



Government of The People's Republic of Bangladesh
Ministry of Local Government, Rural Development and Co-operatives
Department of Public Health Engineering (DPHE)

Emergency Multi-Sector Rohingya Crisis Response Project (EMCRP)



Environmental and Social Screening Report

Sub-project: EMCRP/WD-01
Test cum Observation Tubewell Installation
Location: Rohingya Camp Area, Ukhiya and Teknaf, Cox's Bazar

Funded by: GoB - World Bank

Implemented Agency: Department of Public Health Engineering (DPHE)





Abbreviation and Acronyms:

| | |
|-------|---|
| ACF | Action Against Hunger |
| BBS | Bangladesh Bureau of Statistics |
| BD | Bangladesh |
| BMD | Bangladesh Meteorological Department |
| CIC | Camp in Charge |
| DC | Deputy Commissioner |
| DO | Dissolved Oxygen |
| DoF | Department of Forest |
| DPD | Deputy Project Director |
| DPHE | Department of Public Health Engineering |
| DRP | Displaced Rohingya Population |
| EC | Electrical Conductivity |
| EMCRP | Emergency Multi-sector Rohingya Crisis Response Project |
| ERP | Emergency Response Plan |
| ESMF | Environmental & Social Management Framework |
| ESMP | Environmental and Social Management Plan |
| FAO | Food and Agriculture Organization |
| FGD | Focus Group Discussion |
| GBV | Gender-Based Violence |
| GoB | Government of The People's Republic of Bangladesh |
| GRC | Grievance Redress Committee |
| GRM | Grievance Redress Mechanism |
| GPS | Global Positioning System |
| GW | Ground Water |
| HDPE | High Density Polyethylene |
| IEF | Important Environmental Feature |
| ISCG | Inter Sector Coordination Group |
| IUCN | International Union for Conservation of Nature |
| NGO | Non-Government Organization |
| LGED | Local Government Engineering Department |
| PD | Project Director |
| PIU | Project Implementation Unit |
| PM | Particulate Matter |



EMCRP Environmental and Social Screen Report (DPHE)

| | |
|-------|---|
| PMU | Project Management Unit |
| PPE | Personal Protective Equipment |
| PSC | Project Steering Committee |
| DTTW | Test cum Observation Tubewell |
| PVC | Polyvinyl Chloride |
| ROW | Right of Way |
| RRRC | Refugee Relief and Repatriation Commission |
| SAE | Sub-Assistant Engineer |
| SMC | School Management Committee |
| SW | Surface water |
| TDS | Total Dissolved Solids |
| TSS | Total Suspended Solids |
| TTW | Test Tube Well |
| UN | United Nations |
| UNFPA | United Nations Fund for Population Activities |
| UNHCR | United Nations High Commissioner for Refugees |
| uPVC | Un plasticized Polyvinyl Chloride |
| VfM | Value for Money |
| WASH | Water, Sanitation and Hygiene |
| WB | World Bank |
| WDZ | Water Distribution Zone |
| WFP | World Food Programme |
| WSC | Women's Studies Center |



EMCRP (DPHE part)
Environmental and Social Screening Form

Sub-Project Description Form

Introduction: Under EMCRP (DPHE Part) 28 test cum observation tube well will be install at different DRP camps. This screening report is prepared for this site of 17test cum observation tube well.

Name of Sub-project: Installation of camp based Test cum observation Tubewell including operation and maintenance (WD-01) under EMCRP project at Rohingya camp area, Ukhiya and Teknaf Upazilla, Cox's Bazar.

Implementing Agency/Agencies: Department of Public Health Engineering (DPHE)

Estimated total cost per test cum observation tube well (in Taka):197,195 (Tk.) (on average)

Estimated construction period duration: 03 (Three) months.

Estimated operation and maintenance period (life of sub-project): 24 (Twenty four) months operation and maintenance period but project design life more than 10 (Ten) to 15 (Fifteen) years.

District: Cox's Bazar

Sub-District: Ukhiya and Teknaf

Name of Community/Local Area: Different Rohingya/ DRP Camp area (camp_19, camp_13, camp_15, camp_9, Camp_16, camp_8E, camp_14, camp_11, camp_7, camp_2W, camp_10, camp_20, camp_4, camp_4 ext. and camp_26)

| Test Tubewell Location Information | | | | | |
|------------------------------------|--------------------|----------|-------------|-----------|-----------|
| SI No. | Tubewell ID | Camp No. | Block No. | Latitude | Longitude |
| 1 | EMCRP_WD_01_TTW-01 | 19 | A-02 | 21.183628 | 92.138392 |
| 2 | EMCRP_WD_01_TTW-02 | 13 | Balur Tal | 21.174708 | 92.147586 |
| 3 | EMCRP_WD_01_TTW-03 | 13 | G-4 | 21.178461 | 92.137661 |
| 4 | EMCRP_WD_01_TTW-04 | 13 | G-2 | 21.180142 | 92.137078 |
| 5 | EMCRP_WD_01_TTW-05 | 15 | C-1 | 21.160000 | 92.147000 |
| 6 | EMCRP_WD_01_TTW-06 | 9 | B-1 | 21.191636 | 92.160056 |
| 7 | EMCRP_WD_01_TTW-07 | 16 | B | 21.156856 | 92.152067 |
| 8 | EMCRP_WD_01_TTW-08 | 8E | Jumer Chara | 21.191956 | 92.163894 |
| 9 | EMCRP_WD_01_TTW-09 | 14 | CiC Office | 21.167519 | 92.150822 |
| 10 | EMCRP_WD_01_TTW-10 | 11 | C-3 | 21.179786 | 92.155958 |
| 11 | EMCRP_WD_01_TTW-11 | 7 | D | 21.202422 | 92.169983 |
| 12 | EMCRP_WD_01_TTW-12 | 2W | D-5 | 21.209325 | 92.159558 |
| 13 | EMCRP_WD_01_TTW-13 | 10 | F-17 | 21.190261 | 92.152236 |
| 14 | EMCRP_WD_01_TTW-14 | 20 | S1B1 | 21.191022 | 92.136875 |
| 15 | EMCRP_WD_01_TTW-15 | 4 | PP-08 | 21.205642 | 92.146711 |
| 16 | EMCRP_WD_01_TTW-16 | 4 ext. | C-3 | 21.202625 | 92.137531 |
| 17 | EMCRP_WD_01_TTW-17 | 26 | H3 | 20.96508 | 92.25124 |



Description of proposed sub-project activities (incl. type of activities, footprint area, natural resources required, etc.):

In the proposed sub-project areas test cum observation well construction schemes activities the following interventions would be taken place:

- Exploratory drilling & test cum observation Tubewell installation
- Tubewell development by air compressor (minimum 1 bar) un-till sand free , odor and turbidity free water at a satisfactory yield
- Disinfecting the well including supply of 50 gm of bleaching powder (33% strength), chlorinated water having 150 ppm available free chlorine complete as per standard specification
- Supplying, fitting & fixing of best quality materials
- After ensuring proper well development, collect the water samples and sending the samples to the DPHE zonal laboratory for testing
- Environmental mitigation works

Estimated footprint / land area for this per Test cum Observation Tubewell: Test cum observation tubewell will be installation for observation of groundwater level, sub-surface lithological information & groundwater quality monitoring in the project area. The sub-project will be benefited the maximum area of the DRP camp. Finally, around 3.00 square meter land required for the establishing per test cum observation tubewell installation and all construction activities will be constructed on the government land.

Brief description of sub-project site: (e.g. present land use, Important Environmental Features (IEFs) near site, etc.):

The proposed land is owned by government and no trees, structures and community properties will be affected. There are presences of health post, Mosque, food distribution center, learning center, CiC office and information center around the construction sites but none will be affect by this sub-project. The selected land is near about 50ft to 250ft below the nearest hilltop. Some sites are select at high land. Some sub-project locations have herringbone road and some have no road close to the sub-project area only footpath exists.

Overall Comments:

The sub-project will not direct beneficial for the DRP but indirectly helpful for them. Stakeholders will get a clear scenario about the groundwater level and quality from these sub-projects. The sub-projects are environmentally sustainable and socially acceptable.

In EMCRP (DPHE part), there are 28 test tubewell. These are basically used for monitoring of groundwater quality and level. These tubewells are not use for any water supply system for any camp. So here needs some specific point from Ukhiya to Taknaf camp area. Though it's there is no direct benefit for the DRP people, so there is no need of community consultation. In this respected Consultant of EMCRP discussed with the objectives of test tubewell with presence of Project Director of EMCRP (DPHE), Executive Engineer, DPHE, Cox's Bazar, UNHER, IOM, ISCG and WASH focal representative dated 03.11.2019. In this meeting discussed that these locations will be select throughout Ukhiya to Teknaf camp area in search of best quality of water and monitoring of groundwater level. If some camps are large in size then there will be more than one test tubewell. Because of some geographical barrier some tubewell will be select in depends of geo-physical phenomenon. In cases of better result of those tubewells, it's become feasible for the production tubewell installation foe mini piped water supply system and deep tara tubewell installation. Here also declared that the data will be regulating the present and future feature of water supply. Moreover, other organizations who are engaged with WASH activities can be benefited. So, everyone agreed with this item and put their positive consents in it.



