Resettlement Plan

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Bangladesh: Khulna Sewerage System Development Project

Prepared by the Khulna Water Supply and Sewerage Authority for the Asian Development Bank.

CURRENCYEQUIVALENTS

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BDT 1	-	$0.01180

ABBREVIATIONS

ADB	-	Asian Development Bank
ADC(Rev)	-	Additional Deputy Commissioner (Revenue)
CPR	-	Common Property Resources
DAE	-	Directorate of Agriculture Extension
DSC	-	Design & Supervision Consultant
DOF	-	Department of Forest
MSC	-	Management Support Consultant
FGD	-	Focus Group Discussion
GOB	-	Government of Bangladesh
GPS	-	Government Primary School
GRC	-	Grievance Redress Committee
GRM	-	Grievance Redress Mechanism
IGP	-	Income Generating Program
ILRP	-	Income and Livelihood Restoration Program
INGO	-	Implementing Non-Government Organization
IOL	-	Inventory of Losses
JVC	-	Joint Verification Committee
KWASA	-	Khulna Water Supply & Sewerage Authority
LARP	-	Land Acquisition and Resettlement Plan
LAO	-	Land Acquisition Officer
LA&R	-	Land Acquisition and Resettlement
LGRD&C	-	Local Government Rural Development
M&E	-	Monitoring &Evaluation
MIS	-	Management Information System
MOLGRD &C	-	Ministry of Local Government Rural Development
PAH	-	Project Affected Household
PMU	-	Project Management Unit
PPR	-	Project Progress Report
PPTA	-	Project Preparatory Technical Assistance
PVAC	-	Property Valuation Advisory Committee
R&R	-	Resettlement and Rehabilitation
RAC	-	Resettlement Advisory Committee
ROW	-	right-of-way
SES	-	Socio-economic Survey
PMO	-	Subproject Management Office
SPS	-	Sewage Pumping Station
STP	-	Sewage Treatment Plan

TOR	-	Terms of Reference
XEN	-	Executive Engineer

CONVERSION OF LAND/AREA MEASUREMENTS

1 ha	-	2.47 acres
1 ha	-	10,000 sqm
1 acre	-	100 decimal
1 m	-	1000 mm
1sqm	-	10.76 square feet (sft)

NOTE

In this report, "$" refers to United States dollars.

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GLOSSARY

Affected Person includes all persons with legal rights on land (titleholders) and persons without legal rights (non-titleholders) who are physically displaced (relocation, loss of residential land, or loss of shelter) and/or economically displaced (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.

Affected Household: means (i) a family whose primary place of residence or other property or source of livelihood is adversely affected by the acquisition of land for a project or involuntary displacement due to any other reason; (ii) any tenure holder, tenant, lessee or owner of other property, who on account of acquisition of land in the affected area or otherwise, has been involuntary displaced from such land or other property; (iii) any agricultural or non-agricultural labourer, landless person (not having homestead land or agricultural land) rural artisan, small trader or self-employed person; who has been residing or engaged in any trade, business, occupation or vocation in the affected area, and who has been deprived of earning his livelihood or alienated wholly or substantially from the main source of his trade, business, occupation or vocation because of the acquisition of land in the affected area or being involuntarily displaced for any other reason.

Assistance: means support, rehabilitation and restoration measures extended in cash and / or kind over and above the compensation for lost assets.

Awardee: means the person with interests in land to be acquired by the project after their ownership of said land has been confirmed by the respective Deputy Commissioner's office as well as persons with interests in other assets to be acquired by the project. Compensation for acquired assets is provided to “awardees‟ through a notification under Section 8 of The Acquisition and Requisition of Immovable Property Act, 2017.

Compensation: means payment in cash or kind for an asset to be acquired or affected by a project at replacement cost at current market value.

Cut-off date: means the date after which eligibility for compensation or resettlement assistance will not be considered is the cut-off date. Date of notice under Section 4 of the Acquisition and Requisition of Immovable Property Act, 2017 is considered to be the cut-off date for affected landowners for cash compensation under law (CCL). The date of census survey is considered as the cut-of-date for eligibility of resettlement benefits to the non-titleholders.

Displaced Person: As per ADB Safeguard Policy Statement (SPS) 2009, displaced persons are those who are physically displaced (relocation, loss of residential land, or loss of shelter) and/or economically displaced (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.

Encroachers: The term refers to those extending attached private land into public land or constructed structure on public land or using adjacent public/private land for agriculture etc.

Entitlement: means the range of measures comprising cash or kind compensation, relocation cost, income restoration assistance, transfer assistance, vulnerability assistance, income substitution, and business restoration which are due to affected households, depending on the type and degree /nature of their losses, to restore their social and economic base.

Eminent Domain: means the regulatory authority of the Government to obtain land for public purpose/interest or use as described in the Acquisition and Requisition of Immovable Property Act, 2017.

Household: A group of persons, related or unrelated, living together and taking food from the same kitchen (as stated in Bangladesh Bureau of Statistics [BBS]).

Inventory of loss: means the pre-appraisal inventory of assets as a preliminary record of affected or lost assets.

Non-titled: means those who have no legal/legalizable rights or claims to the land that they are occupying and includes people using private or public land without permission, permit or grant i.e. Those people without legal/legalizable title to land and/or structures occupied or used by them. ADB"s policy explicitly states that such people cannot be denied resettlement assistance.

Relocation: means physical displacement of the affected persons. A relocation site is a designated area forebuilding homes, infrastructure, provision of assets, employment and re-establishing income, livelihoods, quality of life and social systems.

Replacement cost: is the amount of cash or kind needed to replace an asset in its existing condition, without deduction of transaction costs or cost of any material salvaged.

Involuntary Resettlement: means all the impacts associated with land acquisition including restriction of access to, or use of land, acquisition of assets, or impacts on income generation as a result of land acquisition.

Significant impact: means where 200 or more displaced persons suffer a loss of 10% or more of productive assets (income generating) or physical displacement.

Squatters: means are non-titleholders and includes households, business and common establishments on land owned by the government. Under the project, this includes land on part of the crest and slopes of flood control embankments and similar areas of the drainage channels. Under this project there are no squatters on private land.

Structures: mean all buildings including primary and secondary structures including houses and ancillary buildings, commercial enterprises, living quarters, community facilities and infrastructures, shops, businesses, fences, and walls, tube-wells, toilets, etc. Primary structures refers to all residential and commercial structures. Secondary structures refers to fences and walls, tube-wells, poultry and cattle shed, concrete stairs, concrete drains, toilets, etc.

Tenants: are those persons having bonafide written or unwritten tenancy agreements, with a private property owner having clear property titles, to occupy a structure or land for agricultural use, residence and business or have a receipt from the local government body for the use of government land.

Vulnerable Households: means households that are (i) women headed households, especially with low incomes; (ii) headed by elderly/ person with disability, without means of support; (iii) households that fall on or below the poverty line; (iv) households of indigenous population or ethnic minority; (v) households of low social group or caste; and (vi) landless persons.

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EXECUTIVE SUMMARY

Project Background: To address the poor sanitation situation in Khulna city, Khulna Water Supply and Sewerage Authority (KWASA) conducted feasibility study[1] and formulated wastewater management master plan and proposed a centralized sewerage system for Khulna city to be developed in an organized and phased manner while emphasizing on climate resilience, gender-responsiveness and social inclusion. The sewer network will cover 80% of the service area and the remaining 20% will be catered through on-site sanitation. The project has identified measures to ensure increased access of women and disadvantaged groups to basic urban services. The Khulna City Corporation (KCC) has a program to construct public/community toilets. Khulna Water Supply and Sewerage Authority (KWASA) will coordinate with KCC.

Project Description: The Khulna Sewerage System Development Project (KSSDP) intends to address the poor sanitation situation in Khulna city. The project will significantly improve the environment of urban area in Khulna city and will increase the economic activities through the establishment of a sustainable and climate resilient inclusive sanitation system that mainly includes sewer networks, sewage treatment plants, and fecal sludge treatment facilities in Khulna city. The project will also build the capacity of Khulna Water Supply and Sewerage Authority (KWASA) in planning, implementation, and O&M of sewerage system to ensure sustainable management of the sewerage system ensuring good governance and accountability[2]. The project has built-in components to ensure that ensuing infrastructure is climate resilient and promote effective gender mainstreaming. The investment loan is consistent with the vision of Bangladesh's Seventh 5-year plan for the fiscal year (FY) 2016–FY 2020 for pursuing a compact, networked, resilient, competitive, inclusive, and smart urban development.[3]

Project components: The project aims at improving urban infrastructure and service inKhulna city through developing centralized and organized sewerage management system including:

- Construction of 269.67 km primary transmission, secondary and tertiary network;
- Establishment of eight sewage pumping stations;
- Construction of five manhole pumping stations; and
- Construction of two sewage treatment plants (of 52 MLD and 28 MLD capacities).

Resettlement Plan: This Resettlement Plan has been prepared in accordance with applicable legal and policy frameworks of the Government of Bangladesh, namely the Acquisition and Requisition of Immovable Property Act (ARIPA), 2017 and ADB Safeguards Policy Statement (SPS), 2009. The basic objectives of the Resettlement Plan are to (i) guide the Executive Agency in developing the entitlements for the affected persons and developing mechanism for compensating the project affected people appropriately; (ii) serve as a guiding document to ensure Affected Persons / Displaced Persons will be assisted and paid compensation, and (iii) to develop implementation arrangement of the resettlement plan and monitoring the resettlement activities. This Resettlement Plan also deals with the major types of losses and the corresponding nature and scope of entitlements in accordance with the ARIPA, 2017.

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[1] Initial poverty and social analysis Khulna Sewerage System Development Project:https://www.adb.org/projects/documents/ban-49329-007-ipsa

[2] Government of Bangladesh established Khulna Water Supply and Sewerage Authority on 2 March 2008 under article 3 of WASA Act 1996. Source: https://www.kwasa.org.bd/kwasa/en/HistoryofKwasa.aspx

[3] Development Planning in Bangladesh: Seventh Five-year plan and SDG Implementation: General Economics Division Planning Commission Government of the People's Republic of Bangladesh.

Scope of Land Acquisition and Resettlement: The construction of proposed two (2) Sewage Treatment Plants (STP) and eight (8) sewage pumping stations (SPS) will require 36.03 acres (3602.62 decimals) of lands. Process of land acquisition has already been initiated by the KWASA for ten (10) land plots. Out of these 10 land plots, 8 plots belong to private owners measuring 35.53 acres (3553.2 decimals)out of which 34 acres (3400 decimals) land will be required for construction of two STPs. Apart from these, 2 plots belong to Government of Bangladesh (GOB) measuring about 0.5 acres (49.42 decimals) will be utilized for construction of 2 SPSs.

Categorization: This Resettlement Plan is prepared for Khulna Sewerage System Development Project (KSSDP) at Khulna city of Bangladesh. The proposed project includes construction of two Sewage Treatment Plan (STP), eight Sewage Pumping Stations (SPS) and 269.67 km of sewer network (including rising main). The project is classified as category B[4] for involuntary resettlement. The assessment based on preliminary design reveals that the project will cause the following impacts: (i) physical displacement of 24 families (comprising 108 persons) due to loss of residential structures on land proposed for acquisition; (ii)economic displacement of 8 persons (2 business owners due to loss of commercial structures will be affected,3 sharecroppers and 3 employees of the affected businesses) with 35 family members, who stand to face livelihood loss due to land acquisition; (iii) loss of land to 210 private landowners (945 family members)who will lose 35.53 acres of mostly vacant, unproductive land, due to involuntary land acquisition, 95% of whom (199 landowners) are anticipated to lose less than 10% of their total land holding, while remaining 5% (11 landowners) are estimated to lose 10-12% of their total land holding[5] (out of total 210 land owners, 6 land owners reside on the affected land parcel and are counted among those physically displaced); and (iv) temporary income loss of 22 traders and 80 daily wage workers presently using the government land parcel identified for SPS-1 due to temporary access disruption.

The project is expected to cause significant impact to 24 households due to physical displacement and 8 persons due to permanent economic displacement (two business owners, three sharecroppers and three employees of the business owners). In addition, 11 landowners (45 affected persons) who face loss of over 10% of their land (ranging between 10-12%) are counted among those significantly affected. Based on the preliminary assessment,188 persons are expected to be significantly impacted.Temporary economic impacts to 22 traders and 80 wage labour is assessed at two government lands proposed to be used for project works. Based on transect walks and survey of sample stretches of pipe alignment, temporary economic impacts to 2640 hawkers and vendors are anticipated for a period of 2-5 days each. Impacts of manhole pumping station locations which are proposed within road ROWs, were also assessed, based on the study of a sample of two out of 5 manhole pump station locations. A total of 25 vendors are assessed as affected due to construction of 5 manhole pump stations, for a period of 14 days each. Temporary impacts due to sewer pipelaying and manhole pumping station construction will be confirmed in the updated resettlement plan based on detailed measurement surveys, when the exact pipe alignments, manhole locations and manhole pumping station locations are known.

Socio-economic Information and Profile: KWASA conducted a survey of 257 affected persons including 210 affected land owners, 3 sharecroppers, 8 tenants, 2 businessmen, 9 caretakers, 22 traders and 3 employees. The average household size of the surveyed families is found to be 4.5.

[4] A proposed project is classified as category B if it includes involuntary resettlement impacts that are not deemed significant which means less than 200 or less persons will experience major impacts, which are defined as (i) being physically displaced from housing, or (ii) losing 10% or more of their productive assets (income generating). The level of detail and comprehensiveness of the resettlement plan are commensurate with the significance of the potential impacts and risks.

[5] Total land holding includes land parcels at project site location and land parcels at other places.

Monthly income of the affected persons ranges from ≥ 10,000 BDT to ≤ 70,000 BDT. The survey identified 24 affected vulnerable households (which is equivalent to 9.34% of the permanently affected persons).

Legal Framework: This Resettlement Plan has been prepared taking into account the applicable law and policy of the Government of Bangladesh, namely the Acquisition and Requisition of Immovable Property Act (ARIPA), 2017 and ADB's Safeguards Policy Statement (SPS) 2009.

Entitlements, Assistance and Benefits: The anticipated types of loss due to the proposed Khulna Sewerage System Development Project (KSSDP) is assessed to be (i) loss of private land and structures; (ii) physical displacement from housing, (iii) permanent loss of livelihood; and (iv) temporary loss of income. The impact will be due to land acquisition and/or access disruption during construction. The affected land owners are entitled to receive cash compensation under law (CCL) for land and structures from the concerned Deputy Commissioner's office, and resettlement benefits as specified in the entitlement matrix. Affected persons other than landowners e.g. business owners, employees, wage labourers, tenants of affected structures, sharecroppers etc. are entitled to compensation at replacement cost for the loss. Those facing loss of livelihood will receive compensation and assistances aimed at restoration of their livelihoods. Additional assistance for vulnerable persons will be paid as per entitlement matrix.

Consultation and Disclosure: The resettlement plan is prepared in consultation with stakeholders including the affected persons at the proposed project location. Consultations were also conducted with the Project Management Unit (PMU) staff and Design Consultants regarding the proposed designs and locations. Site visits were undertaken to different locations under the proposed project. Consultations were carried out with affected persons during the socio-economic survey. Information dissemination and disclosure has been a continuous process since the beginning of the project. Information has been disseminated to affected persons and will continue to be disseminated throughout the implementation stages. The approved Entitlement Matrix and Resettlement Plan summary will be translated into *Bengali* and made available to the affected persons. Hard copies of the Resettlement Plan will be kept in KWASA Project office, and will be accessible to citizens and affected persons, as a part of the awareness and disclosure program. Also, Project Information Disclosure document with Grievance Redress Mechanism (GRM) overview and contact details will be made available to beneficiaries and affected persons. The resettlement plan will also be disclosed on the official websites of KSSDP and ADB.

Grievance Redress Mechanism: A common grievance redress mechanism (GRM) will be put in place before award of the first contract under the project to receive, evaluate, and facilitate the resolution of social, environmental or any other project related grievances. The GRM will aim to provide a time-bound and transparent mechanism to voice and resolve social and environmental concerns linked to the project. The GRM described in this report has been developed in consultation with stakeholders. Public awareness campaign will be conducted to ensure that awareness on the project and its grievance redress procedures is generated. The campaign will ensure that the poor, vulnerable and others are made aware of and part of the awareness program.

Institutional Arrangement: KWASA under the Ministry of Local Government Rural Development and Cooperatives (LGRD & C), Local Government Division will be the Executing Agency and Khulna Water Supply and Sewerage Authority (KWASA) will be the Implementing Agency responsible for implementing the resettlement plan. Project Management Unit (PMU) headed by a Project Director (PD), will be responsible for the overall execution of the Project.

Monitoring and Reporting: Resettlement Plan implementation will be closely monitored to provide the KWASA with an effective basis for assessing resettlement progress and identifying potential difficulties and problems. Unanticipated impacts and grievance redress will be monitored during construction and corrective actions will be taken if and as required, in accordance with the agreed entitlement matrix. The PMU is required to implement safeguard measures and relevant safeguard plans, as provided in the legal agreements, and to submit periodic monitoring reports on their implementation performance. KWASA's monitoring will include daily planning, implementation, feedback and troubleshooting etc. The PMU formed under KWASA will provide resettlement plan implementation updates and include the social safeguards checklist in the quarterly progress report (QPR), and more detailed semi-annual social monitoring reports(SSMR) to ADB, until a project completion report is issued. Additionally, ADB will provide a social safeguards specialist cum independent monitor to monitor projects on an ongoing basis, guide the PMU and ensure compliance with SPS requirements.

Resettlement Cost: The R&R cost for this project component is BDT 3,59,05,680 equivalent to USD 423,117.

I. INTRODUCTION

A. Project Description

1. The proposed Khulna Sewerage System Development Project (KSSDP) will establish a sustainable and inclusive sanitation system in Khulna, the third largest city in Bangladesh, to contribute to planned urbanization for growth and equity under Perspective Plan of Bangladesh 2010 2021: Making Vision 2021 a Reality. The project will complement past and ongoing efforts of the Government of Bangladesh for creating a cleaner environment, improving climate change resilience, and advancing institutional reforms under various national development programs.

2. The Khulna Sewerage System Development Project is included in the latest Country Operations Business Plan (2020-2022) with a indicative loan amount of $160 million of which $ 50 million from ADB's ordinary capital resources (OCR) in regular terms, and of $110 million in concessional terms. The project aims at improving urban infrastructure and service in Khulna city through developing centralized sewerage management system including:

(i) construction of 269.67 km primary transmission, secondary and tertiary sewer network;
(ii) construction of eight sewage pumping stations;
(iii) construction of five manhole pumping stations; and
(iv) construction of two sewage treatment plants (STPs, 52 MLD and 28 MLD).

3. The project will focus on establishing a sustainable and inclusive sewerage systemin Khulna, that includes sewer networks, STPs, and FSM facilities, covering commercial and the densely populated residential areas with around one million population by 2035. The project will also build the capacity of KWASA in planning, implementation, and O&M of sewerage system. The project will have an immediate positive impact on the city's environment, enhance its climate resilience by increasing sewage treatment capacity, provide sanitation solutions for residents in LICs where a piped sewer network is not feasible, and open the door to the possibility of forging future partnership with private sector.

4. **Project Outputs:** The project is aligned with the following impact: basic needs of the people ensured in a sustainable manner without damaging the environment. The project will have the following outcome: safe, resilient, and sustainable sewerage services in Khulna city delivered.

5. **Output 1:** Climate resilient centralized and organized sewerage system for Khulna city established. The project will support (i) construction of 269 kilometre of trunk sewers, sub-mains, and tertiary collection system with 2 years of O&M; (ii) establishment of eight sewage pumping stations and five manhole pumping stations with 2 years of O&M; (iii) construction of two STPs (52,000 m^3 per day and 28,000 m^3 per day) with 3 years of O&M; (iv) establishment of approximately 27,000 property level sewer connections; (v) installation of 1.3 megawatt solar powered energy generation system to operate the STPs; and (vi) development of FSM facilities (160 m^3 per day).

6. **Output 2:** Institutional capacity of KWASA in delivering sustainable sewerage services strengthened. The physical investments will be complemented by targeted institutional reforms and capacity building, which will build on ongoing reforms to create an institutional framework for KWASA to adopt. The project aims to strengthen the institutional capacity of KWASA through:(i) conduct of institutional capacity development programs for KWASA; (ii) implementation of training

and skills development programs on sewerage system including facility-specific O&M manual; (iii) formulation of sewerage tariff policy; (iv) operationalization of the supervisory control and data acquisition (SCADA) system for sewerage system; (v) identification of appropriate public-private partnership (PPP) modality for water supply and sewerage services of Khulna; (vi) increase of the knowledge of KWASA staff on O&M of sewerage system; (vii) enhancement of project readiness for future investments; (viii) developing a sustainable and inclusive sanitation plan; and (ix) conducting public awareness campaigns on the benefits of sewerage service.

B. Description of Project Area

7. Khulna city is one of the seven Divisional Cities of Bangladesh and is the 3rd largest industrial city. It is located on southern part of Bangladesh and northern part of Khulna district in the catchments of rivers Bhairab and Rupsha which is believed to be one of the most vulnerable areas susceptible to climate change impact. The city is located about 40 km upstream from the Bay of Bengal and experiences tidal effects over its flat terrain and interconnected system of rivers and drainage courses. The city is now home to more than 1 million people and being a regional commercial centre, regularly attracts workers from surrounding areas coming in for livelihood. Its current corporation area extends to app. 45.65 km^2.

8. In the absence of any organized sewerage and sanitation facility, inadequately managed sanitation system causes significant threat to public health and environment. The situation becomes worse during the rainy season when storm water run-off overflows from surface drains causing contaminated water to spread over access roads, land and yards, and other public places. The population of Khulna is expected to rise appreciably in the coming years; which would further increase wastewater loading and cause a much greater threat to public health if existing sanitary conditions are not improved immediately.

9. The existing sanitation condition in Khulna as described in the Feasibility Study (April, 2016) and the last PPTA study (TA 9283-BAN; February, 2018) report is identical and remains the same. In the absence of a developed and organized sewerage system across city areas, majority of households use toilets with septic tanks, mostly without having soak pits/ soak wells, to manage their wastewater, while the rest have access to pit latrines. Sometimes, raw sewage finds its way directly to the storm water drains, due to dysfunctional septic system, which also carries wastewater from other different sources. Roadside drains are also convenient locations for solid waste dumping, which impedes flow and creates insalubrious conditions for residents. The situation becomes worse during monsoon, when storm water run-off overflows from surface drains, causing contaminated water to spread over access roads, land and yards, and public places. In addition, the other downside of an inefficient and unorganized drainage system includes large open drains posing risks for pedestrians, disease vectors breeding in drains, aesthetic value of city compromised, etc.

10. Khulna city has direct connectivity with central and western part of the country and as more people are moving to the city for trade and livelihoods, there is a demand for improved services. As the city is witnessing new construction and industrial growth, the burden on existing utility services is mounting.

11. Population of Khulna is expected to be close to 1.5 million by the year 2035; which would result in further increase in wastewater loading causing a much greater threat to public health if existing sanitary conditions are not improved immediately. Khulna Water Supply and Sewerage Authority (KWASA), being the nodal agency for managing wastewater generated inside current

administrative boundary of Khulna city corporation is mandated to implement and maintain existing and future wastewater management scheme. Empowered by such a mandate and in view of ongoing water supply infrastructure development in Khulna, KWASA is now required to establish a sustainable sewerage and sanitation system for the city to improve its public health and hygiene and upgrade prevailing environmental health conditions. KWASA has already prepared a Wastewater Management Master Plan for Khulna City using financial assistance from ADB (ADB TA – 7820 BAN). In the light of that master plan, KWASA is now set to implement the recommendations provided therein, in a phased manner.

C. Project Components

12. The project aims at improving urban infrastructure and service in Khulna city through the development of a centralized sewerage management system. The Khulna Sewerage System Development Project aims to establish a centralized and organized sewerage system in Khulna city. The entire project has been designed in three separate packages; the details of each package are described below:

1. Construction of Sewer Network including pumping stations and service connections, Package No.: KWASA/KSSDP/SN-01

13. For efficient management of sewerage system, Khulna city has been divided into 10 sewerage districts (SD). The purpose of the components in this package is to carry out the wastewater to sewerage treatment plant (STP-1) from two (2) sewerage districts. The components under this package include:

(i) 118.53 kilometer (km) gravity sewer network comprising 114.43 km HDPE pipe of diameter ranging from 250 to 630 millimeter (mm) to be laid by open cut and trenchless methods, and 4.1 km RCC pipe of diameter ranging from 600 to 1100 mm to be laid by trenchless;
(ii) 5.64 km rising main of HDPE / DI pipe having diameter ranging from 150 to 800mm
(iii) 3 (three) sewage pumping stations(SPS) having discharge capacitiesof1,260 m^3/hour, 2,295 m^3/hour and 2,595 m^3/hour respectively; and 2 manhole pumping stations having pumping capacity of 120m^3/hour;
(iv) 4,703 manholes and 9,000 inspection pits;
(v) 13,800 service connections; and
(vi) incorporation of SCADA system.

14. The sewer network of this package will be connected to STP-1.

Table 1: Details of KWASA/KSSDP/SN-01 Project Components

1. Gravity Sewer Network			
Method of laying	**Pipe material**	**Dia of pipe (mm)**	**Length (km)**
Open cut	HDPE	250 - 500	49.21
HDD	HDPE	250-630	65.22
Micro- Tunneling	M50 grade RCC pipe	600-1100	4.1
Total			**118.53**
2. Rising Main			
Pipe material	**Dia of pipe (mm)**	**Length (km)**	

HDPE	560-800	5.30
DI	150 -700	0.34
Total		**5.64**
3. Sewage Pumping Station (SPS):		
SPS Nos.	**Capacity (m^3/ hour)**	
SPS-1, Customghat	1,260	
SPS-2, Motiakhli	2,295	
SPS-3, Labanchora	2,595	
MH-PS1	120	
MH-PS2	120	
4. Manhole	4,703 nos.	
5. Inspection pit	9,000 nos.	
6. Service connection	13,800 nos.	
7. SCADA system incorporated		

Source: Project Management Unit, KSSDP, date 15.05.20

2. **Construction of Sewer Network including pumping stations and service connections, Package No.: KWASA/KSSDP/SN-02**

15. The purpose of the components under this package is to carry out the wastewater to STP-2 from 5 (five) sewerage districts. This package includes:

(i) 137.94 km gravity sewer network comprising 131.52 km HDPE pipe of diameter ranging from 250 to 630mm, to be laid by open cut and trenchless methods and 6.42 km. RCC pipe of diameter ranging from 600 to 1100 mm to be laid by trenchless;
(ii) 7.56 km rising main comprising 4.37 km HDPE pipe of diameter ranging from 200 to 1000 mm & 3.19 km DI pipe diameter 150-900 mm
(iii) 5 (five) Sewerage pumping stations (SPS) of which, discharging capacities are 810 m^3/hour, 1,140 m^3/hour 1,650 m^3/hour, 2,310 m^3/hour and 5,040 m^3/hour and3 manhole pumping stations having pumping capacity of 120 m^3/hour and 240m^3/hour respectively;
(iv) 6,470 manhole and 12,200 inspection pit;
(v) 16,200nos. service connection, and
(vi) Incorporation of SCADA system.

16. The sewer network of this package will be connected to STP-2.

Table 2: Details of KWASA/KSSDP/SN-02 Project Components

1. Gravity Sewer Network			
Method of laying	Pipe material	Dia of pipe (mm)	Length (km)
Open cut	HDPE	250 - 500	62.49

HDD	HDPE	250-630	69.03
Micro- Tunneling	M50 grade RCC pipe	600-1100	6.42
Total			**137.94**
2. Rising Main			
Pipe material	Dia of pipe (mm)		Length (km)
HDPE	200 - 1000		4.37
DI	150 -900		3.19
	Total		**7.56**
3. Sewage Pumping Station (SPS):			
SPS Nos.			Capacity (m^3/ hour)
SPS-4, Nirala			1,140
SPS-5, GollamariKashim Nagar			5,040
SPS-6, Beside truck terminal, Sonaganga			2,310
SPS-7, Karim Nagar, Sonadanga			1,650
SPS-8, Beside Islamia College Road			810
MH-PS1			120
MH-PS2			240
4. Manhole	6,470 Nos.		
5. Inspection pit	12,200 Nos.		
6. Service connection	16,200 Nos.		
SCADA system incorporated			

Source: Project Management Unit, KSSDP, date 15 May 2020.

3. Construction of Two Sewage Treatment Plants including Wetland, Package No.: KWASA/KSSDP/STPs

17. The purpose of the project is to treat the wastewater to achieve the desired quality of effluent for safe disposal into river and canal. Two sewage treatment plants (STP) will be constructed under this project. The capacity of STP-1 is 28 MLD and capacity of STP-2 is 52 MLD. Extended aeration has been adopted as treatment technology considering that (i) performance is not significantly affected due to normal variations in wastewater characteristics and seasonal changes, (ii) proven technology, and (iii) reliability in effluent quality. Each STP comprises (i) Inlet pump station (ii) screen chamber (iii) aerated grit chamber (iv) aeration tanks (v) flow distribution chamber (vi) secondary clarifying tank (vii) sludge thickening and dewatering chamber (viii) chlorination tank.

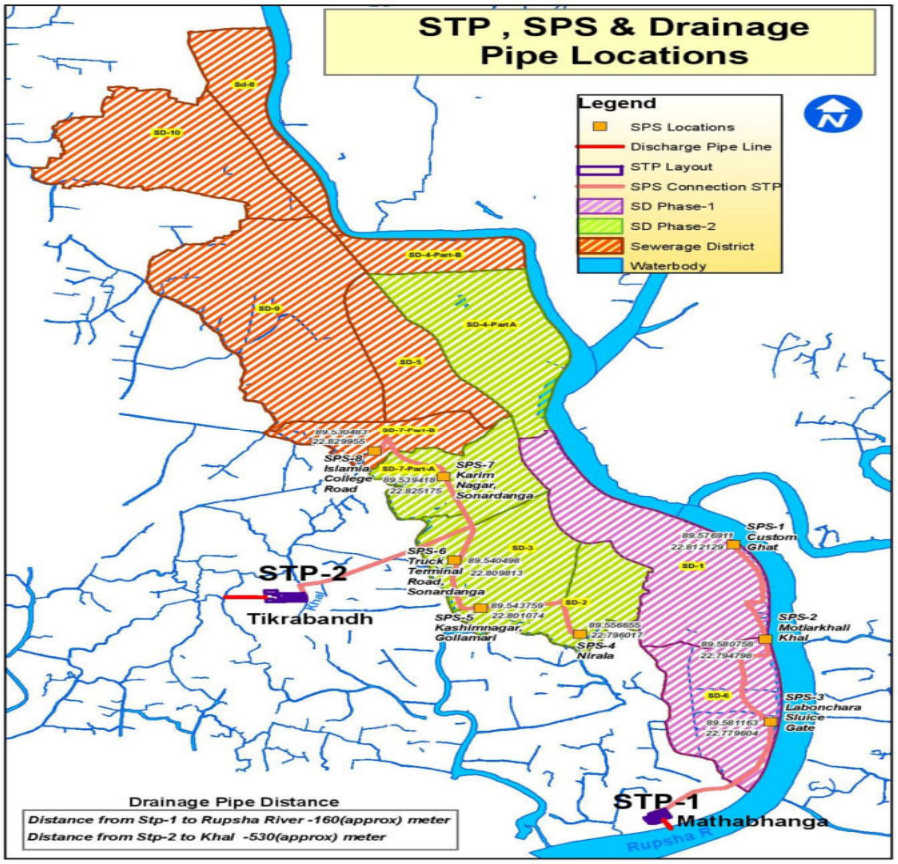
18. A wet land having capacity 160 m^3/day will be constructed to facilitate the co-treatment of fecal sludge (non-sewer) through STP-1.

Table 3: Project Components of Package KWASA/KSSDP/STP-1

STP	Capacity
STP-1	28 MLD
STP-2	52 MLD
Wet land	160 m^3/day

Source: Project Management Unit, KSSDP, date 15.05.20

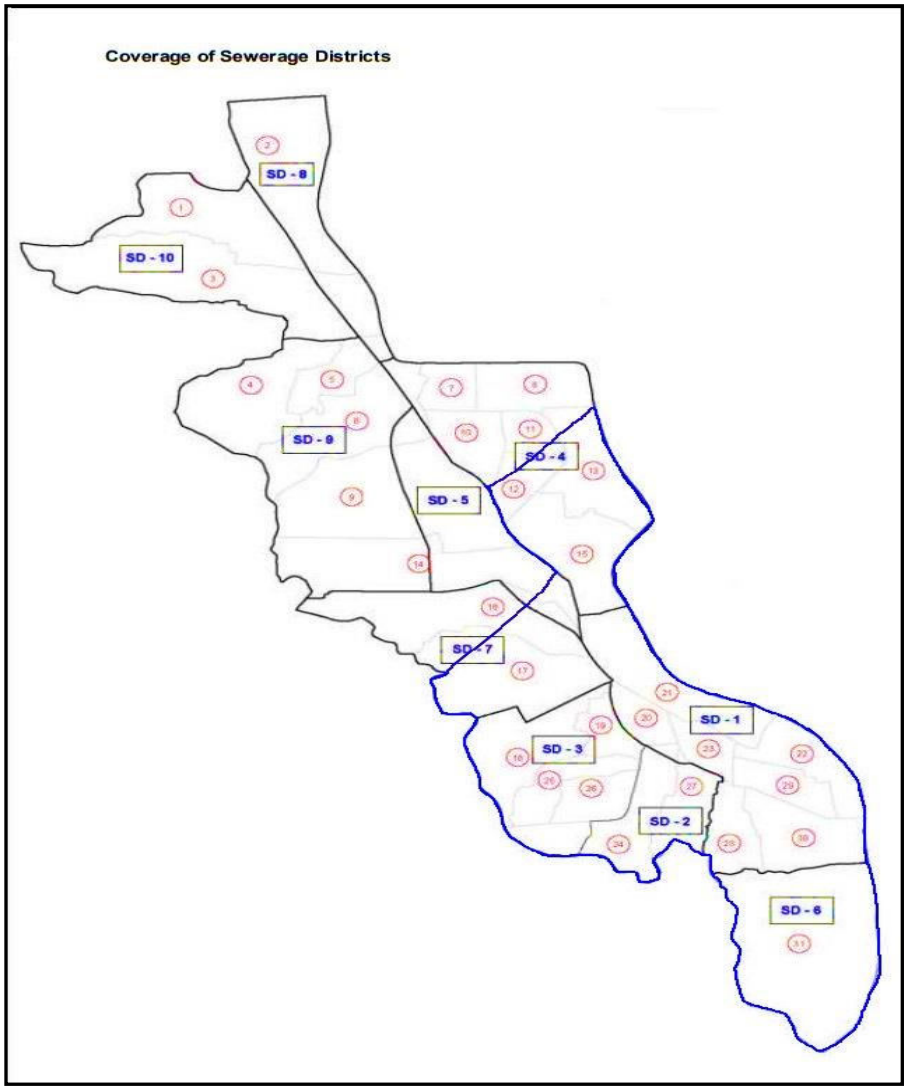
Figure 1: Location map of project components



Source: Draft DPR SN-01 dated 20 March 2020.

19. Khulna city has been divided into 10 separate sewerage zones or districts (SD) considering the topography, gradient, and other relevant factors. The sewer network has been designed following the concept that every sewerage district would have its exclusive sewage collection network to intercept sewage from individual properties and convey this under gravity to a terminal pumping or lifting station. Each sewerage district would be served by either one or two sewage pumping stations. In case any district is served by two pumping stations, the district would be divided into two sub-zones, one on the upstream side, one on downstream. The upstream pumping station would essentially be a lifting station pumping wastewater to a strategically located manhole in the next sub-zone, which would gravitate towards the downstream pumping station for subsequent conveyance.

Figure 2: Sewerage districts of Khulna



Source: Draft DPR for SN -01 dated 20 March 2020.

