 | Moriam         | Lenggu Bepari para | Romna                | Chilmari               | 0.013                        | AAS    | 0.1                         | AAS    |
| BOG2022030181 | Sajeda         | Dakshin Char Sajai | Kodal Kati           | Rajibpur               | 0.012                        | AAS    | 0.1                         | AAS    |
| BOG2022030182 | Esmetara       | Dakshin Char Sajai | Kodal Kati           | Rajibpur               | 0.011                        | AAS    | 0.1                         | AAS    |
| BOG2022030183 | Khusimon       | Dakshin Char Sajai | Kodal Kati           | Rajibpur               | 0.015                        | AAS    | 0.2                         | AAS    |
| BOG2022030184 | Sukhiton       | South Char Sajai   | Kodal Kati           | Rajibpur               | 0.016                        | AAS    | 0.2                         | AAS    |

| Sample ID     | Caretaker Name | Village/ Ward             | Union/<br>Paurashava | Upazila/ City<br>Corp. | Arsenic (mg/L)      |        | Iron (mg/L)        |        |
|---------------|----------------|---------------------------|----------------------|------------------------|---------------------|--------|--------------------|--------|
|               |                |                           |                      |                        | LOQ:0.001, BDS:0.05 |        | LOQ:0.1, BDS:0.3-1 |        |
|               |                |                           |                      |                        | Conc.               | Method | Conc.              | Method |
| BOG2022030185 | Gol Bahaton    | South Char<br>Sajai       | Kodal Kati           | Rajibpur               | 0.012               | AAS    | 0.1                | AAS    |
| BOG2022030186 | Rebeka         | South Char<br>Sajai       | Kodal Kati           | Rajibpur               | 0.011               | AAS    | 0.1                | AAS    |
| BOG2022030187 | Sonabhan       | Char Sajai<br>Mondal Para | Kodal Kati           | Rajibpur               | 0.010               | AAS    | 0.1                | AAS    |

Note: Sample Supplied by Client. LOQ-Level On Quantization, BDS: Bangladesh Standard, AAS: Atomic Absorption Spectrophotometer, UVS: Ultra Violet Spectrophotometer. Lab SI: 8857-8882

| Test Performed by:           |                              | Signature   | Countersigned/Approved by: |                             | Signature   |
|------------------------------|------------------------------|---|----------------------------|-----------------------------|---|
| 1.) Name: Md. Hafizur Rahman | Designation: Sample Analyzer |  | 1.) Name: Md. Sohel Rana   | Designation: Senior Chemist |  |
| 2.) Name:                    | Designation:                 | Md. Hafizur Rahman<br>Sample Analyzer<br>DPHE, Zonal Laboratory, Bogra.           | 2.) Name:                  | Designation:                | Md. Sohel Rana<br>Senior Chemist<br>DPHE, Zonal Laboratory, Bogra.                  |



|   |  |   |
|---|--|---|
|  | <p>Government of the People's Republic of Bangladesh<br/>Office of the Senior Chemist<br/>Department of Public Health Engineering (DPHE)<br/>Bogra Zonal Lab, Seoigari, Jamtola, Bogura.<br/>Phone: 051-78295, Fax: , Email: wqmsc_bograzonallab@yahoo.com</p> |  |
|---|--|---|

Memo:46.03.1000.106.16.01.21.365

Date:25/01/2022

**Physical/Chemical/Bacteriological Analysis of Water Sample**

|   |  |
|---|--|
| Sample ID: BOG2022010897 to BOG2022010900, Total: 4                             | District: Gaibandha.                     |
| Sent by: Md. Shafiul Alam Mondal, ECCCP-Flood (PKSF), TMSS Shaghata, Gaibandha. | Sample Source: STW-Others Pump           |
| Ref. Memo No: ECCCP-Flood (PKSF), TMSS Date: 20/01/2022                         | Date of Testing: 24/01/2022 & 25/01/2022 |
| Collection date: Not Mentioned.   | Receiving date: 20/01/2022               |

**LABORATORY TEST RESULTS:**

| Sample ID     | Caretaker Name      | Village/ Ward | Union/<br>Paurashava | Upazila/ City<br>Corp. | Arsenic (mg/L)      |        | Iron (mg/L)        |        |
|---------------|---------------------|---------------|----------------------|------------------------|---------------------|--------|--------------------|--------|
|               |                     |               |                      |                        | LOQ:0.001, BDS:0.05 |        | LOQ:0.1, BDS:0.3-1 |        |
|               |                     |               |                      |                        | Conc.               | Method | Conct.             | Method |
| BOG2022010897 | Mst. Sheuly Begum   | Kalurpara     | Saghata              | Saghata                | 0.007               | AAS    | 2.7                | AAS    |
| BOG2022010898 | Mst. Hafeza Begum   | Hatbari       | Saghata              | Saghata                | 0.014               | AAS    | 1.9                | AAS    |
| BOG2022010899 | Mst. Shahinur Begum | Hatbari       | Saghata              | Saghata                | 0.027               | AAS    | 2.1                | AAS    |
| BOG2022010900 | Mst. Maleka Begum   | Hatbari       | Saghata              | Saghata                | 0.014               | AAS    | 2.3                | AAS    |

Note: Sample Supplied by Client. LOQ-Level On Quantization, BDS: Bangladesh Standard, AAS: Atomic Absorption Spectrophotometer, UVS: Ultra Violet Spectrophotometer. Lab SI: 8405-8408

|  |  |
|--|--|
| <p><u>Test Performed by:</u></p> <p>1.) Name: Md. Alauddin Al Faruque<br/>Designation: Junior Chemist</p> <p>2.) Name: Md. Hafizur Rahman<br/>Designation: Sample Analyzer</p> | <p><u>Countersigned/Approved by:</u></p> <p>1.) Name: Md. Sohel Rana<br/>Designation: Senior Chemist</p> <p>2.) Name:<br/>Designation:</p> |
|--|--|

Md. Hafizur Rahman  
Sample Analyzer  
DPHE, Zonal Laboratory, Bogra.

Md. Sohel Rana  
Senior Chemist  
DPHE, Zonal Laboratory, Bogra.