EMCRP Environmental and Social Screen Report (DPHE)

The local DPHE, together with RPMU/PMU/IWM Social & Environmental Consultants has conducted formally and informally 17 (seventeen) numbers of consultations with CiC, camp WASH area focal, camp area focal representatives, SAE & Mechanic, and relevant stakeholders.

In terms of natural, ecological features of the area, it was observed that before establishing DRP camp, roads and other essential establishment, it was a forest area but most of the natural forests were cleared during establishment of camps. No, further significant impact is expected on the ecosystem and biodiversity. No agricultural land/ activities or fish farming will be disturbed, due to the construction of the sub-projects. The test cum observation tubewell schemes construction work is confined within the boundary of DRP camps in Ukhiya and Teknaf, Cox's Bazar.

Test cum observation tube well site selection process:

IWM Specialist, DPHE Officials along with EMCRP Consultants jointly visited the proposed DRP Camp area (camp_19, camp_13, camp_15, camp_9, Camp_16, camp_8E, camp_14, camp_11, camp_7, camp_2W, camp_10, camp_20, camp_4, camp_4 ext. and camp_26) to conduct the project screening process. The team primarily selected the site on the basis of transect view, community opinion, existing structures, improved water supply coverage. Also, the E&S team considered the initial probable E&S impact, easy access to the DRP, especially the children, women and old aged. So, the team finally proposed location (with GPS) among the other alternative locations.

BRAC, IOM, OXFAM, NGO Forum and others organization are acting as WASH camp focal agency, UNHCR, IOM, ACTED and other organization are acting area focal agency and DPHE is implementing the project with the financial assistance of World Bank and Government of Bangladesh. After establishing the proposed test cum observation tubewell schemes in the camp area will be benefitted by the groundwater level and groundwater quality information.

Types of waste to be generated during construction and operation phase:

During construction, phase solid and liquid waste will be generated due to construction activities. The types of wastes are uPVC pipe, concrete, earth and liquid drilling mud, etc.

Sensitive environmental, cultural, archaeological, religious sites near (within 1km) of site including elephant migration routes and remaining forests:

Within the test cum observation tubewell areas health post, Mosque, food distribution center, learning center CIC office and information center is identified. However, none is going to be affected due to project intervention. No significant environmental or social disturbance is anticipated due to construction activities. In this scheme area, no elephant migration routes exists (ref. IUCN). Elephant migration routes are approximately 4.00 km away from some area and very close from some scheme area.



Figure- 1: Test Tubewell site _Camp-19 (TTW-1)



Figure- 2: Test Tubewell site _Camp-13 (TTW-2)



Figure - 3: Test Tubewell site_Camp-13 (TTW-3)



Figure- 4: Test Tubewell site_Camp-13 (TTW-4)



Figure- 5: Test Tubewell site_Camp-15 (TTW-5)



Figure- 6: Test Tubewell site_Camp-9 (TTW-6)



Figure- 7: Test Tubewell site_Camp-15 (TTW-7)



Figure- 8: Test Tubewell site_Camp-8E (TTW-8)



Figure- 9: Test Tubewell site_Camp-14 (TTW-9)



Figure- 10: Test Tubewell site_Camp-11 (TTW-10)



Figure- 11: Test Tubewell site _Camp-7 (TTW-11) Figure- 12: Test Tubewell site _Camp-2W (TTW-12)



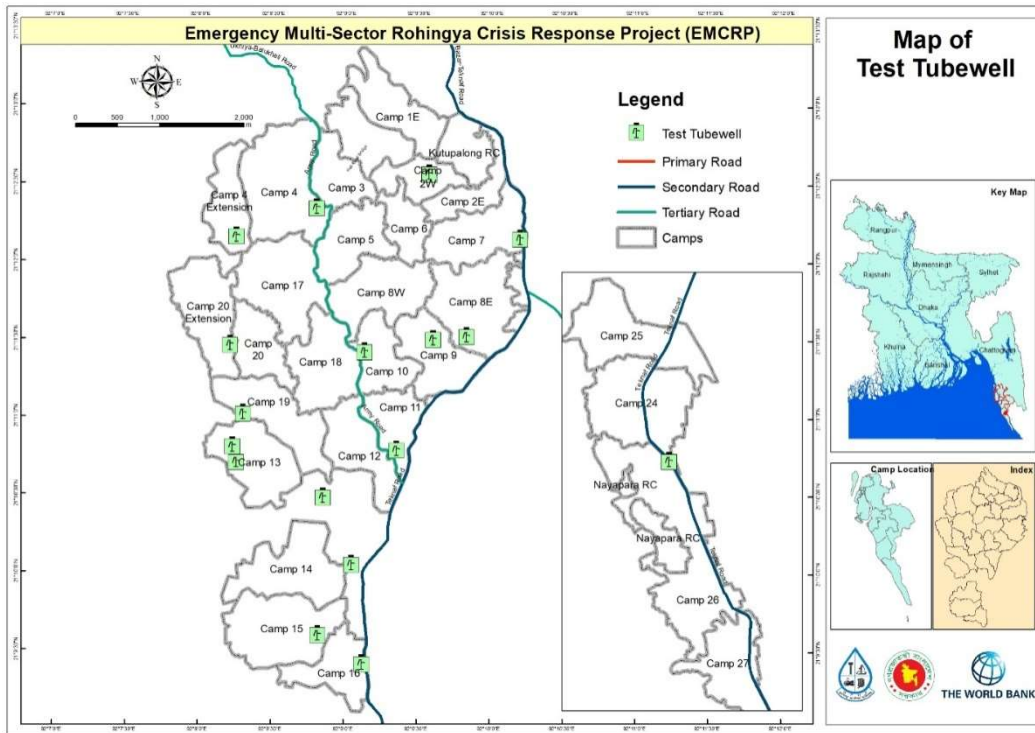
Figure- 13: Test Tubewell site _Camp-10 (TTW-13) Figure- 14: Test Tubewell site _Camp-20 (TTW-14)



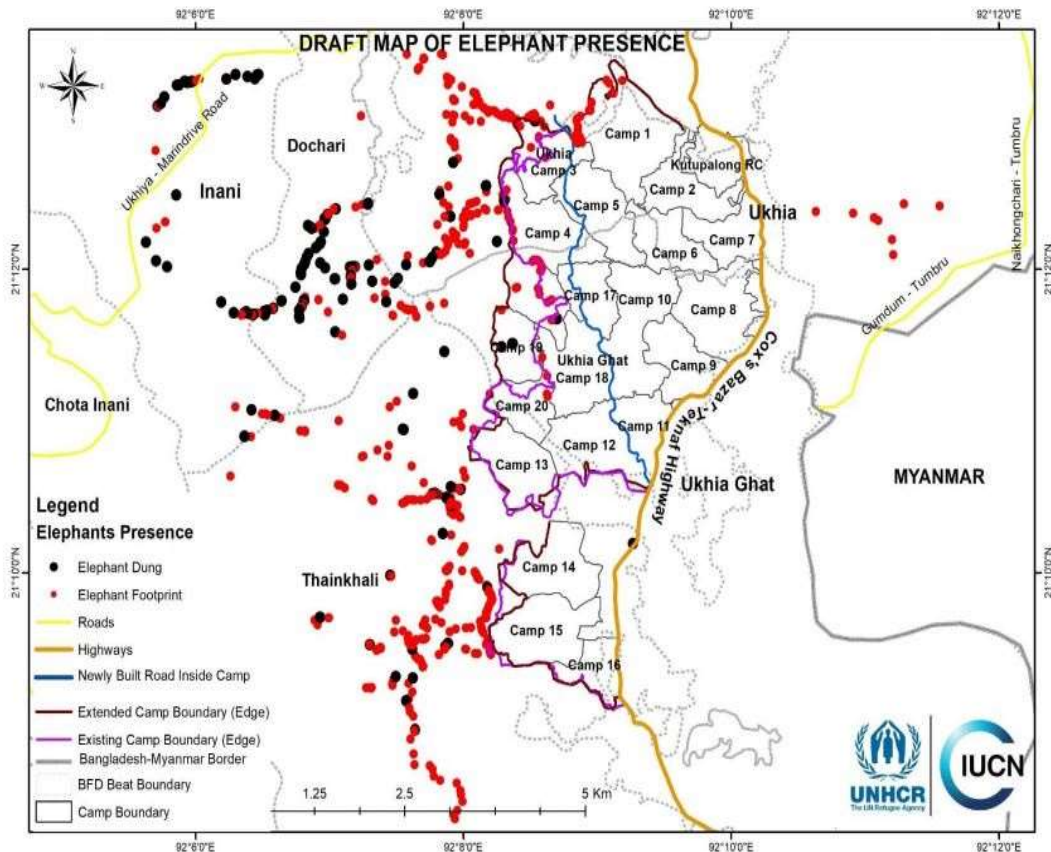
Figure- 15: Test Tubewell site _Camp-4 (TTW-15) Figure- 16: Test Tubewell site _Camp-4 ext. (TTW-16)