20. A feasibility study for a water supply project conducted by JICA (2010), adopted annual population growth rate comparable to past trends and a gradual decline of growth rate over the project horizon (2010 till 2030) from 2.75% to 2.20%. Khulna City Corporation (KCC) projection clustered municipal wards into four categories and adopted future annual average growth rate as 3.84%, 3.10%, 2.98%, and 2.71%. Such growth rates were then applied to individual wards in particular clusters and future population was predicted till 2031, after a detailed review of the process Master Plan (2016) adopted the JICA study. Summary details of the projected population and adopted population figures are presented below.

Table 4: Population of design year[6]

Year	2015	2020	2025	2030	2035
Population	679,971.40	750,625.10	828,836.20	914,633.30	1,000,684.60

Source: Draft DPR for SN-1 dated 20.03

Table 5: Sewerage District-wise Population Distribution[7]

Sewerage District	KCC Population	Targeted population		
		Total	Sewerage system	FSM
SD1	344,909	344,909	241436	72431
SD2	127,276	127,276	89093	26728
SD3	204,343	204,343	143040	42912
SD4	353,762	247,633	173343	52003
SD5	65,004	-	-	-
SD6	67,353	67,353	47147	14144
SD7	131,065	91,746	64222	19267
SD8	48,638	-	-	-
SD9	162,620	-	-	-
SD10	83,142	-	-	-
Total	**1,588,112**	**1,083,260**	**758,281**	**227,485**

Source: Draft DPR for SN-1 dated 20 March.

21. With a view to implementing the proposed project dealing with the construction of two sewage treatment plants (STPs) and eight sewage pumping stations (SPSs) as well as about 269 km sewer network associated with those STP and SPS; the Executing Agency has already identified about 36.03 acres (3602.62 decimals) of land comprising 10 land parcels/sites to be acquired for establishing the STPs and SPSs in the packages 1, 2 and3 under the Khulna Sewerage System Development Project.

22. KWASA has already submitted proposal to the District Commissioner's office for 34 acres (3400 decimals) of land for the construction of 2 STPs and 8 SPSs.[8] STP-1 and STP-2 are located at Lobanchora, Mathabhanga and Tikrabandh respectively under the Batiaghata Upazila, about 5 km away from the Khulna City area. The treated effluent from the STPs will be discharged into river and canal, which is not anticipated to have any involuntary resettlement impact.

23. For construction of 8 SPSs, 2.026 acres (202.62 decimal) of land have been identified. Administrative approval from Ministry (LG Division) and Clearance from DOE, KDA and UDD have also been obtained for these proposed 8 land plots. Out of these 8 land plots, the proposed land

[6] Source: Design Year; Draft DPR of Sewerage Network – 1 dated 20.03.2020; Khulna Sewerage System Development Project.

[7] Source: Design Year; Draft DPR of Sewerage Network – 1 dated 20.03.2020; Khulna Sewerage System Development Project.

[8] No physical or economic displacement has taken place yet, as the land acquisition/transfer process is not yet completed. Compensation payment is not yet undertaken, hence land possession is not taken

plots at Motiarkhali Khal Par and Custom Ghat are government land parcels. Approval for these two land parcels from District Land Acquisition Department is under process. The remaining 6 land parcels located at (i) Nirala, (ii) Kashim Nagar Gallamari, (iii) Sonadanga Truck terminal Road, (iv) Karim Nagar, (v) Islamia College Road, and (vi) Lobanchora Sluice Gate are under private ownership, for which the land acquisition process was initiated early. Land acquisition for the two STPs (comprising 95% of private land requirement) is at an advanced stage.

24. Among the identified 10 locations, (10 land plots), eight (8) locations are found within the KCC area and the remaining 02 land plots are located at the Batiaghata Upazila close to the city area namely Labonchara Mathabanga, (12 acres / 1200 decimals) and Tikrabandh (22 acres/ 2200 decimals). In accordance with the national law, owners have to give up the lands or other properties for development projects when the government intends to acquire land under the Acquisition and Requisition of Immovable Property Act, 2017 (ARIPA) at the request of a requiring agency like Khulna WASA. Appropriate compensation will be paid to all affected persons as per the compensation specified in ARIPA and in the project entitlement matrix.

Figure 3: Google Earth Map of Sewage Treatment Plant (STP- 01)



Source: DPR for STP -1

Figure 4: Google Earth Map of Sewerage Treatment Plant (STP- 02)



Source: DPR for STP - 1

25. Based on consultation with the people in the vicinity of the proposed component locations, no conflict is anticipated where land is proposed to be acquired, as people desire to get benefits from the Khulna Sewerage System Development Project. Secondly, in case of those affected by acquisition of land parcels, landowners will get adequate compensation as per the new Acquisition and Requisition of Immovable Property Act, 2017. According to the Act if the government is acquiring land, it shall provide the affected persons with compensation of 200 per centum of the market price.[9]The existing market price is determined by the government. Moreover, 100 per centum compensation in addition to the existing market price will be required for damaging properties like trees, crops and structures (shops, house).

26. Laying of 269.67 km sewer network (including 13.20 km rising mains – 5.64 km under SN 01 and 7.56 km under SN 02) will be done within the ROW of public roads. Efforts have been made by the engineering team to minimize the resettlement impact by careful design as all the implementation activities under the Project will be confined to the available government land. Observations were made through field visits conducted in the months of May and June 2019 along the proposed roads. The routes visited were based on the current alignments considered feasible as per engineering requirements. The broad engineering requirements in order to avoid the livelihood impact on commercial kiosks, is that the work will be carried out during night time (between 11 PM to 4 AM). No involuntary acquisition of private land is required, and all proposed project components are within existing government land, right of way. However, further assessment for involuntary resettlement impacts to small roadside businesses will be carried out during the detailed measurement survey, when final alignments are known.

Table 6: Details of Sewer Network 1 and 2

SN	Length (km)	Coverage	Beneficiaries Nos.			SPS No	MH-PS
		SD	2020	2025*	2035**		
Sewer network - 1	118.53*	SD1 & SD6 (part)	298,489	329,580	397,552	3	2

[9] "200 per centum of market price" means the compensation for land acquired is equivalent to two times the existing market rate of land.

SN	Length (km)	Coverage	Beneficiaries Nos.			SPS No	MH-PS
		SD	2020	2025*	2035**		
Sewer network - 2	137.94**	SD2, SD3, SD7 (part), SD5 (part) & SD4 (part)	389,354	429,941	519,413	5	2
* excluding the rising main (5.64 km) ** excluding the rising main (7.56 km)			687,843	759,521	916,965	8	4
			*O&M start year		** target year		

Source: Project Management Unit, KSSDP, date 15.05.20

Table 7: Details of Sewage Pumping Station

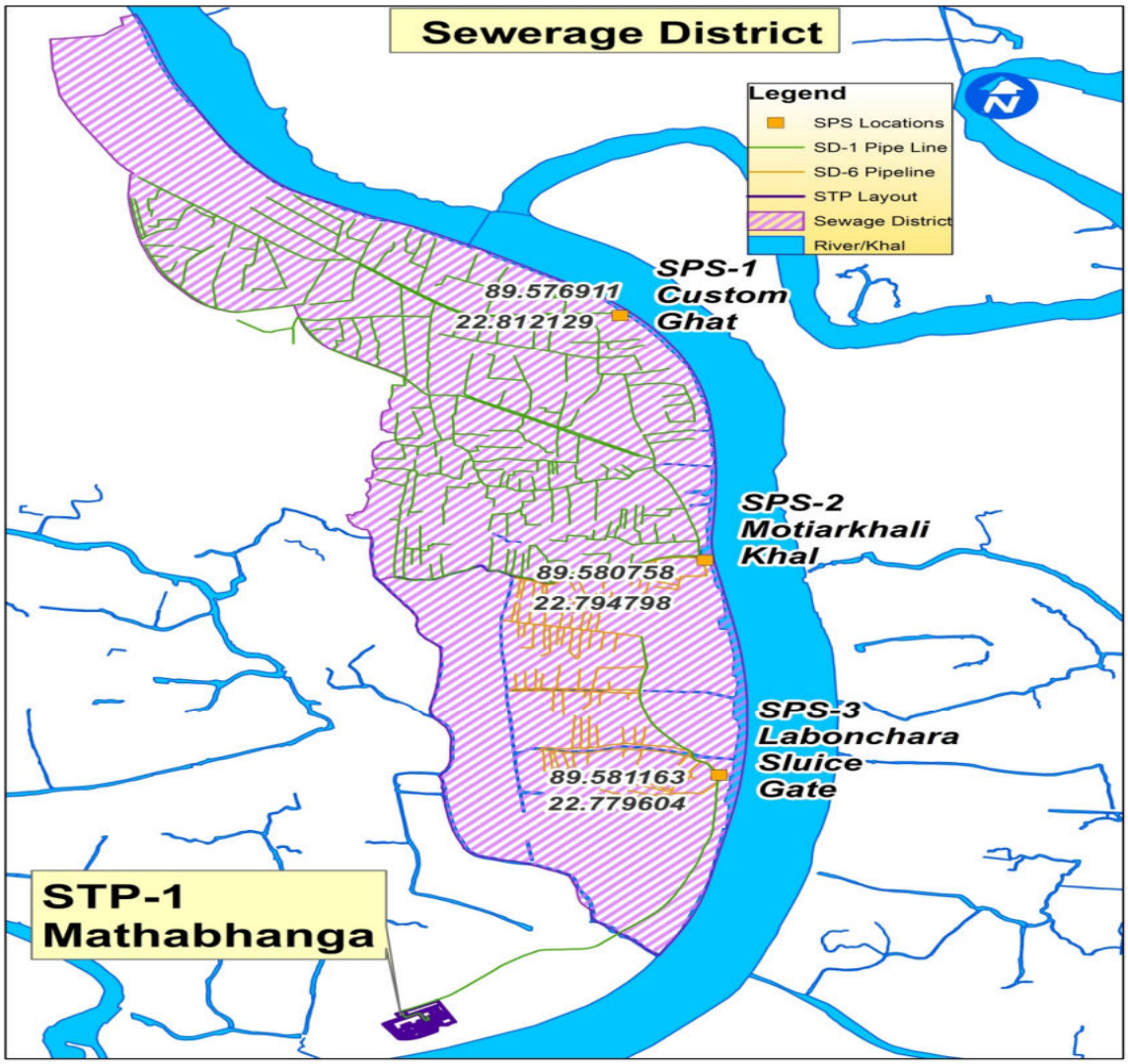
STP	Capacity	Coverage	Beneficiaries Nos.		
		SD	2020	2025*	2035**
Labanchora STP- 1	28 MLD	SD1 and SD6 (part)	208,942	230,706	278,286
- Wetland	160m^3/day		288,372	288,372	288,372
Thikraband STP - 2	52 MLD	SD2, SD3, SD7 (part), SD5 (part) & SD4 (part)	369,886	408,444	493,442
Total Beneficiaries			867,200	927,522	1,060,100

Source: Project Management Unit, KSSDP, date 15 May 2020.

27. **Construction of Sewer Network 1.** SD1 and SD6 are covered under the package-1 of sewer network. The package includes construction of 1 STP, 3 SPSs and 124.08 km of sewer network including 5.3 km rising mains.

28. **Sewerage District1**: This is the most congested and developed area of Khulna and is commonly referred to as the Central Business District or CBD area. This will henceforth be referred as SD-1 or Sewerage District 1. This mostly covers KCC ward numbers 20, 21, 22, 23, 28, 29, 30, and a small part of ward 24. Current land use is a mixture of commercial use, government establishments (both offices and residents), residential houses and complexes, some poor settlements, water bodies, gardens, parks, playgrounds, other utilities, markets, etc. Apart from this, most of the important government facilities (courts, jails, residential quarters, etc.) are located in this area. This area has been given top priority for sewer network because of its commercial and administrative importance and urban congestion to be provided with a centralized sewerage system There area few low-lying pockets (mostly draining towards the drainage course on the south-side) in this zone. It would be difficult to connect them to the centralized sewerage system being conceived. Old Jessore Road by and large serves as a ridge line and divides this area into two parts with its northern part (adjacent to river Rupsha) naturally sloping to the river and southern part (inside city area) towards the south. Planning of sewage collection network has been framed as per this topography to reduce sewer inverts. Some culverts need to be crossed in the sewer pipe alignment.

Figure 5: Project component location under Sewer Network - 1



Source: Draft DPR for SN – 1 dated 20 March 2020.

29. **Sewerage District 6:** Sewerage District 6 consists of KCC ward number 31. Some low-lying areas are also included in this zone. This district has a mild slope from north to south towards an existing drainage course along Al-Amin Sarak and a tributary of Mayur river on the western side. This drainage course has divided the district into two parts. A major sewer line has been proposed along the Shipyard Road from north to south which would be receiving, and conveying flow pumped from sewer district 1. This sewer would also capture incoming flows from western part of the district but would be executed in the immediate phase to complement sewage conveyance from SD 1 to treatment facility near Labanchora. As per preliminary design, depth of excavation over some stretches suggested that trenchless construction may be required to avoid disruption of urban traffic along this busy road. The exact locations where trenchless construction will be undertaken to be identified during preparation of detail measurement survey and the same will be updated in the resettlement plan.

Table 8: Wards Covered under Package 1

Sl. No	Sewerage District	Description	Ward Population-2035	Design Population Coverage - PACKAGE-1			% Coverage	Ward Population		
				Yr-2035	Yr-2025	Yr-2020		Yr-2035	Yr-2025	Yr-2020
1	SD-1	WARD 20	46055	46055	38440	34810	100%	46055	38440	34810
2		WARD 21	50819	47093	39486	35761	93%	50819	42610	38590
3		WARD 22	44467	44467	36890	33410	100%	44467	36890	33410
4		WARD 23	38114	38114	31260	28310	100%	38114	31260	28310
5		WARD 24	4851	4851	3993	3616	5.5%	88933	73260	66350
6		WARD 28	46055	42234	35040	31729	92%	46055	38210	34600
7		WARD 29	42879	42879	34840	31550	100%	42879	34840	31550
8		WARD 30	73052	73052	61100	55330	100%	73052	61100	55330
9	SD-6	WARD 31	67335	58807	48532	43973	87%	67335	55570	50350
TOTAL			**413627**	**397552**	**329580**	**298489**		**497709**	**412180**	**373300**

Source: Project Management Unit, KSSDP, date 15 May 2020.

Table 9: Wards Covered under Package 2

Sl. No	Sewerage District	Description	Ward Population-2035	Design Population Coverage - PACKAGE-2			% Coverage	Ward Population		
				Yr-2035	Yr-2025	Yr-2020		Yr - 2035	Yr - 2025	Yr - 2020
1	SD-4	WARD 15	52407	26200	21932	19862	50%	52407	43870	39730
2	SD-5	WARD 14	53995	30200	25225	22842	56%	53995	45100	40840
3	SD-7	WARD 16	74958	74958	61190	55420	100%	74958	61190	55420
		WARD 17	62253	57415	47737	43237	92%	62253	51760	46880
4	SD-3	WARD 18	34938	34938	28590	25890	100%	34938	28590	25890
		WARD 19	53995	53995	44890	40650	100%	53995	44890	40650
		WARD 24	88933	84486	69597	63033	95%	88933	73260	66350
		WARD 25	55583	55583	46230	41860	100%	55583	46230	41860
5	SD-2	WARD 26	36526	36526	30850	27930	100%	36526	30850	27930
		WARD 27	65112	65112	53700	48630	100%	65112	53700	48630
TOTAL			**578700**	**519413**	**429941**	**389354**		**578700**	**479440**	**434180**

Source: Project Management Unit, KSSDP, date 15 May 2020.

Table 10: Pipe laying by open cut method

Description	Depth	Unit	Total Quantity	SD-1	SD-6
OD 250mm, HDPE Pipe, PN6	Upto 2.0m	m	46,660	32,662	13,998
OD 315mm HDPE Pipe, PN6	2.1m to 3.0 m	m	350	245	105
OD 355mm HDPE Pipe, PN6	2.1m to 3.0 m	m	230	161	69
OD 400mm HDPE Pipe, PN6	3.1m to 4.0 m	m	*30*	21	9
OD 450mm HDPE Pipe, PN6	3.1m to 4.0 m	m	*25*	18	8
OD 560mm HDPE Pipe, PN6	4.1m to 5.0 m	m	*20*	14	6
			47,315	**33,121**	**4,195**

Source: Draft DPR for SN – 1 dated 20 March.

Table 11: Pipe laying through trenchless method

Description	Depth	Unit	Total Quantity	SD-1	SD-6
OD 315mm, HDPE pipe, PN10	2.0m to 3.0 m	Rm	4,930	3,451	1,479
OD 355mm, HDPE pipe, PN10	3.1m to 4.0 m	Rm	2,310	1,617	693
OD 400mm, HDPE pipe, PN10	3.1m to 4.0 m	Rm	1,730	1,211	519
OD 450mm, HDPE pipe, PN10	4.1m to 5.0 m	Rm	5,710	3,997	1,713
OD 560mm, HDPE pipe, PN10	4.1m to 5.0 m	Rm	3,300	2,310	990
OD 630mm, HDPE pipe, PN10	4.1m to 5.0 m	Rm	2,090	1,463	627
			70,070	**49,049**	**21,021**

Source: Draft DPR for SN – 1 dated 20 March.

Table 12: Pipe laying by Jack pushing/ Micro-tunnelling method

Description	unit	Total Quantity	SD1	SD6
DN 700mm MS pipe, with suitable encasement	Rm	1,300	910	390
DN 800mm MS pipe, with suitable encasement	Rm	25	18	8
DN 900mm MS pipe, with suitable encasement	Rm	150	150	
DN 1000mm MS pipe, with suitable encasement	Rm	760		760
DN 1100mm MS pipe, with suitable encasement	Rm	1,500		1,500
		3,735	**1,078**	**2,658**

Source: Draft DPR for SN – 1 dated 20 March.

Table 13: Pipe laying for rising main

Description		unit	Total Quantity	SD1	SD6
OD 200mm, HDPE	2.0m to 3.0 m depth	m	50	35	15
OD 560mm, HDPE pipe, PN10	4.0m to 5.0 m depth	m	1,520	500	1,020
OD 630mm, HDPE pipe, PN10	4.0m to 5.0 m depth	m	4,000	-	4,000
			5,570	535	5,035

Source: Draft DPR for SN – 1 dated 20 March.

D. Justification for selection of Gravity sewer / Rising mains

30. Khulna city has a very flat terrain with limited ground slope. SD1 is the most congested and developed area. This area has been given top priority for sewer network because of its commercial and administrative importance and urban congestion, to be provided with a centralized sewerage system. The sewer pipe alignment will cross some culverts. SD6 is a low lying area and has a mild slope from north to south towards an existing drainage course. As per preliminary design, in some stretches, it is suggested that trenchless construction may be required to avoid disruption of urban traffic along busy roads and minimize temporary economic impacts. The system has been adopted for the approach of gravity sewer. The natural slope of the of the city and natural flow is insufficient and inadequate to impart self-cleansing velocity for flowing of waste water. Moreover, in some cases, sewers have to be laid in reverse slope direction. This resulted in additional depth of inverts. It was also observed that prevailing soil condition also put restrictions on depth of excavation for laying sewers. In order to reduce depth of excavation, three pumping stations (2 in SD6 and 1 in SD1) have been proposed to elevate the head of waste water flow.

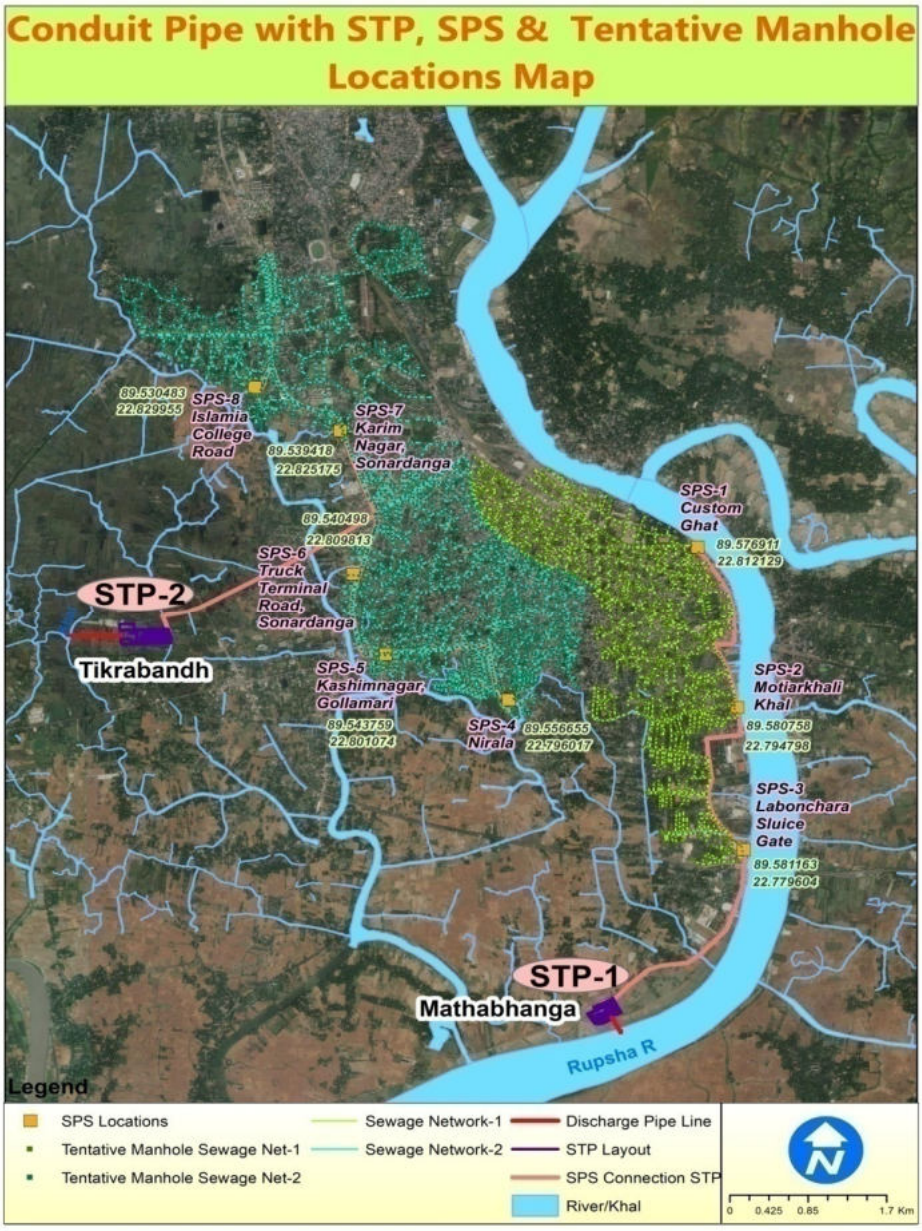
E. Details of Manholes

31. The manholes have been proposed at each road junction / crossing. Along straight road lengths, the manholes have been considered at a spacing of 30m. Depth of the manholes ranges between 2- > 6.5 m. Total 11,173 manholes are proposed to be constructed under the SN01 and SN02 packages (SN01 – 4703 and SN 02 – 6470).

F. Sewage Pumping Station and Allied Rising Mains

32. For the centralized sewerage system, each of the identified sewerage districts will have one sewage pumping station. Under the network package (gr-1), one pumping station will be in SD1 and one in SD6. In consideration of the sewer network designs for each of the sewer districts the, location of the sewage pumping stations for each of the sewerage districts has been defined as shown in Figure 6 below. Outfall locations have been identified: Rupsha river for STP-1 and Hogladanga canal for the STP-2. The locations in google maps are shown in Figure 6 of draft resettlement plan. Department of Environment (DOE) is the owner of both the STP outfall sites. Approval for the outfall locations should be taken from the appropriate government authority and the same should be updated to the resettlement plan document.

Figure 6: Location map of STP, SPS and Tentative Manhole Locations with Conduit Pipes



Source: Project Management Unit, KSSDP

Table 14: Coordinates of project components

Sl. No	Component name, location	Longitude	Latitude
1	STP-1, Mathabhanga	89.566675	22.762951
2	STP-2, Tikrabandh	89.517679	22.803748
3	SPS-1 Custom Ghat	89.576911	22.812129
4	SPS-2 Motiarkhali Khal	89.580758	22.794798
5	SPS-3 Labonchara Sluice Gate	89.581163	22.779604
6	SPS-4 Nirala	89.556655	22.796017

Sl. No	Component name, location	Longitude	Latitude
7	SPS-5 Kashimnagar, Gollamari	89.543759	22.801074
8	SPS-6 Truck Terminal Road, Sonadanga	89.540498	22.809813
9	SPS-7 Karim Nagar, Sonadanga	89.539418	22.825175
10	SPS-8 Islamia College Road	89.530483	22.829955

Source: Data received from Project Management Unit, KSSDP, House Service Connections

33. Provision for house service connection has been proposed to ensure adequate flows in the sewer network and optimum utilization of STP capacity. The works related to service connection involves, construction of roadside inspection chambers including laying of sewer lines from the property lines up to the inspection chambers including cutting and reinstatement of roads. Roadside inspection chambers shall be constructed every 15m on either side of the Road.

G. House Connection Sewer

34. The house-connecting sewer either will carry the wastewater from the inspection chambers to a manhole in the street sewer or may carry the wastewater through intervening inspection chambers before reaching the manhole.

H. Objective of the Resettlement Plan

35. This Resettlement Plan is prepared for Khulna Sewerage System Development Project (KSSDP). The Resettlement Plan has been prepared to identify and mitigate the project impacts and suggest mitigation measures in line with applicable national laws and ADB social safeguard policies. This Project is classified as Category B, based on the SPS 2009 Involuntary Resettlement categorization criteria. This resettlement plan is prepared in accordance with ADBs SPS, 2009 requirements for involuntary resettlement which includes:

(i) Screen the project early to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a census and socio-economic survey of affected/displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.

(ii) Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.

(iii) Improve, or at least restore, the livelihoods of all displaced persons through (i) land based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost

for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.

(iv) Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.

(v) Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.

(vi) Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.

(vii) Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.

(viii) Prepare a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.

(ix) Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final resettlement plan and its updates to affected persons and other stakeholders.

(x) Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.

(xi) Establish a framework for grievance redressal for affected persons that is appropriate to the local context, in consultation with stakeholders;

(xii) Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.

(xiii) Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.

I. Vulnerability[10]

36. Among the surveyed households, 10 households have multiple vulnerabilities like elderly women headed and 2 household heads have been identified to be suffering from chronic diseases since a long time; apart from this, during socio-economic survey it has been found that 9 households who are landless and 3 employees belonging to lower income profile (BPL) having permanent impact due to loss of livelihood, hence a total of 24 vulnerable families are identified as vulnerable households. The socio-economic survey shows that 9.34% of the affected persons are vulnerable. Assessment of actual number of vulnerable persons will be based on the census and socio-economic survey in the updated resettlement plan.

Table 15: Vulnerability

Type of Vulnerability	WHH/Widow HOH (No. of HHs)	Chronic Disease (No. of HHs)	Landless	BPL
	10	2	9	3
Total	**24**			

Source: Socio economic survey, 2019

J. Methodology for Preparation of the Resettlement Plan

37. The draft Resettlement Plan has been updated based on the information collected through socio-economic survey (SES), focus group discussions (FGD) and consultation meetings held with affected households, local authorities, concerned government departments and local community. The draft resettlement plan is prepared on the basis of outline design. The draft resettlement plan will be updated package-wise, based on detailed measurement surveys and detailed design.

38. Questionnaires, checklist formats were prepared in Bengali, which were field tested and finalized. Before the survey, all field staff were given a training on creating an environment of trust with affected households, maintaining confidentiality, communication skill and how to present the tools/instruments and record their responses. The aim of the socio-economic survey was to identify the affected households/ persons, establish a detailed inventory of losses by type and quantity and identify the socioeconomic condition of the affected households. The results of the survey were subsequently analyzed to prepare a Resettlement Plan and livelihood restoration program; to determine the Resettlement Plan implementation costs involved and establish a database of affected persons among others. The objectives of the socio-economic survey were to identify the affected households, establish a detailed inventory of losses and develop socio economic profiles of the affected households.

39. KWASA's previous experience in impact assessment and minimization, land acquisition and resettlement planning and implementation is drawn upon and the lessons applied to preparation of this draft resettlement plan. Impact minimization efforts were an essential part of the land acquisition and resettlement planning process. Permanent and significant impact

[10] Vulnerable households comprise (i) women and children including low income women-headed households, working children, orphans etc.; (ii) headed by elderly/ person with disability, without means of support; (iii) headed by persons with chronic disease or terminal illness (in line with GoB policy); (iv) households that are below poverty line; (v) households belonging to indigenous peoples groups or small ethnic communities; (vi) households belonging to lower castes; (vii) persons without legal title; and (viii) landless persons.

minimization efforts made by the project include: (i) identification of lands belonging to landowners with larger holdings; (ii) acquisition of only the required amount of land for each facility; (iii) identification of government lands for project facilities, where available and technically feasible.

40. There is further scope to minimize temporary impacts on businesses and residences during construction, through proper planning and the implementation of impact avoidance and mitigation measures.

II. SCOPE OF LAND ACQUISITION AND INVOLUNTARY RESETTLEMENT

A. Land Acquisition

41. The proposed civil works for the two (2) STPs and (8) sewerage Pumping Stations (SPS) will require 36 acres (3602.62 decimals) of lands in 10 locations. The process of land acquisition has already been initiated by the KWASA in 10 locations. In addition to STPs and SPSs, 269.67 km long sewage network will be established along the existing roads within the Khulna City Corporation. The scope of the land acquisition and resettlement plan is based on field visits, stakeholder consultation, socio-economic survey and transect walk; the assessment will be further updated based on the detailed design and detailed measurement survey. The resettlement plan has been prepared based on the households' socio-economic survey of the affected landowners, other affected persons including titleholders and non-titleholders and other relevant documents available with KWASA in this connection.

42. It is to be noted that the new land acquisition and requisition act of the GOB, 2017 has given more benefits to the affected landowners than the previous land acquisition and requisition ordinance. During the consultation with the one of the landowners who wished to be anonymous, has 7 acres of land under the proposed land-area at Thikrabad, expressed his willingness to part with his land to avail the enhanced compensation from the government, as he could not sell such a large volume of land in the open market in a single drive. At a point of discussion, he also expressed that he wanted to sell the land, as the land has remained fallow for long years but found no customers for the big parcel of land. The survey team visited all the proposed sites and collected primary information on the status of the ownership of proposed lands. The impacts of the identified locations/ lands are as follows:

1. Sewage Treatment Plants (STPs), Sewage Pumping Stations (SPSs) and Manhole Pumping Stations

43. **STPs.** The KSSDP project proposes to construct two STPs under the third project KWASA/KSSDP/STP-1; proposed capacity of STP – 1 is 28 MLD at Mathabhanga and STP -2 of 52 MLD capacity at Thikrabad. For the two STPs total land requirement is 34 acres. The land for the two STPs will be acquired from private land owners by enforcement of the Acquisition and Requisition of Immovable Property Act, 2017. The 12 acres land for STP-1 and 22 acres land for STP -2 will be acquired from 7 land owners and 193 land owners respectively.

44. **Fecal sludge treatment plant (FSTP)** will be constructed to treat the fecal sludge. The site of FSTP is integrated with the STP-1 (Mathabhanga) site. No further land is required for FSTP.

45. In STP-1 and STP-2, in total 200 land owners (out of the total 210 affected landowners identified under the project, 193 owners have been identified at STP-2 location and 7 owners

have been identified at STP-1 location, refer Table 18) will be impacted due to land acquisition. In most cases, the landowners are living elsewhere. Some settlements have been identified in Tikarabad, STP-2 location. Among the 193 landowners, only 06 families are living on their land parcels and 9 caretakers families, hired by the landowners, reside on the land to take care of their plots.[11] It is to be noted that one of the land owner has about 30% of the total land at Tikarabad; the land owner does not reside on the land which is being looked after by the caretaker. At Lobonchora Matabangha (STP-1) location, there are 7 landowners, who do not reside within the plot. It has been identified during the socio-economic survey that three (3) families living outside the land seasonally cultivate fish. Further assessment will be carried out to understand the commercial side of the fish cultivation or if this is used for self-consumption and presented in the updated resettlement plan. It is assessed that and also reported by the land owners during stakeholder consultations that they will potentially gain from land acquisition.[12] The land owners are expected to gain financially with the compensation received under the present land acquisition Act. The survey conducted by PMU on 100% landowners in each of the site, indicates that 95% of the land owners are anticipated to lose less than 10% of their total land holding, while remaining 5% are estimated to lose 10-12% of their total land holding. Also as indicated in Table 30 the primary income of the land owners are not associated with the affected land. There are no involuntary resettlement issues anticipated with the pipe route from both the STPs to the discharge sites; Rupsha river for STP-1 and Hogladanga canal for the STP-2, as the proposed government land is free from encumbrances. The pictures of the outfall location are provided in Appendix 10.

Table 16: Details of Land Availability for Two Sewage Treatment Plants

Sr. No.	Project Component	Location	Ownership	R.S.Daag No.	Total Area available (acre)	Area required (acre)
1	Sewerage Treatment Plant(STP-1)	Mathabhanga	Private Land	3169, 3170, 3171,	19.84	12.00
2	Sewerage Treatment Plant(STP-2)	Thikrabad	Private Land	34, 35, 48, 49, 50, 51, 52, 53, 54, 55, 56	32.99	22.00

Source: Data received from Project Management Unit, KSSDP, date 15 May 2020.

46. **Sewage Pumping Stations**. Khulna city has been divided into 10 sewerage districts for effective sewerage management. Ten (10) sewage pumping stations have been proposed for the 8 sewerage districts in Khulna city. As mentioned earlier, under package KWASA/KSSDP/SN-01 three (3) SPSs and under package KWASA/KSSDP/SN-02 five (5) SPSs are proposed to be

[11] The interviews of the landowners and the 9 caretakers clearly reveals that they will continue to be in the employment of the landowners, to look after their remaining lands. The caretakers were assessed to suffer physical displacement alone, not economic displacement. The entitlement matrix includes provision for preference to one person from each physically displaced household for employment in project construction or operation and maintenance work, if willing and available for such work.

[12] Part of STP1 plot is sharecropped and 10 structures (on SPS 3,SPS 7 and SPS 8 sites) are rented out, from which the landowners get a share /rental income. Fish production for 3-4 months in a year by sharecroppers is reported on part of the land for STP 1, which is low lying. This activity is not the primary source of income for the 7 landowners of STP 1. Some of the caretakers (STP 2) grow vegetables in their backyard for their own consumption. No other agricultural production is reported on any of the affected land parcels for over 7 years. Some of the landowners have monthly rents from structures as their secondary source of income. None of the landowners are reported to be practicing agriculture on their lands or putting it to productive use.

constructed. Out of the eight SPSs, two SPS are proposed on government owned land parcels (SPS 1 and 2) and for rest of the SPS 3 to 8 private land will be acquired. For all the 8 SPS total land requirement is 2.27 acres; of which 0.494 acres is government owned land and 1.776 acres is private land. The private land for the SPSs will be acquired from 10 land owners.

47. Physical displacement has been assessed in SPS-3, SPS-7 and SPS-8. Total affected structures are 10 in number; of these 8 are residential, 1 is residential and commercial (cowshed) and 1 is commercial. Eight families face physical displacement, one family (cowshed owner) faces physical and economic displacement and one family (furniture shop owner) faces economic displacement. Employees of the two commercial entities are likely to face economic displacement as well. Land owners of SPS 3, SPS 4, SPS, 5, SPS 6, SPS 7 and SPS 8 do not reside at the location(identified plots). All the proposed plots are vacant, except SPS-3, SPS-7 and SPS-8 that has 10 tenants, discussed above. The SPS-3, SPS-7 and SPS-8 is owned by 7 land owners. None of the landowners will face physical displacement at the SPS locations.

48. Among the above mentioned three locations, the proposed plot at Karim Nagar More for SPS-7 is owned by 5 landowners. Presence of 2 tenants (business owners) using the area (one is residential plus cowshed and the other a furniture shop on the SPS-7 plot) have been observed in this plot. During census and socio-economic survey the loss of rent (received by the landowners) from the tenants would be ascertained.