Completed environmental and social (E&S) screening forms and respective E&S Management Plan are given below:



Map-1: Site selected for Test cum observation tubewell installation at camp area



Map-2: Map of Elephant Presence in Camp area



Environmental and Social Screening Form

Section A: Test cum-observation Tubewell work overview

Description of sub-project/component interventions:

- ❖ 125mm dia exploratory drilling & 50mm dia test cum observation tubewell installation
- ❖ Tubewell development by air compressor (minimum 1 bar) un-till sand free , odor and turbidity free water at a satisfactory yield
- ❖ Disinfecting the well including supply of 50 gm of bleaching powder (33% strength), chlorinated water having 150 ppm available free chlorine complete as per standard specification
- ❖ Supplying, fitting & fixing of best quality materials
- ❖ After ensuring proper well development, collect the water samples and sending the samples to the DPHE zonal laboratory for testing
- ❖ Environmental mitigation works

Sub-project Location:

This sub-project area is located at camp_19, camp_13, camp_15, camp_9, Camp_16, camp_8E, camp_14, camp_11, camp_7, camp_2W, camp_10, camp_20, camp_4, camp_4 ext. and camp_26at under Ukhiya and Teknaf Upazila of Cox's Bazar District. There are seventeen (17) test cum observation tubewell will be constructed in the camp area. Most of the sites are hilly land and near about 30ft to 50ft below the nearest hill top. Some sites are selected at high land. Some sub-project locations have herringbone road and some have no road close to the sub-project area only footpath exists.

Land ownership: Land is owned by Government.

Expected construction period:03 (Three) months.

Description of project intervention area and project influence area with schematic diagram (where relevant, indicate distance to sensitive environmental areas such as elephant corridors, water bodies, etc. and historical or socio cultural assets):

- i) Adjacent of the scheme site under the sub-project intervention area: camp_19, camp_13, camp_15, camp_9, Camp_16, camp_8E, camp_14, camp_11, camp_7, camp_2W, camp_10, camp_20, camp_4, camp_4 ext. and camp_26
- ii) Impacted area: Approx. 3.00 square meter per Test cum Observation Tubewell
- iii) No structures, trees and livelihood will be affected.
- iv) DRP houses/structures relocation is not required.
- v) Influence area: 30-50m around test tubewell site



- vi) Environmental sensitivity: Within the influence area of the sub-project no historical sites were identified. Although there used to be elephant present near some of the test tubewell sites, recently there is no evidence of presence of elephants in the sub-project influence area (checked with local IUCN representative).
- vii) Every selected test cum observation tubewell locations have one alternative location and 10 meter to 100 meter away from the final selected location. Alternative locations are narrow, congested, low land or close to a toilet.

Section B: Environmental Screening

B.1: Environmental feature of test cum observation tubewell location

Description of cultural properties (if applicable, including distance from site):

There are health post, Mosque, food distribution centre, learning center, moktob, CiC office and information centre exist surrounding of proposed test cum observation tubewell locations. No other sensitive cultural, archaeological or religious sites is there in the area.

Location of environmentally important and sensitive areas:

The locations used to be environmentally important and sensitive as protected forest area but now these locations have no forest. Erosion/land slide may occur when moderately to highly sloping terrains are disturbed for the construction of test cum observation tubewell. The impacts are negative but very small scale, site-specific within a relatively small area is adjustable by mitigation measures.

(1) Within/near Elephant Migration Routes Yes/No*:

No. According to UNHCR/IUCN prepared elephant migration route map, no Elephant corridor/ route is there at present because of deforestation and settlement of DRP.

(2) Potential impacts on remaining forests in/around camps Yes/No*:

No. There is no original forests in this area now. A forestation works have been started and some plantation is ongoing by different organizations.

(3) Other issues:

No more mentionable issues raised.

Dust:

Ambient air quality data was not readily available. In the proposed site the existing air quality is almost dust free except for few months in the dry season (November to March).



Noise:

Noise in the sub-project area is not a major concern based on the consultations. Noise is originating from communication among the DRP, service providers and relief distributors.

Baseline soil quality:

Soil types are alluvial reddish brown, muddy & sandy soil and Dupitila formation. The soils developing from the weathered sandstones tend to be sandy to clay loams. Presence of organic matter content in the soil is moderate.

Landslide potential (high/medium/low, with explanation):

Low. Potential erosion/land slide may occur when moderately to highly sloping terrains are disturbed for the construction of test cum observation Tubewell. The impacts are negative but very small scale, site-specific within a relatively small area and minimized by mitigation measures.

Baseline surface water and groundwater quality (FE, TDS, fecal coliform, pH):

Surface water quality:

No surface water.

Groundwater quality:

Groundwater is the main source of potable water in the Sub-project area. The shallow depth is about 100 feet and deep tubewell depth is 280ft to 800ft. In the sub-project area, groundwater is saline and arsenic free. Iron concentration is little high in the water of Shallow tubewell of surrounding the sub-project area. pH_7.50 to 8.50, DO_2.20 to 8.50mg/l, TDS_25.50 to 350 mg/l, EC_25 to 425 μ s/cm, Fe_0.50 to 3.5 mg/l, Mn_0.01 to 0.08 mg/l, Chloride_10 to 95 mg/l and As_ Nil to 0.001 mg/l. (Tubewell depth: 280 ft. to 800 ft.)

Many shallow tube wells have been installed in the camp area and extraction of excessive water from those shallow aquifer made some of the wells dried up.

***Data source: Secondary data and field survey**

Status of wildlife movement:

It is reported that previously Wildlife movement was there but due to deforestation and settlement of DRP those are not seen in that area at present.

State of forestation:

To accommodate large numbers of DRP, the hills were cleared and forest cut indiscriminately, and shelters have been set up on the hills. Steps have been cut into the slope to facilitate access to the shelters. Hill cutting loosens the soil and can result in soil erosion, sedimentation and siltation. Washing out of the valuable fertile topsoil that will make the hills unsuitable for supporting any valuable vegetation cover. The eroded soil will also cause stream congestion, which might hinder stream flow, which in turn will result in habitat loss, water pollution and water scarcity. New plantations have been made by different organizations.



Summary of water balance analysis (For water supply scheme only):N/A

B.2: Pre construction Phase

Information on Ancillary Facilities (e.g. status of access road or any other facility required for sub-project to be viable):

Regarding ancillary facilities at the concerned test cum observation tubewell scheme area under this some sub-project have the main camp connecting herringbone road and some have no road close to the sub-project area only footpath exists. However, it is possible to reach the sites and the most feasible option is to carry the construction materials by head load (uPVC pipes, drilling materials, bamboo, bricks, cement, sand, air compressor, gravel etc.) to the construction site.

Requirement of accommodation or service amenities (toilet, water supply, electricity) to support the workforce during construction:

Toilet and water supply available but no electricity supply system in the sub-project area.

Possible location of labor camps:

Within the scheme area and very close to the sub-project sites.

Requirement and type of raw materials (e.g. sand, stone, wood, etc.):

i) Bricks, ii) Sand iii) Cement iv) uPVC pipe vi) Gravel etc. are the most common type materials used in construction.

Identification of access road for transportation (Yes/No):

Yes. For unloading point of materials some locations have herringbone road and some locations have footpath/ narrow earthen road is the main way for transportation of the materials by head load from unloading point to sub-project location.

Location identification for raw material storage:

Adjacent to the test cum observation tubewell location and very close to the construction sites and away from steep slopes.

Type and quantity of waste generated (e.g. Solids wastes, liquid wastes, etc.):

Solid waste :i) Bricks, ii) Sand iii) uPVC pipes vi) earth or mud. It is difficult to give exact figures of pre-construction waste produced on a Test cum Observation Tubewell construction site. However, 100 kg of waste may be produced per site.

Approx. area (in square meters) of vegetation and soil in the right-of-way, borrow pits, waste dumps, and equipment yards:

No valuable vegetation presence in proposed sub-project construction sites (approx. 3.00square meter land per Test cum Observation Tubewell).



**Possibility of stagnant water bodies in borrow pits, quarries, etc. encouraging for mosquito breeding and other disease vectors:
(High/Medium/Low with explanation):**

Low. Very low possibility of stagnant water bodies accumulation in borrow pits reported around or adjacent to the sub-project area.

**Disturbance or modification of existing drainage channels(rivers, canals) or surface water bodies(wetlands, marshes):
(High/Medium/Low with description):**

Low. Beside the proposed test cum observation tubewell of TTW_01, TTW_05, TTW_09 and TTW_13 natural channel and low land close to the site. During pre-construction phase impact is low.

**Destruction or damage of terrestrial or aquatic ecosystems or endangered species directly or by induced development:
(High/Medium/Low with description):**

Low. Under these scheme establishment interventions, the effect of destruction or damage of lives and endangered species ecosystem is very low.

Activities that can lead to landslides, slumps, slips and other mass movements in road cuts:

In pre-construction phase, stock piling of raw materials can lead to localized land slips. The impacts can be minimized by careful selection of stock pile locations and ensuring large amounts are not stored in one place.

Describe possible traffic movement impacts on (unwanted) light, noise and air pollution:

No traffic movement impacts on light but low effects of noise and air pollution.

High = Likely to cause long-term impacts or over large area (>1sqkm); Medium = Likely to cause temporary damage or over moderate area (0.5 to 1sqkm); Low = Likely to cause little, short-term damage and over small area (<0.5sqkm)

B.3: Construction Phase

Type and quantity of waste generated (e.g. Solids wastes, liquid wastes, etc.):

Solid waste :i) Bricks, ii) Sand iii) uPVC pipes vi) earth or mud. It is difficult to give exact figures of construction waste produced on a Test cum Observation Tubewell construction site. However, 150 kg of waste maybe produced per site.

Liquid waste: Drilling mud and drilling fluid waste water. During construction period, fecal sludge will be generated from labor camp. It is difficult to give exact figures of construction waste produced on a Test cum Observation Tubewell construction site. However, 600 kg of waste may be produced per site.



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| <p>Type and quantity of raw materials used (wood, bricks, cement, water, etc.):</p> <p>Raw Materials: Bricks, ii) Sand iii) Cement iv) uPVC pipe vi) water, v) Pre-gravel etc. It is difficult to provide exact figures of construction materials that will be used on a Test cum Observation Tubewell construction site. However, 350 kg of raw materials may be required.</p> |
| <p>Approx. area (in square meters) of vegetation and soil in the right-of-way, borrow pits, waste dumps, and equipment yards:</p> <p>No valuable vegetation presence in proposed sub-project construction sites. So, vegetation will not be affected by construction work.</p> |
| <p>Possibility of stagnant water bodies in borrow pits, quarries, etc., encouraging for mosquito breeding and other disease vectors: (High/Medium/Low with description)</p> <p>Medium. Water reservoir for tubewell drilling will be required. These can potentially store stagnant water for short period of time during and after rain events. The top soils in the sub-project are is sandy and the water should drain away quickly.</p> |
| <p>Disturbance or modification of existing drainage channels(rivers, canals) or surface water bodies (wetlands, marshes): (High/Medium/Low with description)</p> <p>Low to medium. Beside the proposed test cum observation tubewell of TTW_01, TTW_05, TTW_09 and TTW_13 natural channel and low land close to the site. However, it would be minimal because contractor will dispose the generated waste into designed waste dump site regularly.</p> |
| <p>Destruction or damage of terrestrial or aquatic ecosystems or endangered species directly or by induced development: (High/Medium/Low with description):</p> <p>Low to medium. Under these scheme establishment interventions, the effect of destruction or damage of lives and endangered species is very low except TTW_01, TTW_05, TTW_09 and TTW_13.</p> |
| <p>Activities that can lead to landslides, slumps, slips and other mass movements in road cuts:</p> <p>Construction of the sub-project components can lead to low scale effects of land slide/slips. The impacts are expected to be negative, short-term, site-specific within a relatively small area and can be minimized by mitigation measures.</p> |
| <p>Erosion of lands below the road bed receiving concentrated outflow carried by covered or open drains: (High/Medium/Low with description):</p> <p>Low to medium. Potential erosion may occur when moderately to highly sloping terrains are disturbed for the development of Test cum Observation Tubewell. The impacts are expected to be negative, small scale, site-specific within a relatively small area and minimized by mitigation measures.</p> |
| <p>Describe possible traffic movement impacts on (unwanted) light, noise and air pollution:</p> <p>No traffic movement impacts on light as all vehicular movement will be during day time. Some temporary, localized effects of noise and air pollution can occur due to truck movements.</p> |
| <p>High = Likely to cause long-term impacts or over large area (>1sqkm); Medium = Likely to cause temporary damage or over moderate area (0.5 to 1sqkm); Low = Likely to cause little, short-term damage and over small area (<0.5sqkm)</p> |



B.4: Operation Phase

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|--|
| <p>Activities leading to health hazards and interference of plant growth adjacent to roads by dust raised and blown by vehicles:N/A.</p> |
| <p>Chance of long-term or semi-permanent destruction of soils: (High/Medium/Low with description) Low. No chance of long-term or semi-permanent destruction of soils for Test cum Observation Tubewell project area.</p> |
| <p>Possibility of odor and water, soil quality impacts from SWM and FSM disposal system (High/Medium/Low with description): N/A</p> |
| <p>Possibility of stagnant water bodies in borrow pits, quarries, etc., encouraging for mosquito breeding and other disease vectors: (High/Medium/Low with explanation): Low. There are very low possibilities of stagnant water deposition in operation period.</p> |
| <p>Likely direct and indirect impacts on economic development in the project areas by the sub-project: N/A</p> |
| <p>Extent of disturbance or modification of existing drainage channels (rivers, canals) or surface water bodies (wetlands, marshes): (High/Medium/Low with description): Low. No existing drainage channels or surface water bodies in the test cum observation tubewell project area.</p> |
| <p>Extent of destruction or damage of terrestrial or aquatic ecosystems or endangered species directly or by induced development: (High/Medium/Low with description): Low. Operation and maintenance activities of test cum observation tubewell schemes will be localized and temporary in nature.</p> |
| <p>Activities leading to landslides, slumps, slips and other mass movements in road cuts: N/A</p> |
| <p>Erosion of lands below the roadbed receiving concentrated outflow carried by covered or open drains: (High/Medium/Low with explanation): N/A</p> |
| <p>Describe possible traffic movement impacts on (unwanted) light, noise and air pollution: Temporary, localized impacts on noise and air pollution from maintenance vehicles movement can occur. All maintenance works will be conducted during daytime – so no light impacts expected.</p> |
| <p>High = Likely to cause long-term impacts or over large area (>1sqkm); Medium = Likely to cause temporary damage or over moderate area (0.5 to 1sqkm); Low = Likely to cause little, short-term damage and over small area (<0.5sqkm)</p> |



Section C: Social Screening

C.1 General Labor Influx Screening

| Key Screening questions | Aspects to Consider |
|--|---|
| Will the project potentially involve an influx of workers to the project location, and will the influx be considered significant for the local community? | The number of total skilled Labor is 1-2 and unskilled labor is 3-5 every test cum observation tubewell. All the unskilled labor will be engaged from the DRP community. No additional foreign labor will be engaged. All the skilled labor will be staying at labor shed within the camp. The size of the labor shed will be 120 square feet. |
| Is the project located in a rural or remote area? | The project area is in a camp area demarcated by the Government and belongs to camp_19, camp_13, camp_15, camp_9, Camp_16, camp_8E, camp_14, camp_11, camp_7, camp_2W, camp_10, camp_20, camp_4, camp_4 ext. and camp_26 in a remote specialized area. The frequency and extent of the contract, communication between the local community and outsiders are limited, and controlled by the respective authority. After establishing the proposed per test cum observation tubewell scheme in the camp area will be benefitted by groundwater level and groundwater quality information. |
| Based on the socioeconomic, cultural, religious and demographic qualities of the local community, Rohingya population and the incoming workers, is there a possibility that their presence or interaction with the local community could create adverse impacts? | No. It is not expected that the presence of the skilled (local) and unskilled labor (DRP) may generate any adverse impacts. The project will benefit the DRP communities. There will be a code of conduct for the labors to follow, which will be monitored by the PMU on a regular basis. |
| Consultation with DRP Community People and relevant stakeholders (SH) | During screening and site identification DPHE has conducted 17 (seventeen) consultation meetings with primary and secondary stakeholders. The stakeholders include RRRC, WASH Sector, Site Management Committee representatives, Contractor team and DRP Community. In addition to the above-mentioned meetings, the local DPHE has undertaken many consultations with male and female members of the DRP. Through the coordination and linkage activities of the project, the authorities have accomplished some formal exchange meetings, individual household visits, FGD, Tea Stall discussion and other consultation meetings. |