49. There are 3 employees engaged by the two business units at Karimnagar plot whose income loss has been assessed. It is expected that, all the three employees (two persons engaged with the furniture shop and one employee of the cowshed) will face permanent loss of income due to impact on structure for land acquisition. The loss will be further validated before start of civil construction work and the resettlement plan will be updated. All the affected persons will be compensated as per the project entitlements specified in the entitlement matrix.

50. The plots for SPS-3 and SPS-8 which is owned by 2 landowners are receiving rent paid by 8 tenants (seven tenants at SPS-3 and one tenant at SPS-8). The rent received by the landowners will be confirmed during census and socio-economic survey and the resettlement plan will be updated accordingly. Apart from the above 3 plots (SPS 3, SPS 7 and SPS 8) all the landowners will incur loss due to acquisition of lands which are vacant and have no productive use.

Table 17: Details of Land Availability for Sewage Pumping Stations

Sr. No.	Project Component	Location	Ownership	R.S.Daag No.	Total Area available (decimal)	Area required (decimal)
1	Sewage Pumping Station(SPS#1)	Custom Ghat	Govt.Land	3866,3867, 3868,3869	48.18	24.71
2	Sewage Pumping Station(SPS#2)	Motiarkhali Khal Par	Govt.Land	1321,1322, 1323,1324, 1325	39.57	24.71
3	Sewage Pumping Station(SPS#3)	LaboncharaSluice gate	Private Land	7214,7646 7647	256.68	24.71
4	Sewage Pumping Station(SPS#4)	Nirala	Private Land	34576, 34577	57.2	24.71

Sr. No.	Project Component	Location	Ownership	R.S.Daag No.	Total Area available (decimal)	Area required (decimal)
5	Sewage Pumping Station(SPS#5)	Kashimnagar, Gollamari	Private Land	29595	39.6	29.65
6	Sewage Pumping Station(SPS#6)	Sonadanga	Private Land	3002	84.8	24.71
7	Sewage Pumping Station(SPS#7)	Karim nagar	Private Land	3460,3462, 3463,3464	30.72	24.71
8	Sewage Pumping Station(SPS#8)	Islamia College road	Private Land	7594, 7673	75.13	24.71

Source: Data received from Project Management Unit, KSSDP, date 15 May 2020.

51. **Manhole Pumping Stations**. Five (5) manhole pumping stations are proposed to be constructed under the project for pumping out wastewater from the manholes due to inundation issues in some low-lying areas within the city. The manhole pumping stations are in the nature of larger diameter manholes with pumps fitted underground. The manhole pumping stations will be constructed well within the ROW of government roads. No land acquisition or permanent involuntary resettlement impacts due to construction of manhole pumping stations are assessed. The location of each manhole pumping station is provided in Appendix 8D. The location of the manhole pumping stations and ownership of the road ROWs where these pumping stations would be constructed would be updated on finalization of the design and in the resettlement plan. Transect walks and surveys of sample manhole pumping station locations were undertaken despite COVID-19 restrictions and helped estimate potential temporary economic impacts to 25 hawkers and vendors for a period of 14 days each, due to construction of manhole pumping stations (Appendix 7). The Project will confirm the extent of temporary economic impacts due to manhole pumping stations based on detailed measurement surveys, in the resettlement plan.

52. Process of land acquisition has already been initiated by the KWASA for ten (10) land plots. Out of these 10 land plots, 8 plots belong to private owners measuring 35.53 acres (3553.2 decimals), out of which 34 acres (3400 decimals) land is required for construction of two STPs.

53. Land acquisition requirements were identified during preliminary engineering design. Total land required for the project is 3602.62 decimals (~ to 36.02 acres) of which 35. 53 acres (3553.2 decimal, i.e., 98.62%) is privately owned and 0.494 acres (49.42 decimal, i.e., 1.37%) is government owned (*Khas)* land. Acquisition of private land for the STPs and the SPSs will impact 235 households (comprising 1060 persons) that includes210 landowners families, 9 caretakers families, 3 sharecroppers families, 10 tenants families (including 2 business units – one cow shed and one furniture shop) and 3 workers of the business owners.

54. Temporary income loss to 22 traders and the 80 daily wage workers who are using government land required for the project, is assessed. In addition, potential temporary income loss to an estimated 25 vendors due to construction of manhole pumping stations, and 2640 vendors due to sewer pipe laying, is assessed on the basis of transect walks along sample pipe alignments and sample manhole pumping station locations. The project will cause significant impact to (a) 24households (108 persons)due to physical displacement which includes 6 landowners, 9 caretakers, 9 tenants (of which one is residential cum commercial unit, one

cowshed); (b) eight households (36 persons), including two business owners, three sharecroppers and three employees of the two business owners will face significant income loss, however this would be further assessed during the census and socio-economic survey to ascertain full or partial income loss and resettlement plan will be accordingly updated; and (c) 10 landowners (45 persons) who are assessed to face loss of more than 10% of their land. The landowners, sharecroppers, caretakers, tenants, employees and business-owners will be compensated for their income loss as per the entitlement specified in the entitlement matrix. As per law of the land, the Deputy Commissioner is the owner of *Khas* or government land on behalf of Government of Bangladesh.

55. Temporary income loss to 80 daily wage workers will be further assessed through census survey during the DMS after final design. Based on the findings of the survey the budget will be revised (if felt required). However, information related to daily wages has been collected from the 22 traders based on which a resettlement budget has already been prepared. Information received from the 22 traders has confirmed that none of the wage workers are female or belong to any ethnic group. Regarding the wages; it has been confirmed by the traders that for avoiding any labor related issues all the workers are paid on equal basis as per prevailing govt. rate without any prejudice. Efforts will be given to maintain access during construction phase for avoiding any livelihood loss. The details of displaced families are given below in Table 18.

Table 18: Land Plot wise Number of Landowners and Displaced Families

Sl. No	Name of the Locations (Clusters)	Location	Land use classification	Nature of Ownership	Land area (decimals)	Total No. of Landowners	Involuntary Resettlement Impacts
1.	Tikraband, (STP-2) under SD-2, 3,4,7	Outside Khulna city limits	Bilan, danga, Vita	Private	2200.00	193	Total 193 landowners are affected: 184 landowners are losing less than 10% of their landholdings; 9 landowners are losing more than 10% of their landholdings. 6 landowners residing on Vita / homestead land are expected to face relocation impact due to loss of residential structure. 9 caretakers face relocation impact. Total affected households= 202 Total affected persons=912 Total significantly affected households= 26 Total significantly affected persons=108
2.	Mathabhanga STP 1 under SD-1 and 6	Outside Khulna city limits	Bilan	Private	1200.00	07	Total 7 landowners are affected: none are anticipated to face physical displacement, and none face

Sl. No	Name of the Locations (Clusters)	Location	Land use classification	Nature of Ownership	Land area (decimals)	Total No. of Landowners	Involuntary Resettlement Impacts
							significant loss (loss of more than 10% of their land). Three seasonal sharecroppers (14 affected persons) who practice pisciculture for 3-4 months in a year on part of the land, are assessed to be permanently and significantly affected due to livelihood loss. Total affected households=10 Total affected persons= 54 Total significantly affected households=3 Total significantly affected persons=14
3.	Labonchora Sluice gate SPS-3 under SD-6	Within Khulna city limits	Danga	Private	24.71	01	One landowner faces land acquisition impact of less than 10% land owned. 07 tenant households (32 persons) face physical displacement / significant impacts. Total affected households= 08 Total affected persons= 36 Total significantly affected households=7 Total significantly affected persons=32
4.	Nirala SPS -4 Under SD-2	Within Khulna city limits	Bilan, Danga	Private	24.71	01	One landowner faces land acquisition impact of less than 10% land owned. No physical displacement or any other significant impact anticipated. Total affected households=01 Total affected persons=04 Total significantly affected households=0 Total significantly affected persons=0
5.	Kashim Nagar, Gallamari	Within Khulna city limits	Bilan	Private	29.65	01	There is only one land owner (4 affected persons), anticipated to be significantly affected, facing loss of more

Sl. No	Name of the Locations (Clusters)	Location	Land use classification	Nature of Ownership	Land area (decimals)	Total No. of Landowners	Involuntary Resettlement Impacts
	SPS-5 under SD-3						than 10% land owned. No relocation impact is anticipated. Total affected households=01 Total affected persons=04 Total significantly affected households=1 Total significantly affected persons=4
6.	Sonadanga Truck terminal Road SPS-6 under SD-7	Within Khulna city limits	Bilan	Private	24.71	01	One landowner faces land acquisition impact of less than 10% land owned. No physical displacement or any other significant impact anticipated. Total affected households=01 Total affected persons=04 Total significantly affected households=0 Total significantly affected persons=0
7.	Karim Nagar More SPS-7 under SD-5	Within Khulna city limits	Danga, Bastu	Private	24.71	05	Of the 5 landowners (23 affected persons), 1 landowner faces loss of house and homestead land (5 affected persons). The remaining 4 landowners (19 affected persons) are anticipated to lose less than 10% of their landholdings. Two business owners (9 affected persons) face loss of livelihood due to loss of structure. One business owner will also face relocation impact (as the family resides on the plot). In addition, 3 employees of the two affected businesses face loss of livelihood. Total affected households=10 Total affected persons=45 Total significantly affected households=6 Total significantly affected persons=28
8	Islamia	Within Khuln	Bilan	Private	24.71	01	There is one landowner, who is anticipated to face loss of

Sl. No	Name of the Locations (Clusters)	Location	Land use classification	Nature of Ownership	Land area (decimals)	Total No. of Landowners	Involuntary Resettlement Impacts
	College Road SPS-8 under SD-4	a city limits					less than 10% of total landholdings. Total affected households=02 Total affected persons=09 Relocation impact to 1 tenant household (4 affected persons) anticipated.
9	Custom Ghat SPS-1 under SD-1	Within Khulna city limits	Danga	Govt. Land	0.2471	Govt. land	22 traders and 80 daily wage workers are anticipated to face temporary economic impacts due to access disruption during construction, for periods ranging between 1 month to 3 months. For the latter, respectively. No permanent and significant impacts anticipated.
10	Motiarkhali Khal Par SPS -2 Under SD – 1	Within Khulna city limits	Danga	Govt. Land	0.2471	Govt. land	No impact anticipated. This is vacant and unused government land.
11	Sewer pipelaying and manhole construction (269.67 Km) and manhole pumping stations (5 no.s)#	Within the ROW of government roads	Road	Govt. Land	-	Govt. Land	Transect walks were conducted along sample 1 Km each of high, medium and low-density road length and 2 sample manhole pumping stations. Based on the sample survey, temporary economic impact due to sewer pipe laying is estimated to affect 2640 hawkers and vendors, for 2-5 days each. For the 5 manhole pumping stations, the estimated impact is to 25 hawkers and vendors, for 14 days each. No permanent and significant impacts anticipated.

Manholes with maximum widths of 4.5 feet and manhole pumping stations with width of 5.75 feet are proposed within government road ROWs.
Note: Bilan= low lying agricultural land; Danga=Higher land; Vita = Homestead land; Bastu=Homestead land
Data Source: KWASA.

Table 19: Package wise Number of Affected Persons

Package	Land owners	Caretakers	Sharecroppers	Tenants	Employ-ees	Traders /vendors	Wage Workers	Physical displacement
KWASA/KSSDP/SN-01								
SPS-1, Customghat	-	-	-	-	-	22	80	-
SPS-2, Motiakhli	-	-	-	-	-	-	-	-
SPS-3, Labanchora	1	-	-	7	-	-	-	7 tenants
Sewer Pipe alignment						1214		
Manhole pumping stations (2 No.)						10		
KWASA/KSSDP/SN-02								
SPS-4, Nirala	1	-	-	-	-	-	-	-
SPS-5, Gollamari Kashim Nagar	1	-	-	-	-	-	-	-
SPS-6, Beside truck terminal, Sonaganga	1	-	-	-	-	-	-	-
SPS-7, Karim Nagar, Sonadanga	5	-	-	2	3	-	-	1tenant
SPS-8, Beside Islamia College Road	1	-	-	1	-	-	-	1 tenant
Sewer pipe alignment						1426		
Manhole pumping stations (3 No.)						15		
KWASA/KSSDP/STP-1								
STP -1	7	-	3	-	-	-	-	-
STP-2	193	9	-	-	-	-	-	6 landowners, 9 caretakers
TOTAL	**210**	**9**	**3**	**10**	**3**	**2687**	**80**	**24**

Source: Above information is based on transect walk, socio-economic survey and preliminary designs. The actual number of affected persons will be finalized based on the detail design, DMS and activities outlined in the next step of this resettlement Plan.

56. Considering the land utilization pattern, eight categories of land have been identified within the project footprint that will be acquired. Major portion of the proposed land are vacant. Of the total land to be acquired, Table 20shows the quantity of land to be acquired by land category.

Table 20: Quantity of Acquired Land by Usage Pattern

SL No.	Utilization pattern of Land	Private Land (Acre/ Decimal)	Govt. Land (Decimal)	Total Land (Decimal)
1	Agriculture Land	0.099 acre (9.90 decimal)	NA	0.099 acre (9.90 decimal)
2	Fishery	0.5575 acre (55.75 decimal)	NA	0.5575 acre (55.75 decimal)
3	Garden	0.0495 acre (4.95 decimal)	NA	0.0495 acre (4.95 decimal)
4	Pond	0.033 acre (3.30 decimal)	NA	0.033 acre (3.30 decimal)
5	Vacant Plot	33.301 acre (3330.105 decimal)	49.42	33.301 acre (3330.105 decimal)
6	Homestead Land	1.377 acre (137.695 decimal)	NA	1.377 acre (137.695 decimal)
7	Cowshed	0.055 acre (5.50 decimal)	NA	0.055 acre (5.50 decimal)
8	Furniture Shop	0.06 acre (6.00 decimal)	NA	0.06 acre (6.00 decimal)
Total (Decimal)		35.53 acre (3553.2 decimal)	0.4942 acre (49.42 decimal)	36.02 acre (3602.62 decimal)

Source: Above information is based on transect walk, socio-economic survey and preliminary designs. The actual details will be finalized based on the detail design, DMS and activities outlined in the next step of this resettlement Plan.

57. The ponds/water bodies located in Nirala and Islamia college road is small, and have no productive use. The pond is used by few people to wash their clothes during monsoon period. Consultation with the local user of the pond revealed that, they use the pond water occasionally and as an alternative water source for domestic use. With the inception of Khulna Water Supply Project; piped water supply service has been resumed in the area which meets their domestic water requirements on daily basis. Hence, the acquisition of the plot area will not have any adverse impact on their daily life.

2. Gravity Sewer Lines, Rising Mains and Sewer Network

58. The proposed gravity sewer lines, rising mains and the sewer network pipelines will be laid within the ROW of existing public roads and are assessed to not have any involuntary land acquisition impact. KSSDP will take 'no objection' or approval from the appropriate government department that are owners of the public roads before start of civil work and the same should be updated in the resettlement plan document.

B. Involuntary Resettlement Impacts

1. Impact of the Sewerage Network

59. The aim of the proposed Khulna Sewerage system development is to improve urban infrastructure and service in Khulna city through developing centralized sewerage management system dealing with Sewage Network including:

(i) 269.67 km primary transmission/pipe collection, secondary and tertiary network;
(ii) 30,000 sewerage property line connection installed in residential and institutional establishment.

60. Under the Khulna Sewerage System Development Project, 269.67km primary transmission, secondary and tertiary network that will be covered in the different lanes and by-lanes of the residential areas of the entire Khulna city Corporation and part of the Batighata Upazila by connecting with the STPs and SPSs.

61. Potential resettlement impacts are anticipated during laying of the sewer pipelines. Laying of sewer pipelines in SD-1 and SD-6 may potentially cause resettlement impacts related to temporary income loss to the road side vendors, kiosks, shops. Information based on the project description indicates that SD-1 (which is referred as Central Business District) is the most congested area with presence of commercial entities and administrative offices. It has been generally observed that presence of commercial entities, administrative offices attract many vendors, shops, kiosks, where the shop owners carry out small commercial activities or business based out of make and shift arrangement. Similarly, there may potentially be road side shops, vendors in SD6 where the sewer pipelines will be laid.

62. To reduce involuntary resettlement impacts, sewer pipelines will be laid through trenchless method and by jack pushing/ micro-tunnelling method in congested locations. Based on the preliminary design 49.05 km and 21.02 km sewer pipeline will be laid through trenchless method in SD-1 and SD-6 respectively. Map showing geo-coordinates for micro-tunnelling is provided in Appendix 9.Resettlement impacts are anticipated on the roads where open-cut method will be used for laying of the pipelines due to access disruption, however, this will be limited to loss of income for a short period. Based on transect walks and field assessment along sample alignments of high, medium and low-density roads, temporary income loss to an estimated 2640 hawkers and vendors is assessed, during pipelaying including manhole construction. Further assessment of impacts will be carried out at the micro-tunnelling pit locations based on the detailed design, to ascertain the exact number of affected persons due to temporary income loss and the number of days of impact and this will be updated to the resettlement plan.

63. Pipe-laying works may require potential temporary shifting of mobile hawkers and those with movable structures, for a short period (during laying of the pipeline in stretches). The mobile hawkers, carts may require to shift their structures, may potentially be assisted by contractors in moving to alternative locations to continue business during the brief period of construction and allowed to return once construction in the area is declared complete (if required). However, in the event that there is income losses for persons with movable structures during shifting, compensation for lost income will be made for the time of disruption. Additional assistance will be provided to vulnerable affected persons, if any. Assessment of all temporary impacts will be done during detailed design stage and the resettlement plan will be updated accordingly. The details of the pipelines to be laid in major roads is provided in Table 21.

Table 21: Pipe line and major roads

Sl. No	Name of major Road	Dia of Pipe (mm)	Trench Width (mm)	Ownership of Road	Width of Road	Permission required#
1	Lower Jessore Road	250 – 1000	850 – 1600	KCC	15.5m - 9.5 m	Yes
2	West Market Road	250	850 – 600	KCC	2.9m -3.3m	Yes
3	Baro Bazar Road	225 – 403	850 – 915	KCC	2.9m – 3m	Yes
4	Seikh para main Road	225 – 403	825 – 1003	KCC	4.4m – 7.4m	Yes
5	Seikhpara Road	225 - 283	825 – 883	KCC	4.4m-4.5m	Yes
6	Sher -E- Bangla Road	225 - 403	825 – 1003	RHD	8.5m-10.1m	Yes
7	B.K. Roy Road	225 – 358	825 – 958	KCC	6.0m –6.3m	Yes

Sl. No	Name of major Road	Dia of Pipe (mm)	Trench Width (mm)	Ownership of Road	Width of Road	Permission required#
8	Deben Babu Road	225 – 358	825 – 958	KCC	3.8m-4.m	Yes
9	Khan Jahan Ali Road	225 - 283	825 – 883	KCC	8.9m-9.9m	Yes
10	Cemetery Road	225	825 – 600	RHD	5.9m-7.6m	Yes
11	Tarerpukur Road	225	825 – 600	KCC	5m-5.6m	Yes
12	Sir Iqbal Road	225 - 283	825 – 883	KCC	5.6m-6.3m	Yes
13	Ahsan Ahamed Road	225 - 283	825 – 883	KCC	7.6m-8m	Yes
14	Shamsur Rahman Road	319 - 458	919 – 1058	KCC	4.8m – 8.2m	Yes
15	Babu Khan Road	225 – 500	825 – 1100	KCC	5,8m – 4,5m	Yes
16	Haji Mohasin Road	225 – 358	825 – 958	KCC	6.1m – 7.4m	Yes
17	S Central Road	225- 403	825 – 1003	KCC	7m – 9.2m	Yes
18	Gagan babu Road	225 – 600	825 – 1200	KCC	8.6m – 9m	Yes
19	Rupsha Strand Road	225 – 500	825 – 1100	KCC	9.2m – 12.4m	Yes
20	Rupshaghat Road	225 - 358	825 – 958	KCC	5.3m – 5.6m	Yes
21	Railway Hospital Road	225 – 403	825 – 1003	KCC	3.7m – 8.5m	Yes
22	Station Road	225 – 283	825 – 883	KCC	7m - 9.4m	Yes
23	Clay Road	225 – 319	825 – 883	KCC	7.2m – 10.2m	Yes
24	K.D. Ghosh Road	225 – 283	825 – 600	KCC	8.2m – 10.2m	Yes
25	Advocate Manjrul Imam Road.	225	825 – 600	KCC	5.2m – 8.3m	Yes
26	Hospital Road	225	825 – 600	KCC	7.5m -8.5m	Yes
27	Tutpara central Road	250	850	KCC	5m-6.7m	Yes
28	Tutpara main Road	225 – 600	825 – 1200	KCC	5.5m-6.3m	Yes
29	Korpara Road	319 - 403	919 – 1003	KCC	5.4m-5.8m	Yes
30	PurbaBaniakhama Road	225 - 403	825 – 1003	KCC	3.9m-4.9m	Yes
31	Azizurrahman Road	225 – 500	919 – 1058	KCC	4.3m-4.6m	Yes
32	S.Circular Road	225 – 358	825 – 1100	KCC	3.8m-4.8m	Yes
33	Shipyard Road	225- 403	825 – 958	KCC	6.5m-9.8m	Yes
34	Ali Hafege Road	225 – 600	825 – 1003	KCC	3.3m-3.7m	Yes
35	Jinnah Para Road	225 – 500	825 – 1200	KCC	3.6m-5.6m	
36	Ibrahimia Madrasah Road	225 - 358	825 – 958	KCC	2.8m - 3.6m	Yes
37	Al-Amin- Sarak	225 – 283	825 – 883	KCC	29m - 3.9m	Yes
38	Mukta Sarak	225	825	KCC	2m – 3.1m	Yes
39	Rupsha bridge approach Road	225	825	KCC	9m – 8.6m	Yes
40	BIDC Road	225 - 358	825 – 958	KCC	5.5m – 12.0m	Yes
41	KDA Bypass Road	600 – 1200	1200 – 1800	KCC	14.0m – 21.0m	Yes
42	Kishob Lal Road	358 – 500	958 – 1100	KCC	3.1m – 3.6m	Yes
43	Jalil Sarani	225 - 500	825 – 1100	KCC	12m – 14m	Yes
44	Sher-e-Bangla Road	358 – 500	958 – 1100	KCC	18m – 22m	Yes
45	Bagmara main Road	319 - 600	958 – 1100	KCC	5.4m – 5.8m	Yes

Source: Data received from Project Management Unit, KSSDP. # Note: Road cutting and pipe laying permission will be required from the road owner (KCC).

64. There will be no impacts on road side residential and commercial structures along the proposed route of pipeline other than possible access disruptions. In case of disruption of access to the Affected Persons, the contractor will provide assistance through provision of access planks. Night work (11 pm – 4 am) will be undertaken in congested areas to avoid traffic disruptions. Full closure of roads will be avoided.

65. The following measures are proposed for minimization of temporary impacts during construction:(i) Trenches and pit excavations and other work shall be carried out during night time particularly at busy road sections; (ii) The excavation works for pipe laying will be done section by section to reduce the length of excavation. The time period for open trenches will be limited; (iii) In case of excavation in major roads, the trenches and pits will be covered by steel plates to allow traffic to pass during non-working periods with proper signages; (iv) The contractor and KWASA will make liaison with the concerned authority to control the flow of traffic; (v) If required, diversion way will be constructed temporarily, to facilitate the shops located adjacent to the road, to continue their business; (vi) Making the community fully aware of the grievance redressal mechanism; providing contact number of responsible persons in the PMU and ULB offices; (vii) The contractor will be required to maintain access to properties including businesses, through the provision of access planks. For any excavations that are more than 1 m wide or deep, access planks with handrails will be provided. This resettlement plan forms part of the bid documents and these impact minimization measures during construction will need to be costed and implemented by the contractor.

2. Impact on Structures

66. The project will impact 23 (96%) residential structures, one residential structure including cowshed and one (4%) commercial/business structures (furniture shop). Table 22 summarizes the number and percentage of affected residential and commercial structures. The impacted structures are owned by the landowners.

Table 22: Impact on Structures

SL No.	Utilization pattern of Land	Residential Structures	Business Structures	Total Structures
1	Tikrabandh, (STP-2) under SD-2, 3,4,7	15	Nil	15
2	Labonchara STP-1 Under SD-1 & 6	Nil	Nil	Nil
3	Labonchara,Sluice gate,SPS-3 under SD-6	7	Nil	7
4	Nirala SPS -4 Under SD-2	Nil	Nil	Nil
5	Kashim Nagar,Gallamari, SPS-5 under SD-3	Nil	Nil	Nil
6	Sonadanga Truck terminal Road SPS-6 under SD-7	Nil	Nil	Nil
7	Karim Nagar MoreSPS-7 under SD-5	1 (residential-cum-commercial)	1	2
8	IslamiaCollege RoadSPS-8 under SD-4	1	Nil	1
9	Custom GhatSPS-1 under SD-1	Nil	Nil	Nil
10	Motiarkhalikhal parSPS-2 under SD-1	Nil	Nil	Nil
Total		**24**	**1**	**25**

* Including 1 cowshed Source: Above information is based on transect walk, socio-economic survey and preliminary designs. The actual number of affected structures will be finalized based on the detail design, DMS and activities outlined in the next step of this resettlement Plan.

3. Impact on Common Property Resources (CPR)

67. Based on available design and transact walk it has been observed that there are no adverse impact anticipated on Community Property Resources (CPR) as there are no such structures present in any of the proposed plots for construction of STPs and SPSs. Apart from that, routing of sewer network line has been proposed through the available public ROW. Hence laying of sewage line will not have any impact on CPRs. However, based on final design and detail measurement survey (DMS), impact on CPR will be further assessed and subsequently updated in the resettlement plan.

4. Impact on Trees

68. Compensation is required for the affected trees and crops based on the unit prices of trees and crops if significant numbers will be affected by the land acquisition. The unit prices for compensation of different species of fruit trees will be based on the rates as assessed by the Horticulture Department. As per current practice in Bangladesh, DC office determines the price of trees through the respective government agency for paying compensation to the affected persons.

69. The survey team has identified 1186 trees belonging to45 land owners who were interviewed at the Tikrabandh, one of the significant affected locations among the 10 locations. Based on the species, age, quality and productive value of the trees, the exact compensation rate will be finalized in consultation with the divisional forest office and if required inputs from any agriculture/horticulture experts will also be consulted to assess the valuation. Based on final valuation compensation will be paid to the respective owners as per the prevailing rates. During census and socio-economic survey the actual tree count will be confirmed for rest of the plots both on private and government land.

Table 23: Number of Affected Trees in Private Land under Acquisition (By Type and Size)

Types of the affected trees	No. of the Tree	%	Size			
			Large	Medium	Small	Plants
Fruit Tree (Seasonal)	117	9.87	18	42	41	17
Wood Tree	121	10.2	2	55	56	8
Fruit Tree (All season)	398	33.56	2	130	167	77
Not Classified	550	46.37	11	99	439	1
Total	1186	100	55	326	703	102

Source: Above information is based on transect walk, socio-economic survey and preliminary designs.

5. Impact on Traders and Daily Wage Earners

70. It should be noted that based on the preliminary design for the project only 24.71 decimals of land will be required for construction of SPS. The area at Customghat, government land parcel

identified for SPS-1 location accounts for 200 decimals, out of which 24.71 decimals will be utilized for the proposed SPS; similarly, at Motiarkhalikhalpar, for SPS-2, the area of the identified government land parcel is of 150 decimals, out of which 24.71 decimals will be utilized. At SPS-1 location 22 non-titled traders including their 80 day-laborer (daily wage labour) are currently operating business in 200 decimals of land and at SPS-2 location 7 non titled traders including their 10 day-laborers (for loading and unloading purpose) are operating business in 150 decimals of land owned by the Government they stock and supply construction materials (bricks and sand).

71. It has been assessed that the non-titled 22 traders at SPS-1 will be able to continue operating their business in same premises post construction, but are likely to face temporary impact during construction work. The contractor will provide adequate space for access to their business location, to the extent possible, so that the non-titled traders in Custom ghat will be able to continue to operate the business. However, it has been assessed that during initial stage of construction phase there may be a temporary disruption in daily business which may lead to temporary livelihood loss to the 22 traders and also to the wage laborers. Since there is no socio economic data of 80 wage laborers presently available with the PMU, the necessary information will be incorporated in the updated resettlement plan and compensation to the wage laborers will be as per the minimum wage rate considered by Government of Bangladesh which is equivalent to the daily minimum wage rate of garment sector workers. All the wage laborers will be paid cash compensation for their lost wages as outlined in the entitlement matrix. Provision of cash compensation due to business loss for 22 traders has been computed in resettlement budget according to the entitlement matrix.

72. The Motiarkhalikhalpar Government land proposed for construction of SPS-2, the non-titled trades will be able to continue to operate their business in same premises and the laborers will also be able to continue their work as well. It has been observed that there are no existing structures erected by the traders on the proposed plot and their commercial activities are confined within a limited portion of the plot. Based on the nature of their business, construction materials are stocked on ground and further distributed on daily basis to the customers. The entire plot measures 40 decimals out of which 24.71 decimal will be required for construction of SPS.

73. The traders and the their workers of SPS-1 have been included into the project affected persons list currently, with the understanding that their business may potentially be impacted temporarily, during the construction of the SPS, however, the involuntary resettlement impacts will be further assessed following the detail design and detail measurement survey (DMS).

6. Impact on Tenants

74. At the proposed site of STP – 2, at Tikrabandh, 9 caretakers cum tenants are living with their families within the plot. The size of the land parcels vary between 5 to 8 decimals. It is noted that one landowner has maximum land holding, almost 30% of total proposed land; the owner does not reside there except for one caretaker. All the 9 caretaker families will need to be displaced due to land acquisition.

75. At the proposed site for STP – 1 at Mathabhanga, 3 families (tenants) living outside the land, are cultivating seasonal fish for 3-4 months. They will face significant livelihood loss because of land acquisition.

76. Seven poor families are living in thatched (low cost) houses on the proposed land for SPS-3 at Labonchara Sluice Gate, each paying rent of BDT 1000 for every month to the landowner. These poor families will be physically displaced.

77. At Karim Nagar More plot proposed for SPS-7 under SD-5, one family(tenants) will be physically displaced. One of the affected persons has a furniture shop without any residential structure and another person has a cowshed besides his residence. The furniture shop has 2 employees and the cowshed has one employee. Final assessment for loss of income for the landowners due to loss of rent and details of employees will be provided in the updated resettlement plan.

7. Impact on Vulnerable Households

78. Based on the socio economic survey, 24 (9.34%) permanently affected households are assessed as vulnerable.[13] Out of the 24 vulnerable households,10 households have multiple vulnerabilities like elderly women headed households and 2 persons found who have been suffering from chronic diseases. 9 caretakers losing their shelter and livelihood (all landless) and 3 employees belonging to lower income profile (below poverty line)[14] having permanent impact due to loss of livelihood..The actual number of affected vulnerable persons will be assessed based on the final design and DMS and census survey.

C. Indigenous Peoples

79. No indigenous peoples impact involving direct or indirect impacts to the dignity, human rights, livelihood systems or territories or natural or cultural resources that are used, owned, occupied or claimed by indigenous peoples as their ancestral domain or asset, is anticipated. None of the affected persons surveyed belongs to small ethnic communities. Census data for 2011 published by Bangladesh Bureau of Statistics (BBS) does not report the presence of small ethnic minorities in Khulna City Corporation area. Transect walks conducted through project sites and alignments do not reveal the presence of small ethnic communities such as *adibashi* (tribal) communities, *pahari* (hill) communities, and forest communities at these locations. No project component with any adverse impact on small ethnic communities will be included. The project is category C for indigenous people.

D. Summary of Impacts

80. The overall construction activities of the project components for three packages will cause both physical and economic displacement. Land acquisition will affect 210 landowners, of whom 95% are assessed to be affected by less than 10% loss of land and the remaining 5% affected by 10-12% loss of land owned by them. Proposed project activities will cause the following significant

[13] Vulnerable households comprise (i) women and children including low income women-headed households, working children, orphans etc.; (ii) headed by elderly/ person with disability, without means of support; (iii) headed by persons with chronic disease or terminal illness (in line with GoB policy); (iv) households that are below poverty line; (v) households belonging to indigenous peoples groups or small ethnic communities; (vi) households belonging to lower castes; (vii) persons without legal title; and (viii) landless persons.

[14] This Resettlement Plan calculates the upper poverty line for urban area from the 2016 upper poverty line determined by the Bangladesh Bureau of Statistics (BBS), with added inflation rate 5.4 (*Source: Economic trends Bangladesh Bank, December 2019, Published by Research Department of Bangladesh Bank*). The upper poverty line for the year 2016 for urban area is BDT 2,929 [*source: Report on Household Income and Expenditure Survey 2016, published on October 2017* (latest publication) *by Statistics and Information Division, BBS*]. Thus, BPL definition for urban metropolitan is BDT 3087.16 per capita/month in 2019. As such the per capita average monthly household income under BPL stands at BDT 17,905 {3087.16×5.8 (HH size) =17,905}.

and permanent impacts due to land acquisition: (a) physical displacement of 24 households residing on the STP and SPS plots,(b) economic displacement of 8 affected persons, two business owners, threesharecroppers, three employees at STP-1, SPS-7 area. Temporary income loss is also assessed. The project impacts have been summarized in Table 24, this is based on socio-economic survey of 210 households.

Table 24: Summary of Involuntary Resettlement Impacts

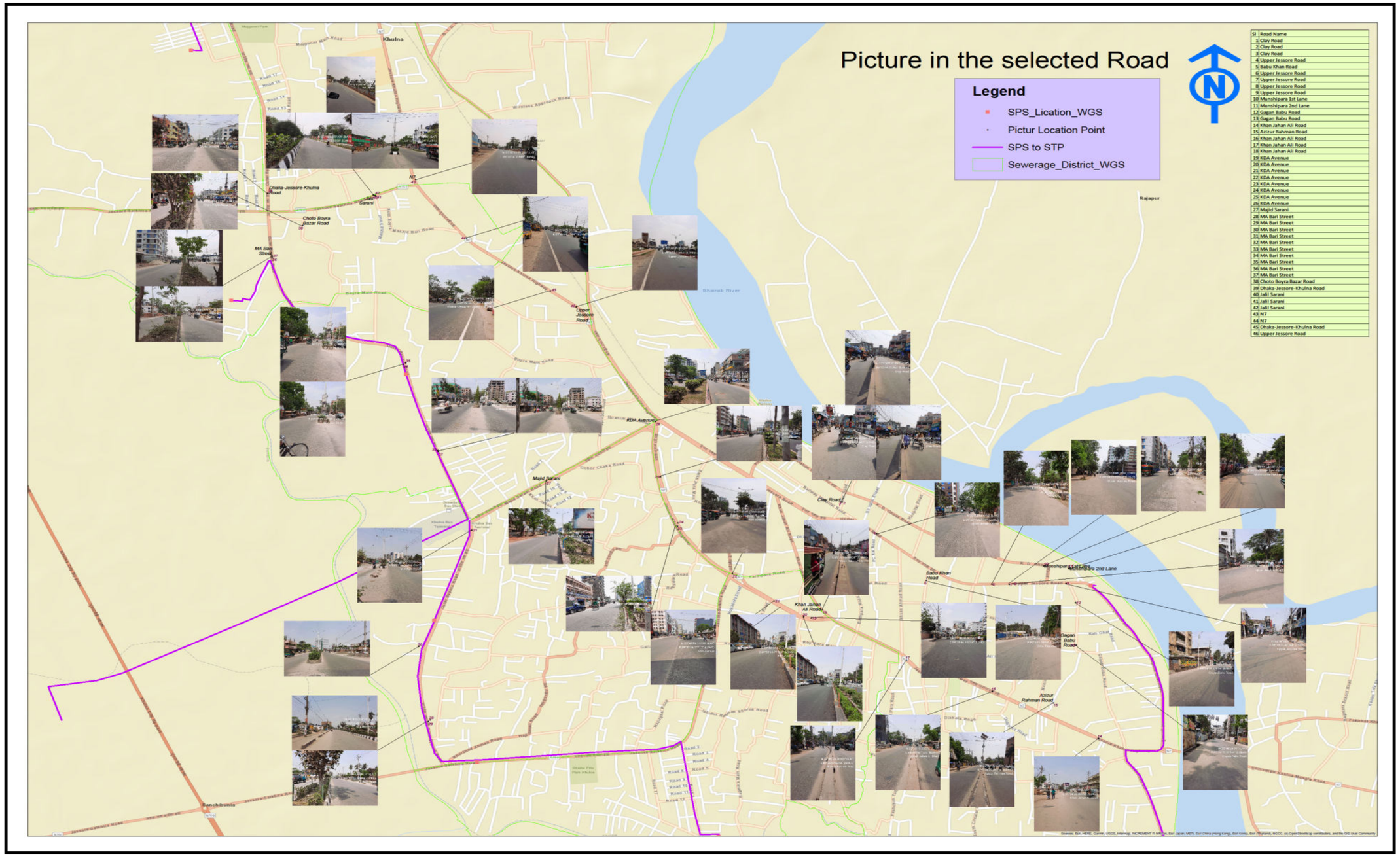
Sl. No.	Types of Affected Persons & Others	Nature of Impact	Numbers	Family members of Affected Persons (Estimated Number based on Sample Survey)	Remarks
A	Affected land owners due to land acquisition	Permanent loss of land	210	937	
	A.1: Affected land owners losing less than 10 % land		199	895	
	A.2: Affected land owners losing 10 % or more land		11	45	Significant impact
B	Physically displaced households	Physical displacement	24 (6 land owners, 9 caretakers and 8 tenants)	108	Significant impact
C	Loss of Income	Permanent loss of income	8	35	Significant impact
	C-1: 3 share croppers		3	14	
	C-2: 2 Business Owners		2	11	
	C-3: 3 employees of two business owners		3	13	
D	Vulnerable Households		24	95	Permanent impact
E	Structures (i + ii + iii)		25		
	i. Affected Residential Structures		23		
	ii. Affected Business Structures		1		
	iii. Affected Residential-cum-Commercial Structure (cow shed)		1		
F	Affected Businesspersons (non-titleholders on government land)	Temporary loss of income	22 traders	99	Temporary impact
H	Wage Laborers (unskilled) Employed in Business Enterprises in serial no. F	Temporary loss of income	80	360	Temporary impact
I	Estimated No. of Affected Hawkers and Vendors along sewer network alignment	Temporary loss of income	2640	11,880	Temporary impact
J	Estimated No. of Affected Hawkers and Vendors along	Temporary loss of income	25	113	Temporary impact

Sl. No.	Types of Affected Persons & Others	Nature of Impact	Numbers	Family members of Affected Persons (Estimated Number based on Sample Survey)	Remarks
	manhole pumping station locations				
K	Affected Trees (Including Banana and Bamboo)		1186		
L	Affected Indigenous People		Nil	NA	

Note: Above information is based on transect walk, socio-economic survey and preliminary designs. The actual number of affected persons will be finalized based on the detail design, DMS, census survey and activities outlined in the next step of this resettlement Plan.