C.2 Land acquisition and stakeholder screening

| Probable Involuntary Resettlement Effects | Yes | No | Not Known | Remarks |
|---|-----|----|-----------|--|
| Involuntary Acquisition of Land/ Land Donation/ Land Taking | | | | |
| 1. Will there be any land acquisition? | | √ | | No, land acquisition will not be required for this sub-project test cum observation tubewell at the DRP camp site. |
| 2. Is the project construction site known? | √ | | | The land is selected with the recommendation of CiC, SMC & Local DPHE and assigned UN agencies. |
| 3. Who manage the land? | √ | | | The ownership of the land is government and lands are currently empty. |
| 4. Will easement be utilized within an existing Right of Way (ROW)? CRP (Common Resource Property) | √ | | | In the camp area Provision is available to utilize existing Right of Way (ROW) within this camp_19, camp_13, camp_15, camp_9, Camp_16, camp_8E, camp_14, camp_11, camp_7, camp_2W, camp_10, camp_20, camp_4, camp_4 ext. and camp_26 area under EMCRP. |
| 5. Will there be loss of DRP tent, agricultural crops, trees, and other productive or fixed assets due to project intervention? | | √ | | No DRP shelters will be affected. However, during construction if any shelter requires to shift, mitigation measures will be taken according to RPF. Consultations will be conducted with stakeholders, camp and block focal persons, and site management. During construction, if any shelters are affected, contractors are responsible to mitigate the impacts following the RPF as well. |
| 6. Will there be loss of businesses or enterprises due to project intervention? | | √ | | No |
| 7. Will there be loss of income sources and means of livelihoods due to project intervention? | | √ | | No |
| Involuntary restrictions on land use or on access to legally designated parks and protected areas | | | | |



| | | | | |
|--|--|---|--|---|
| 8. Will people lose access to natural resources, communal facilities and services? | | √ | | No |
| Information on Displaced Persons: | | | | |
| 9. Any estimate of the likely number of persons that will be displaced by the Project? If yes, approximately how many? | | | | <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes |
| 10. Are any of them poor, female-heads of households, or vulnerable to poverty risks? | | | | <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes |
| 11. Are any displaced persons from indigenous or ethnic minority groups? | | | | <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes |
| During Screening, project authority will conduct consultation with the primary and secondary stakeholders and provide their observations in the following sections (12 to 16) | | | | |
| 12: Who are the stakeholders of the project? Please provide a summary of consultation meetings with stakeholders and the affected community. | | | | |
| <p>The key stakeholders of this sub-projects are Labors, People/communities/organizations within the project influence area indirectly affected by project activities, relevant government departments/agencies, Dept. of Environment and Forest Department, Development Partners (WASH Cluster, UNHCR, WFP, IOM) and Local and international NGOs working with local host communities/DRP.</p> <p>No DRP will be directly benefited from this sub-project but will be indirectly benefitted as it will identify feasible locations for the tube well. The sub-project will not direct beneficial for the DRP but indirectly helpful for them. Stakeholders will get a clear scenario about the groundwater level and quality from these sub-projects. The sub-projects are environmentally sustainable and socially acceptable.</p> <p>The local DPHE, together with RPMU/PMU/IWM Social & Environmental Consultants has conducted formally and informally 17 (Seventeen) numbers of consultations with community representative, CiC, Camp WASH area focal, Camp area focal representatives , SAE & Mechanic, and relevant stakeholders.</p> <p>In the consultation meeting they were informed about the project goal and objectives. In the meeting (WASH Cluster, SMC other NGO representatives), discussed on the benefits of the sub-project TTW establishment. In the consultation session elaborately discussed on E&S for proposed TTW sites, its various impacts. In the meetings no significant negative impact perceived as well. The discussed issues are probable social and environmental impacts, its mitigation measures, GRM issues were discussed as potentially occurring at the project sites.</p> <p>CiC, Camp WASH area focal, Camp area focal said that they will get a clear picture of groundwater quality that will help them for getting safe water for these areas. Also, they will get the reserve information that can help them for future planning.</p> | | | | |



The CiC very much welcomed, praised appreciated the DPHE EMCRP water supply and other WASH services initiatives under the TTW installation sub-projects. As a whole, the Stakeholder participants of the consultation meeting opined that, they have no objections to construct of the test cum observation tubewell installation schemes on proposed sites. They also requested to involve the DRP community during the construction work. In terms of natural, ecological features of the area, it was observed that before establishing DRP camp, roads and other essential establishment, it was a deep protected forest area.

Project introduced Social and Environmental safeguard issues, grievance redress mechanism (GRM), possible social environmental and economic effects, livelihoods options, discussions on minimizing the laborer conflict with DRP. Infrastructure gender-based violence (GBV), forestation, elephant corridor, waste, sludge management to implement the EMCRP. In the consultation session regarding environmental and social aspects of the project interventions, the above-mentioned issues were discussed as potentially occurring at the project sites. The CiC, Site management, WASH focal agency very much welcomed & appreciated the DPHE EMCRP initiatives.

13: What social and cultural factors affect the ability of stakeholders to participate or benefit from the proposed policy or project?

None.

14: Are project objectives consistent with their needs, interests and capacity?

Yes, the EMCRP project objectives consistent with the respective stakeholders, DRP and host community, needs, interests and capacity in the project areas.

15: What will be the impact of the project or sub-project on the various stakeholders, especially women and vulnerable groups?

The stakeholders of WASH sector will directly benefit from the sub-project to collect information about soil structure, groundwater level and groundwater quality of the camp area. The DRP communities will be indirectly benefited from the TTW establishment. The Women and vulnerable people will not get directly help from this sub-project. But future generation will get benefit for their livelihood and better environmental condition. Researchers/Scientist will get benefit from this sub-project to collect related sector information. DRP will get chance to work as labours.

The injuries may happen to the labours if not works are done with care. Unless data's related to water quality are not preserved properly, the researchers may be deprived of proper information.

It is noted that, as per the opinion of the stakeholders there will not be any significant negative impact perceived over there.



16: What social risks might affect project or sub-project success?

As per the visit findings and consultation meeting with DRP community, other organizations and representatives of the scheme area, it has been revealed and perceived that the following social risks might be affected to accomplish the scheme interventions:

Since the skilled labor will be engaged from the host community and unskilled laborers will be engaged from the DRP, there may be some conflict between the two groups. To establish the scheme tasks, additional labor from outside such as technicians will be engaged. Thus, there may appear risk of some social conflict which is minimizable. A complete Gender action plan has already been developed and approved, a full time Gender Specialist for this project has been assigned to oversee the GBV based issues for this subproject. The gender and GBV issues (i.e. human trafficking, eve teasing, etc.) are being addressed through mainstreaming activities. As a mitigation measure, the Social Safeguard team and grievance redress committee (GRC) has been following the respective GRM, is keeping abreast on GBV occurrences and will guide the community through consultation meetings and counseling. Given the sensitivities in the camps areas (social, cultural, religious, gender, disabilities, orphaned and vulnerable children, relationship with DRP and host community), if the site area will be used as the open play space for the DRP kids, it might hamper their movement and play time for the time being. Unexpected noise, dust pollution, waste materials due to scheme establishment activities, might affect general social, religious activity of the DRP community at site area. However, by adopting the project E&S safeguard and through community consultation, the CIC, community leader and local DPHE representatives may determine possible ways and options to overcome and mitigate the constraints and risks during the scheme implementation.