81. From the above Table 19 and Table 24 it may be summed-up that due to acquisition of private land, a total of 235 households comprising 1060 persons will be impacted. However, significant impact will be on 24 households being physically displaced and permanent economic displacement of 8 households. In addition, the 11 landowners who reported loss of more than 10% land (10-12% land) are counted among those significantly affected in the draft resettlement plan, taking the estimated total number of significantly affected households to 42 and significantly affected persons to189. The 210 land owners reportedly do not have primary dependence on the acquired land for their livelihood. Rental income (from structures on affected land or plot rent) and share from sharecroppers practicing seasonal pisciculture on part of the land for STP1, serve as secondary sources of income for 10 landowners. On the government land required for the project, 22 traders and their 80 daily wage laborer are likely to face temporary income loss due to access disruption.Temporary impacts to 2640 hawkers and vendors due to sewer pipe laying and 25 vendors due to construction of manhole pumping stations is also anticipated. Hence, the project is assessed Category B for involuntary resettlement.

Figure 5: Picture of roads proposed for laying of sewer lines



Source: Project Management Unit, KSSDP

III. SOCIO-ECONOMIC INFORMATION AND PROFILE

A. Profile of Affected Persons

82. The profile of the affected persons is prepared based on socio-economic and loss assessment survey 210 land owners, 9 caretakers, 8 tenants, 3 sharecroppers, 2 businessmen, 22 local traders and 03 employees. Out of the total 210 affected land owners at 8 locations proposed for STPs and SPSs, household socio-economic surveys were conducted with 210 land owners who will lose about 35.53 acres of vacant and non-productive land. Involuntary land acquisition will cause loss of land, homestead lands, residential and commercial structures, loss of trees and other assets. The remaining affected landowner households could not be identified physically for interviewing during the survey as they were found as absentee landowners living elsewhere.

83. Socio-economic profile of the project area has been analyzed based on household size, level of education, occupation, per capita household income and marital status. The analysis below covers 257 affected households covering 1146 persons for whom the household surveys were carried out. The socio-economic survey was conducted using a structured questionnaire, that was developed based on prior field visits and were pre-tested on field. The detailed socioeconomic profile based on Socio-economic survey of the affected population is given in this chapter.

1. Demography

84. Under the socioeconomic survey, 257 households were interviewed of which 210 are landowners, and the majority of the remaining persons are mainly caretakers and tenants of the affected landowners who will face physical displacement. Total landowners (210) surveyed include 937 population, of which 78 (31%) were female respondents and 179 (69%) were male respondents with an average family size of 4.5 which is slightly higher than the national average household size of 4.35.[14] Among the total households, 98 of them are found to be nuclear families, and the remaining 55 households are identified as joint families. The findings show that the ratio of men to women is 2:1.The following table shows the distribution of respondents by sex:

Table 25: Distribution of Respondents (Affected Persons) by Sex (N=101)[15]

Sl. No.	Category of AP	No. of AP	Female	Male
1	Landowners	210	76	134
2	Caretakers	9	1	8
3	Tenants	8	1	7
4	Businessmen	2	Nil	2

[14] Socio-economic and Demographic Report, Bangladesh Population and Housing Census, 2011, December 2012, Bangladesh Bureau of Statistics (BBS)Statistics And Informatics Division (SID)Ministry Of Planning Government Of The People's Republic Of Bangladesh. http://bbs.dhaka.gov.bd/sites/default/files/files/bbs.dhaka.gov.bd/law_policy/6ed6b42c_2015_11e7_8f57_286ed488c766/Socio-Economic%20and%20demographic%20Report%202012.pdf

[15] The caretakers, tenants, business owners, sharecroppers are all male, therefore, they had been interviewed and consulted. All 18 female land owners have also been consulted and were included in the survey. A program of continuous consultations is proposed, which will ensure that female family members of affected households are adequately and meaningfully consulted in the course of RP updating and implementation, in particular, regarding relocation preferences (if applicable), training needs, and any other specific concerns and issues related to involuntary resettlement, entitlements and compensation.

Sl. No.	Category of AP	No. of AP	Female	Male
5	Sharecroppers	3	Nil	3
6	Traders	22	Nil	22
7	Employees	3	Nil	3
Total		257	78 (31%)	179 (69%)

Source: socioeconomic survey, 2019

Table 26: Household size of Affected Families (N=101)

Sl. No.	Category of AP	No. of AF	Total Family Members	Average Family Size
1	Landowners	210	937	4.46
2	Caretakers	9	38	4.22
3	Tenants	8	35	4.38
4	Businessmen	2	9	4.50
5	Sharecroppers	3	13	4.33
6	Traders	22	101	4.59
7	Employees	3	13	4.33
Total		257	1146	4.5

Source: socioeconomic survey, 2019

Table 27: Family type

Type of Family	Joint Family	Nuclear Family
Total	69	188
Total Households	257	

Source: socioeconomic survey, 2019

2. Education Profile of Affected Heads of Households

85. Among the affected households surveyed (257), only 9 heads of household (HoH) (4%) are found to be informally literate without attending any school and received education at home to some extent, 20 HoHs (8%) have completed primary level of education and 30 HoHs (12%) have reportedly completed upper primary level of education (class 8 pass). On the other hand, altogether 41 HoHs (16%) are found to have completed secondary level of education; 49 affected HoHs (19%) have completed higher secondary level education. In case of higher level of education, 49 HoHs (19%) have completed graduation level out of which 42 are landowners, one caretaker and 07 are traders. Out of the surveyed landowners 38 (15%) have obtained post-graduation degrees. The finding shows that about 11 HoHs (5%) among land owners have received professional degrees like medicine and engineering. Among the total population under the survey, average literacy rate is found to be about 96%, much higher than the national average of 58.77%, as per 2011 Census data and the average literacy for Khulna city (73.6 %).[16] One of

[16] Literacy data based on Population and Housing Census – 2011, Bangladesh Bureau of Statistics

the reasons of such finding is that the major portion of the surveyed is constituted by 210 landowners and 22 local traders.

Table 28: Education Level of Affected Head of Households

Education Level	Landowners		Caretakers		Tenants		Business men		Sharecroppers		Traders		Employees		Total	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Illiterate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Informally literate	-	-	1	2	1	3	-	-	-	2	-	-	-		**2**	**7**
Up to Class V	-	-	-	4	-	2	-	-	-	1	-	-	-	**2**	**0**	**9**
Class V	6	5	-	-	-	-	-	-	-	-	-	-	-		**6**	**5**
Class VIII	7	16	-	1	-	2	-	2	-	-	-	1	-	**1**	**7**	**23**
Class X	17	13	-	-	-	-	-	-	-	-	-	11	-	-	**17**	**24**
Class 12	11	31	-	-	-	-	-	-	-	-	-	7	-	-	**11**	**38**
Graduate	25	30	-	1	-	-	-	-	-	-	-	3	-	-	**25**	**34**
Post Graduate	8	30	-	-	-	-	-	-	-	-	-	-	-	-	**8**	**30**
Doctor / Engineer	-	4	-	-	-	-	-	-	-	-	-	-	-	-	**0**	**4**
Professional Diploma	2	5	-	-	-	-	-	-	-	-	-	-	-	-	**2**	**5**
Total	**76**	**134**	**1**	**8**	**1**	**7**	**-**	**2**	**-**	**3**	**-**	**22**	**-**	**3**	**78**	**179**

Source: socio economic survey, 2019

86. **Occupational pattern**

87. Findings of the household survey show that among the 257 affected households surveyed, 48 HoHs (19%) are doing government jobs (10 female and 38 male land owners). Similarly, 45 HoHs (18%) are involved in the private sector service (which includes 5 female landowners). Of the total households surveyed, 25% (64 HoHs) are into trade and business. Other occupations vary among the affected households. However, among the total respondents, 21% (owners) are found to be housewives. It is observed that most of the landowners are found to be well-off economically. Altogether about 37% households have either government and private jobs. Thus, occupational pattern is found to be different from other locations of the district. Occupations of the heads of households are given Table 29 below:

Table 29: Occupational status of the head of household

Occupational Profile	Landowners		Caretakers		Tenants		Businessmen		Sharecroppers		Traders		Employees		Total	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Housewife	54	0	1	-	-	-	-	-	-	-	-	-	-	-	**55**	**-**
Govt. Service	10	38	-	-	-	-	-	-	-	-	-	-	-	-	**10**	**38**
Private Service	5	38	-	1	-	1	-	-	-	-	-	-	-	-	**5**	**40**
Pension	2	7	-	-	-	-	-	-	-	-	-	-	-	-	**2**	**7**
Trade & Business	4	33	-	1	-	1	-	2	-	-	-	22	-	-	**4**	**59**
House Rent	1	-														
Doctor		4	-	-	-	-	-	-	-	-	-	-	-	-	**-**	**4**

Occupational Profile	Landowners		Caretakers		Tenants		Businessmen		Sharecroppers		Traders		Employees		Total	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Lawyer		3	-	-	-	-	-	-	-	-	-	-	-	-	-	**3**
Owners of Garage		1	-	-	-	-	-	-	-	-	-	-	-	-	-	**1**
Agriculture and allied activities	0	5													-	**5**
Auto Rickshaw driver		1	-	1	-	4	-	-	-	2	-	-	-	-	-	**8**
Unskilled labour			-	3	-	2	-	-	-	-	-	-	-	1	-	**6**
Self-Employment		2	-	1	-	-	-	-	-	-	-	-	-	-	-	**3**
Tea Stall			-	1	-	-	-	-	-	-	-	-	-	-	-	**1**
Skilled Worker			-	-	-	-	-	-	-	1	-	-	-	2	-	**3**
Total	**76**	**134**	**1**	**8**	**-**	**8***	**-**	**2**	**-**	**3**	**-**	**22**	**-**	**3**	**77**	**180**

Source: socioeconomic survey, 2019.
Note: * It is to be noted that out of 10 tenants identified under the project 8 have been considered under 'Tenant' category and 2 of the tenants (business owners) have been categorized under 'Businessmen'.

88. Out of 257 surveyed households, 121 households have secondary occupations. Among the major sources of secondary income, private services constitute 29%, government service constitute is 20% aand 27% are into trade and business. Among the 210 landowners, 108 (51%) of them have alternative sources of income.

Table 30: Secondary Occupation of the Affected Families

Education Level	Landowners	Caretakers	Tenants	Businessmen	Sharecroppers	Traders	Employee	Total
Govt. Service	24	0	0	0	0	0	0	24
Private Service	34	1	0	0	0	0	0	35
Pension	5		0	0	0	0	0	5
Trade & Business	29	2	2	0	0	0	0	33
Owners of Garage/ Mechanic	0	0	1	0	0	0	0	1
Auto Rickshaw driver	1	2	0	0	0	0	0	3
Fish Firming, Agriculture	6	0	0	0	3	0	0	9
Plot Rent	1	0	0	0	0	0	0	1

Fruit & Fish Seller	0	0	2	0	0	0	0	2
Self Employed	8	0	0	0	0	0	0	8
Total	**108**	**5**	**5**	**0**	**3**	**0**	**0**	**121**

89. **Age Distribution**

90. It is observed in the following Table 31 that nearly 3.58% of the children in affected persons' households fall in the age group 0-5. In other age-group, about 8.20% of the population is found to be under the age of 6-15 years. Similarly, about 2.27% of the population is found to be in the age group of 61-65 years, and the last group consists of the age group above 66. The children and the senior citizens (age group of 60 and above) constitute the dependents or non-earning age groups. As per the information collected through socio-economic survey, the remaining population (about 85.86%) is in the productive age and is expected to contribute to the family income. The following table shows the details of the age structure:

Table 31: Distribution of Affected Persons by Age

Code	Age range details	Total	Percentage
1	0-5	41	3.58%
2	6 – 10	57	4.97%
3	11 – 15	37	3.23%
4	16-20	157	13.70%
5	21-25	131	11.43%
6	26-30	113	9.86%
7	31-35	107	9.34%
8	36-40	117	10.12%
9	41-45	109	9.51%
10	46-50	97	8.46%
11	51-55	107	9.34%
12	56-60	47	4.10%
13	61-65	17	1.48%
44	66+	9	0.79%
	Total	**1146**	**100%**

Source: socioeconomic survey, 2019

91. **Income of the Heads of Households**

92. In terms of monthly incomes, the finding based on socio-economic survey shows that average stated monthly income per surveyed household is approximately BDT 41.645.26, with the minimum monthly income reportedly in the range BDT 10,000 to BDT 70,000. Among the 257 households, average monthly incomes of the 210 households have been identified by the survey in which 54 women who are landowners, do not have paid work. However, husbands of 20 women and sons of 2 women earn incomes to run their families.

Table 32: Monthly Family Income of Affected Families

Income Range (BDT)	210 Landowners	9 Caretakers	8 Tenants	2 Businessmen	3 Sharecroppers	22 Traders	3 employees
Total Family Income (Monthly)	96,68,500	1,65,000	1,42,333	1,40,000	60,000	4,95,000	32,000
Average Family Income (Monthly)	46,040.48	18,333.33	17,791.63	70,000	20,000	22,500	10,667

Source: socioeconomic survey, 2019
Note: Distribution of each category of households across income groups is in Table 33 below.

Table 33: Monthly Family Income Range of Affected Families

Income Range (BDT)	Landowners	Caretakers	Tenants	Businessmen	Sharecroppers	Traders	Employee	Total
Less than 20,000	14	5	7		1		**3**	**30**
20,000 to 50,000	140	4	1	1	2	22	**-**	**170**
50,000 to 75,000	36	-	-	-	-	-	**-**	**36**
75,000 – 1,00,000	14	-	-	-	-	-	**-**	**14**
More than 1,00,000	6	-	-	1	-	-	**-**	**7**
Total	**210**	**9**	**8**	**2**	**3**	**22**	**3**	**257**

Source: socioeconomic survey, 2019
Note: The minimum wage rate in Bangladesh for garment workers is BDT 8000.

93. Bangladesh government does not have any directive on minimum wage rate except for readymade garments employees. Minimum wage rate for them is BDT 8000 per month. This Resettlement Plan considers the minimum daily wage rate for the affected daily wage labours at current market rate for wage labour, BDT 400.

B. Status of Land Holding of the Affected Land Owners

94. As reported by the PMU details of the land holding and final ownership of the private land parcels will be made available when the office of the Deputy Commissioner issues notice under Section 8 of ARIPA, 2017 to the actual land owner awardee, based on validation of ownership documents. The final list of land owners as received from the office of the Deputy Commissioner will be appended to the updated resettlement plan. Based on the preliminary survey, it indicates that 95% of the land owners are anticipated to lose less than 10% of their total land holding, while

remaining 5% are estimated to lose 10-12% of their total land holding[17] (out of total 210 land owners, 6 land owners reside on the affected land parcel and will be physically displaced).

IV. INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

A. Public Consultation

95. This chapter describes details of consultations carried out with different stakeholders at all the three package locations. The key objective of the consultative meetings was to get the perception and feedback of the affected population regarding the proposed project. Stakeholder's participation and consultation in project planning promotes transparency, sustainability, and prevents possible delays through amicable conflict management. Involvement of communities having interest in the project area, is vital in project planning and design phase so that grievances and conflicts can be minimized. The concern of communities about the negative impacts and loss of property, loss of income and social kinship can be addressed through the process of consultation.

96. Consultations were carried out with the citizens of Khulna who will be benefited by the project and potentially the project displaced persons within the project footprint and project alignment are the primary stakeholders of the project. Secondary stakeholders of the project include local community leader, business community, NGOs and Civil Society Organizations(CSOs) and KWASA and other related government agencies. The project stakeholders were classified into Primary and Secondary stakeholders. Table 34 provides the stakeholder profile for both of the categories.

97. The survey team conducted 8 consultation meetings that was attended by 148total participants, out of which 102 were male and 46were females in August and September, 2019.

Table 34: Classification of the Stakeholders

Type of Stakeholders	Stakeholder Profile
Primary Stakeholder	Project beneficiaries in Khulna and persons affected due to involuntary displacement and resettlement in the project area.
Secondary Stakeholder	Executing Agency and their supporting agencies, local government, project consultants, Non- Government Organization (NGOs) and Civil Society Organizations (CSOs).

B. Consultation and Participation Methodology

98. The primary consultations were conducted with the affected landowners during the households' socio-economic impact study in which 7 consultation meetings were conducted with various stakeholders through formal and informal meetings and personal contact in the vicinity of the proposed project sites. The assigned consultant with the assistance of KWASA organized meetings with affected landowners' councillors of the Local Govt. and local elites.

99. The consultative process with the stakeholders is aimed at addressing the concerns of the sub-project benefits and impacts, and need to identify their (i) perceptions of improvement of the sewage pumping stations and sewage treatment plants along with the 269.67 sewage networks

[17]Total land holding includes land parcels at project site location and land parcels at other places.

and its impacts; (ii) views on the requirement of acquiring the lands for the construction of sub-projects components for which lands are going to be acquired by the government; laws of land acquisition and ADB's policy on Safeguard Statement; (iv) socio-economic needs; (v) potential beneficiary participation in the project implementation; (vi) role of the different agencies/ officials concerned in the implementation process of the sub-project and (vii) addressing on the consequences of land acquisition, compensation package and resettlement processes in line with the existing land acquisition rules and process dealing with DC office. Women and other vulnerable groups were also consulted concerning the project impact and their livelihood aspects. The feedback received from the different stakeholders, and observations of the survey team at the stakeholders' meetings have been used in preparing the resettlement plan.

C. Findings of Consultation

100. Finding of the consultations with the affected persons at each of the project component location are summarized below:

Table 35: Summary of the Consultation Meetings

Consultation Dates, Venue	Type of consultation	No. of Participants	Key Discussion Issues and Output	Project Response
Tikrabandh, (proposed site of STP-2) Meeting 1: 4 Sept. 2019 Meeting 2: 5 Sept 2019 Meeting 3: 7 Sept 2019	3 community consultation meetings	Meeting 1 Male=27 Female=14 Total=41 Meeting 2 Male=28 Female=12 Total=40 Meeting 3 Male=22 Female=10 Total=32	Issues discussed: (i) Opinion of the participants about impact of the project (ii) Compensation payment procedure (iii) Impact on livelihood based activities due to project intervention (iv) GRM and complaint redress resolution Findings of Consultations: Consultation meetings were held in a cordial atmosphere and each participant took part in discussion spontaneously. Through the consultation process, it was found out that most of the affected persons were worried about losing of their land and agriculture based livelihoods. The people said, compensation for lost properties must be paid to the genuine owner and also they alerted the concerned authorities about intrusion of dishonest middlemen and broker during compensation payment. They discussed about if they have any complaint on compensation or payment related grievance where to approach for solution. However, they were positive towards project.	The Project Authority will take necessary mitigation measures to compensate the lost assets in accordance with ADB's social safeguard policy. All technical and administrative support will be provided to get compensation from the Deputy Commissioners office as well as to get resettlement benefits from KWASA. As per guidelines of ADB, KWASA prepared the Resettlement Plan to restore livelihood and income of affected persons. All affected households will be compensated for their lost properties at current market value. The project will bring more income and employment opportunities. Affected persons will get priority to get employment in project construction works based on qualification and skill. Regarding GRM it was suggested that the aggrieved persons can lodge their complaint with the project contractor, and to the other members of GRC as well.

Lobongochora Sluice Gate (proposed site of SPS) 13 Sept. 2019	Focus Group Discussion	Male=4 Female=1 Total=5	Issues discussed: i. Opinion of the participants about impact of the project ii. Compensation payment procedure iii. Impact on livelihood based activities due to project intervention iv. GRM and complaint redress resolution Consultation meetings were held in a friendly environment and each of the participants took part in discussion amicably. During the consultation process, most of the affected persons were very anxious about losing their land and properties. Affected persons said that the project will be implemented for development of the country but they will lose crop land and income from Agri-based activities, as a result the participants questions were how they will bear the cost of living of their families in the future. They want to know the facilities/entitlements to be provided to them as compensation for their lost properties. During compensation payment, affected person's demanded that their compensation be paid at their village or locality. Regarding income and livelihood activities affected persons also said that there are several types of livelihood scope/opportunities such as agriculture, cattle rearing, poultry rearing, fish culture, handloom, tailoring, day labour, construction, small business etc. They requested the Project Authority to provide actual compensation as early as possible for relocation and restoration of their livelihood. They asked about if they have any complaint on compensation or payment related grievance where to approach for solution.	The Project Authority will take necessary mitigation measures to compensate the lost assets in accordance with ADB's social safeguard policy. All technical and administrative support will be provided to get compensation from the Deputy Commissioners office as well as to get resettlement benefits from KWASA. As per guidelines of ADB, the KWASA prepared the Resettlement Plan to restore livelihood and income of affected persons. All affected households will be compensated for their lost properties at current market value. The project will bring more income and employment opportunities. Affected persons will get priority to get employment in project construction works based on qualification and skill. Regarding GRM it was suggested that the aggrieved persons can lodge their complaint with the project contractor, and to the other members of GRC as well.

Mathabanga (proposed site of STP-1) 12 Sept.2019	Site-specific meeting with affected persons	Male=2 Female=0 Total=2	Issues discussed: i. Opinion of the participants about impact of the project ii. Compensation payment procedure iii. GRM and complaint redress resolution iv. Impact on livelihood based activities due to project intervention Consultation meetings were held in a congenial environment and every participant took part in the discussions willingly. Through the consultation process, it was evident that both of the affected persons were worried about losing their ancestral lands. They expressed that their land is their main source of livelihood through the generations. The people demanded a fair price for their lost land at current market value as the price of land is very high. They said without full compensation at current market value, they will not surrender their possession of acquired land. They asked the authority concerned to provide necessary services to collect the required papers/documents for getting CCL without any intermediary or middlemen. They requested the Project Authority to provide sufficient compensation immediately for restoration of their livelihood. They asked about if they have any complaint on compensation or payment related grievance where to approach for solution. However, the affected persons were positive towards the project.	The Project Authority will take necessary mitigation measures to compensate the lost assets in accordance with ADB's social safeguard policy. All technical and administrative support will be provided to get compensation from the Deputy Commissioners office as well as to get resettlement benefits from KWASA. As per guidelines of ADB, the KWASA prepared the Resettlement Plan to restore livelihood and income of affected persons. All affected households will be compensated for their lost properties at current market value. The project will bring more income and employment opportunities. Affected persons will get priority to get employment in project construction works based on qualification and skill. Regarding GRM it was suggested that the aggrieved persons can lodge their complaint with the project contractor, and to the other members of GRC as well.

Karim Nagar (Proposed plot SPS) 14 Sept.2019	Site-specific consultation meeting with affected persons	Male=2 Female=0 Total=2	Issues discussed: i. Opinion of the participants about impact of the project ii. Compensation payment procedure iii. Impact on livelihood based activities due to project intervention iv. GRM and complaint redress resolution Only 5 persons own the proposed land will be affected with one cowshed and one furniture making house. However, they are willing to provide the land for the acquisition for getting good compensation as government gives the higher price for the acquisition of the new laws that they have known. The owners informed that they were happy to know that government is going to set up sewerage treatment plant that would provide facilities to them for discharging the human excreta in a healthy manner.	As per guidelines of ADB, the KWASA prepared the Resettlement Plan to restore livelihood and income of affected persons. All affected households will be compensated for their lost properties at current market value. The project will bring more income and employment opportunities. Affected persons will get priority to get employment in project construction works based on qualification and skill. Regarding GRM it was suggested that the aggrieved persons can lodge their complaint with the project contractor, and to the other members of GRC as well.
Custom Ghat (proposed site of SPS) (GOVT. Land) 15 Sept.2019	Focus Group Discussion	Male=09 Female=06 Total=15	Issues discussed: i. Opinion of the participants about impact of the project ii. Impact on livelihood based activities due to project intervention iii. GRM and complaint redress resolution Consultation meetings were held in a congenial environment and every participant took part in the discussions willingly. Through the consultation process, it was evident that most of the affected persons were worried about losing their livelihood. It was revealed that due to land acquisition there will be temporary impact on day labourers engaged in jetty and 22 business men. The participants were informed that, the project will acquire a small portion of the land, the traders can use the rest of the plot for their business purpose. As	As per guidelines of ADB, the KWASA prepared the Resettlement Plan to restore livelihood and income of affected persons. The project will bring more income and employment opportunities. Affected persons will get priority to get employment in project construction works based on qualification and skill. They would not be affected as they can continue their business in the rest of the vacant plot. Regarding GRM it was suggested that the aggrieved persons can lodge their complaint with the project contractor, and to the other members of GRC as well.

			because there are no structures so the traders won't get affected due to loss of structures. The day laborers will have scope to engage in project work. Compensation will be paid to them for loss their wages.	
Nirala (Proposed plot SPS) 15 Sept.2019	Individual meeting	Male=1 Female=0 Total = 1	Consultation was done with the landowner who alone owns the largest share of 24.71 decimal land in the proposed land parcel at the Nirala. However, he is willing to provide the land for the acquisition for getting good compensation as govenrment gives the higher price for the acquisition of the new laws that they have known.	The Project Authority will take necessary mitigation measures to compensate the lost assets in accordance with ADB's social safeguard policy. All technical and administrative support will be provided to get compensation from the Deputy Commissioners office as well as to get resettlement benefits from KWASA

D. Planning for Continued Consultation

101. Comprehensive planning is required to assure that government officials, communities, and project staff interacts regularly and purposefully in all stages of the project. Aiming at promotion of public understanding and fruitful solutions to address the local needs of the communities and issues pertaining to resettlement, various sections of affected persons, community members and other stakeholders were consulted through focus group discussions (FGD), meetings and individual interviews. The opinions of the stakeholders and their perceptions were obtained during these consultations. This approach adopted towards the formulation of the resettlement plan would be continued, and documentation of the same improved during the project implementation. The following will be the key stakeholders who will be consulted with at various stages of the project implementation:

(i) All affected persons (APs), program beneficiaries, including representatives of vulnerable households;
(ii) decision makers, policy makers, elected representatives of people, community members, eminent citizens etc.;
(iii) staff of PMU, PIUs etc.;
(iv) officials of the deputy commissioner's office, government departments, banks and NGOs running micro-credit schemes;
(v) officials of the National Housing Authority (if and as required), and
(vi) representatives of the various government departments, as required.

102. It is envisaged that during project implementation, this consultative process will be carried forward to ensure that the affected population and other stakeholders are informed, consulted, and allowed to participate actively in the development process. Care will be taken to ensure that women members of affected families are engaged in the consultation process, involved in decision-making, e.g. related to relocation preferences, if applicable. This will be done throughout the duration of the project, during preparation, implementation, and monitoring of project results and impacts. During implementation and monitoring, information will be disseminated to affected persons and other key stakeholders in appropriate ways (e.g. in case there are any illiterate affected persons, individual meetings will be conducted to explain entitlements, available options etc. in person). This information will be prepared in the local language, as required, describing the main project features including the entitlement matrix.

103. The consultation process established for the Project will employ a range of formal and informal consultative methods. Different techniques of consultation with stakeholders are proposed during project preparation: in-depth interviews, public consultation meetings, focus group discussions etc. The consultations will be held with special emphasis on vulnerable groups. The key informants during the project preparation phase and during RP implementation will include stakeholders such as:

(i) Heads and members of households likely to be affected,
(ii) Groups/clusters of APs,
(iii) Local voluntary organizations and CBOs,
(iv) Government agencies and departments, and
(v) Major project stakeholders, such as women, trader's associations, community based organizations, etc.

104. The RP will be updated and implemented in close consultation with stakeholders and will involve focus group discussion (FGD) and meetings, particularly with affected households.

Census of households and individuals located within the Program will be undertaken to register and document the status of the potentially affected population within the impact area. It will provide a demographic overview of the population served by the RP and profiles of household assets and main sources of livelihood. It will cover 100% of the potentially affected population within the project impact area. Consultations with APs during RP preparation will ensure that views of APs on compensation and rehabilitation measures, relocation preferences, livelihood training preferences and aptitudes are fully incorporated while consultations conducted during RP implementation will identify help required by APs during rehabilitation.

105. The effectiveness of the resettlement and rehabilitation process is directly related to the degree of continued involvement of those affected by the project. The PMU will ensure that APs and other stakeholders are informed and consulted about the project, its impact, their entitlements and options, and allowed to participate actively in the development process. This will be done particularly in the case of vulnerable individuals and groups, who will be encouraged to choose options that entail the lowest risk. This exercise will be conducted/continued throughout the project life—during preparation, implementation, and monitoring of subproject results and impacts.

106. For any subsequent consultations held (post draft RP preparation), the PMU will meticulously document the consultation process (with minutes of meetings, recordings with the permission of participants, photographs and signature sheets) and ensure that any views of APs, particularly vulnerable APs, related to the resettlement process are addressed. The PMU will ensure that groups and individuals consulted are informed about the outcome of the decision-making process and confirm how their views were incorporated.

107. KWASA will continue to conduct and carefully record meaningful consultation with affected persons, during implementation of the resettlement plan at each of the three package locations. Meaningful consultation is a process that: (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) undertakes in an atmosphere free of intimidation or coercion; (iv) needs to give importance to gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues. Consultation will be carried out in a manner commensurate with the impacts on affected communities. Particular attention will be needed for the affected landowners, affected day-laborer and small traders (non-titleholders) who are working in the Custom Ghat and Motiarkhali Khal Par, disadvantaged or vulnerable groups, especially those below the poverty line, the landless, the elderly, female headed households, women and children. The consultations process to be continued throughout the project cycle from the very beginning of project to end of the project implementation among the DPs and different stakeholders of the project.

108. During the implementation stage, consultation with concerned stakeholders will continue for smooth implementation of the resettlement plan. Through public consultations, the affected households will be informed regularly about the grievance redress process. The effectiveness of resettlement implementation is related to the continuous involvement of those affected by the project. Several additional rounds of consultations with the affected households will be carried out during detail design and Resettlement Plan implementation. The other round of consultation will occur when compensation and assistance will be provided and actual resettlement begins. Information disclosure will be carried out for effective implementation and timely execution of

Resettlement Plan. For continued consultations in project design and implementation, the following steps are proposed:

(i) KWASA along with the Resettlement Specialist/ Social Safeguards Specialist will organize public meeting and will appraise the communities about the progress in the implementation of resettlement and social activities.
(ii) KWASA along with the Resettlement Specialist/ Social Safeguards Specialist will organize public meeting to inform the community about the compensation and assistance to be paid. Regular update of the progress of the resettlement component of the project will be placed for public display at the local level KWASA office and local Union Parishads.
(iii) All monitoring and evaluation reports of the Resettlement Plan components of the project will be disclosed in the same manner as that of Resettlement Plan.
(iv) Key features of Resettlement Plan, particularly entitlement and institutional arrangement for grievance redress will be summarized in a booklet and distributed among the affected households and their communities along with the project corridor.
(v) KWASA along with the Resettlement Specialist/ Social Safeguards Specialist will conduct information dissemination session at major intersection and solicit the help of the local community leader to encourage the participation of the affected households in Resettlement Plan implementation.
(vi) Attempts will be made to ensure that vulnerable affected persons understand the process and to take their specific needs into account.

E. Information Disclosure

109. Information will be disseminated to the affected persons at various stages, during the project implementation period. For the benefit of the community in general and affected households in particular, a summary of the resettlement plan will be made available in Bengali during consultation meetings and will be disclosed at KWASA offices and at local union and Upazila Parishad prior to project appraisal. Key features of the Resettlement Plan, particularly the entitlements, institutional arrangements for grievance redress, etc. will be summarized in a leaflet and distributed among the affected households and their communities in the project area. This will enable stakeholders to provide inputs on the resettlement process, prior to the award of civil work contracts.

110. The Executing Agency through the PMU and the Social Safeguard and Resettlement Specialist will provide relevant information related to entitlements, compensation, relocation, duration of civil construction work, grievance redress mechanism, as specified in this resettlement plan document in a timely manner, in an accessible place and in a form and language(s) understandable to the affected persons (Bengali language) and other stakeholders. For illiterate people, suitable other communication methods such as briefing them, holding discussions/ meetings, broadcasting in the radio/television etc. will be used. In case, if there is no impact on the community the Executing Agency will disclose the issue by informing the community members under the project that no land or structure, irrespective of their title will be affected by any activities of this project activities. The report of this disclosure giving detail of date, location will be shared with ADB. The cost required for this purpose to be included in the resettlement plan budget. The details on consultation process and disclosure at various phases of project development including the responsible agency are described in Table 36.

Table 36: Consultation and disclosure roles and responsibilities at different stages

Project Phase	Activities	Details	Responsible Agency
Project Initiation Stage	• Information dissemination on various Subproject components • Disclosure of information on proposed land acquisition requirements to affected persons based on preliminary design • Preliminary information sharing about the tentative alignment/ sites to the affected persons in case of temporary impact on business, income and livelihood	• Leaflets containing information on the Project and sub-project area to be prepared • Public notice issued in public places including newspapers and direct consultation with APs	PMU with the support of the Social Safeguard and Resettlement Specialist
Resettlement Plan Preparation Phase	• Stakeholder consultations	• Further consultations with affected persons and households, titled and non- titled-holders. • Summary of resettlement plan made available to all affected persons at the convenient place which is easily accessible and should be in local language (Bengali)	PMU with the support of the Social Safeguard and Resettlement Specialist
	• Disclosure of final entitlements and rehabilitation packages and disclosure of draft Resettlement Plan	• Resettlement Plan disclosed to all affected persons (both title holders and non-title holders in local language (Bengali)	PMU with the support of the Social Safeguard and Resettlement Specialist
	• Finalization of Resettlement Plan	• Review and approval of Resettlement Plan by Executing Agency. • Review and approval of Resettlement Plan by ADB (prior to award of contract). • Disclosure of the Resettlement Plan on ADB and KSSDP, KWASA Website. • Disclosure of the Final Resettlement Plan to the affected persons.	PMU with the support of the Social Safeguard and Resettlement Specialist
Resettlement Plan Implementation Stage	• Consultation with APs during RP implementation	• Consultations with the affected persons; • Payment of entitlements prior to displacement or relocation; • Written notification from KWASA to ADB that all compensation paid before displacement and start of civil work	PMU

V. POLICY AND LEGAL FRAMEWORK

111. The legal framework for the project is based on applicable legal and policy frameworks of the Government of Bangladesh, namely The Acquisition And Requisition Of Immovable Property Act, 2017 (ARIPA) and ADB's Safeguards Policy Statement (SPS), 2009. Under the law, the owners affected by the acquisition will be eligible to receive compensation for (i) land permanently acquired (including standing crops, trees, houses); and (ii) any other impact and damages caused by such acquisition. In accordance with the land acquisition Act, the legal process is initiated by an application by the requiring agency or department to the Deputy Commissioner (DC) of the concerned District with a detailed map of the proposed area. In determining the compensation, the Deputy Commissioner considers the recorded price of land transacted during the past 12 months in the Project area, plus 200 percent premium on the assessed value of the property for compulsory acquisition. The new Act of 2017, however, does not cover the project Affected Persons such as informal settlers/squatters or persons without titles or ownership records. Further, being a relatively new policy, the compensation payment needs to be studied by an appropriate authority (which, in case of the project, is the Property Valuation Advisory Committee (PVAC)) to ensure that it constitutes replacement cost of the property acquired, in line with ADB policy.[18]In case of discrepancy between the policies of ADB and the government, the ADB policy will prevail.

A. The Acquisition and Requisition of Immovable Property Act, 2017 (ARIPA)

112. For the determination/ assessment of the price the existing Land Law of theGoB,2017[19] spells outs the following points: Matters to be considered in determining compensation:

(i) in determining the amount of compensation to be awarded for any property to be acquired under this Part, the Deputy Commissioner shall take into consideration-

(a) the market value of the property at the date of publication of the notice under section 4:
(b) Provided that in determining such market value, the Deputy Commissioner shall take into account the average value, to be calculated in the prescribed manner, of the properties of similar description and with similar advantages in the vicinity during the twelve months preceding the date of publication of the notice under section 4;
(c) the damage that may be sustained by the person interested, by reason of the taking of any standing crops or trees which may be on the property at the time of the making of the joint list;
(d) the damage that may be sustained by the person interested by reason of severing such property from his other property;
(e) the damage that may be sustained by the person interested by reason of the acquisition injuriously affecting his other properties, movable or immovable, in any other manner, or his earnings; and

[18] The PVAC will confirm the replacement cost of land and structures and recommend if any top-up is required to ensure compensation at replacement cost.
[19] The acquisition and requisition of immovable property act (ARIPA), 2017.

(f) if in consequence of the acquisition of the property, the person interested is likely to be compelled to change his residence or place of business, the reasonable expenses, if any, incidental to such change.

(ii) While the government is acquiring land, it shall provide the persons interested with compensation of 200 per centum of the market price as defined in sub-section 1(a): Provided that if the government acquires the land for any non-government person then the amount of compensation shall be 300 per centum.

(iii) In cases of injuries made under sub-section 1(b), (c), (d) and (e), additional 100 per centum compensation shall be provided.

(iv) Notwithstanding any compensation provided under this section, necessary steps may be taken to rehabilitate evicted persons due to acquisition in the prescribed form.

113. The first step in acquiring land is an application to the Ministry of Land through the concerned ministry requesting requisition and transfer of the land and property in question. A detailed statement specifying whether the land mentioned in the application is needed for public or private purpose, the area of the land, a sketch-map, purpose for which it could be used, etc. should be submitted as well. The Ministry of Land examines the application and sends it to the concerned Deputy Commissioner for necessary action. The Deputy Commissioner then authorizes the Additional Deputy Commissioner related to land (ADC Revenue) to prepare and execute a plan of action for requisition. The Deputy Commissioner in turn issues a public notice regarding the acquisition with a view to settling matters relating to payment of compensation to the owner or owners of the property or any other person or persons entitled to compensation, and any other related issues. When any property is required temporarily for a public purpose or in the public interest, the Deputy Commissioner may requisition it by an order in writing. In case of such a requisition of property, compensation shall be paid to the owner or owners of the property determined in accordance with legal provisions, and the decision taken by the government is deemed to be final. Any person who contravenes or attempts to contravene an order, or who obstructs the enforcement of an order, is punishable with imprisonment for a term which may extend to three months, or with a fine which may extend to Taka three thousand, or with both.

B. ADB's Safeguard Policy Statement (2009)

114. The objectives of ADB's Safeguard Policy Statement (SPS) 2009 with regard to involuntary resettlement are:(i) to avoid involuntary resettlement wherever possible; (ii) to minimize involuntary resettlement by exploring project and design alternatives; to enhance, or at least restore, the livelihoods of all displaced persons in real terms relating to pre-project levels; and (iii) to improve the standards of living of the displaced poor and other vulnerable groups.

115. ADB's Safeguard Policy Statements covers physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. It covers them whether such losses and involuntary restrictions are full or partial, permanent or temporary.

116. For any ADB financed projects requiring involuntary resettlement, resettlement planning is an integral part of project design, to be dealt with from the earliest stages of the project cycle, taking into account the following basic principles:

(i) Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.

(ii) Carry out meaningful consultations with affected persons, host communities, concerned nongovernment organizations and other relevant stakeholders. Inform all displaced & affected persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population.

(iii) Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.

(iv) Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.

(v) Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards.

(vi) Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.

(vii) Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.

(viii) Prepare a resettlement plan for all packages with resettlement impacts elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.

(ix) Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final resettlement plan and its updates to affected persons and other stakeholders.

(x) Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts,

consider implementing the involuntary resettlement component of the project as a stand-alone operation.

(xi) Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.

(xii) Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.

C. Comparison Between ARIPA, 2017 and ADB SPS, 2017

117. Difference between the national land acquisition act and principles laid down in ADB SPS, 2009 is compared in the table below and the measures to bridge the gaps are discussed.

Table 37: Comparison between Government of Bangladesh Laws and ADB Safeguard Policies on Land Acquisition and Resettlement

Sl. No.	ADB's SPS (2009)	The Acquisition and Requisition of Immovable Property Act (ARIPA) of 2017	Gaps Between ARIPA and ADB's Policies and Action Taken to Bridge the Gap
1	Involuntary resettlement should be avoided wherever possible	The Act has no direct statement that involuntary Resettlement should be avoided. **The Secion-4 of the act mentions:** 4. Publication of preliminary notice of acquisition of immovable property:(1) Whenever it appears to the Deputy Commissioner that any property in any locality is needed or is likely to be needed for any public purpose or in the public interest, he shall cause a notice to be published at convenient places on or near the property in the prescribed form and manner stating that the property is proposed to be acquired.	The Executing Agency will follow ADB's SPS to avoid involuntary resettlement where feasible, if involuntary resettlement impacts cannot be avoided mitigation measures will be taken as per policy
2	Regarding the compensation issue, ADB safeguards policy 2009 spells out the following points: The borrower/client will provide adequate and appropriate replacement land and structures or cash compensation at full replacement cost for lost land and structures, adequate compensation for partially Damaged structures, and relocation assistance, if applicable, to those persons described in	Payment of compensation at "market value" for the properties acquired for development projects. **Land Acquisition Acts does not clearly mention regarding the 'full replacement cost'.** The Section-9 of the ARIPA, 2017 point outs the following: **9. Matters to be considered in determining compensation:** (1) In determining the amount of compensation to be awarded for any property to be acquired under this Part, the Deputy Commissioner shall take into consideration- (a) the market value of the property at the date of	The Executing Agency will ensure the full replacement cost dealing with ADB safeguards policy, and will address the gaps between the government and ADB policy

Sl. No.	ADB's SPS (2009)	The Acquisition and Requisition of Immovable Property Act (ARIPA) of 2017	Gaps Between ARIPA and ADB's Policies and Action Taken to Bridge the Gap
	para. 7(i) and 7(ii) prior to their relocation.		
3	For those persons described in para. 7(iii), the borrower/ client will compensate them for the loss of assets other than land, such as dwellings, and also for other improvements	Publication of the notice under section 4: Provided that in determining such market value, the Deputy Commissioner shall take into account the average value, to be calculated in the prescribed manner, of the properties of similar description and	The Executing Agency will ensure payment of compensation for the lost assets to both title holders and non-title holders for their lost assets.
4	to the land, at full replacement cost. The entitlements of those under para. 7(iii) is given only if they occupied the land or structures in the project area prior to the cutoff date for eligibility for resettlement assistance.	with similar advantages in the vicinity during the twelve months preceding the date of publication of the notice under section 4; (b) the damage that may be sustained by the person interested, by reason of the taking of any standing crops or trees which may be on the property at the time of the making of the joint list; (c) the damage that may be sustained by the person interested by reason of severing such property from his other property; (d) the damage that may be sustained by the person interested by reason of the acquisition injuriously affecting his other properties, movable or immovable, in any other manner, or his earnings; and (e) if in consequence of the acquisition of the property, the person interested is likely to be compelled to change his residence or place of business, the reasonable expenses, if any, incidental to such change. (2) While the government is acquiring land, it shall provide the persons interested with compensation of 200 per centum of the market price as defined in sub- section 1(a): Provided that if the government acquires the land for any non-government person then the amount of compensation shall be 300 per centum. (3) In cases of injuries made under sub-section 1(b), (c), (d) and (e), additional 100 per centum compensation	

Sl. No.	ADB's SPS (2009)	The Acquisition and Requisition of Immovable Property Act (ARIPA) of 2017	Gaps Between ARIPA and ADB's Policies and Action Taken to Bridge the Gap
		shall be provided. (4) Notwithstanding any compensation provided under this section, necessary steps may be taken to rehabilitate evicted persons due to acquisition in the prescribed form.	
5	As per ADB safeguards policy, displaced persons in a project area could be of three types: (I) persons with formal legal rights to land lost in its entirety or in part; (ii) persons who lost the land they occupy in its entirety or in part who have no formal	**ARIPA, 2017 of the GOB does not allow to be compensated to the persons who do not have legal title of the lands/ assets to be acquired.** It recognizes only the entitlements of the legal titleholders who are capable of establishing their ownership rights. The only exception is for sharecroppers who have	Non-titleholders are considered eligible to receive compensation as per ADB safeguards policy.
6	legal rights to such land, but who have claims to such lands that are recognized or recognizable under national laws; and (iii) persons who lost the land they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land. The involuntary resettlement requirements apply to all three types of displaced persons.	cultivated standing crops under a legally constituted written agreement; they are entitled to a part of the compensation money as provided for in the written agreement. **12. Payment of compensation to *bargadar***: (sharecropper) Notwithstanding anything contained in this Act, when the property acquired under this Part contains standing crops cultivated by *bargadar*, such portion of the compensation as may be determined by the Deputy Commissioner for the crops shall be paid to the *bargadar*. **23.** Payment of compensation: (1) On section 22, the Deputy Commissioner's the compensation awarded by him to the thereto according to the award, and shall prevented by any of the contingencies (2).	
7	Preference will be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based	The laws indicate cash compensation for properties to be acquired.	The Project may consider land for land for vulnerable affected persons on case to case basis

Sl. No.	ADB's SPS (2009)	The Acquisition and Requisition of Immovable Property Act (ARIPA) of 2017	Gaps Between ARIPA and ADB's Policies and Action Taken to Bridge the Gap
8	The rate of compensation acquired housing, land and to assets will be calculated at replacement costs. The calculation of full replacement cost will be based on following elements: (I) fair mar value; (ii) transaction costs; interest accrued, (iv)transition and restoration costs; and other applicable payments,	Section-9 of the Land Acquisition is mentioned: 9. Matters to be considered in determining compensation: (1) In determining the amount of compensation to be awarded for any property to be acquired under this Part, the Deputy Commissioner shall take into consideration- (a) the market value of the property at the date of publication of the notice under section 4: Provided that in determining such market value, the Deputy Commissioner shall take into account the average value, to be calculated in the prescribed manner, of the properties of similar description and with similar advantages in the vicinity during the twelve months preceding the date of publication of the notice under section 4; (b) the damage that may be sustained by the person interested, by reason of the taking of any standing crops or trees which may be on the property at the time of the making of the joint list; (c) the damage that may be sustained by the person interested by reason of severing such property from his other property; (d) the damage that may be sustained by the person interested by reason of the acquisition injuriously affecting his other properties, movable or immovable, in any other manner, or his earnings; and (e) if in consequence of the acquisition of the property, the person interested is likely to be compelled to change his residence or place of business, the reasonable expenses, if any, incidental to such change. (2)While the government is acquiring land, it shall provide the	ADB safeguards policy is consistent with the Govt. acts at large in case of considering market price/value, however, it is not consistent with the 'Replacement Cost' which needs to be addressed by the Executive Agency in the resettlement plan.
9	Establishment of Grievance Redress Mechanism/ Committee for resolving the Grievances of the affected persons	**Land Acquisition Laws does not ha any provision of forming GRM/GRC.** The affected persons may appeal in dealing with the following section of the land acquisition acts: **Objections against acquisition: (1**) Any person concerned may file an objection	As per ADB Safeguards Policy 2009, GRM/ GRC will be established to redress the grievances of the project affected persons and appraise them on the same.

Sl. No.	ADB's SPS (2009)	The Acquisition and Requisition of Immovable Property Act (ARIPA) of 2017	Gaps Between ARIPA and ADB's Policies and Action Taken to Bridge the Gap
		against the acquisition proceeding to the Deputy Commissioner within 15 working days. (2) The Deputy Commissioner shall, speedily hear the objection filed under sub-section 1 in the presence of the appellant or an agent, after hearing all such objections and after making such further inquiry, if any, as he thinks necessary, prepare a report within thirty working days, and in case of a nationally important project within 15 working days, following the expiry of the period specified under sub- section (1) containing his opinion on the objections.	
10	Meaningful consultations with affected persons, host communities, and concerned nongovernment organizations, and establish a grievance redress mechanism that would receive and facilitate resolution of the concerns of the affected persons.	**No provisions for stakeholder consultations or to establish a grievance redress mechanism.** Affected persons may raise objections to land acquisition only after section 5 Notice is issued, while disputes over land acquisition have to be settled through an arbitrator or the courts of law. The Section-4 spells out: 4**. Publication of preliminary notice of acquisition of immovable property:(**1) Whenever it appears to the Deputy Commissioner that any property in any locality is needed or is likely to be needed for any public purpose or in the public interest, he shall cause a notice to be published at convenient places on or near the property in the prescribed form and manner stating that the property is proposed to be acquired. (2) In case of acquisition of immovable property for any	Stakeholder consultation and disclosure meetings with the project affected persons are required before starting the staring the acquisition process by the Government. Any grievances will have to be addressed as per established/ agreed GRC of the project.
11	Need to conduct census for the Displace Persons (DPs) for resettlement plan	**Govt. laws does not have any provision for conducting census/ socio-economic survey for those who will be displaced due to land acquisition.** The laws spell out: **40. Power to enter and inspect: (1**) With a view to acquiring or requisitioning any property or determining the compensation payable in respect	As per ADB safeguards policy census survey for the affected households for the assessment of the affected properties required, and the findings will be incorporated in the resettlement plan

Sl. No.	ADB's SPS (2009)	The Acquisition and Requisition of Immovable Property Act (ARIPA) of 2017	Gaps Between ARIPA and ADB's Policies and Action Taken to Bridge the Gap
		thereof or securing compliance with an order made under this Act, the Deputy Commissioner or any officer, generally or specially authorized by the Deputy Commissioner in this behalf, and any of the assistants and workmen may- (a) enter upon and survey and take levels of any property; (b) inspect any property or anything therein; (c) measure and set out the boundaries and prepare a plan of any property and the intended line of the work, if any, proposed to be made thereon; (d) mark such levels, boundaries and line by placing marks and cutting trenches, and, where otherwise the survey cannot be completed and the levels taken and the boundaries and line marked, cut down and clear away any part of any standing crop, tree or jungle: **41. Power to obtain information:** With a view to acquiring or requisitioning any property or determining the compensation payable in respect thereof, the Deputy Commissioner may, by order in writing, require any person to furnish to such officer or authority, as may be specified in the order, such information in his possession as may be specified relating to any property which is acquired or requisitioned, or intended to be acquired or requisitioned, under this Act.	
12	A comprehensive income and livelihood rehabilitation program, supported by an adequate budget, is in place to help displaced persons improve, or at least restore, their incomes and livelihoods	Govt. laws does not have any provision for providing livelihoods support for those who will be displaced due to land acquisition.	Livelihood restoration/ support program and budget will be included in the Resettlement Plan document.

ADB = Asian Development Bank, ARIPA = Acquisition and Requisition of Immovable Property Act, 2017, IOL = inventory of losses, SPS = Safeguard Policy Statement.

VI. ENTITLEMENTS, ASSISTANCES AND BENEFITS

118. The project entitlement policy addresses the direct and indirect impacts of construction works and operation on affected households and communities. As per this resettlement plan prepared for the KSSDP project all affected households and persons will be entitled to a combination of compensation packages and resettlement assistance, depending on the nature of ownership rights on lost assets, scope of the impacts including vulnerability of the displaced persons, and measures to support livelihood restoration if livelihood impacts are envisaged.

119. Compensation eligibility is limited by a cut-off date. The project entitlement matrix identifies and lists the various types of losses resulting out of the project and specific compensation and resettlement packages for each category. The section of the Entitlement Matrix relevant to this component is given in Table 38.

A. Eligibility

120. All affected persons working or living within the project footprint, identified finally during the DMS based on detail design under the three packages, and are likely to be impacted due to the construction activities and land acquisition, irrespective of the type/category to which they belong[20] will be eligible to receive compensation under this resettlement plan.

121. The initial transect walk and socio-economic survey has identified loss of land for construction of STPs and SPSs, loss of livelihood, physical displacement due to land acquisition and impeded access. Therefore, affected persons are:

(i) Those land owners who will lose land due to acquisition (titleholders);
(ii) Tenants, caretakers, sharecroppers, traders, daily wage labors, who are using the land to be acquired, by virtue of some arrangement with the affected land owner;
(iii) Persons whose normal activities will be disturbed due to the laying of sewer pipelines, open trenches, excavated soil and movement of machineries (local residents, road side shops, vendors, etc.); and
(iv) Affected persons belonging to socially, physically, economically vulnerable group.

B. Cut-Off-Date

122. For legal title-holders, the date of publication of the notice by the Deputy Commissioner under Section 4 of ARIPA, 2017 will be considered as the cut-off date. The date of Detail Measurement Survey (DMS) will be the cut-off-date for the affected non-titleholders. Any persons moving into the project area after the cut-off date will not be entitled for compensation or assistance under the project.

123. All Affected Persons who are identified within the Project footprint on the cut-off date will be entitled to receive compensation for their affected assets, and rehabilitation measures (as outlined in the entitlement matrix below) sufficient to assist them to improve or at least maintain their pre-project living standards, income-earning capacity and production levels. Compensation eligibility is limited by a cut-off date which will be the date of Details Measurement Survey for the

[20] ADB SPS SR II para 7 specifies that displaced persons in a project area could be of three type: (i) persons with formal legal rights to land lost in its entirety or in part; (ii) persons who lost the land they occupy in its entirety or in part who have no formal legal rights to such land, but who have claims to such lands that are recognized or recognizable under national laws; and (iii) persons who lost the land they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land.

non-titleholders in this case. The KWASA will inform the affected persons and other stakeholders about the cut-off date. The written notices will be provided to the affected persons detailing information about the cut-off; eligibility for compensation, and process paying compensation.

C. Types of Losses by Impact Category

124. The anticipated losses for construction of the STPs and SPSs include (i) loss of land (ii) loss of residential/commercial structures other assets; (ii) loss of trees; (iii) loss of crops; (iv) loss of business/livelihood; (v) temporary loss of work days/incomes, and (vi) relocation of households and businesses and (vii) impact on vulnerable persons.

125. According to ADB SPS 2009 in the context of economic impacts due to involuntary resettlement vis-à-vis, affected persons are those who are economically displaced (loss of productive land, structures, assets, access to assets, income sources, or means of livelihood). The absence of formal legal title to land does not bar the affected person from receipt of compensation and resettlement assistance from the project. Vulnerable affected persons are eligible for additional compensation and assistance and are to be accorded priority in employment in project related construction activities.

126. DMS based on the detail final design will be conducted before start of construction work and the impacts will be further assessed and updated in the resettlement plan.

127. The entitlement matrix (Table 38) summarizes the types of possible losses and corresponding entitlements in accordance with ADB and government policies, based on the principle of replacement cost. In addition to the estimated impacts, the entitlement matrix safeguards unforeseen impacts.

128. In accordance with the entitlement matrix for the project, all affected households and persons will be entitled to a combination of compensation packages and resettlement assistance, scope of the impacts including socioeconomic vulnerability, and measures to support livelihood/ income restoration.

D. Entitlements

129. The entitlement matrix (Table38) summarizes the types of possible losses and corresponding entitlements in accordance with ADB SPS, 2009 and government policies, based on the principle of replacement cost. In addition to the estimated impacts, the entitlement matrix safeguards unforeseen impacts.

130. In accordance with the entitlement matrix for the project, all affected households and persons will be entitled to a combination of compensation packages and resettlement assistance, scope of the impacts including socioeconomic vulnerability, and measures to support livelihood/income restoration.

E. Assessment of Compensation of the Affected Properties

131. **Land:** All lands proposed to be acquired under this project will be compensated according to both Government and ADB policies. The design consultants have prepared the site plan overlaying on the cadastral map to define the area that to be acquired.

132. The process of the land acquisition is dealt with the approval of the Administrative Ministry (Ministry of Local Government) and concerned Deputy Commissioner. In determining the amount of compensation for the proposed land parcels, the Deputy Commissioner shall take into consideration the market value of the property at the date of publication of the notice under section 4. The market value is determined, taking into account the average value of similar properties in the immediate vicinity during the twelve months preceding from the date of publication of the notice under section 4. The affected land owners will also be eligible under the law to receive compensation for trees, crops, or any other movable or immovable asset attached to the affected land. The affected land owners will be eligible to receive twice the market price of the land if government is acquiring the land and additional 100 per centum for any assets attached to the land. Under ARIPA, cash compensation under law(CCL) is calculated considering 2 times of the market price of land (as compensation against land loss) plus one time market price of land for compensation against structures and assets attached to the land. Property Valuation Advisory Committee (PVAC) will be formed through a gazette notification, who will review the CCL against the market price (replacement cost) of the land and properties affected by the project, and recommend if any top-up is required, to meet the replacement cost requirement. KWASA will ensure that the replacement cost of land as assessed by the Property Valuation Advisory Committee and the differential if any, between cash compensation under law and the market price identified by PVAC, is paid to the affected landowners. With the enhanced compensation under ARIPA 2017, KWASA assesses that such top-up willl not be required. In the event that no differential is observed, PVAC will certify the same.

133. **Assessment of Private Buildings and Structures**. The socio-economic survey team has identified residential houses i). 15 households in Thikrabad, ii). 7 households in Labonchara sluice gate, iii). 1 household in Karim Nagar and iv). 1 household in Islamia College road will have to be displaced due to land acquisition.

134. At Karim Nagar, there is 1 cow-shed and 1 furniture making house that has been established at the proposed plot for SPS. Both the units are operated by two different persons (tenants), one of them resides there. However, there are no structures in other land-plots located within the city corporation area.

135. The team collected socioeconomic information on the affected households along with associated properties like residential buildings/ structures and trees only. The cost / value of the assets as per market price has also been determined through the interviews/ consultations of the affected people. The land acquisition department under the Office of the Deputy Commissioner has already completed its survey for affected houses, buildings and other immovable properties for the assessment of the price for the affected properties. As per rule of the government procedure, the land acquisition department under the Office of the Deputy Commissioner will determine the cash compensation under law as per provisions under ARIPA. Under ARIPA, CCL is calculated considering 2 times of the market price of land (as compensation against land loss) plus one time market price of land for compensation against structures and assets attached to the land. As specified in the entitlement matrix, any difference between the replacement cost and CCL will be determined by the PVAC and paid in the form of top-up (for land as well as structures and other assets).[21]KWASA has to ensure that the assessment is done in keeping consideration with the market price and consultation with owners by assessing sources, types and cost of materials, usage of buildings, the cost related to labor and transportation etc.

[21] In order to arrive at the replacement cost of structures, PVAC will compare the CCL against the PWD schedule of rates adjusted for inflation until the year of compensation payment, and will gather additional information from market surveys, if required. The project consultants will assist the PVAC in conduct of any market surveys required.

136. **Trees and Crops.** For loss of crops, 60 days advance notice will be given to harvest crops and if harvest is not possible, cash compensation equal to prevailing market price will be given.

137. For loss of trees to landowners: Cash compensation under Law (CCL) as per ARIPA, 2017, or, cost of trees based on annual net product value multiplied by number of productive years remaining, whichever is higher, will be paid. For fruit bearing trees,60 days advance notice will be given to harvest existing fruits, and compensation will be calculated at market value of annual net product multiplied by the number of productive years, to be determined by the Horticulture Department. Compensation at market value of timber in case of timber-bearing trees, will be determined by the Forest Department.

138. For non-titled tree owners, computation of compensation against trees loss will be as follows: For fruit bearing trees, compensation will be calculated at market value of annual net product multiplied by the number of productive years, to be determined by the Horticulture Department. Compensation at market value of timber in case of timber-bearing trees, will be determined by the Forest Department.

139. Of the 1186 affected trees, the survey team identified 550 trees from 45 land owners at Tikrabandh, one of the significant affected locations among the 10 locations. For trees producing timber will be based according to their species, age and quality and the cost will be collected after consultation with the divisional forest office, and the compensation/ unit price will have to be determined in consultation with agriculture/horticulture experts.

140. **Community and Government Buildings and Structures.** Community or any government structure has not been identified in the proposed land acquisition area or project foot print, hence, compensation will not be required in this connection.

141. **Business or Sources of Income**. The survey team has found 03 share croppers at proposed SPS site at Mathabhanga. The affected persons are using the plot for seasonal fish cultivation during monsoon period. Due to land acquisition, they are going to face permanent livelihood loss. Socio-economic survey of these 03 families was undertaken. During the consultation, the affected fish-farmers told that they would collectively lose an yearly income of about BDT 240,000 approximately from the fish-farming.

F. Income restoration and rehabilitation

142. Income restoration assistance to the affected persons includes both short and medium term strategies. Short term income restoration strategies are for immediate assistance during relocation and include the following:

(i) Compensation for land, structures, and all other lost assets is required to be paid to the Affected Persons by the government in full before physical or economic displacement;
Affected Persons who are losing entire structures entitled to shifting and reconstruction allowance (cash) for moving to alternative premise for re-establishing house/business
(ii) Shifting allowance for households based on actual cost of moving/unloading
(iii) 60 days' advance notice is required to harvest standing seasonal crops, if harvest is not possible, compensation for share of standing crops at market rates.
(iv) 60 days’ advance notice is required to harvest the fishing from the water body located at the Lobonchora Mathabhanga. Actual loss of the business during the

closing month, in addition, lump-sum compensation/ grant is required for shifting the business elsewhere that should be based on the nature of losses of business and associated properties.

(v) For vulnerable groups, additional subsistence allowance equal to their average three months' income BDT 15,000 per vulnerable households for restoring or enhancing their livelihood. Vulnerable households will be prioritized in any project employment.

(vi) The Social Safeguard and Resettlement Specialist from Project management and Supervision Consultant along with PMU will (a) conduct a transect walk jointly with contractor; to determine the extent / nature of impacts. Such walks will establish the need for DMS on each road stretch; (b) conduct a detailed measurement and inventory of losses survey; to establish the number of affected persons/businesses along each proposed waste water pipe alignment/road stretch/sites and potential impacts and enable an inventory of losses; (c) update the resettlement plan (identifying potential losses); and (d) send the updated resettlement plan to PMU and ADB for review and approval after detailed designs and surveys are complete.

(vii) The PMU along with the support of the Social Safeguard and Resettlement Specialist and NGO will collect details of bank accounts of affected persons, and assist those without bank accounts to open the same.

(viii) Affected persons can then access the compensation /assistance / allowances provided from the project.

(ix) PMU to give formal clearance to the contractor to proceed with civil works, through a certification to proceed with work, after all compensation is paid.

(x) PMU to keep accounts, record of affected persons, amounts paid, and receipts record for accounting purposes and submit copies of records in the periodic Social Monitoring Report to ADB.

G. Compensation Mechanism

143. Compensation to all affected families will be paid on the basis of Entitlement Matrix prepared in accordance with GOB and ADB SPS, 2009 policies. Appropriate compensations for all types of impact as identified during socio-economic survey and consultation with the affected persons has been included in the Entitlement Matrix, presented in Table 38.

Table 38: Entitlement Matrix

Sl. No.	Type of Loss	Application	Entitled Person	Compensation Entitlements	Remarks
A.	**Loss of Land**				
A.1	Loss of private land	Agricultural, homestead, vacant land	Land owner (s) with legal title	(i) Cash compensation under land (CCL) as per ARIPA, 2017 or replacement cost for land whichever is higher. If the replacement cost is more than the CCL, the difference is to be paid by the project in the form of assistance • All fees, taxes, or other charges, as applicable under relevant laws are to be borne by the project. • Option to be compensated for entire land parcel (if the remaining fragmented plot remains unviable for use), if remaining land is no longer viable • Additional compensation for vulnerable household, as specified in row # F	• CCL for land and assets attached to the land will be paid through the office of the Deputy Commissioner. • The difference between the replacement cost and the cash compensation under the law will be paid by the Executing Agency as a top up to the cash compensation paid under law. • The displaced households will be allowed to take all salvage materials of structures, trees and crops free of cost. • Vulnerable households to be identified during DMS as part of resettlement plan update.
A.2	Loss of private land	Agricultural, homestead, vacant land	Tenants and lease holders	(i) Compensation equivalent of up to 3 months of rental (ii) Additional compensation for vulnerable households as specified in row # F	• Landowners will reimburse tenants andleaseholdersand rental deposit or unexpired lease. • Vulnerable households to be identified during DMS as part of resettlement plan update
A.3	Loss of private land	Agricultural land	Sharecroppers	(i) 60 days advance notice to harvest standing seasonal crops, if harvest is not possible, compensation for crops as specified in row # C (ii) 60 days advance notice to harvest the fish livestock and additional compensation for the investments made for fishing activity as specified in row # C	• Work schedule to allow harvesting of crops and fish prior to acquisition and avoid harvest season. • Vulnerable households to be identified during DMS as part of resettlement plan update

Sl. No.	Type of Loss	Application	Entitled Person	Compensation Entitlements	Remarks
				(iii) Additional compensation for vulnerable affected persons as specified in row # F	
B. Loss of Structures					
B.1	Loss of residential and commercial structures	Residential, commercial structure affected	Owners of structures with legal title	(i) 60 days advance notice before relocation; (ii) Cash compensation under Law (CCL) as per ARIPA, 2017 or cost of structures at replacement cost, whichever is higher; (iii) Additional compensation for damages of structures at 100 per centum as per ARIPA, 2017; (iv) Option to be compensated for entire structure if remaining structure is no longer viable (In case the structure remains unviable or possess safety risk, and the owner to get this additional amount if he plans to shift.) (v) Rights to salvage materials from structure (vi) Provision of all taxes/fees, registration cost, and other fees incurred for replacement of structures (vii) Shifting allowance based on actual cost of moving (e.g., truck hire, equipment, etc.)calculated at BDT 15,000.00 (viii) Transfer and subsistence allowance (up to three months). (ix) Additional compensation for vulnerable household as specified in row # F.	• Vulnerable households to be identified during DMS as part of resettlement plan update. • CCL for land and assets attached to the land will be paid through the office of the Deputy Commissioner. • The difference between the replacement cost and the cash compensation under the law will be paid by the Executing Agency as a top up to the cash compensation paid under law. • The affected structural cost at replacement cost to be assessed by the Property valuation committee. • Transfer and subsistence allowance is meant to also cover loss of rental income if any, during the transition period. • Physical displacement will not be undertaken during monsoon.

Sl. No.	Type of Loss	Application	Entitled Person	Compensation Entitlements	Remarks
B.2	Loss of residential and commercial structures	Residential, commercial structure affected	Tenant(s) and lease holders	(i) 60 days advance notice before relocation; (ii) Cash refund of the lease money for the tenant, lease holder for the duration of the remaining lease period (to be deducted from the owner's compensation). (iii) Shifting allowance based on actual cost of moving (e.g., truck hire, equipment, etc.) calculated at BDT 15,000.00 (iv) If any structure is constructed by the tenant or lease holder, the person will receive cash compensation at replacement cost for the affected structure as per the basic schedule rates, without considering the depreciation cost.	• Vulnerable households to be identified during DMS as part of resettlement plan update. • Physical displacement will not be undertaken during monsoon.
C. Loss of Trees and Crops					
C.1	Loss of crops	Standing Crops on Affected Lands	Owners of Crops and sharecroppers	(i) Provision of 60 days' notice to harvest standing seasonal crops. (ii) If harvest is not possible, cash compensation equal to prevailing market price.	Valuation of the crops will be assessed by the property valuation committee.
C.2	Loss of timber and fruit bearing trees	Trees on affected land parcel	Owner of the tree	(i) 60 days advance notice to harvest existing fruits; (ii) For landowners: Cash compensation under Law (CCL) as per ARIPA, 2017, or, cost of trees based on annual net product value multiplied by number of productive years remaining, whichever is higher; (iii) For fruit bearing trees compensation to be calculated at market value of annual net product multiplied by the number of productive years, to be determined by the Horticulture Department. (iv) Compensation at market value of timber in case of timber-bearing trees, to be determined by the Forest Department. (v) For non-titled tree owners, (iii) and (iv) above will apply for computation of compensation.	(i) For landowners, the difference between the replacement cost and the cash compensation under the law will be paid by the Executing Agency as a top up to the cash compensation paid under law. (ii) For tree owners other than land owners, compensation will be assessed for fruit or timber trees as per provisions in this entitlement matrix,

Sl. No.	Type of Loss	Application	Entitled Person	Compensation Entitlements	Remarks
					and paid by the Executing Agency.
D. Loss of Income					
D.1	Loss of Income	Permanent business losses, rent collection along the RoW / proposed land for the projects	Landowners, Traders, shop owners antiemployee	(i) Cash compensation equivalent to net income from the affected business/ rent from tenants/sharecroppers for the duration of twelve months on producing relevant income or income tax return documents; in absence of proper income documents, the income will be calculated by the Joint Verification Committee. (ii) The employees will receive compensation equivalent to their net income for the duration of twelve months based on the payment/salary/wage receipts. If income documents are not available then the person will receive compensation calculated as per the minimum wage rate.	Determination of income loss during detail census and socio-economic survey conducted and part of final resettlement plan preparation.
D.2	Loss of Income	Temporary business losses along the RoW/ proposed land for the project	Traders, shop owners and their employees	(i) Cash compensation equivalent to net income from the affected business for the period of disruption on producing relevant income or income tax return documents; in absence of proper income documents, the income will be calculated by the Joint Verification Committee. (ii) The employees will receive compensation equivalent to their net income for the duration of disruption based on the payment/salary/wage receipts. If income documents are not available then the person will receive compensation calculated as per the minimum wage rate[22].	

[22]Bangladesh government does not have any directive on minimum wage rate except for readymade garments employees. Minimum wage rate for them is BDT 8000 per month. This Resettlement Plan considers the minimum daily wage rate for the affected employees at current market rate for wage labour, BDT 400.