C.3. Social Capital Format

The objective is to list various types of social institutes/bodies working in the camp, intended project influence areas to enlist them for the possible inclusion in the management, and monitoring of the projects. List the name of social institutes/ bodies under the given categorization along with the following information. Use separate sheet for each category of social institute/body. The information can be collected through secondary sources such as RRC/UN agencies or different development organizations that are involved with the Rohingya crisis projects, etc.

| Type of Social Institutes/bodies | Name of Institution | Contact Person and Address and phone number | Primary areas of Work | Coverage areas in the camp and communities |
|----------------------------------|--|--|--|--|
| Government Organizations | RRRC DPHE DC LGED, MoDR, DRP CIC | Mr. Md. Mahbub Alam Talukder, RRRC Commissioner , Cox's Bazar, Email rrccox@yahoo.com Engr. Ritthick Chowdhury, CXB, DPHE , Executive Engineer Email. chowritthick@gmail.com Md. Kamal Hossain dccoxsbazar@mopa.gov.bd Camp-in-Charge, camp_19, camp_13, camp_15, camp_9, Camp_16, camp_8E, camp_14, camp_11, camp_7, camp_2W, camp_10, camp_20, camp_4, camp_4 ext. and camp_26 | Overall Coordination of GoB dept., Dev partners , NGO, INGO , UN Agencies , Volunteers, Management of DRP Crisis in BD. Refugee Relief and Repatriation, Site management , Ensuring DRP HH shelter , F/NFIs , WASH facilities , Education , Health , Livelihoods , Social security , power sources , renewable solar energy . | DRP Camps, Blocks, synchronizing with Host, E&S aspects, Elephant corridors, conserve NR. Establish proper road communication. |
| UN Agencies /INGOs | WSC IOM, UNICEF, WFP, FAO , UNHCR UNFPA | Damian Seal WASH Sector Coordinator UNICEF dseal@unicef.org Please IUCN too. Tanvir Ahmed WASH Information Management Officer , | Management of DRP Crisis in BD. Refugee Relief and Repatriation, Site management , Ensuring DRP HH shelter , F/NFIs , WASH facilities , Education , Health , Livelihoods , Social security , power sources , renewable solar energy . | DRP Camps, Blocks, synchronizing with Host, E&S aspects, Elephant corridors, conserve NR. Establish proper road communication. |



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| Type of Social Institutes/bodies | Name of Institution | Contact Person and Address and phone number | Primary areas of Work | Coverage areas in the camp and communities |
|--|---------------------|--|--|--|
| | | UNICEF taahmed@unicef.org Asif Arafat Sector Coordinator WASH, ACF washsecco-cox@actionagainsthunger.org | | |
| National Organizations | Not yet on boarded | the database web link https://www.humanitarianresponse.info/en/operations/bangladesh/document/wash-sector-coxs-bazar-members-contact-list-17-october-2017 | | |
| Community Based Volunteer Organizations are those, which constitute the members of the community working towards social development. | Not yet involved | Yet to develop the database | Ensuring DRP HH shelter , F/NFIs , WASH facilities , Education , Health , Livelihoods , Social security , power sources , renewable solar energy . | |



Section D: Environmental and Social Screening Summary

Please summarize the results of environmental and social screening conducted above. Mitigation measures need to be proposed in referenced to ESMP Guidelines relevant to the type of the sub-project. This table needs to be completed by both environmental and social specialists. Please add rows to the table as necessary.

| Section | Main Environmental and Social Impacts | Impact Significance* | Suggested Mitigation Measures | Person/Institution Responsible | Monitoring Suggestions | |
|-----------------------------|---------------------------------------|--|--|---|---|--|
| | | | | | Indicators | Frequency |
| 1:Sub-Project Interventions | Air Quality | Under the sub-project intervention the overall score is low . | <ul style="list-style-type: none"> Limiting earthworks; watering of dry exposed surfaces and stockpiles of aggregates at least twice daily, as necessary; (spreading of crushed gravel over backfilled surfaces; Work place isolated by fencing active work sites in populated areas. Limiting speed of construction vehicles in access roads and work sites to maximum of 20 kph. | Construction Contractor monitored by Environmental Consultant and PMU | <ul style="list-style-type: none"> Location of stockpiles; Number of complaints from stakeholders; Covering of trucks; Records of air quality inspection; | Air quality test (CO and PM) once in construction period in winter season. |



| Section | Main Environmental and Social Impacts | Impact Significance* | Suggested Mitigation Measures | Person/Institution Responsible | Monitoring Suggestions | |
|---------|---------------------------------------|--|--|---|--|--------------------------------------|
| | | | | | Indicators | Frequency |
| | Soil | Under the sub-project intervention the overall score is low . | <ul style="list-style-type: none"> • Precautions might be taken when rainstorms are likely, when a rainstorm is imminent or forecast, and actions to be taken during or after rainstorms shall be developed by the Contractor. • The earthwork sites where exposed land surface is vulnerable to runoff shall be consolidated and/or covered. • Channels, earth bunds, netting, tarpaulin and or sand bag barriers shall be used on site to manage surface water runoff and minimize erosion. • The overall slope of the works areas and construction yards shall be kept to a minimum to reduce the erosive potential of surface water flows elsewhere. | Construction Contractor monitored by Environmental Consultant and PMU | <ul style="list-style-type: none"> • No visible degradation to nearby drainages, • Canals or water bodies due to soil erosion. | Weekly, especially after rain events |



| Section | Main Environmental and Social Impacts | Impact Significance* | Suggested Mitigation Measures | Person/Institution Responsible | Monitoring Suggestions | |
|---------|--|--|---|---|--|--|
| | | | | | Indicators | Frequency |
| | Hydrology (surface and groundwater) | Under the sub-project intervention the overall score is low . | <ul style="list-style-type: none"> All precautions to store chemicals/oil/fuel properly so that no chance of spill. Proper disposal of excess bleaching powder and care should be taken to follow the appropriate procedure for chlorination. Monitor water quality according to the environmental management plan. Ensure drilling equipment is cleaned well and will be free of contaminants such as grease, and chemicals, prior to drilling; and properly dispose of spoils and wastes at the end of each day's work. | Construction Contractor and monitored by Environmental Consultant and PMU | <ul style="list-style-type: none"> Areas for stockpiles, storage of fuels and lubricants and waste materials; Records of water quality inspection; Water Quality Test (National Drinking Water Quality Standard Parameters); No visible degradation to nearby drainages, khals or water bodies due to construction activities. For surface water quality parameters: pH,FC For groundwater quality parameters: pH, Chloride, As, Fe Training records | <p>Water quality test (SW & GW) once in construction period and Operation period.</p> <p>Training records reviewed quarterly</p> |



| Section | Main Environmental and Social Impacts | Impact Significance* | Suggested Mitigation Measures | Person/Institution Responsible | Monitoring Suggestions | |
|---------------------------|---|--|---|---|---|---|
| | | | | | Indicators | Frequency |
| 2: Pre-construction Phase | Safe Sanitation, water supply | Under the sub-project intervention the overall score is low . | <ul style="list-style-type: none"> • Provide suitable housing, adequate supplies of potable water, and toilet and bathing facilities within the housing area for the assigned laborer. • Provide means for disposing of wastewater from toilets, baths and food preparation areas either through a septic tank and soak away, or holding tank with removal by vacuum truck. | Construction Contractor and monitored by Environmental Consultant and PMU | <ul style="list-style-type: none"> • Site-specific H & S Plan; • Records of supply of uncontaminated water; • Record of Health & Safety orientation trainings; • Condition of sanitation facilities for workers | Visual inspection by PMU and supervision consultants on monthly basis |
| | Transportation impacts | Under the sub-project intervention the overall score is low . | <ul style="list-style-type: none"> • All vehicle movement to be done during the day time • Speed needs to be limited to 20kmph • Contractor's responsibility to verify the suitability carrying, loading and unloading of materials by trucks or others transport and head load arrangement. | Construction Contractor and monitored by Environmental Consultant and PMU | <ul style="list-style-type: none"> • Check the vehicle pool. • Record of regular inspection. • Record of accidents/incidents | Monthly monitoring. |
| | Storage of construction materials can cause pollution or land slips | Under the sub-project intervention the overall score is low . | <ul style="list-style-type: none"> • Train to the concerned person, team assigned for the construction work regarding proper storage procedures: away from steep slopes, proper bonding to avoid runoff from site. | Contractor and monitored by Environmental Consultant and PMU | <ul style="list-style-type: none"> • List of materials and sources of materials; • Storage site away from steep slopes and has proper bonding | Weekly |



| Section | Main Environmental and Social Impacts | Impact Significance* | Suggested Mitigation Measures | Person/Institution Responsible | Monitoring Suggestions | |
|-----------------------|---|---|--|---|---|---|
| | | | | | Indicators | Frequency |
| 3: Construction Phase | Wastes (earth, mud) causing pollution | Under the sub-project intervention the overall score is medium . | <ul style="list-style-type: none"> Prepare and implement drilling mud and water runoff management plan approved by PMU. Wastes must be placed in the designated bins which must be regularly emptied. All waste must be removed from the site and transported to a disposal site. | Contractor and monitored by Environmental Consultant and PMU | <ul style="list-style-type: none"> Complaints from community; Regular inspection of waste management activity; Waste disposal record. | As work weekly progresses |
| | Storage of materials (Creating dust/ air pollution spillage of liquid/ hazardous substance i.e. oil, drilling fluid, chemicals etc., Risk of crime) | Under the sub-project intervention the overall score is medium . | <ul style="list-style-type: none"> By the site management committee in Camp to identify the storage site and other requirements, which will be approved by PMU and consultants. | Contractor and monitored by Environmental Consultant and PMU | <ul style="list-style-type: none"> List of materials and sources of materials; | Monthly basis during implementation phase. |
| | Noise pollution | Under the subproject intervention the overall score is medium . | <ul style="list-style-type: none"> Consultation with affected people; not to operate noisy equipment during working and operations time (22:00 – 06:00); Sound suppression for equipment; Ear protection for workers. Conduct noise quality monitoring. | Construction Contractor and monitored by Environmental Consultant and PMU | <ul style="list-style-type: none"> Number of complaints from stakeholders; Use of silencers in noise-producing equipment and sound barriers; Noise Level following decibel meter (dB) | Inspection by PMU and supervision consultants on monthly basis; |



| Section | Main Environmental and Social Impacts | Impact Significance* | Suggested Mitigation Measures | Person/Institution Responsible | Monitoring Suggestions | |
|-----------------------------|---------------------------------------|---|--|--|---|---|
| | | | | | Indicators | Frequency |
| | Air pollution | Under the sub-project intervention the overall score is low . | <ul style="list-style-type: none"> Water spraying from other source for dust control; Construction materials with potential for significant dust generation shall be covered; no smoke emitting equipment; and limiting speed of construction vehicles in access roads and work sites to maximum of 20 kph. | Construction Contractor and monitored by Environmental Consultant and PMU | <ul style="list-style-type: none"> Location of stockpiles; Number of complaints from stakeholders; Records of air quality inspection; Air quality test report. | Air Quality: PM ₁₀ , PM _{2.5} , SPM and SO ₂ test once in construction period. |
| | Stagnant water risk | Water reservoir for tubewell drilling will be required. These can potentially store stagnant water for short period of time during and after rain events. Medium | <ul style="list-style-type: none"> Water stagnant area should be fenced with marking tape The top soils in the sub-project are sandy and the water should drain away quickly After construction of tube well, backfilling & compaction of water storage (which is used during drilling) pit is essential Contractor should arrange proper water pumping facilities (pump, etc.) Proper PPEs are essential during construction work. | Construction Contractor foreman and monitored by Consultant and PIU | Water stagnant beside community toilet area | Daily during construction |
| 4: Operational Phase | Destruction of soil | The operation period may be possible soil damage problems in the project areas by rainstorms and overall score is | Safeguards to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecast, and actions to be taken during rain storms. | Construction Contractor weekly monitored by Environmental Consultant and PMU | No visible degradation to nearby drainages or water bodies due to soil damage at pipe laying area. | Site inspection weekly/2-weekly in rain season. |



| Section | Main Environmental and Social Impacts | Impact Significance* | Suggested Mitigation Measures | Person/Institution Responsible | Monitoring Suggestions | |
|---------|--|---|--|--|--|--------------------------|
| | | | | | Indicators | Frequency |
| | | low. | | | | |
| | Injuries to operation and maintenance workers | Site staff can be seriously hurt by accidents. Low | <ul style="list-style-type: none"> • Ensure proper training given to all staff • Ensure PPE used by all staff | <ul style="list-style-type: none"> • Camp WASH NGO staff DPHE XEN | <ul style="list-style-type: none"> • Accidents register | Monthly |
| | Air Pollution and Noise from Traffic Movement | Temporary, localized impacts Low | <ul style="list-style-type: none"> • Properly maintained vehicles to be used. • Limit speed to 20kmph at/near work sites | <ul style="list-style-type: none"> • Maintenance Contractor • DPHE XEN | Complaints by nearby DRPs | During maintenance works |

* Overall Impact Score: High = Likely to cause long-term E&S impacts; Medium = Likely to cause temporary impacts; Low = Likely to cause little, short-term impacts

Social Screening Summary:

Under the Construction of Test cum Observation Tubewell (WD-01) at camp_19, camp_13, camp_15, camp_9, Camp_16, camp_8E, camp_14, camp_11, camp_7, camp_2W, camp_10, camp_20, camp_4, camp_4 ext. and camp_26 herein have been illustrating the overall 'Social screening summary:

To furnish the details of social screening, have followed the ESMF, focusing the sub-projects major social impacts its significance (Equity, labor influx, population coverage, easy access, GBV, impact mitigation measures, referral, monitoring suggestions. For this purpose, no land acquisition is required for this sub-project. Provision is available be utilized within an existing Right of Way within this camp_19, camp_13, camp_15, camp_9, Camp_16, camp_8E, camp_14, camp_11, camp_7, camp_2W, camp_10, camp_20, camp_4, camp_4 ext. and camp_26 of Test cum Observation



Tubewell sites. The sub-project location was found by the support of RRRC, CiC, SMC and local DPHE. The assigned consultants and local DPHE, CiC representatives, SMC and WASH focal team have visited the proposed site location and after then prepared the screening report. Initially the team surveyed the locality and primarily sorted (2-3) places to establish the scheme. The foot of hill, natural drain or channel, toilet and others environmental obstructions not close to the site.

Construction induced impact issues:

Since every Test cum Observation Tubewell schemes will be implemented in an empty government-owned land, no land acquisition will be required, so the construction induced impacts will be minimized. During construction, movements of heavy vehicles or construction materials may cause damages to the shelters or assets. If any damages are reported, DPHE will hold consultations with the site management along with contractors and camp focal points to take mitigation measures according to ESMF and RPF. No DRP will be directly benefited from this sub-project but will be indirectly benefitted as it will identify feasible locations for the tube well.

The sub-project will not direct beneficial for the DRP but indirectly helpful for them. Stakeholders will get a clear scenario about the groundwater level and quality from these sub-projects. The sub-projects are environmentally sustainable and socially acceptable.

The local DPHE, together with RPMU/PMU/IWM Social & Environmental Consultants has conducted formally and informally 17 (Seventeen) numbers of consultations with community representative, CiC, Camp WASH area focal, Camp area focal representatives, SAE & Mechanic, and relevant stakeholders.

In the consultation meeting they were informed about the project goal and objectives. In the meeting (WASH Cluster, SMC other NGO representatives), discussed on the benefits of the sub-project – TTW establishment. In the consultation session elaborately discussed on E&S for proposed TTW sites, its various impacts. In the meetings no significant negative impact perceived as well. The discussed issues are probable social and environmental impacts, its mitigation measures, GRM issues were discussed as potentially occurring at the project sites. CiC, Camp WASH area focal, Camp area focal said that they will get a clear picture of groundwater quality that will help them for getting safe water for these area. Also, they will get the reserve information that can help them for future planning. The CiC was very much welcomed, praised appreciated the DPHE EMCRP water supply and other WASH services initiatives under the TTW installation sub-projects. As a whole, the Stakeholder participants of the consultation meeting opined that, they have no objections to construct of the test cum observation tubewell installation schemes on proposed sites.



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They also requested to involve the DRP community during the construction work. In terms of natural, ecological features of the area, it was observed that before establishing DRP camp, roads and other essential establishment, it was a deep protected forest area

Labor issues:

Every Test cum Observation Tubewell Schemes executing contractor will engage skill & unskilled labors. About 3-5 unskilled&1-2 skilledlabor will be required to implement the activities of every scheme. Unskilled labor will be engaged from the camp while the skilled from the local/host community/other places of Bangladesh. No foreign labor will be needed to implement the sub-project there. Since the number of external workers will be very few and working for short periods of time (more than 3 months), there will have no competition in using resources amongst the host and DRP communities. Thus, the sub-project will not be created any influx of workers. The unskilled labors will be hired from the DRP community of camp_19, camp_13, camp_15, camp_9, Camp_16, camp_8E, camp_14, camp_11, camp_7, camp_2W, camp_10, camp_20, camp_4, camp_4 ext. and camp_26who already reside in the camp. The skilled labors will be accommodated on site in the DRP camp by the contractors. The contractor will prepare a labor shed measuring 15ftX15ft for males and 15ftX12ft for females if necessary. All laborers (skilled and unskilled) shall be given appropriate training and capacity development to entail a multitude of codes of conduct pertaining to conflict, GBV and other issues.

Linkage with other stakeholders:

The team has provided emphasis to keep better linkage with related stakeholders (*i.e.* RRRC, CiC, Camp focal, WASH focal, DRP & Host Community, INGO & Local NGO *etc.*). The team conducts several types of consultation meeting with them group/individually for any social issues.