Sl. No.	Type of Loss	Application	Entitled Person	Compensation Entitlements	Remarks
D.2	Loss of income	Temporary loss of daily income	Daily wage labors working for the Traders	(i) Cash compensation for loss of income for the period for 26 days (~ to one month) based on the daily income rate accounted during census and socio-economic survey or the minimum wage rate specified by government, whichever is higher. (ii) The daily labor will get preference as unskilled workers during construction as livelihood restoration support.	(i) PMU to ensure livelihood restoration of the daily wage labors are included into contract documents of the civil Contractors. (ii) The compensation is assessed for one month as it is expected that daily wage labours can find work within one month. (iii) Determination of income loss during detail census and socio-economic survey conducted and part of final resettlement plan preparation.
D.3	Loss of Income	Permanent loss of income	Sharecroppers undertaking fishing activity	(i) 60 days advance notice to harvest the fish livestock. (ii) Cash compensation for loss of income, equivalent to net income from fish cultivation for the duration of twelve months on producing relevant income or income tax return documents; in absence of proper income documents, the income will be calculated by the Joint Verification Committee. (iii) Transition allowance equivalent to net income from fish cultivation for the duration of six months for alternate livelihood; (iv) Skill training for sharecroppers or any member of their family for alternate livelihood option as a rate of BDT 20,000.00 per head training cost.	(i) Determination of income and invest for undertaking fishing activities and probable alternate measures of livelihood during detail socio-economic survey.
E. Relocation Assistance					

Sl. No.	Type of Loss	Application	Entitled Person	Compensation Entitlements	Remarks
E.1	Physical displacement[23]	Residences or business entities or agricultural activities that is to be relocated due to land acquisition	All affected persons who will be physically displaced (titleholders and non-titleholders)	(i) Logistical and administrative assistance, with identification and purchasing or rental of replacement plots and/or structures, or the construction of new ones. (ii) Cash allowance covering the cost of transport of people and their moveable property at current market rate on actual cost basis. (iii) Transition allowance equivalent to 6months income of the affected persons (HoH) based on documental evidence. (iv) Preference to one member of physically displaced household (preferably a woman) to participate in paid project construction and operation and maintenance work, if willing and available for such work. (v) Support to access microfinance institution for credit facilities for microenterprise or land development.	(i) Determination of monthly income of the affected persons (HoH) for ascertaining relocation assistance during detail socio-economic survey. (ii) Minimum 12 months' notice period will be provided prior to physical displacement. (iii) Physical displacement will not be undertaken during monsoon.
F. Vulnerability Assistance					
F.1	Impact on vulnerable persons[24]	Affected due to land acquisition, involuntary resettlement etc.	Affected Households which are: female–headed; poor (below poverty line) or headed by person with disabled	(i) Vulnerable households, who lost lands/residence/shops, will be provided an additional three months of average household income allowance as assistance. (ii) Provide preferential employment in the project construction (iii) Provision of skill training for alternate livelihood for the affected person or any member of the household. (iv) Support to receive financial grants or access to micro-finance institutions for livelihood investment as well as organizational/logistical	(i) Vulnerable households to be identified during DMS as part of resettlement plan update. (ii) Construction contracts will require contractors to employ specific numbers of vulnerable affected persons in their construction workforces.

[23] Transportation costs, transition allowance and other resettlement costs are not incremental. For example, if an affected household loses land, shelter and commercial business in one lot, the family will get each of these allowances only once.

[24] Vulnerable households / families comprise woman-headed households, households having a person with disability, scheduled caste/scheduled tribe households, elderly-headed households, children including orphans, child workers, Below Poverty Line households, landless households and those without legal title.

Sl. No.	Type of Loss	Application	Entitled Person	Compensation Entitlements	Remarks
				support to establish an alternative income generation activity. (v)One-time cash compensation of BDT 10,000 to the affected vulnerable person.	(iii) Representation from vulnerable affected persons will be a requirement of all committees and consultation forums for KSSDP.
G. Other Impacts					
G.1	Damages to property, assets	Partial or total damages caused to private or government property	(i)titleholders; (ii)tenants, leaseholders; and(iii)persons with on-recognizable claims(informal settlers)	(i) Extreme care should be taken by the contractors to avoid damaging any properties or assets during construction. (ii)Replacement cost of restoring to original or better condition	(i) Compensation for the losses will be the responsibility of the contractor, as a part of the contract. (ii) PMU to monitor the replacement made by the Contractors
G.2	Un-anticipated losses	Any other loss not identified in the matrix	Any affected person or affected entity	Unanticipated involuntary impacts will be documented and mitigated based on principles and policies of ARIPA, 2017 and ADB SPS, 2009.	(i) The PMU resettlement and social safeguard specialist to ascertain the nature and extent of impact and loss and finalize the entitlements as per the resettlement policies of government and ADB and update the same into the resettlement plan.

Note: The compensations and grants will be free from GoB tax and the owners of affected properties will be allowed to take away all the salvageable materials of structures and trees free of cost without delaying the project intervention.

H. Assistance for Income Restoration and Rehabilitation

144. **Permanent Income Loss**. The entitlement matrix provides for income restoration activities that are of two types (i) short-term; and (ii) long-term. Short-term income restoration activities are intended to restore AP's income in the period immediately before and after relocation focusing on relocation, and providing short-term allowances such as (i) subsistence/transitional allowance; and (ii) shifting assistance. Long-term options will be applicable to affected persons facing permanent loss of livelihood such as business owners facing permanent loss of business, sharecroppers and employees of affected businesses. Vulnerable affected persons facing permanent impacts (loss of land/residence/shops) will also be eligible for livelihood and income restoration support, in line with entitlement matrix provisions.

145. Income restoration activities and schemes will be conducted / designed in consultation with affected persons. The strategy for income restoration needs to be prepared based on the information collected on income restoration activities from the census and the socioeconomic surveys. The PMU and project consultants will consider the available skills, existing professions, resource base of affected persons and their socio-economic characteristics and preferences to tailor individual income restoration schemes.

146. The basic objective of income restoration activities is to ensure that each affected person will at least have the same or improved income and livelihood after the Project. For the displaced poor and vulnerable groups, the aim is to improve standards of living to at least national minimum standards. Towards this, it is proposed that one member of each of the vulnerable households and those losing their livelihoods, who has the capacity and willingness to acquire a new set of skills, would be eligible for assistance. The PMU SSO supported by the two community mobilizers of PMU and the social safeguards personnel of project consultants (including field support staff) will identify the number of eligible families and the individual beneficiaries based on the 100% census of the affected households and a training needs assessment through consultations with the affected persons. The PMU SSO assisted by project consultants, will frame a list of possible income restoration options in consultation with affected persons, having examined local employment and business opportunities. Suitable trainers/local resources would be identified by the PMU, with the assistance of the project consultants in identification of local/regional training institutes, as required.

147. Livelihood restoration and enhancement strategies will be derived from detailed socio-economic survey information, conducted as a part of resettlement plan updating. The time frame will be decided based on the training to be provided, which will also be outlined in the updated resettlement plan. Strategies for promoting economic recovery of eligible affected persons(as per the entitlement matrix) should also include skill upgrading through training. The PMU will be responsible for provision of required training, with the help of local institutions or specialized trainers, as necessary. The resettlement plan budget will reflect the cost of providing training. Access to micro-credit will be facilitated for vulnerable households facing permanent impacts as provided in the entitlement matrix. Project officials with the assistance of project consultants will ensure affected persons' access to micro-credit schemes (both government and NGO run micro-credit schemes are reportedly available in Khulna) that could help them restore income and livelihoods.

148. Key steps to be undertaken in livelihood skill training of vulnerable households and other affected households eligible for such training as per the entitlement matrix and responsibilities of agencies involved would be as follows:

(i) Identification of affected, vulnerable/sharecropper households through the census survey of affected persons will be undertaken by the designated social safeguards officer of the PMU, supported by project consultant teams;
(ii) Identification of potential trainees and training needs assessment for vulnerable /other eligible households will require a detailed survey and assessment of literacy/educational level and/or skill sets available with one member nominated by the household for skill training. The needs assessment would also document income from various sources, assets, resources and coping strategies currently used by the household. The strategy would aim at improving/maximizing returns from the present occupation of the principal earning member or taking up a new/supplementary occupation aimed at achieving the right mix of activities in order to enable the household to improve/maintain its living standards. Training needs assessment would be undertaken by the PMU, assisted by project consultants. Baseline details collected for individual households need to be carefully preserved in order to enable a post-training impact assessment;
(iii) Identification of Local Trainers/Resource Persons or Training Institutes by the PMU will depend on the type of skill training required (as identified through the needs assessment survey);
(iv) Livelihood Skill Training as well as training in budgeting/accounting, micro enterprise development training will be coordinated by the PMU, with project consultants' support. Training to suit the aptitude of identified trainees would be imparted. A time frame of a maximum of three months is envisaged for training;
(v) Internal monitoring of training and submission of progress reports will be by the PMU;
(vi) Special assistance for access to micro-credit / grants for purchase of equipment/materials will be provided to each affected, vulnerable household. This will be undertaken by the PMU, with the support of project consultants.

149. Institutional arrangements and responsibilities for livelihood restoration. The responsibility to ensure restoration of livelihoods of affected persons lies with the Social Safeguards Officer (PMU), supported by two Community Mobilizers and project consultants (PMSC and IADC social safeguards personnel and field support staff). The Community Mobilisers at field level will engage with the affected persons facing economic displacement. Regular consultations and disclosure meetings will be held to share the entitlements with the affected persons, by the Social Safeguards Officer (SSO) of PMU who will be assisted by the two community mobilisers and project consultants. The livelihood restoration process including identification of trainers/resource persons will be facilitated by the SSO PMU, with the support of Social Safeguard Specialists of Project Consultants and their support staff. The Community Mobilisers will engage with the affected sharecropper families and vulnerable households to identify a member of the family willing and available to receive skill training for alternate livelihood and facilitate in receiving the training from a local vocational training institute. The Community Mobilisers will also help the affected business owners to shift. The SSO and social safeguards specialists of project consultants will conduct post-livelihood intervention impact assessment and report the same in the SSMRs. Field verification of the status of affected persons facing livelihood loss will be conducted by the independent consultant appointed by ADB, a year after implementation of the above. The household asset base and socio-economic status would be compared with the pre-project scenario. Indicators would be developed and presented in the updated resettlement plan.

150. **Temporary income loss** is assessed for traders and their employees, as well as for hawkers and vendors. The SSO PMU, assisted by project consultants will be responsible to

ensure compensation against temporary income loss for the actual period of disruption to each affected person facing such loss, per entitlement matrix provisions.

151. Compensation against temporary income loss needs to be assessed based on detailed measurement surveys (sewer pipe alignments including manholes and manhole pumping stations) and paid prior to the impact. In case the actual impact extends beyond the assessed period of impact during construction, it will need to be compensated per actual number of days of disruption, through a corrective action. Assessment of temporary impact needs to be based on a joint site verification/ detailed measurement survey conducted by the contractor, design engineer and resettlement specialist of PMSC/IADC, and based on the final alignments including manhole and manhole pumping station locations as per detailed design. Details of affected vendors and their socioeconomic profiles will be presented in the updated Resettlement Plan. Vendors will need to be assisted by the contractor and the community mobilizers to move to the other side of the road and return after construction is completed. The construction period will be minimized and is estimated as 3-5 days per section of work for pipelaying, 14 days for manhole pumping stations and 7 days per manhole. Initial transect walks and reconnaissance surveys in the project area do not reveal the need for closure of roads. Opening a trench for pipelines in one stretch of the road at a time is likely to minimize disruptions and impacts. Facilities for pedestrian movement will be provided so that there are no major impacts on businesses and their employees.

152. **Vendor Assistance**

(i) Compensation and assistance to affected persons must be provided prior to start of civil works. Affected persons will be provided 60 days advance notice, followed by a reminder one week before start of construction, and again, one day before start of construction to ensure no or minimal disruption to livelihood.

(ii) For construction activities involving disruption for a period of more than a month, provision of alternative sites for hawkers and vendors for continued economic activities. If not possible, allowance based on the net income of the affected business or minimum wage rate for the affected households up to 3 month or the actual period of disruption whichever is more.

(iii) Mobile hawkers and vendors will be assisted by contractor in moving to alternative locations or on other side of the road during the period of construction. Hawkers and street vendors can shift back to their original location after the construction is complete. To help in continuing the commercial activities of the hawkers and vendors, the adjacent lanes and by lanes that are not covered under the project may be considered. Construction during the night time and traffic diversion for part road will be considered. Signage designating spot for parking will be put up and other vacant space will be allowed for the affected vendors to conduct their business. The civil works will be conducted phase wise on sections of each of the road length which will allow the hawkers and street vendors to move to the opposite side of the road and before and after the construction zone. Contractors will ensure: leaving spaces for access between mounds of soil, providing walkways and metal sheets to maintain access across trenches for people and vehicles where required, increased workforces to finish work in areas with impacts on access, timing of works to reduce disruption during business hours.

(iv) Area will also be designated by KWASA for the hawkers to shift during the construction based on the contractor's schedule after finalization. Notice displayed will contain the road signage and dates for commencement of the civil works. Details will also be shared with the Hawkers Union to enable hawkers to inform their regular customers of the new location during period of construction. Civil

works are also proposed to be carried out during 11:00PM to 4:00AM which will have less disruption of livelihood activities.

153. In case of affected persons facing temporary income loss, the resettlement plan envisages the following steps:

(i) **Step 1**: Conduct public awareness and information dissemination prior to construction works by Community Mobilisers.
(ii) **Step 2**: PMU, KSSDP, PMSC/IADC and the contractor(s) to jointly confirm exact alignments/mark the extent of excavation on each road section, and the traffic diversion plan.
(iii) **Step3**: The KSSDP Social Safeguards Officer with the close monitoring of the PMSC/IADC Social Safeguard Specialist will (a) conduct a transect walk jointly with the environment and social safeguard unit of PMU and contractor; to determine the extent / nature of impacts. Such walks will establish the need for Detailed Measurement Surveys on each road stretch; (b) conduct a detailed measurement and inventory of losses survey; to establish the number of affected persons/businesses along each proposed feeder pipe alignment/road stretch/sites and potential impacts and enable an inventory of losses., (c) update the Resettlement Plan (identifying potential losses), and (d) send the updated resettlement plan to PMU and ADB for review and approval after detailed designs and surveys are complete.
(iv) **Step4:** The Community Mobilisers will distribute identity cards to affected persons: those facing income losses and those requiring assistance, and vulnerable affected persons. The Community Mobilisers will collect details of bank accounts of affected persons and assist those without bank accounts to open the same.
(v) **Step 5**: Affected persons can then access the compensation/assistance/ allowances provided from the project.
(vi) **Step 6:** PMU to pay compensation/assistance/allowances prior to displacement in sections ready for construction (as required). The SSO and PMSC/IADC to closely monitor compensation payment, which can be through account payee cheques.
(vii) **Step 7:** PMU to give formal clearance to the contractor to proceed with civil works, through a certification. After receiving due clearance contractor will proceed.
(viii) **Step 8:** PMU through Community Mobilisers to keep accounts, record of affected persons, amounts paid, and receipts record for accounting purposes and submit copies of records in the Semi-annual Social Safeguard Monitoring Report.

154. Details of compensation payments against temporary impacts will be reported in the SSMRs. In case any of the assessed temporary impacts are possible to avoid during civil works, no compensation needs to be paid. Any such avoided impacts will be carefully documented with photographic evidence during construction and consultations with persons assessed as affected in this RP, to confirm impact avoidance. Details of any impact avoidance will be presented in the SSMRs.

I. Assistance for Relocation

155. The project will provide transition allowance equivalent to 6 months income of the affected persons (HoH) based on documental evidence or as recorded during the socio-economic survey. The affected persons facing physical displacement will receive cash allowance for transport of their moveable property at current market rate on actual cost basis. Consultations will be conducted with the physically displaced affected persons, including women household members, to understand relocation preference of the household.[25]Physical displacement will not be undertaken during monsoon, in line with the entitlement matrix. In addition, based on learnings from previous ADB projects, physical displacement will be planned, taking into account school examination schedules of children of the affected households.

156. The project will ensure that (i) shifting assistance, logistical and administrative assistance for relocation, including identification and purchasing or rental of replacement plots and/or structures, or the construction of new ones, and transition allowance and assistances in line with the entitlement matrix will be provided to all physically displaced persons (ii) displaced persons can choose between self-relocation or assisted relocation by the project. For self-relocation, KSSDP will assist in obtaining necessary approvals and permits for house construction, if opting to construct a new house.

157. In the event that any physically displaced household seeks assistance with arrangements for alternate land/housing, the PMU will provide assistance with identification and purchasing or rental of replacement plots and/or structures, or the construction of new ones. For relocates interested in affordable housing options, the PMU - in consultation with the concerned household, will explore the alternative of a suitable government housing program (e.g. of the National Housing Authority), preferably within a 3 Km radius of the relocation site and facilitate convergence with the program.

158. The following steps are suggested for development and implementation of the relocation plan for the project:

(i) A phased relocation plan will be prepared by the PMU with the assistance of project consultants, in consultation with the affected persons. The Plan will take into account the physically displaced persons' preferences related to the timing of relocation and the contractor's work plan. The relocation plan will identify all actions and activities to be taken before, during and after relocation.
(ii) The relocation plan for the project will be prepared in close consultation with the physically displaced affected persons and the landowners on whose lands physically displaced tenants and caretakers are presently staying. It will be important to conduct meaningful consultations with all concerned stakeholders, to ensure timely relocation with a humane approach and minimal disruption.
(iii) All compensation due to the relocates will be paid before physical displacement.
(iv) Relocation strategies will be specific to the expressed preferences of the relocated households. The preferred relocation option (self-assisted or project-assisted) will

[25] The preferred relocation option as per socioeconomic survey (and initial consultation) with sample (21 out of 24, i.e. 88%) physically displaced households was self-relocation with lumpsum cash compensation. This will be further ascertained based on continued and meaningful engagement with the affected persons facing physical displacement.

be discussed and the required assistance provided by the project, in line with the entitlement matrix.

(v) Participation of affected persons particularly women members of households, in decision-making related to the timing of displacement, will be ensured. Shifting should preferably not be done during difficult periods, such as monsoon season or during the months of religious importance or during school examinations, for families with school-going children. The PMU will arrange meetings with the displaced persons and mutually agree on a date that is suitable for the affected household for shifting to the new location.

(vi) The PMU SSO and PMSC will explain all relocation related entitlements and assistances available under the project. Affected persons requiring assistance with logistics or administrative assistance to obtain approvals or permits, will be provided such assistance by the project. Logistics arrangements may include arrangements for transport of people and their belongings, arrangements for food for the relocated households for the first 2-3 days after relocation, as their kitchens may not be fully functional yet, and coordination between school authorities and relocated families to ensure school bus or other transport arrangements are available for the children of affected households, to enable them to reach school.

(vii) The PMU will ensure that contract packages involving physical displacement include a clause requiring the contractor to give preference to one member from each relocate household for construction and/or operation and maintenance related work, if willing and available. If this requirement is not included in the contract during invitation for bid, this Resettlement Plan (referred in the contract, Section 8) will serve to inform the contractor of the requirement.

(viii) The PMU SSO assisted by community mobilizers and PMSC will coordinate with the physically displaced households and the contractor to identify suitable jobs for one member of each physically displaced household (preferably a woman) to participate in paid project construction and operation and maintenance work, who is willing and available for such work. One person will be nominated for such work by the head of household, if willing.

(ix) The PMU SSO with the support of project consultants will also identify any need for access to credit facilities for microenterprise or land development, for each physically displaced household and if so, will facilitate access to microfinance institutions.

(x) The PMU SSO, assisted by the community mobilizers of PMU and PMSC social safeguards specialist, will closely monitor the relocation process and immediately address any concerns or issues that arise during relocation.

(xi) After shifting the displaced persons to their new location, PMU SSO with the assistance of the community mobilizers and project consultants shall follow-up with the affected households and provide any administrative assistance required post relocation. Assistance with school admissions for children of displaced households, will be provided, if and as required.

(xii) Socioeconomic status of each physically displaced persons will be closely monitored by PMU and PMSC. Pre-relocation socioeconomic details will be maintained, to facilitate comparison, post-relocation.

(xiii) Field verification of the status of affected persons facing physical displacement will be conducted by the independent consultant appointed by ADB, a year after completion of relocation. The household socio-economic status would be compared with the pre-project scenario. Indicators would be developed and presented in the updated resettlement plan.

J. Assistance to Affected Vulnerable Persons

159. The following categories of displaced persons are recognized as vulnerable groups in this section: female-headed, elderly-headed, and disabled-headed and BPL households[26], landless and non-title holders. In addition to the entitlements specified in the matrix for loss of land, structure, income, the vulnerable affected persons will be entitled to receive one-time vulnerability assistance of BDT 10,000 per affected family. Vulnerable persons will be given priority in work opportunities under the project depending on their skill and willingness to work. Access to financial grants and/or microcredit for livelihood investment as well as organization and logistical support will be provided to set up alternative income generation activity.

VII. RESETTLEMENT BUDGET AND FINANCING PLAN

160. The land acquisition cost involved for the project for the three packages have been considered separately. The cost will be disbursed to the affected land owners through concerned office of the Deputy Commissioner. The Resettlement Plan budget considers the additional costs to match the replacement cost of land, structures and trees. It also includes the relocation, livelihood restoration, income loss, administrative cost for resettlement plan implementation, monitoring cost, socio-economic survey cost. The Executing Agency will be responsible for timely allocation of the funds needed for implementation of the resettlement plan and land acquisition.

A. Land Acquisition Cost

161. The land prices vary depending on the land classification within a Mouza, the smallest administrative land unit, in Bangladesh. Cash Compensation under Law (CCL) will be calculated as per ARIPA, 2017, based on the market value of the land. The affected person land will get compensation two times higher than the market rate as per the National Law, if land is acquired
162. through land acquisition process. However, land value at replacement cost will be considered if CCL is lower than the replacement cost. The compensation will also add the costs applicable for stamp duty, registration and any other cost necessary for the registration of the replacement land. The updated resettlement plan will include the cost of the private land, to be acquired, based on the latest mouza rates. Mouza level land rates vary based on land classifications. The estimated land cost for the STPs and SPSs is indicated below in Table 39. The land acquisition costs include the cost of the structures, trees, crops and other assets attached to the land. The estimated land acquisition cost is BDT1,368,271,747.80 (USD16,427,803.43).The affected land owners will receive cash compensation for land acquisition and attached structures, assets to land, at three times the market rate of land. The Property Valuation and Advisory Committee will advise whether it is equivalent to market price / replacement cost.[27]

[26]This Resettlement Plan calculates the upper poverty line for urban area from the 2016 upper poverty line determined by the Bangladesh Bureau of Statistics (BBS), with added inflation rate 5.4 (*Source: Economic trends Bangladesh Bank, December 2019, Published by Research Department of Bangladesh Bank*). The upper poverty line for the year 2016 for urban area is BDT 2,929 [*source: Report on Household Income and Expenditure Survey 2016, published on October 2017* (latest publication) *by Statistics and Information Division, BBS*]. Thus, BPL definition for urban metropolitan is BDT 3087.16 per capita/month in 2019. As such the per capita average monthly household income under BPL stands at BDT 17,905 {3087.16×5.8 (HH size) =17,905}.

[27]Based on communication from Managing Director (MD), KWASA on 3rd June 2020 and virtual meeting with project team and MD on 6th June 2020.

Table 39: Estimated Land Acquisition Cost

Sl. No.	Name of Location	Quantity	Unit	Market Rate/ Decimal (BDT)	Multiplier as per ARIPA	Total Land Value (BDT)
KWASA/KSSDP/SN – 01						
1.	SPS-1 Custom Ghat	24.71	Decimals	827,417.00	3	61,336,422.21
2.	SPS- 2 Motiarkhali	24.71	Decimals	289,511.00	3	21,461,450.43
3.	SPS-3 Labonchara Sluice gate	24.71	Decimals	289,511.00	3	21,461,450.43
KWASA/KSSDP/SN – 02						
4.	SPS-4Nirala	24.71	Decimals	676,793.00	3	50,170,665.09
5.	SPS-5 Kashimnagar, Gollamari	29.65	Decimals	676,793.00	3	60,200,737.35
6.	SPS-6 Sonadanga	24.71	Decimals	549,809.00	3	40,757,341.17
7.	SPS-7 Karimnagar	24.71	Decimals	633,370.00	3	46,951,718.10
8.	SPS-8 Islamia College road	24.71	Decimals	532,054.00	3	39,441,163.02
KWASA/KSSDP/STP -1						
9.	STP – 1 Mathabhanga	1,200	Decimals	72,147.00	3	259,729,200.00
10.	STP – 2 Tikrabandh	2200	Decimals	116,176.0000	3	766,761,600.00
TOTAL Land (in acres)		**36.02**			**BDT**	**1,368,271,747.80**

Source: Information provided by PMU
Note: The above estimated land acquisition cost includes the cost of structures and assets belonging to landowners.

B. Resettlement Cost

163. The resettlement cost estimate includes transition allowance for affected persons physically displaced, vulnerability assistance, cash compensation for temporary loss of income for closure of business maximum up to 3 months, relocation assistance, cost for detail measurement and socio-economic survey, monitoring cost, GRM cost, etc. The cost also includes a contingency amount for unanticipated impacts. The following is an indicative resettlement plan budget assuming lumpsum cost. The detail socio-economic survey based on the detail measurement and design will provide the resettlement plan budget for the three packages. The indicative resettlement cost is **BDT 3,59,05,680** equivalent to **USD 423,117**.

Table 40: Indicative Resettlement Plan Budget

Sl. No.	Location wise Details of Cost	Quantity	Unit	Market Rate (BDT)	Multiplied factor	Total (BDT)	Remarks
KWASA/KSSDP/SN – 01							
1.	SPS-1 at Custom Ghat Business loss for 22 traders; compensation for loss of income@	22	Numbers	50,000.00	3 months	3,300,000	Estimated period of disruption is 3 months based on preliminary assessment. To be paid for actual period of disruption.
2.	SPS-1 at Custom Ghat Loss of daily income for 80 daily wage labors; compensation for loss of income	80	Numbers	400.00*	26 days	832,000	Minimum wage rate has been considered for calculating the per day income loss of daily wage labor.
3.	SPS-3 Non-titled families at Laboncharafacing relocation; one time transition allowance equivalent to 6 months income	7	Numbers	100,000.00	-	700,000	Each affected family will receive transition allowance equivalent to 6 months income .Income range of the households is BDT 8000-14000 per
4.	SPS-3 One time shifting allowance for non-titleholder families facing relocation @ BDT 15,000 per	7	Numbers	15,000	-	105,000	Each family will receive one-time shifting allowance.
5.	SPS-3 Loss of income from rent collection from 7 tenants for the land owners	7	Numbers	10,000	12 months	8,40,000	Rental income loss by the land owner

Sl. No.	Location wise Details of Cost	Quantity	Unit	Market Rate (BDT)	Multiplied factor	Total (BDT)	Remarks
6.	Provisional sum for compensation against temporary income loss due to sewer pipelaying #	1214	Numbers	400	5	2,428,000	
7.	Provisional sum for compensation against temporary income loss due to manhole pumping station construction (2	10	Numbers	400	14	56,000	
***Note: The resettlement cost considered for loss of income for the traders and daily wage labors will be applicable if disruption due to construction work happens. If the traders are enabled to continue their business at one corner of the plot with access then the compensation will not be applicable.*							
KWASA/KSSDP/SN – 02							
8.	SPS-8 at Islamia College Road Relocation of one non-title holder family (tenant)@	1	Number	50,000.00	6	300,000	Transition allowance equivalent to 6 months income plus shifting allowance.
9.	SPS-8: Relocation of tenant household (shifting allowance)	1	Number	15000.00	1	15,000	
10.	SPS 7 Loss of structure – Furniture shop, Islamia College Road	1000	ft	2,000.00	1	2,000,000	The tenants are eligible to receive the compensation for structures if it is constructed by them.
11.	SPS7 Loss of structure – Cow shed, Islamia College Road	1000	ft	2,000.00	1	2,000,000	

Sl. No.	Location wise Details of Cost	Quantity	Unit	Market Rate (BDT)	Multiplied factor	Total (BDT)	Remarks
12.	SPS 7 Employees furniture shop and cow shed	3	Numbers	400.00	12months	3,74,400	The employees will receive compensation equivalent to their net income for the duration of twelve months calculated considering minimum wage rate.
13.	SPS 7 Business loss (Furniture shop); transition allowance@	1	Number	50,000.00	12	600,000	Each affected family will receive transition allowance equivalent to 6 months income for setting up the business at alternate location plus the shifting allowance.
14.	SPS 7 Shifting allowance for furniture shop and cowshed owner	2	Number	15000	1	30,000	
15.	SPS 7 Business loss (Cowshed); transition allowance@	1	Number	50,000.00	12	600,000	
16.	SPS-7 Loss of income from rent collection from 2 tenants for the land owners	2	Numbers	10,000	12 months	2,40,000	Rental income of the land owners
17.	Provisional sum for compensation against temporary income loss due to sewer pipelaying #	1426	Numbers	400	5	2,852,000	Based on estimated number of affected persons (using data from transect walks). The actual number of

Sl. No.	Location wise Details of Cost	Quantity	Unit	Market Rate (BDT)	Multiplied factor	Total (BDT)	Remarks
18.	Provisional sum for compensation against temporary income loss due to manhole pumping station construction (3 no.)#	15	Numbers	400	14	84,000	temporarily affected persons will be derived from the DMS survey
KWASA/KSSDP/STP -1							
19.	STP – 1 Mathabhanga Seasonal fish farming and cultivation(share croppers)@	3	Numbers	600,000.00	LS	600,000	Compensation for loss of income plus transition cost for setting up alternate livelihood
20.	Skill training for affected sharecroppers or their family members	3	Numbers	20,000.00	-	60,000	Skill training for livelihood restoration for the sharecropper or any member of the family.
21.	Compensation against loss of income from sharecropping to landowners	-	-	LS		80,000	One-third of the reported income by the three sharecroppers, that is paid to landowners
KWASA/KSSDP/STP -2							
22.	STP-2 Shifting allowance for 6 landowners facing structure loss and relocation	6	Numbers	15,000	-	90,000	
23.	STP-2 Subsistence allowance for 6 landowners facing structure loss and relocation impact@	6	Numbers	50,000	6	18,00,000	

Sl. No.	Location wise Details of Cost	Quantity	Unit	Market Rate (BDT)	Multiplied factor	Total (BDT)	Remarks
24.	STP-2 Shifting allowance for 9 caretakers	9	Numbers	15,000	-	135,000	
25.	STP-2 Subsistence allowance for 9 caretakers	9	Numbers	20,000	6	10,80,000	Average income of affected caretakers is BDT 20000
OTHER COSTS							
26.	Vulnerable Households- One time	24	Numbers	10,000.00	1	240,000	Based on estimated number of vulnerable households. Skill training cost up to BDT 20,000 is budgeted; to be used as per need
27.	Skill training cost	24		20,000.00	1	480,000	
28.	Additional assistance (3 months)	24		8000x3= 24,000.00	1	576,000)	
29.	Provisional sum for compensation against affected trees	1186	Numbers	5,000.00	1	5,930,000	To be computed based on productive age of each tree, per entitlement matrix provisions
30.	Cost for Public Consultation	LS	LS	1,50,000.0	1	150,000	
31.	Cost for Grievance	LS	LS	250,000.0	1	250,000	
32.	Cost for DMS and socio-	LS	LS	300,000.00	1	300,000	
33.	Post Implementation	LS	LS	200,000.00	1	200,000	
Estimated Sub-Total Resettlement Cost				**BDT**	**29,327,400**		
Contingency				BDT	6,578,280		
Grand Total				**BDT**	**3,59,05,680**		

*Bangladesh government does not have any directive on minimum wage rate except for readymade garments employees. Minimum wage rate for them is BDT 8000 per month. This Resettlement Plan considers the minimum daily wage rate for the affected employees at current market rate for wage labour, BDT 400.

**Optional cost: In the event that traders are enabled to continue their business with access provision at SPS – 1&2 during construction period, they will not be eligible to receive compensation.

Any temporary economic impacts that cannot be avoided or mitigated during construction, will require to be compensated. If vendors are enabled to continue their business without access loss, they will not be eligible to receive compensation. Based on initial assessment a provisional sum has been allotted in resettlement budget for temporary income loss during laying sewer pipe lines. Final involuntary resettlement impact will be further reassessed in sections ready for construction work.

@The stated overall average monthly income (BDT 50,000) based on the survey of affected persons (other than wage labour and employees) is used for budget preparation in this draft resettlement plan. Estimates in the updated resettlement plan will be based on documental evidence if available and provided by affected persons or as per decision of the joint verification committee.

VIII. GRIEVANCE REDRESS MECHANISM

A. Common Grievance Redress Mechanism (GRM)

164. A common grievance redress mechanism (GRM) will be put in place to receive, evaluate, and facilitate the resolution of social, environmental or any other project related grievances. The GRM will aim to provide a time-bound and transparent mechanism to voice and resolve social and environmental concerns linked to the project. The GRM described below has been developed in consultation with stakeholders. Public awareness campaign will be conducted to ensure that awareness on the project and its grievance redress procedures is generated and shared with affected persons and other stakeholders. The campaign will ensure that the poor, vulnerable and others are made aware of.

165. The GRM provides an accessible, inclusive, gender-sensitive and culturally appropriate platform for receiving and facilitating resolution of affected persons' grievances related to the project. The multi-tier GRM for the project is outlined below, each tier having time-bound schedules and with responsible persons identified to address grievances and seek appropriate persons' advice at each stage, as required. ULB-wide public awareness campaigns will ensure that awareness on grievance redress procedures is generated through the campaign. The Environmental and Social Safeguard Officer of PMU will have the overall responsibility for timely grievance redress on environmental and social safeguards issues.

166. **Who can complain:** A complaint may be registered by stakeholders who may be, "directly, indirectly, materially, and adversely" affected by the project. Any other representative can register a complaint on behalf of the affected person/s or any stakeholder by, provided that he or she identifies the affected person/sand includes evidence of the authority to act on their behalf.

167. **What the Grievance/Complain should contain:** Any concerns pertaining to safeguard compliance - environment, involuntary resettlement, and indigenous people, design related issues, compensation, service delivery or any other issues or concerns related to the project. The complaint must contain name, date, address/contact details of the complainant, location of the problem area, along with the problem. Sample grievance registration form is at **Appendix 5**.

168. **Where & How to file a Complaint:** The contractor's site office will be the primary point for receiving and lodging any complaint. Apart from that, Grievances/ suggestions from affected persons can be dropped into suggestion boxes or conveyed through phone or e-mails. Affected Persons or any complainant will also be able to register grievances on social, environmental or other related issues, personally to the Grievance Redress Committee (GRC). The Social Safeguard Officer (SSO) and designated official will be able to correctly interpret/record verbal grievances of non-literate persons and those received over telephone. The concerned Executive Engineers/ contractor's site engineer, Environment Health and Safety Officer (EH&S) or any designated person from the Contractor's side will monitor these grievance register books and if possible take necessary actions to redress minor complaints with intimation to the complainant as well as to the SSO at PMU. The time period to resolve any grievances at different level of GRC has been discussed below.

169. **Documentation:** Documentation of the complaints is important and must contain name of the complainant, date of receipt of the complaint, address/contact details of the person, location of the problem area, and how the problem was resolved. SSO at PMU with the support of Social Safeguard Specialist, PMS Consultant will have the overall responsibility for timely grievance

redress, and for registration of grievances, related disclosure, and communication with the aggrieved party. All the documents made available to the public at the community level (at ward offices) and will include information on the contact number, address and contact person for registering grievances, and will be disseminated throughout the project area by the support staff of PMU.

170. **Grievance/Problem Redress through Participatory Process:** Efforts must be made by the two support staff to help the safeguard officers to resolve problems and conflicts amicably through participatory process with the community and the ULBs. In case of grievances that are immediate and urgent in the perception of the complainant, the Contractor and supervision personnel from the will provide the most easily accessible or first level of contact for the quick resolution of grievances. Contact phone numbers and names of the concerned staff and contractors will be posted at all construction sites at visible locations.