GBV issues:

The GBV risk for the project is assessed as high. The proposed project activities will involve major civil works through skilled (from the host community) and unskilled (from the DRP community) labor. Although a strict labor code of conducted will be enforced, a key concern is the potential exposure to sexual exploitation and abuse (SEA), sexual harassment (SHA) and GBV for females in the area. During the construction of the pipelines many women and vulnerable groups in the project location may be exposed to male laborers, which may lead to sexual harassment of varying degrees. A GRM will be established to deal with related issues. The team will conduct consultation meetings with the DRP & Host communities, contractors and labor to address GBV. In this meeting, another topic of discussion was the 'do's and don'ts' during implementation of the sub-project



intervention to mitigate all the cross-cutting issues. The expected impact of the sub-project on the various stakeholders, women and vulnerable groups is expected to be positive and will create a friendly socioeconomic climate to implement the intervention. It has been determined that Camp WASH Focal, DRP communities and their community leader have no objection to establish the Test cum Observation Tubewell in the proposed site of camp_19, camp_13, camp_15, camp_9, Camp_16, camp_8E, camp_14, camp_11, camp_7, camp_2W, camp_10, camp_20, camp_4, camp_4 ext. and camp_26. If any odd situations arise, the GRC will attempt to mitigate any issues according to the ESMFGRM guideline. On the other hand, if any private land/land leases issues arise, the team will conduct a consultation meeting with the owner and relevant stakeholders according to the ESMF& resettlement guideline.

UNFPA has been hired as a specialized organization to deal with the GBV activities. This project is a part of the Gender Component of the UNFPA 9th Country Programme and will contribute to achieve the CP outcome 3 “Advanced gender equality, women’s and girls’ empowerment, and reproductive rights, including for the most vulnerable and marginalized women, adolescents and youth”. In the event any issues on GBV arise, they will be well communicated with UNFPA through appropriate channels to resolve the issue following proper processes.

In this project, 16 new WFS will be established and 2 existing WFS will be fully operationalized, providing comprehensive GBV case management services such as lifesaving information, community and outreach initiatives, community-based psycho-social support, community engagement in GBV prevention activities through SASA, community engagement in safety audit, and strengthening of community-based support mechanism for women and girls through women support groups and adolescence support groups. The staff’s capacity will be developed to adequately handle GBV case management, coaching, mentoring, supervision, GBVIMS and GBVIMS+ to ensure comprehensive case management services through proper supervision. Capacity development will also focus on inclusion of people with disability into response and prevention work for GBV. Various tools will be developed/adapted to facilitate GBV services, MHPSS services and engaging men and boys into GBV prevention work. Along with the GBV case management services mentioned above, GBV and labor code of conduct awareness programs will be implemented, where all stakeholders including the host and DRP communities, labor engaged for the project, site management, the WB and project clients such as DPHE and LGD can participate. Mukti will procure WFS strengthening materials and awareness raising materials. They will also implement the preparedness/ contingency plans for any and upcoming disasters. Finally, strict monitoring and supervision initiatives will be in place to ensure any arising issues are averted and to facilitate smooth project processes.



Consultations and Future Consultations:

Under the EMCRP, the DPHE has initiated elaborate consultations with various stakeholders of this project for the Test cum Observation Tubewell Scheme site management. These include GIS specialist (initially), Hydrogeologist located in the scheme area, E&S consultants, local DPHE authorities, other development partners such as UN as well as the DRP community. These sessions covered topics such as Project introduced Social and Environmental safeguard issues, GRM, possible social environmental and economic effects, discussions on minimizing the laborer conflict with DRP , Infrastructure, GBV, forestation, waste, sludge management. It was also determined that there is no Elephant corridor and no scope of Elephant/Human conflict in the site area.

As a result of these consultations, the CiC, Site management, WASH focal very much welcomed and appreciated the DPHE EMCRP initiatives on WASH sector sub projects. As per their opinion, WASH sector will get test results of water quality and how much water is preserved in the underground for future plan. Thus, future consultations during the lifetime of the project is expected to ensure that negative social and environmental impacts are being mitigated and community needs and opinions are being considered. Consultations will involve determining with the site management team whether proper signage is being used (e.g. for occupational hazard) and whether a properly GRM system is being implemented through an efficient GRC. The GRM will be set up to serve as an integral tool for engaging the various stakeholders during the project activities and its implementation. There will have complaint book for stakeholders for complain registration. The GRM will be institutionalized with qualified personnel having adequate training in dealing with relevant complaints. The GRM will be available for a wide array of issues such as malpractice, labor issues and GBV.

COVID Management Guidelines during implementation:

- A. **Labor, Workers and Working Conditions:** Contractors are responsible to manage the labors, workers and working conditions. PMU with the support of superstition and monitoring firms will ensure implementation.
- i. Stop any Project Activities that may increase community exposure to COVID risks
 - ii. Communicate to communities about protective COVID risks and measures
 - iii. Monitor incidence and outbreak of communicable diseases
 - iv. Identify hotspots based on health data available
 - v. Screen Security personnel for COVID



- vi. Follow strict protocols in management of project interventions that may increase the COVID risk for human health (for instance in livestock and commercial farming)
- vii. Undertake preventive measures in resettlement settlements
- viii. Practice social distancing in meetings, workshops and consultations

B. Land Acquisition and Involuntary Resettlement: Though this sub-project will not require land acquisition and involuntary resettlement but during implementation if any involuntary resettlement issues arises, following steps will be followed:

- i. Identify vulnerable PAPs and Non-title holders who may have increased vulnerability due to COVID outbreak and (lockdown or loss of livelihood); particularly NTH
- ii. Make accelerated payments for compensation and/or livelihood restoration to project affected persons, especially vulnerable households, non-titled holders to help them cope with lockdown;
- iii. Employ local population on wage labor, make advance payments;
- iv. Manage migrant labor for COVID related risks
- v. Invest in living conditions in relocation settlements

C. Community Health and Safety: PMU and contractors are responsible to implement the following

- i. Stop any Project Activities that may increase community exposure to COVID risks
- ii. Communicate to communities about protective COVID risks and measures
- iii. Monitor incidence and outbreak of communicable diseases
- iv. Identify hotspots based on health data available
- v. Screen Security personnel for COVID
- vi. Follow strict protocols in management of project interventions that may increase the COVID risk for human health (for instance in livestock and commercial farming)
- vii. Undertake preventive measures in resettlement settlements
- viii. Practice social distancing in meetings, workshops and consultations

D. Stakeholders and Citizen and Grievance Mechanism:

- i. Disseminate COVID advisories over phones, texts, what's app groups, radio, TV, frontline workers Communication;
- ii. Monitor existing grievance and public information mechanisms for any COVID related grievance, queries etc.;
- iii. Widely disseminate material on those who have recovered from COVID to remove stigma
- iv. Include Doctor or medical staff in the GRM
- v. Use more video conference facilities and conferences.



Labor and Contractors management during COVID-19:

A. For projects involving construction/civil works, contractors will develop specific procedures or plans so that adequate precautions are in place to prevent or minimize an outbreak of COVID-19, and what should be done if a worker gets sick.:

- Assessing the characteristics of the workforce, including those with underlying health issues or who may be otherwise at risk
- Confirming workers are fit for work, to include temperature testing and refusing entry to sick workers
- Considering ways to minimize entry/exit to site or the workplace, and limiting contact between workers and the community/general public
- Training workers on hygiene and other preventative measures, and implementing a communication strategy for regular updates on COVID-19 related issues and the status of affected workers
- Treatment of workers who are or should be self-isolating and/or are displaying symptoms
- Assessing risks to continuity of supplies of medicine, water, fuel, food and PPE, taking into account international, national and local supply chains
- Reduction, storage and disposal of medical waste
- Adjustments to work practices, to reduce the number of workers and increase social distancing
- Expanding health facilities on-site compared to usual levels, developing relationships with local health care facilities and organize for the treatment of sick workers
- Building worker accommodations further apart, or having one worker accommodation in a more isolated area, which may be easily converted to quarantine and treatment facilities, if needed
- Establishing a procedure to follow if a worker becomes sick (following WHO guidelines)
- Implementing a communication strategy with the community, community leaders and local government in relation to COVID-19 issues on site.

B. For supporting health facilities, plans or procedures will be in place to address the following issues:

- Obtaining adequate supplies of medical PPE, including gowns, aprons, curtains; medical masks and respirators (N95 or FFP2); gloves (medical, and heavy duty for cleaners); eye protection (goggles or face screens); hand washing soap and sanitizer; and effective cleaning equipment. Where relevant PPE cannot be obtained, the plan should consider viable alternatives, such as cloth masks, alcohol-based cleansers, hot water for cleaning and extra hand washing facilities, until such time as the supplies are available
- Training medical staff on the latest WHO advice and recommendations on the specifics of COVID-19
- Conducting enhanced cleaning arrangements, including thorough cleaning (using adequate disinfectant) of catering facilities/canteens/food/drink facilities, latrines/showers, common areas, including door handles, floors and all surfaces that touched regularly
- Training and providing cleaning staff with adequate PPE when cleaning consultation rooms and facilities used to treat infected patients
- Implementing a communication strategy/plan to support regular communication, accessible updates and clear messaging to health workers, regarding the spread of COVID-19 in nearby locations, the latest facts and statistics, and applicable procedures.



EMCRP Environmental and Social Screen Report (DPHE)

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