171. **Grievance Redressal Committee:** In pursuance of Asian Development Bank (ADB) Guideline, an independent Grievance Redressal Committee (GRC) has to be established under KWASA to address the grievance of persons affected due to implementation of sub- projects under ADB assisted projects. The composition of the GRC is provided in Table 41 below:

Table 41: Composition of Grievance Redressal cell

Level 1:Site level GRC	Level 2: Central GRC	Level 3: Apex GRC
• Social Safeguard Officer, EHS Officer of Contractor • Contractor's site engineer • Site Engineer, KWASA • Two Community Mobilizers	• Deputy Managing Director, Khulna WASA – Convener • Project Director, Khulna WASA – Member • Executive Engineer, Khulna WASA –Member • Assistant Engineer, Khulna WASA –Member	• Project Director, Khulna WASA – Convener • Respective Ward Councilor, Khulna City Corporation – Member • Representative from Affected Persons – Member • Respective Union Paraisad Chairman/ Councilor- Member • Assistant Engineer, Khulna WASA

172. **Grievance Redress Process and Timeframe:**

(i) **1st level grievance**: In case of grievances that are immediate and urgent in the perception of the complainant, he/she can first register their complaint with the Contractor's Site Engineer. Complaints and grievances will be heard by the SSO, EHS Officer of Contractor and focus group discussions at the village level. The grievance will need to be resolved within14 days from the date of receipt of the complaint. If the grievance cannot be addressed at level 1 then it should be escalated to second level. The affected person can approach the GRC.

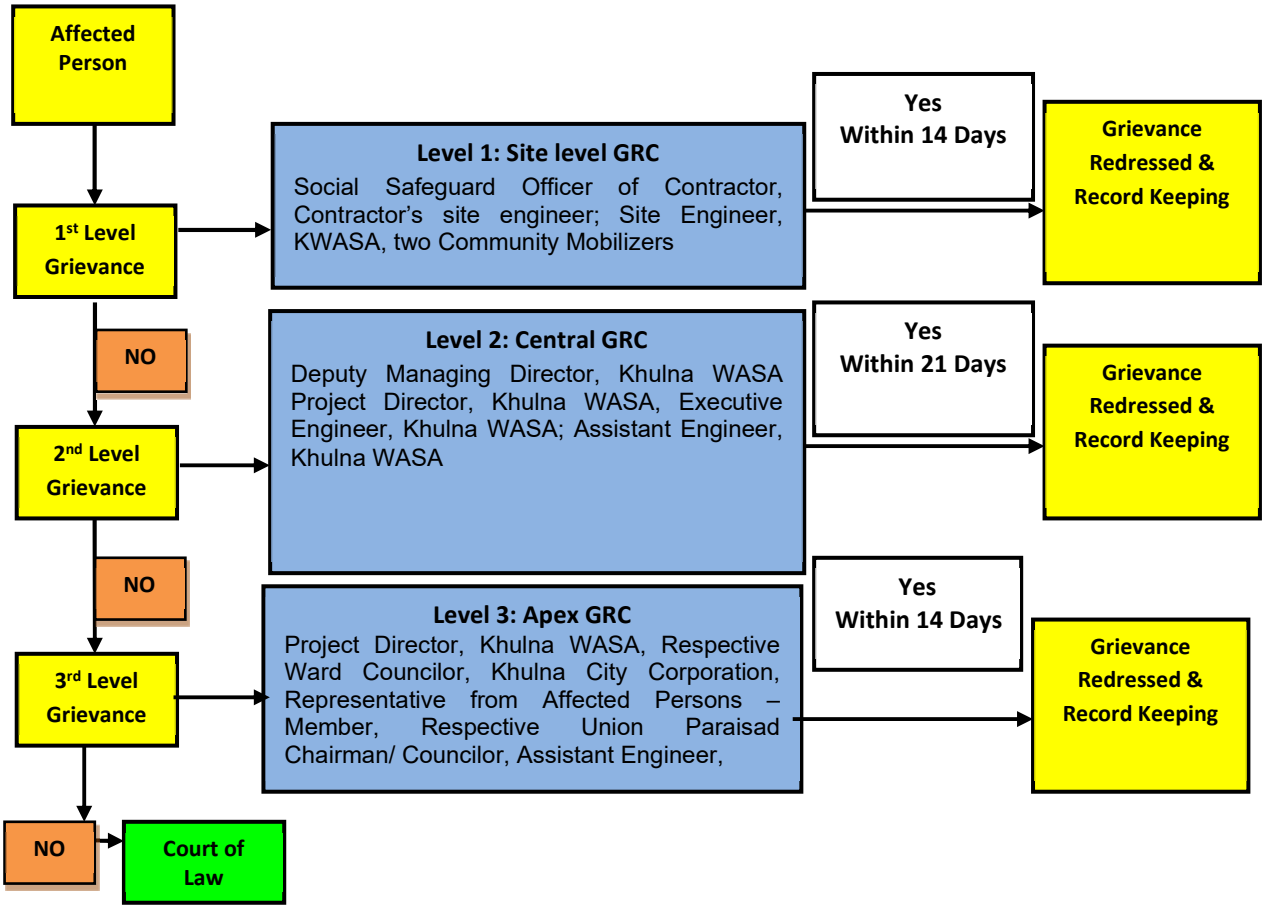
(ii) **2nd level grievance**: All grievances that cannot be redressed at first level within 14 days will be brought to the notice of Deputy Managing Director, Khulna WASA who is also the convener of the 2nd level GRC by the SSO. The 2nd level GRC comprising of Project Director, Executive Engineer, KWASA will try to resolve the complaints/ grievances raised by the complainant, facilitated by the SSO within a time period of 21 days from the date of receipt of the complaint at the 2ndlevel.If

the grievance cannot be addressed at 2ndlevel then it should be escalated to third level. affected person or the complainant can approach the 2nd tire directly also.

(iii) **3rd level grievance:** All the grievances that cannot be not addressed at 2ndlevelwithin in 21 days of receipt will be brought to the notice of the Apex Grievance Redressal Committee (GRC). The Apex GRC will meet twice a month (based on grievances launched with the Apex GRC) and determine the merit of each grievances brought to the committee. The GRC will resolve the grievance within 14 days of receiving the complaint at the 3rd level. The Social Safeguard Officer will communicate all decisions taken by the GRC to the complainant.

173. The process of the grievance redressal mechanism (GRM) is given in Figure 7.

Figure 6: Grievance Redressal Mechanism



174. In case of any inter-departmental or inter-jurisdictional coordination required for resolution of specific grievances, the PMU will refer the matter directly to the Deputy Managing Director, Khulna WASA for inter-departmental coordination and resolution. The project GRM notwithstanding, an aggrieved person shall have access to the country's legal system at any stage, and accessing the country's legal system can run parallel to accessing the GRM and is not dependent on the negative outcome of the GRM.

175. Periodic community meetings with affected communities to understand their concerns and help them through the process of grievance redress (including translation from local dialect/language, recording and registering grievances of non-literate affected persons and explaining the process of grievance redress) will be conducted if required. The above Grievance Redress Process will be discussed with the different stakeholders during stakeholder consultation meetings. These meetings will be held with affected persons and community members (beneficiaries) and the concerned Municipal Ward Councillors where civil works are proposed. The process and timelines for grievance redress and contact details of the persons responsible for grievance redress will be shared in the stakeholder meetings. Action taken in respect of all complaints will be communicated to the complainant by letter, over phone or e-mail or WhatsApp as the case may be.

176. **Consultation Arrangements for GRM**. This will include group meetings and discussions with affected persons, to be announced in advance and conducted at the time of day agreed on with affected persons and conducted to address general/common grievances; and if required with the SSO of PMU and Social Safeguard Specialist of PMS Consultant for one-to-one consultations. Non-literate affected persons/ vulnerable affected persons will be assisted to understand the grievance redress process. At the site office the of contractor, EH&S or Safeguard personnel will assist the non-literate affected persons to register complaints and with follow-up actions at different stages in the process.

177. **Documentation and Record keeping.** All GRC documents will be maintained by and PMU. Record of all complaints received, and action taken will be maintained at both at the field level and the PMU. This information will be available for review and verification by supervision consultants and ADB or any third party. KWASA field offices will act as secretariat to the GRCs. All the grievance records will be updated regularly and easily accessible on-site.

178. **Information dissemination methods of the GRM:** GRC procedures and operational rules will be publicized widely through community meeting and pamphlets in Bengali so that the affected persons are aware of their rights and obligation, and procedures of grievance redress.

179. Grievances received, and responses provided will be documented and reported back to the affected persons. The number of grievances recorded and resolved and the outcomes will be displayed/disclosed in the Central Complaint Cell at KWASA and web. The phone number where grievances are to be recorded will be prominently displayed at the construction sites.

180. Leaf let containing information of the project along with grievance redress, the address and contact numbers where the affected persons can go and register their complaints have been distributed to the affected persons.

181. **Costs:** All costs involved in resolving the complaints (meetings, consultations, communication and reporting/information dissemination) will be borne by the PMU.

182. **ADB Accountability Mechanism**: If the established GRM is not in a position to resolve the issue, the affected person also can use the ADB Accountability Mechanism through directly contacting (in writing) the Complaint Receiving Officer (CRO) at ADB headquarters. Before submitting a complaint to the Accountability Mechanism, it is recommended that affected people make a good faith effort to resolve their problems by working with the concerned ADB operations department (in this case, the resident mission). Only after doing that, and if they are still dissatisfied, they could approach the Accountability Mechanism. The ADB Accountability

Mechanism information will be included in the project-relevant information to be distributed to the affected communities, as part of the project GRM.

IX. INSTITUTIONAL ARRANGEMENTS AND RESPONSIBILITIES

A. Institutional Arrangement

183. KWASA under the Ministry of Local Government Rural Development & Cooperatives (LGRD & C), Local Government Division (LGD) will be the Executing Agency (EA) and Khulna Water Supply and Sewerage Authority (KWASA) is the implementing agency for the project. responsible for implementing the Resettlement Plan. The Project Management Unit (PMU) headed by a Project Director (PD), under KWASA will be responsible for the overall execution of the Project. The Resettlement Plan implementation and internal monitoring of the resettlement plan implementation will be undertaken by the Social Safeguard Officer at the PMU level, supported by the Social Safeguard Specialist hired under PMS Consultants. The PMU will facilitate in preparation of the Land Acquisition plan(LAP) and submit it to the concerned Deputy Commissioner in order to expedite the process of land acquisition. The Resettlement Plan Implementing will support the PMU in preparation of the LAP and Resettlement Plan.

184. KWASA, the Implementing Agency, will implement the resettlement planthrough a Social Implementation Unit (SIU) consisting of Social Safeguard Officer (SSO) at the PMU level, who will oversee and monitor resettlement plan Implementation process in close liaison with the Project Director (PD) and Deputy Project Director (DPD). A Social Safeguards Specialist will be engaged under Project Management and Supervision (PMS) Consultant, who along with Social Safeguard Officer (at PMU level) will carry out the range of activities including implementing and monitoring the safeguards aspects of the project. In case of negotiation purchase of land (if applicable), the PMU will also take the leading role in the negotiation process with the land owners through involvement of a third party professional negotiator and with the voluntary donors.

185. The PMU, under the overall responsibility of the Project Director, and assisted by the Deputy Project Director (DPD) will undertake day-to-day activities pertaining to resettlement/ compensation issue with the active support of the SSO. Social Safeguard Specialist at PMS will be responsible for arranging or carrying out the activities of preparation/updating/finalizing the Resettlement Plan for the project with involuntary resettlement impacts based on the information from the detailed engineering design documentation. The SSO at the SIU level will be assisted by two community mobilizers for discharging his/her activities related to resettlement plan implementation, grievance redress and any other related work for social safeguard.

186. Four committees endorsed by the gazette notification will assist in resettlement implementation such as Joint Verification Committee (JVC), Property Valuation Advisory Committee (PVAC), Grievance Redress Committee (GRC) and Resettlement Advisory Committee (RAC). Roles and responsibilities of these committees have been described later in this chapter. The Executive Engineer will be the convener of the Joint Verification Team (JVC) and Property Valuation Advisory Committee (PVAC). The PMU will coordinate and manage resettlement and rehabilitation of the affected persons, disburse resettlement benefits, and ensure affected person’s access to development programs. The PMU, with support of Social Safeguard Officer and Social Safeguards Specialist (PMS) will carry out the following specific tasks relating to resettlement plan implementation:

(i) Liaise with the district administration to support resettlement plan implementation activities i.e., appointment of JVC and PVAC members etc.
(ii) Discharge overall responsibility of planning, management, monitoring and implementation of the resettlement and rehabilitation program;
(iii) Ensure availability of budget for all activities and disbursement of compensation;
(iv) Synchronize resettlement activities and handover the encumbrance free land to the contractor within the construction schedule.

B. Roles and Responsibility of Project Director and Social Safeguard Officer (PMU Level)

187. The roles and responsibilities of the Project Director (KSSDP) at PMU level for implementation of the resettlement plan are as follows:

(i) Call and chair regular coordination meetings between PMU, PMSC, Contractors;
(ii) Coordinate the implementation of resettlement and rehabilitation activities with the support of social safeguards officer at PMU;
(iii) Ensure conducting resettlement training program for executing / implementing agency staff including field level employees, consultants, contractors and partner agencies/entities for capacity building;
(iv) Monitor monthly progress of Resettlement Plan implementation;
(v) Facilitate obtaining of statutory clearances and obtaining no objection certificates from government agencies and/or other entities, if required;
(vi) Guide staff of KWASA, PMSC and contractor on policy related issues during implementation;
(vii) Liaise with district administration for land acquisition, transfers, ensuring land availability (as and when required);
(viii) Synchronize compensation payment activity and handover of encumbrance-free land to the contractor; and
(ix) Ensure timely release of fund for land acquisition and resettlement and rehabilitation activities.

188. The SIU will consist of a Social Safeguard Officer, a Gender Specialist, a Technical Coordinator/Engineer and a MIS Specialist. The SSO, with assistance from Social Safeguard Specialist PMS, will coordinate and manage compensation claim and other relevant matters of the affected households, disburse due compensation and other relevant benefits, and ensure unhindered access by the affected households to the program. Two support staff will be hired by PMU to assist the Social Safeguard Officer in resettlement plan implementation; the support staff will be based in Khulna city. The SIU or SSO will carry out the following specific tasks relating to Resettlement Plan finalization and its implementation.

(i) Coordinate necessary arrangement to ensure Resettlement Plan finalization and implementation activities, i.e. appointing GRC and PVAC members facilitating detailed measurement, census and socioeconomic surveys, etc.
(ii) Submit updated Resettlement Plan to ADB for review, endorsement, and disclosure before Resettlement Plan implementation;
(iii) Ensure meaningful consultations and stakeholder participations during Resettlement Plan updating and its implementation;
(iv) Perform the overall responsibility of planning, management, monitoring, and implementation of the program;
(v) Ensure availability of necessary budget for complying with all necessary activities;
(vi) Synchronize compensation payment activity and handover encumbrance-free land

to the contractor;

(vii) Develop socio-economic census survey, inventory of losstools along with the Social Safeguard Specialist of PMSC;

(viii) Develop training modules on social safeguards and internal monitoring systems with PMSC/IADC

(ix) Monitor the effectiveness of entitlement packages and payment modality;

(x) Prepare sections of monthly and quarterly progress reports pertaining to social safeguards, and detailed Semi-annual Social Monitoring Reports; Prepare corrective action plans in the event of any non-compliance observed during monitoring;

(xi) Oversee day-to-day implementation of resettlement plans by contractors, including compliance with all government rules and regulations; take necessary action for obtaining rights of way clearances;

(xii) Liaise with district administration for land acquisition, transfers, ensuring land availability;

(xiii) Provide oversight on social safeguard management aspects of packages and facilitate and follow up to ensure that delays in land procurement are addressed;

(xiv) Ensure timely disclosure of entitlements to affected persons at locations and form that is accessible to the public and easily understood by them;

(xv) Ensure effective implementation of grievance redress mechanism at all levels and duly communicate the details of GRM to the affected persons and other stakeholders; and

(xvi) Ensure encumbrance free site handover to Contractor, and that all compensation payments to the affected persons are completed before handing over of site.

189. Two support staff will be hired by PMU to assist the Social Safeguard Officer in resettlement plan implementation. The support staff will be based in Khulna city. The PMU will engage Community Mobilization Assistants for effective implementation of Resettlement Plan, including support to affected persons to receive cash compensation under law, assist the SSO in consultations and disclosure of entitlements and GRM to affected persons and monitoring of compensation disbursement as well as grievance redress mechanism. Post resettlement plan implementation, they will assist in conduct of connection campaigns in different localities including collection of connection applications and supporting documents and ensuring 100% coverage of poor and vulnerable households under project benefits. Minimum qualification for the post should Bachelor's Degree in sociology, social work or similar filed and at least 5 years of experience in resettlement and rehabilitation work in any ADB funded or similar lender supported GOB projects. The broad terms of reference for the post of Community Mobilizers are mentioned below, and are not limited to:

1. General Tasks:

(i) Assist in organizing workshops, focus group discussions (FGDs) and community consultation during design and implementation phase for safeguard issues;

(ii) Carry out all relevant activities pertinent to implementation of resettlement plan like identification of affected families through census and socio-economic survey;

(iii) Preparation and distribution of identity cards among the project affected families, resettlement plan disclosure meeting with the affected persons;

(iv) Disbursement of compensation among the identified affected persons as per resettlement plan;

(v) Prepare public notices, disclosing the proposed package details, proposed entitlements if any and mitigation measures if required;
(vi) Organize meetings as stated in the resettlement plan at community and household levels with affected persons and draw up minutes of such meetings;
(vii) Disclose the grievance redressal mechanism of the project to the affected persons and also facilitate the entire process to register, mitigate / redress grievances raised due to construction work;
(viii) To generate awareness about livelihood restoration activities among the affected persons;
(ix) To organize periodical meetings with all SSO, PMSC/IADC, reviewing progress and decide upon further plan of action;
(x) Assist to ensure payments of compensation to affected persons in section ready for construction prior to civil works;
(xi) Assist in preparing social monitoring reports, corrective action plans and semi-annual reports; and
(xii) Reporting and documentation of all field level activities and any other work as and when assigned by the Project Authority.

2. Sewerage House Connection:

(i) To supervise household surveys (for sewerage connection) in the project coverage area and prepare list of eligible households with necessary details as deemed fit by the authority.
(ii) To generate awareness among the customers regarding the project objectives, benefits of house connection, procedure of getting house connections, project grievance redress mechanism etc. through ward / locality level connection campaigns
(iii) To conduct public consultation program for information dissemination;
(iv) To work closely with PMU, PMSC/IADC to facilitate the house connection process and redressal of public grievances and also to identify issues related to sewerage house connection;
(v) To identify vulnerable households (women headed, elderly headed, disabled, BPL etc.) and assist them to appeal to the competent authority for assistance; To ensure 100% coverage of poor and vulnerable households under project benefits
(vi) Support SSO with data and information for monthly, quarterly, semi annual progress monitoring reports.
(vii) Documentation and preparation of case studies, consultation reports etc.
(viii) Any other tasks as assigned by the authority.

190. Gender Specialist will by engaged by the PMU. The resettlement plan implementation will ensure a gender sensitive approach in planning, management and operations of resettlement. If necessary, separate groups of women affected persons may be formed with the assistance of the Resettlement Consultant. Feedback from the female affected persons and female headed households will be obtained through these female focused groups for planning relocation and resettlement.

191. Female staff including Gender Specialist/ Social Safeguard Officer will be engaged by the Executing Agency who will identify needs of female affected persons for income restoration approaches and implementation of the income restoration component of the resettlement plan.

Women are to be consulted from the beginning of the project and will continue till end of the project activities.

C. Responsibilities of Social Safeguard Specialist of Project Consultants (PMSC/IADC)

192. The PMSC/IADC will assist SIU of PMU to achieve compliance with the involuntary resettlement and indigenous peoples' safeguards requirements in accordance with ADB Safeguard Policy Statement 2009 and government policies, as per the agreed Entitlement Matrix for the Program, and ensuring that the contractors design, construct and operate the project facilities in compliance with the same. Detailed terms of reference of the PMSC and IADC social safeguards teams are in Appendix 3. Summary of key tasks of the PMSC/IADC given below, is not limited to the following:

(i) Establish a system to monitor social safeguards outcomes of the Project; including the functioning of the GRM, and prepare indicators for monitoring important parameters of safeguards;
(ii) Take proactive action to anticipate the social safeguards aspects of the Project to avoid delays in implementation;
(iii) Support PMU to prepare/update resettlement plan and quarterly and semi-annual social safeguard monitoring reports (SSMR) that will be appraised during project implementation;
(iv) Support the PMU in ensuring that the social safeguard activities are carried out in accordance with the agreed plans and frameworks;
(v) Ensure that the relevant measures specified in the resettlement plan will be incorporated in bidding documents and approved by ADB prior to issuance of invitation for bidding and monitor their compliance on behalf of PMU; and
(vi) Ensure monitoring of social safeguards plans and address unanticipated impacts, if any; and
(vii) Provide training programs to PMU/PMSC staff and contractors involved in the project implementation for strengthening their capacity in managing and monitoring social safeguards.

193. Project Contractor. The Contractor will have a dedicated Social Supervisor, who will hold a Bachelor's degree in social science and would have at least 5 years of experience in resettlement planning and implementation, as well as gender action plan implementation, preferably in multi-lateral aided projects. The tasks of the Contractor's Social Supervisor will be –

(i) Work in close coordination with the PMSC/IADC, design engineers and social safeguards personnel to finalize detailed design keeping the safeguard principles adopted for the project in view;
(ii) Ensure that all design-related measures (e.g. special considerations for the vulnerable related to facility locations or design, mitigation measures for affected persons etc.) are integrated into project designs before approval;
(iii) Conduct joint walk-through with PIU, design engineers and social safeguards personnel from PMSC/IADC at sites/sections ready for implementation; identify the need for DMS, and conduct DMS to arrive at the final inventory of loss;
(iv) Ensure strict adherence to ADB and government policy on social safeguards and the agreed entitlement matrix during implementation;
(v) Review the IEE and RP Report including the entitlement matrix and REA checklist, category and the EMP, and conduct site visits to understand the environmental and social sensitivity of the project sites.

(vi) Assist with grievance redress and ensure recording, reporting and follow-up for resolution of all grievances received;
(vii) Understand the regulatory compliance requirements related to labour welfare, social, safety, environment etc.,
(viii) Assist PMU in disclosing relevant information on safeguards (eligibility, entitlements, compensation, cut-off date, processes, timelines, GRM etc.) to beneficiaries and affected persons including the vulnerable;
(ix) Assist PMU to facilitate the house connection process and redressal of public grievances and also to identify issues related to sewerage house connection.

194. The above arrangement will ensure that:

(i) Social safeguard issues are addressed;
(ii) Resettlement principles are followed in all resettlement issues;
(iii) Approved resettlement plan is implemented;
(iv) Implementation of resettlement plan is monitored;
(v) Periodic monitoring reports are prepared in time and submitted to PD, PMU for onward transmission to ADB upon approval; and
(vi) Database on resettlement monitoring and due diligence is updated and maintained.

195. **Independent Monitor.**[28] ADB will provide a social safeguards specialist cum independent monitoring consultant, whose main task will be to support SPS compliance monitoring and reporting. As an independent monitor, the specialist (consultant) will be required to confirm/verify the information presented in the semi-annual social monitoring reports based on field level verification studies and consultations, compliance with loan covenants on social safeguards, assess the resettlement process and timing, adequacy of institutional arrangements for resettlement planning and implementation, affected persons' status before and after displacement, and verify compliance with social safeguards related loan covenants. The specialist will also be responsible to (i) assess whether resettlement objectives, particularly restoration or enhancement of livelihoods and living standards of the Displaced Persons (DPs) are being met and the compensation and measures proposed for people facing economic impacts are adequate for livelihood restoration; (ii) suggest any corrective actions as required; and (iii) review the project impacts on vulnerable affected persons and assess the effectiveness of the mitigative actions taken for vulnerable affected persons.

D. Implementation

196. The PMU will be responsible for monitoring and implementation of the resettlement plans. The PMU along with the PMSC will undertake surveys and record observations throughout the construction period to ensure that safeguards and mitigation measures are provided as intended. The PMU with the support of the PMSC will arrange for delivery of entitlements to affected persons, implementation and monitoring of safeguards compliance activities, public relations activities, gender mainstreaming activities and community participation activities. It will also arrange for obtaining statutory clearances and obtaining no objection certificates from government agencies and/or other entities, if required. It will also coordinate for obtaining ROW clearances with related state and national agencies. The PMSC Social Safeguard Specialist will supervise

[28] Budget for the social safeguards specialist cum independent monitor will be provided by ADB under a TRTA. The independent monitoring consultant will have intermittent inputs spread over the period 2021-2024.

data collection for resettlement plan report updating, preparation and implementation and prepare progress reports with respect to resettlement plan implementation.

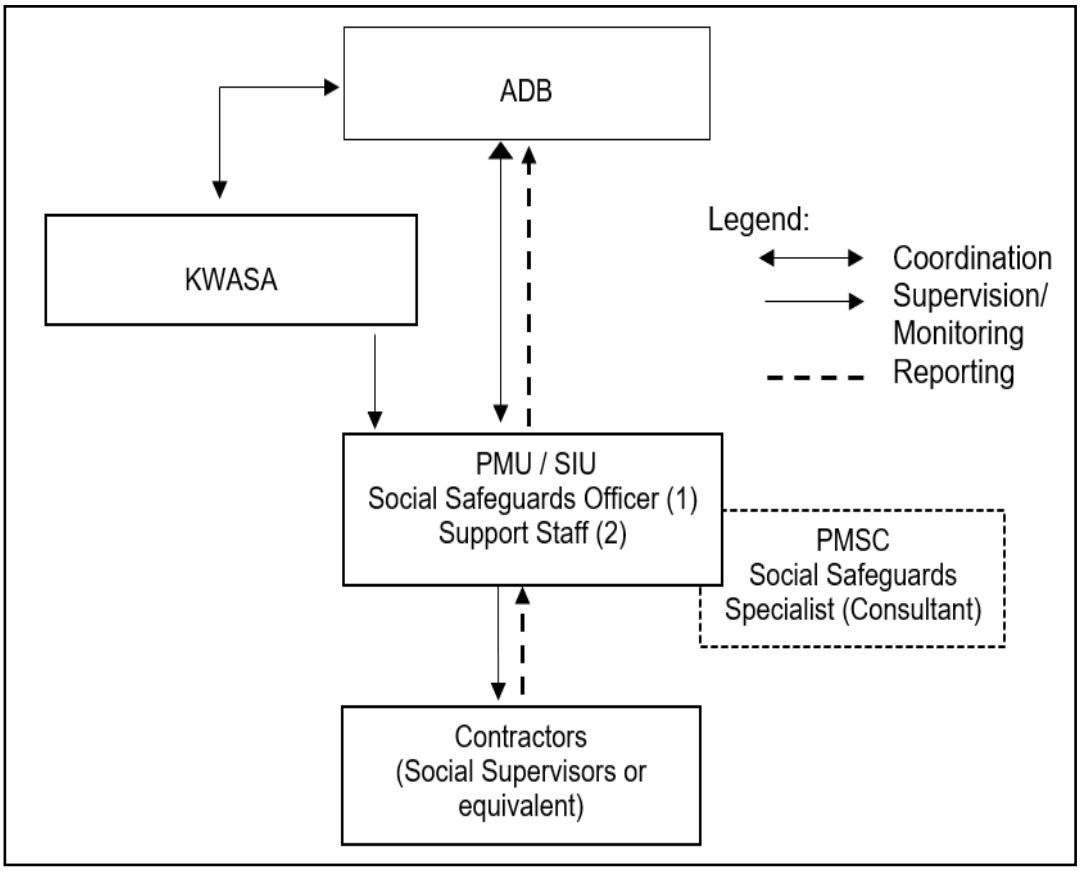
197. Organizational procedures/institutional roles and responsibilities for resettlement plan implementation and steps and/or activities involved in delivery of entitlements are described in Table 42.

198. Institutional responsibilities for RP preparation and implementation activities are summarized in table below.

Table 42: Institutional Roles and Responsibilities

Activity	Responsible Agency
A. Project Initiation Stage and Institutional Setup	
• Formation of PMU	Local Government Division
• Selection & finalization of project sites	PMU
• Disclosure of proposed land acquisition and project details by issuing Public Notice	Deputy Commissioner / PMU
• Meetings at community/household level with APs	PMU
• Capacity Building training	PMU/ PMSC/IADC
B. Resettlement Plan Preparation and Updating Stage	
• Census of APs and socioeconomic survey	PMU / PMSC
• Survey on unit prices for computing replacement costs	JVC/PMU
• Screening of vulnerable affected persons	PMSC
• Calculation of compensation and entitlements	Deputy Commissioner /PVAC
• Prepare/update of project RP	PMU/ PMSC
• Consultations on RP and entitlements with APs	PMU/ PMSC
• Incorporate comments and suggestions to resettlement plan	PMU/ PMSC
• Finalize RP and submit to ADB. All draft RP must be submitted to ADB for clearance prior to award of contracts.	PMU ADB
ADB website disclosure	ADB
C. RP Implementation Stage	
Issuance of ID Cards to APs	PMU
Detailed Schedule for compensation payment	PMU/ PMSC
Distribution of Relocation Notices to affected persons	PMU
Award of Cheques for Land Compensation	Deputy Commissioner
Award of Cheques for other Compensation and Assistance/Rehabilitation	PMU
Providing compensation to the hawkers and vendors before start of civil construction work	PMU
Providing assistance to the hawkers and vendors to move to nearby, alternate locations for carrying out their business	PMU, Contractors
Confirm with ADB in writing when payment to APs has been completed. Permission to contractor to begin works once compensation to APs is confirmed.	PMU
Income Restoration Program and Training	PMU/ PMSC/IADC
Demolishing/ Relocation of Affected Structures/Assets	Deputy Commissioner /PMU
Grievances Redressal	PMU/GRC
Internal monitoring	PMU/ PMSC/IADC
Monitoring and Evaluation of resettlement plan implementation, compensation disbursement and achievement of objectives of resettlement plan, in line with SPS	Independent monitor
If Resettlement Plan Implementation found satisfactory, Notice to proceed for Civil works is issued	PMU

Figure 7: Institutional Arrangement for Resettlement Plan Implementation



ADB = Asian Development Bank, KWASA = Khulna Water Supply and Sewerage Authority, PMSC = project management and supervision consultant, PMU = project management unit, SIU = Social Implementation Unit

E. Management Committees for Resettlement Plan Implementation

199. To arrive at a fair compensation sufficient to cover replacement cost of the lost properties and assets, if any, formation of a Joint Verification Committee (JVC) and a Property Valuation Advisory Committee (PVAC) will be formed for the project and members will be area specific. For grievance redress a Grievance Redress Committee (GRC) will also been formed. A Resettlement Advisory Committee (RAC) will be formed to facilitate KWASA for timely relocation of affected persons from the project area and assist in the delivery of project resettlement benefits to the affected persons, if necessary.

200. The Ministry of LGRD&C through a gazette notification shall form the various committees involving the Deputy Commissioner, LGI and the affected persons. These committees will ensure stakeholders' participation and uphold the interests of the vulnerable Project Affected Persons. The powers and jurisdictions of the committees will be clearly defined in the gazette notification.

1. Joint Verification Committee (JVC)

201. The major responsibility of the Joint Verification Committee (JVC) to be formed by Ministry of LGRD&C will carry physical verification and review the collected data along with the DCs' assessment of loss of physical assets and their owners. The scope and responsibility of the JVC will be clearly defined in the gazette. The JVC will comprise of:

(i) Executive Engineer, PMU, KWASA, –Convener
(ii) Representative of Deputy Commissioner –Member
(iii) Social Safeguard Officer, PMU, - Member
(iv) Assistant Engineer, PMU, KWASA – Member Secretary

202. JVC will be responsible for the following tasks:

(i) Verify and assess physical assets, including structure, trees, crops, businesses, etc. to be affected on the project ROW.
(ii) Make an Estimate on CCL (Cash Compensation under Law) of all assets to be affected as well as assets that are not falling under CCL and submit to Deputy Commissioner's office and PMU.
(iii) Communicate and assist INGO for process the entitlements of the project-affected persons using JVC data as one of the determinants for valuation.

2. Property Valuation Advisory Committee (PVAC)

203. A Property Valuation Advisory Committee (PVAC) will be formed for the project by the Ministry of LGRD through a gazette notification, and will review the assessment based on the market price of the properties affected by the project at their replacement cost. The scope and responsibility of the PVAC will clearly be defined in the gazette. JVC and PMU will support PVAC processing the data on the entitlements of the project-affected persons. The PVAC will comprise of:

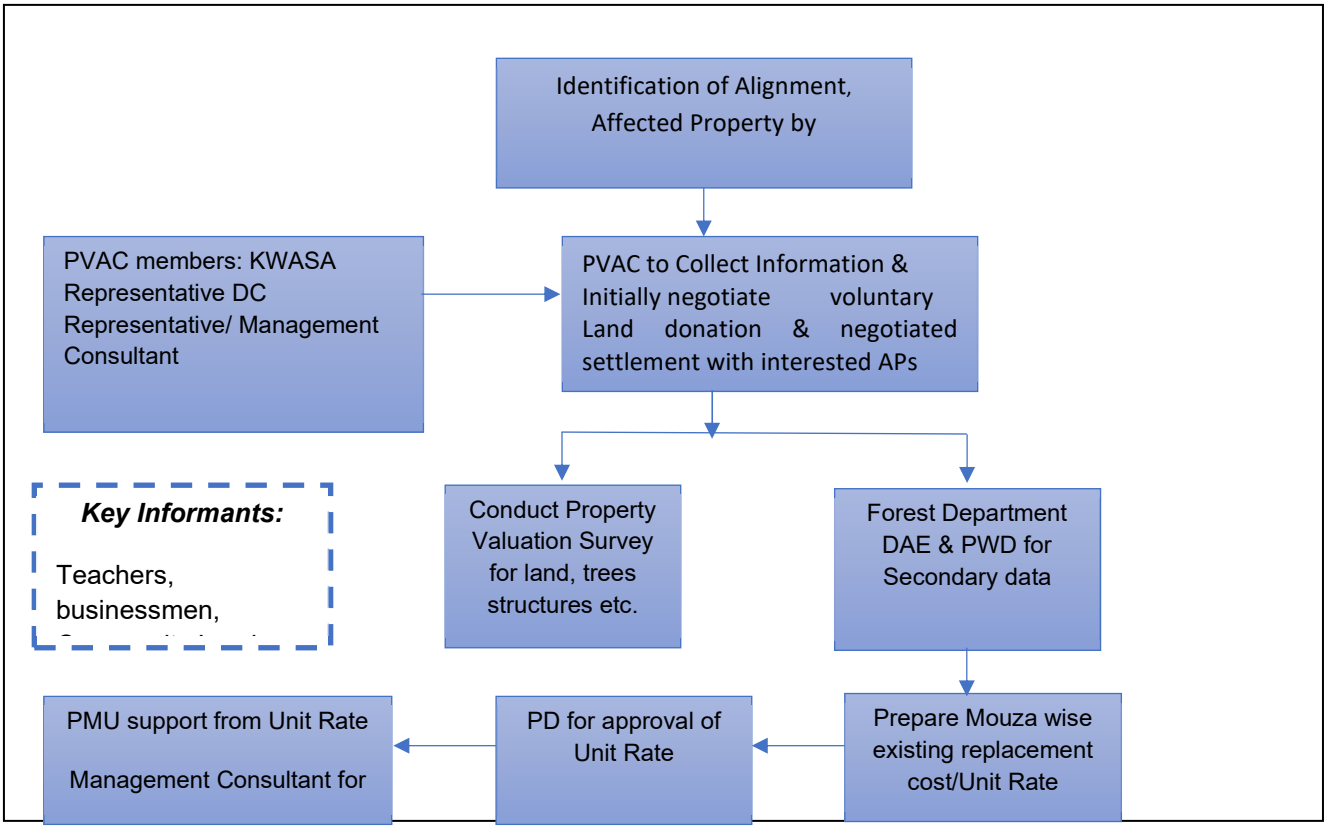
(i) Mayor, Khulna City Corporation – Convener
(ii) Vice Chancellor, Khulna University of Engineering and Technology - Member
(iii) Representative of Deputy Commissioner -Member

204. The PVAC is responsible for:

(i) The PVAC will review the assessment made by the SIU based on the market value of the properties to be affected by the project as replacement cost after verification by the JVC.
(ii) Communicate and assist SSO for process the entitlements of the project-affected persons using PVAC data as one of the determinants for building the estimate of the replacement cost.
(iii) PVAC may visit the site if necessary, for verifying any information.
(iv) The committee will use CCL (Cash Compensation under law), Current Market Value (CMV) assessed by the Deputy Commissioner's Office, PWD data in proposing replacement cost of land, structures, common property resourced and other losses prior to recommending to PMU.
(v) For recommending to PMU the committee will take decision at two-third majority basis.

205. The procedure for determining the valuation of property by the PVAC is provided in the Figure 9.

Figure 8: Procedure of Determining Valuation of Property



3. Resettlement Advisory Committee (RAC)

206. The Social Safeguard Officer (SSO) will assist the KWASA to form municipal Ward based Resettlement Advisory Committees (RACs) to involve the local communities and affected persons in the implementation process. The committees will seek local assistance from the affected people and communities in the implementation process and assist the Executing Agency in all matters related to resettlement. The RACs will ensure local participation in the implementation of the Resettlement Plan. The RACs may be comprised of the following manner by including the representatives of all stakeholders at the sub-project level that should be approved by the KWASA:

(i) Chairperson
(ii) Member Secretary
(iii) Local Informants (one male, and one female)
(iv) Representatives of various stakeholders
(v) Representatives of the Affected Persons including one female

207. The RAC will be responsible for:

(i) The committees will seek local inputs from the affected people and communities in the implementation process and assist DWASA in all matters related to resettlement.
(ii) The RACs will ensure local participation in the implementation of the resettlement plan.

(iii) Assist SIU to process the entitlements of the project-affected persons using the data, which is verified and validated as one of the determinants.

F. Institutional Capacity Development

208. Capacity to handle environmental/involuntary resettlement/indigenous people impacts, gender and vulnerability issues, etc., may need to be built in the Project. Training of Executing Agency and PMU staff on ADB SPS 2009 and Operational Manual Bank Policies (OM F1), covering aspects such as environmental planning/resettlement planning/implementation, social protection and gender, including the specific recording, reporting, and disclosure requirements will therefore be needed to be planned separately.

209. For the capacity building of designated social safeguards officer and engineers, PMU will organize training programs on safeguards. Services of consultant trainers may be procured for coordinating and imparting required trainings to the staff.

210. Owing to the complexity of projects spread across two ULBs, there is a need to specially focus on capacity building on social (distinct social, economic and cultural traits and traditions of people and the importance of preserving these, legal and technical aspects in such Projects with an adequate budgetary provision. If required external resources, e.g., sociologists and development practitioners with relevant experience and knowledge of ADB SPS as well as government policies will be employed.

211. KWASA with the support of the social safeguards specialist cum independent monitor provided by ADB and the Social Safeguard Specialist from PMS Consultant will conduct training and capacity building program on Resettlement Plan design, implementation and monitoring for the PMU staff on issues concerning: (i) ADB SPS 2009 – safeguards policy principles and requirements; (ii) principles and procedures of land acquisition; (iii) meaningful consultation and participation; (iv) entitlements and compensation disbursement mechanisms; (v) grievance redress; (vi) monitoring of resettlement operation; and (vii) reporting and disclosure methods. The trainers will require to be well versed in SPS requirements as well as local practices and legal frameworks. Cross-learning with other ADB projects in Bangladesh, e.g. Dhaka Environmentally Sustainable Water Supply Project, will be encouraged in training workshops. Specific modules will be devised after assessing the capabilities of the target participants and the requirements of the project. Institutional capacity building programs will involve training on social safeguards for the PMU/SIU/ PVAC/GRC/ RAC/JVC and the Contractors. Table 43 gives an indicative outline of the training programs that can be carried out. The Resettlement Expert of PMSC will suggest and facilitate the training programs.

Table 43: Indicative Training Program

Sl. No.	Staff	Training Module
I	PMU	–Orientation on ADB SPS and applicable Government of Bangladesh laws and policies; Discussion on the Resettlement Framework; how to develop an Entitlement Matrix; Identification and assessment of social impacts; avoidance and mitigation measures; Resettlement Plan preparation; Socioeconomic and Census Survey; Preparation of land plans; Implementation Schedule; Compensation calculation; sharing of good practices; Consultation and disclosure are some of the topics to be covered
II	All the committees PVAC, RAC, JVC responsible for social safeguard/ resettlement activities, municipality representatives and GRC members.	Measurement of structures; Valuation procedures; Resettlement site selection; Minimizing resettlement; preparation of LAPs, Disbursement method; Shifting of CPRs; disclosure requirements, preparation of income restoration plans, preparation of micro plans; grievance redress process.
III	Monitoring Consultants/ Contractors/ Construction Supervision Consultants	Monitoring indicators, reporting requirements; preparation of Corrective Action Plans, Due Diligence Reports, Grievance redress process; consultation and disclosure processes.

X. IMPLEMENTATION SCHEDULE

212. Land acquisition, compensation and relocation of affected persons will not commence until the updated resettlement plan with detailed measurement and census survey data has been reviewed and cleared by ADB. All entitlements are to be paid prior to displacement. The civil works packages will be implemented over the project period of about six years. For each package, there will be a separate time bound implementation schedule. The implementation of resettlement plan will include: (I) identification of cut-off date and notification, (ii) verification of losses and extent of impacts, (iii) finalization of entitlements and distribution of identity cards, (iv) consultations with affected persons on their needs and priorities, and (v) resettlement, provision of compensation and assistance, and income restoration for affected persons. An indicative resettlement plan implementation schedule is provided in Table-45below.

Table 44: Implementation Schedule

Land Acquisition & Resettlement Activities	Year 1				Year 2				Year 3
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Deployment the Assigned officer from KWASA									
Formation of Committees by Ministry of LGRD									
RP Implementation Action Plan/ Compensation Plan									
Information Campaign									
Consultation and focus group discussion									
Start paying compensation by the DC									
Payment of compensation/resettlement benefits to affected persons by KWASA									
Determination of Individual Entitlements for payment									
Preparation & Submission of Resettlement Budget and individual entitlement									
Approval of Resettlement Budget by the Ministry/ EA									
Redress of Grievances									
Payment of additional Resettlement benefits based on GRC decision									
Relocation of HHs									
Training and Income Generation Programs									
Submission of project completion report by IA/EA									
Internal Monitoring Reporting									

XI. MONITORING AND REPORTING

A. General

213. The Executing Agency, through the Project Management Unit, will establish a monitoring system involving an assigned officer for collecting, analyzing, reporting and use of information about the progress of resettlement, based on the resettlement policy. PMU will be responsible for monitoring the progress of all aspects of resettlement and income generation. The EA will report to the ADB on resettlement and income regeneration by APs in semi-annual reports, including identification of significant issues. At the end of the project a Project Completion Report describing all significant activities and outcomes will be prepared and submitted to the ADB by the PD/PMU.

214. The resettlement plan implementation monitoring will be done internally to provide feedback to PMU through monitoring and evaluation reports and other relevant data, to identify any action needed to improve resettlement performance or to respond to changing circumstances. Evaluation of the resettlement activities will be undertaken during and after implementation of each resettlement plan to assess whether the resettlement objectives were appropriate and whether they were met, including specifically whether livelihoods and living standards have been restored or enhanced. The evaluation will also assess resettlement efficiency, effectiveness, impact and sustainability, drawing lessons as a guide to future resettlement planning. Budgetary provisions shall be kept in the RP for independent monitoring and review.

215. Monthly monitoring reports will be submitted by assigned officer to PMU. The PMU will consolidate monthly reports into quarterly monitoring reports for submission to ADB. These reports will form a part of the project progress reports submitted by PMU to ADB. A sample monitoring report format is given inAppendix5**.**

216. The major objectives of monitoring are to: (I) ensure that the standards of living of affected/displaced persons are restored to the original condition or improved; (ii) ascertain whether activities are progressing as per schedule and the specified timelines are being met; (iii) assess if compensation, rehabilitation measures are sufficient; (iv) identify problems or potential issues; and (v) identify methods to rapidly mitigate any problems. The above information will be collected by Executing Agency through its PMU, which is responsible for monitoring the day-to-day resettlement activities of the project through the following instruments:

(i) Review of census information for all Affected Persons/ Displaced Persons;
(ii) Consultation and informal interviews with Affected Persons/ Displaced Persons;
(iii) In-depth case studies;
(iv) Survey of Affected Persons/ Displaced Persons;
(v) Key informant interviews; and
(vi) Community public meetings.

B. Internal Monitoring

217. Monitoring shall be undertaken by the PMU through the assigned officer supported by Project Consultant. They will gather information on RP implementation covering relevant activities as per the schedule. All activities listed will be illustrated showing the target dates for completing resettlement activities. Monitoring reports on resettlement plan implementation shall be included in each quarterly Project Progress Report (PPR). The report of the Consultant will contain: (I) accomplishment to-date, (ii) objectives attained and not attained during the period, (iii) challenges encountered, and (iv) targets for the next quarter. The internal monitoring report will then be

integrated by the PMU with the overall PPR submitted to ADB. The reports submitted to ADB will describe the progress of the implementation of resettlement activities and any compliance issues and corrective actions. These reports will closely follow the involuntary resettlement monitoring indicators agreed at the time of resettlement plan approval. Outline of semi-annual monitoring report is in Appendix 5. Table 45 below shows the monitoring indicators that will require to be reported.

Table 45: Monitoring indicator

Monitoring Issues	Monitoring Indicators
Budget and Timeframe	• Have all resettlement concerned officer/staff been appointed and mobilized for field and office work on schedule? • Has capacity building and training activities been completed on schedule? • Are resettlement implementation activities being achieved against agreed implementation plan? • Are funds for resettlement being allocated to resettlement agencies on time? • Have resettlement offices received the scheduled funds? • Have funds been disbursed according to RP? • Has the land made encumbrance free and handed over to the contractor in time for project implementation?
Delivery of DP Entitlements	• Have all DPs received entitlements according to numbers and categories of loss set out in the entitlement matrix? • How many affected households relocated and built the new location? • Are income and livelihood restoration activities being implemented as planned? • Have affected businesses received entitlements? • Have the squatters, encroachers displaced due to the project, been compensated? • Have the community structures (e.g. Mosque, etc.) been compensated for and rebuilt at new site? • Have all processes been documented?
Consultations, grievances & Special issues	• Have resettlement information brochures/leaflets been prepared and distributed? • Have consultations taken place as scheduled including meetings, groups, community activities? • Have any DPs used the grievance redress procedures? • What are grievances were raised? • What were the outcomes? • Have conflicts been resolved? • Have grievances and resolutions been documented? • Have any cases been taken to court?
Benefit Monitoring	• What changes have occurred in patterns of occupation compared • What changes have occurred in income and expenditure patterns compared to pre-project situation? • Have DPs income kept pace with these changes? What changes have occurred for vulnerable groups?

C. Compliance Monitoring

218. Compliance monitoring of resettlement plan implementation shall cover (i) project compensation and entitlement policies, (ii) adequacy of organizational mechanism for implementing the resettlement plan , (iii) restoration of incomes of affected persons, (iv) settling complaints and grievances, and (v) provisions for adequate budgetary support for implementing the resettlement plan. The Project Management Consulting Team will assess if the affected persons: (i) have been paid proper compensation and resettlement benefits; (ii) have re-established their structures; (iii) have re-established their business; and (iii) were extended assistance to restore their incomes from pre-project levels. It will also appraise the accounting documents used in recording the payments of compensation to affected persons by the Executing Agency. ADB will provide the support of a social safeguards specialist cum independent monitor, to guide the PMU and project consultants and ensure independent monitoring and reporting on project compliance with SPS requirements.

D. Reporting Requirements

219. ADB will monitor and evaluate the resettlement plan implementation and economic rehabilitation activities during entire project period. The monitoring report will contain evaluation of the resettlement plan implementation, its efficacy and provide valuable insight into the constraints in the way of implementation of resettlement plan.

220. The Project Director shall prepare and send status reports to ADB on RP implementation periodically through the semi-annual Project Progress Reports and a final report upon completion of the resettlement program.

221. During project implementation, will establish a monthly monitoring system involving staff at the PMO level who will prepare monthly progress reports on all aspects of resettlement operations.

222. The assigned officer (PMU) will conduct periodic reviews and supervision missions during the implementation stage and will report to on the progress of all aspects of resettlement activities. It is understood that a post-evaluation of resettlement plan activities will be carried out by ADB to assess the resettlement impact and the efficacy of the resettlement plan policy.

223. The monitoring indicators for evaluation of the objectives achieved under the resettlement and rehabilitation program are of three kinds:

(i) Process indicators, indicating project inputs, expenditure, staff deployment, etc.;
(ii) Output indicators, indicating results in terms of numbers of affected people compensated/assisted and resettled, skill development training organized, and number of displaced persons capable of reorganizing their economic livelihood; and
(iii) Impact indicators, related to the long-term effects of the project on people's lives, including economic standard sustained or improved, and alternative employment provided to contractual employees on muster roll etc.

XII. NEXT STEPS

224. The resettlement plan has been prepared based on preliminary design and initial socio-economic survey data, feedback of community, affected persons and transact walk along the

proposed alignment and project locations of the project components. The resettlement plan needs to updated with the following information and to be presented to ADB for final approval and disclosure in public domain.

A. Subproject description:

(i) **Location of Micro-tunnelling pits and stretches of trenchless pipelaying**: Based on the initial information received from PMU, KSSDP, sewer pipelines in some congested stretches, will be laid through trenchless or micro-tunnelling method. The geo-coordinates and exact locations where trenchless and micro-tunneling pits are proposed, have been identified (Appendix 9). Potential involuntary resettlement impacts at the micro-tunnelling pit locations should be assessed and updated to the resettlement plan.

(ii) **Outfall locations:** Outfall locations have been identified as Rupsha river for STP-1 and Hogladanga canal for STP-2. Department of Environment (DOE) is the owner of both the STP outfall sites. The resettlement plan will be updated with the NOC of DOE.

B. Scope of Land Acquisition and Involuntary Resettlement Impact:

(i) **Lobonchora Matabangha (STP-1):** At Lobonchora Matabangha (STP-1) location, there are 7 landowners, who do not reside within the plot. It has been identified during the socio-economic survey that three (3) families living outside the land seasonally cultivate fish. Further assessment may be carried out to understand the commercial side of the fish cultivation or if this is used for self-consumption.

(ii) **Manhole Pumping Station:** As per the project description five (5) manhole pumping stations are proposed to be constructed under the project for pumping out wastewater from the manholes due to inundation issues in some low lying areas within the Khulna city. The locations of the manhole pumping stations have been identified; involuntary resettlement impacts to be assessed and appended to the updated resettlement plan.

(iii) **Sewer Pipelines:** KSSDP will take ‘no objection’ or approval from the appropriate government department that are owners of the public road before start of civil work and the same should be updated in the resettlement plan document.

(iv) **Assessment of Involuntary Resettlement Impacts due to laying of Sewer Pipelines:** Based on the detail design, further assessments will be carried out to ascertain number of affected persons due to temporary income loss for laying of sewer pipelines and subsequently this will be updated to the resettlement plan.

(v) **SPS -1 at Custom Ghat and SPS-2 at Motiarkhalikhalpar:** The government land identified for SPS 1 and 2 are used by traders doing business of construction materials and who use the land for storing construction materials. About 80 daily wage labours work for these 22traders in SPS 1and 2. Potential impacts are anticipated due to access disruption and reduction in storage area. Impact assessment will be carried out for these traders and their daily wage labours and the same will be appended to the updated resettlement plan, if impacts are identified.

(vi) **Approval or transfer** of the government land to KWASA will be updated to the resettlement plan.

(vii) **SPS-7, Karimnagar more**: At Karimnagar more, location for SPS-7 there are two tenants who will be physically displaced. One of the affected person has furniture shop and the other has a cow shed. The furniture shop has 2 employees and the

cowshed has 1 employee, information related to these three employees hasnot been included in this resettlement plan. The impacts caused to these employees will be assessed and added to the resettlement plan. The details of employees will be provided in the updated resettlement plan as no socio-economic data could be collected during survey.

(viii) **Outfall location**: Any potential impact related to the outfall location will be assessed before start of civil works and duly updated to the resettlement document.

C. Socio-economic Profile and Information:

(i) **Census and socio-economic survey:** The census and socio-economic survey of all the affected persons, currently identified under the three packages must be conducted and appended to the updated resettlement plan. The survey to include:

(a) Tenants,
(b) Sharecroppers,
(c) Traders and daily wage labours
(d) Roadside vendors, hawkers, shop owners along the sewer pipeline alignment.

D. Other Information:

(i) Socio-economic information of affected persons with photographs of all including employees, wage laborers, traders in govt. plots, landowners and all other affected persons to be identified by the project.
(ii) Photographs of affected persons with affected structures.
(iii) Separate list of affected persons who will be physically displaced.
(iv) After the land acquisition process is completed, the Deputy Commissioner will issue a land handover notice to KWASA which should be updated to the resettlement document subsequently.

PHOTOGALLERY





Available Land at Labanchora STP – 1 (source: DPR STP -1; page -6)





Available Land at Thikraband STP – 2 (source: DPR STP -1; page -9)





Consultation with landowners at STP sites

	
Kashim Nagar (SPS - 5).	**Karim nagar (SPS-7)**
	
Truck terminal road (SPS-6)	**Islamia college road (SPS-4)**
	
Customghat(SPS-1)	**Motiarkhal par (SPS-2)**





Consultation with the family members of Non titled Holder





Consultation with the Affected Persons at Customghat





Consultation with the Affected Persons at Motiarkhal par





Consultation with the local traders and residents of the project area





Consultation with the local traders and residents of the project area





Photographs of Public Consultations (in 2021) maintaining Covid protocol

PHOTOGRAPHS OF ROADS OF KHULNA CITY WITH CO-ORDINATES

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<tr><td>MUNSHI PARA 1ST LANE</td><td>GAGAN BABU ROAD</td></tr>
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<tr><td>GAGAN BABU ROAD</td><td>KHAN JAHAN ALI ROAD</td></tr>
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UPPER JESSORE ROAD	**BABU KHAN ROAD**
	
KDA AVENUE	**MAJID SARANI**
	
MA BARI STREET	**MA BARI STREET**

	
DHAKA – JESSORE – KHULNA ROAD	**JALIL SARANI**

	
MUNSHIPARA 2ND LANE	**KHULNA – JESSORE – DHAKA HIGHWAY**

Appendix 1 : Details of land availability and ownership status

Sr. No.	Project Component	Location	Ownership	Area required (m^2)	Area of government land available at the location(Decimals)	Dag No.	Plot number	Total Area available (decimal)	Area required (decimal)	Photographs
1	Sewerage Treatment Plant(STP-1)	Mathabhanga	Private Land	48587.15	NA	3169, 3170, 3171,	3	1984	1200	
2	Sewage Treatment Plant(STP-2)	Tikrabandh	Private Land	89076.44	NA	34, 35, 48, 49, 50, 51, 52, 53, 54, 55, 56	11	3299	2200	
3	Sewage Pumping Station(SPS #1)	Custom Ghat	Govt.Land	1000.49	200	3866, 3867, 3868, 3869	4	48.18	24.71	

Sr. No.	Project Component	Location	Ownership	Area required (m^2)	Area of government land available at the location(Decimals)	Dag No.	Plot number	Total Area available (decimal)	Area required (decimal)	Photographs
4	Sewage Pumping Station(SPS #2)	Motiarkhali Khal Par	Govt.Land	1000.49	150	1321, 1322, 1323, 1324, 1325	5	39.57	24.71	
5	Sewage Pumping Station(SPS #3)	Labonchara Sluice gate	Private Land	1000.49	NA	7214, 7646 7647	3	256.68	24.71	
6	Sewage Pumping Station(SPS #4)	Nirala	Private Land	1000.49	NA	34576, 34577	2	57.2	24.71	

Sr. No.	Project Component	Location	Ownership	Area required (m^2)	Area of government land available at the location(Decimals)	Dag No.	Plot number	Total Area available (decimal)	Area required (decimal)	Photographs
7	Sewage Pumping Station(SPS #5)	Kashimnagar, Gollamari	Private Land	1200.33	NA	29595	1	39.6	29.65	
8	Sewage Pumping Station(SPS #6)	Sonadanga	Private Land	1000.49	NA	3002	1	84.8	24.71	
9	Sewage Pumping Station(SPS #7)	Karim Nagar	Private Land	1000.49	NA	3460, 3462, 3463, 3464	4	30.72	24.71	

Sr. No.	Project Component	Location	Ownership	Area required (m^2)	Area of government land available at the location(Decimals)	Dag No.	Plot number	Total Area available (decimal)	Area required (decimal)	Photographs
10	Sewage Pumping Station(SPS #8)	Islamia College Road	Private Land	1000.49	NA	7594, 7673	2	75.13	24.71	

Source: Land Availability details 05.05.2020.

Appendix 2: Socio economic Profile of 210 Land Owners

Sl. No. (AP wise)	Sl. No. (plot wise)	Proposed Plot	Name of AP	Sex	Name of father/mother (as in valid ID)	Education Qualification of AP	Dag Nos.	Khatian no.	Total Area of Affected Land Parcel (Acres)	Area of land to be Acquired for Project Component (Acres)	Other Land Size (Acres) and classification'	Total area owned	Percentage of Land loss	HH size (No. of persons)	Primary occupation (mention occupation type)	Secondary occupation (mention occupation type)	Income From Primary Source	Income From Secondary Source	Total HH income per month	Per head income per month (BDT)	Whether vulnerable/If yes, type of vulnerability	Current land use of the parcel	Type of Affected Structure	Whether any livlihood impact anticipated for the landowners due to LA
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		19	20	21	22
1	1	(STP-2) Thikrabandh	SK.Md.Didar Hossain Bulbul	M	Late SK. Abdur Rahman	Middle School (Class 8)	55	1/1, 72	0.132	0.0495	0.534	0.666	7%	6	Private service	N/A	25,000.00	0	25,000.00	4,166.67	N/A	Vacant Plot	N/A	N/A
2	2	(STP-2) Thikrabandh	Md. Nurul Islam Gazi	M	Late Lokman Gazi	Higher Secondary Education (class 12)	56	56	0.0495	0.0495	0.99	1.0395	5%	7	Private Service	Private Service	21,600.00	50400	72,000.00	10,285.71	N/A	Residential Structure	Thatched	N/A
3	3	(STP-2) Thikrabandh	Md. Anisur Rahman	M	Late Md. Shamsur Rahman	Middle School (Class 8)	55	1/1, 72	0.0413	0.0413	0.99	1.0313	4%	4	Owner of Garage	N/A	20,000.00	0	20,000.00	5,000.00	N/A	Vacant Plot	N/A	N/A
4	4	(STP-2) Thikrabandh	Sabiha Kamrul	F	Late Munshi Abdur Rahim	Middle School (Class 8)	56	56	0.1485	0.0825	0.6825	0.831	10%	3	Housewife	Pension	0	35000	35,000.00	17,500.00	N/A	Vacant Plot	Boundary Wall	N/A
5	5	(STP-2) Thikrabandh	Rokeya Khatun	F	Md. Abdul Zabbar Hawladar	Higher Secondary Education (class 12)	56	56	0.1585	0.1585	1.3995	1.558	10%	5	Housewife	Trade & Business	0	120000	120,000.00	24,000.00	N/A	Residential Structure	Kucha , Tin house & Boundary wall	N/A
6	6	(STP-2) Thikrabandh	Tahamina	F	SK Abdur Rahman	Middle School (Class 8)	56	56	0.1815	0.1155	1.0325	1.214	10%	6	Housewife	Trade & Business	0	25000	25,000.00	4,166.67	N/A	Vacant Plot	N/A	N/A
7	7	(STP-2) Thikrabandh	Md. Nur Alom Molla	M	Late Abdul khaleK Molla	Secondary Educated (ClassX)	55	1/1, 72	0.5886	0.1256	0.976	1.5646	8%	6	Trade & Business	N/A	45,000.00	0	45,000.00	7,500.00	N/A	Residential Structure	Tin Shed House	N/A
8	8	(STP-2) Thikrabandh	Md.Masud	M	Abdul Monnnan Ponched	Secondary Educated (ClassX)	56	56	0.099	0.069	1.05	1.149	6%	5	Trade & Business	N/A	30,000.00	0	30,000.00	6,000.00	N/A	Vacant Plot	Boundary Wall	N/A
9	9	(STP-2) Thikrabandh	Kohinur Khatun	F	Md. Lal Mia Prodhan	Graduate	55	1/1, 72	0.0578	0.0578	0.6	0.6578	9%	3	Govt. Service	Govt. Service	20,000.00	20000	40,000.00	13,333.33	FHH	Vacant Plot	Boundary Wall	N/A
10	10	(STP-2) Thikrabandh	Afroza Begum	F	Late Ul fatur Rahman	Graduate	55	1/1, 72	0.2805	0.1055	1.065	1.3455	8%	3	Housewife	Private Service	0	50000	50,000.00	16,666.67	N/A	Vacant Plot	Boundary Wall	N/A
11	11	(STP-2) Thikrabandh	Md.Abul Kalam Azad	M	Late Rajob Ali Shaik	Post Graduate	55	1/1, 72	0.05	0.05	0.728	0.778	6%	5	Govt. Service	N/A	45,000.00	0	45,000.00	9,000.00	N/A	Vacant Plot	N/A	N/A

12	12	(STP-2) Thikrabandh	Farhana Parvin	F	Sorder Soheb Ali	Graduate	55	1/1, 72	0.0495	0.0495	0.45	0.4995	10%	5	Housewife	Govt. Service	0	50000	50,000.00	10,00 0.00	N/A	Vacant Plot	N/A	N/A
13	13	(STP-2) Thikrabandh	Sabina Yeasmin	F	Late Md. Sultan Ahmed	Graduate	56	56	0.066	0.066	0.6095	0.6755	10%	4	Govt. Service	Govt. Service	20,000.00	20000	40,000.00	13,333.33	FHH	Vacant Plot	N/A	N/A
14	14	(STP-2) Thikrabandh	SK. Saidur Rahman	M	Sk. Monsur Rahman	Post Graduate	55	1/1, 72	0.1237	0.0825	0.879	1.0027	8%	3	Govt. Service	Govt. Service	30,500.00	30500	61,000.00	20,333.33	N/A	Vacant Plot	N/A	N/A
15	15	(STP-2) Thikrabandh	Sayed Al Imran	M	Late Muzahidul Alom	Post Graduate	56	56	0.099	0.079	1.048	1.147	7%	4	Govt. Service	Private service	49,920.00	57720	78,000.00	19,500.00	Chronic Disease	Vacant Plot	Boundary Wall	N/A
16	16	(STP-2) Thikrabandh	Sagufta Zaman`	F	Sk. Anowaruzzaman	Higher Secondary Education (class 12)	55	1/1, 72	0.033	0.033	0.432	0.465	7%	4	Housewife	Private service	0	60000	60,000.00	15,000.00	N/A	Vacant Plot	N/A	N/A
17	17	(STP-2) Thikrabandh	Golam Kuddus	M	Late Joinul Abedin	Graduate	56	56	0.099	0.099	1.07	1.169	8%	5	Govt. Service	N/A	40,000.00	0	40,000.00	8,000.00	N/A	Vacant Plot	Boundary Wall	N/A
18	18	(STP-2) Thikrabandh	Archisman Debnath	M	Ram Proshad Debnath	Enginer	55	1/1, 72	0.099	0.079	0.96	1.059	7%	5	Govt. Service	N/A	58,000.00	0	58,000.00	11,600.00	N/A	Vacant Plot	Boundary Wall	N/A
19	19	(STP-2) Thikrabandh	Salina Parvin	F	Late Abul Hossain Sikder	Middle School (Class 8)	55	1/1, 72	0.0495	0.0495	0.45	0.4995	10%	4	Govt. Service	Govt. Service	35,400.00	23600	59,000.00	14,750.00	FHH	Vacant Plot	Boundary Wall	N/A
20	20	(STP-2) Thikrabandh	China Begum	F	Late Irmat Ali Gazi	Primary Education (Class - V)	55	1/1, 72	0.0495	0.0495	0.465	0.5145	10%	4	Trade & Business	N/A	19,000.00	0	19,000.00	4,750.00	N/A	Vacant Plot	N/A	N/A
21	21	(STP-2) Thikrabandh	Dr. Sk. Syeed Aftab	M	Sk. Anwaruzzaman	Doctor	55	1/1, 72	0.0495	0.0495	0.573	0.6225	8%	5	Doctor	N/A	60,000.00	0	60,000.00	12,000.00	N/A	Vacant Plot	N/A	N/A
22	22	(STP-2) Thikrabandh	Md. Hafijur Rahman Molla	M	Late Golam Sarowar	Higher Secondary Education (class 12)	53	1/1, 134	0.0495	0.0495	0.73	0.7795	6%	5	Govt. Service	N/A	40,000.00	0	40,000.00	8,000.00	N/A	Vacant Plot	N/A	N/A
23	23	(STP-2) Thikrabandh	Md Tarikul	M	Hafijur Rahman	Graduate	53	1/1, 134	0.22	0.033	0.083	0.303	11%	4	Govt. Service	Govt. Service	30,000.00	20000	50,000.00	16,666.67	N/A	Vacant Plot	N/A	N/A
24	24	(STP-2) Thikrabandh	Rita Biswash	F	Dinboandhu Roy	Graduate	53	1/1, 134	0.0675	0.0495	2.97	3.0375	2%	8	Housewife	Private Service	0	80000	80,000.00	10,000.00	N/A	Vacant Plot	N/A	N/A
25	25	(STP-2) Thikrabandh	Khan Monowar Hossain	M	Late Khan Yusuf Ali	Graduate	53	1/1, 134	0.099	0.099	1.65	1.749	6%	4	Pension	N/A	16,000.00	0	16,000.00	4,000.00	N/A	Vacant Plot	N/A	N/A
26	26	(STP-2) Thikrabandh	Sk. Shabuddin	M	Sk. Abdul Ohab	Graduate	53	1/1, 134	0.0505	0.0505	0.63	0.6805	7%	4	Lawyer	N/A	40,000.00	0	40,000.00	10,000.00	N/A	Vacant Plot	N/A	N/A
27	27	(STP-2) Thikrabandh	Tarak Chan Dhali	M	Late Norendra Nath Dhali	Graduate	53	1/1, 134	0.066	0.066	0.7795	0.8455	8%	5	Govt. Service	N/A	76,000.00	0	76,000.00	15,200.00	N/A	Vacant Plot	N/A	N/A
28	28	(STP-2) Thikrabandh	Safia Begum	F	Late Abdur Rahim Sarder	Primary Education (Class - V)	54	1/1, 72	0.099	0.079	0.9495	1.0485	8%	4	Housewife	Trade & Business	0	30000	30,000.00	7,500.00	N/A	Vacant Plot	N/A	N/A

29	29	(STP-2) Thikrabandh	Md. Sohrab Hossain	M	Late Md. Abdul Baki	Post Graduate	48	152	0.0502	0.0502	0.825	0.8752	6%	5	Private Service	Private Service	42,000.00	28000	70,000.00	14,000.00	N/A	Vacant Plot	N/A	N/A
30	30	(STP-2) Thikrabandh	Abu Mojaffer Mahmud	M	Late Abdur Rashid	Post Graduate	48	152	0.0495	0.0495	0.736	0.7855	6%	3	Private Service	N/A	60,000.00	0	60,000.00	20,000.00	N/A	Vacant Plot	Boundary Wall	N/A
31	31	(STP-2) Thikrabandh	Nazmin Khanm	F	Sk. Mahbubur Rahman	Graduate	53	1/1, 134	0.0521	0.0521	0.605	0.6571	8%	4	Housewife	Govt. Service	0	35000	35,000.00	8,750.00	N/A	Vacant Plot	N/A	N/A
32	32	(STP-2) Thikrabandh	Beg Rafikul Islam	M	Late Beg Abdus Salam	Graduate	53	1/1, 134	0.0495	0.0495	0.56	0.6095	8%	5	Trade & Business	N/A	35,000.00	0	35,000.00	7,000.00	N/A	Vacant Plot	N/A	N/A
33	33	(STP-2) Thikrabandh	Afroja Akter	F	Late S. M. Sunnat Ali	Graduate	52	1/1, 158	0.0484	0.0484	0.4495	0.4979	10%	3	Housewife	Trade & Business	0	70000	70,000.00	23,333.33	Chronic Disease	Vacant Plot	N/A	N/A
34	34	(STP-2) Thikrabandh	Md. Abdullah Hawlader	M	Hafez Md. Abdul Haque	Doctor	56	56	0.129	0.0825	0.797	0.926	9%	6	Doctor	N/A	45,000.00	0	45,000.00	7,500.00	N/A	Vacant Plot	N/A	N/A
35	35	(STP-2) Thikrabandh	Kazi Saifur rahman	M	Kazi Khalilur rahaman	Post Graduate	54	1/1, 72	0.0825	0.0825	0.8495	0.932	9%	6	Private service	N/A	50,000.00	0	50,000.00	8,333.33	N/A	Vacant Plot	N/A	N/A
36	36	(STP-2) Thikrabandh	Faruk Hossain	M	Hossain Ali Khan	Post Graduate	48	152	0.7021	0.033	1.65	2.3521	1%	4	Govt. Service	Govt. Service	30,000.00	30000	60,000.00	15,000.00	N/A	Vacant Plot	Boundary Wall	N/A
37	37	(STP-2) Thikrabandh	Sk Asadur rahman	M	Sk. Hasem ALi	Graduate	49,50, 51	1/1, 230,193	0.397	0.0436	0.34	0.737	6%	5	Trade & Business	Fish Firming, Agricultur etc	175,000.00	75000	250,000.00	50,000.00	N/A	Residential Structure	Pucca House	N/A
38	38	(STP-2) Thikrabandh	Gouri Saha	F	Sham Shundar Adhikari	Professional Diploma	52	1/1, 158	0.0907	0.0495	0.755	0.8457	6%	3	Pension	Private service	27,000.00	63000	90,000.00	30,000.00	N/A	Vacant Plot	N/A	N/A
39	39	(STP-2) Thikrabandh	Sonia Begum	F	Husband Sk. Asadur Rahman	Graduate	50, 51	1/1, 230,193	0.015	0.015	0.173	0.188	8%	4	Housewife	Trade & Business	0	250,000.00-	250,000.00	62,500.00	N/A	Vacant Plot	N/A	N/A
40	40	(STP-2) Thikrabandh	Sk Mizanur rahman	M	Sk. Hasem ALi	Graduate	50, 51	1/1, 230,193	0.132	0.015	0.131	0.263	6%	3	Trade & Business	Fish Firming, Agricultur etc	49,000.00	21000	70,000.00	23,333.33	N/A	Vacant Plot	N/A	N/A
41	41	(STP-2) Thikrabandh	Mizanur Rahman	M	Late Lutfar Rahman	Graduate	34	148	0.34	0.14	0.785	1.125	12%	4	Trade & Business	Fish Firming, Agricultur etc	49,000.00	21000	70,000.00	17,500.00	N/A	Vacant Plot	N/A	N/A
42	42	(STP-2) Thikrabandh	Khandakar Sahin Hossain	M	Alhaz khandakar	Higher Secondary Education (class 12)	53	1/1, 134	0.0495	0.0495	0.99	1.0395	5%	5	Trade & Business	N/A	60,000.00	0	60,000.00	12,000.00	N/A	Vacant Plot	N/A	N/A
43	43	(STP-2) Thikrabandh	Md. Golam Mostofa	M	Late SK. Abdur Rashid	Higher Secondary Education (class 12)	54	1/1, 135	0.0495	0.0495	0.66	0.7095	7%	6	Trade & Business	N/A	30,000.00	0	30,000.00	5,000.00	N/A	Vacant Plot	N/A	N/A
44	44	(STP-2) Thikrabandh	Md. Alomgir Hossain	M	Late Md. Mokhlesur Rahman	Graduate	48	152	0.066	0.066	1.55	1.616	4%	4	Trade & Business	N/A	45,000.00	0	45,000.00	11,250.00	N/A	Vacant Plot	Boundary Wall	N/A
45	45	(STP-2) Thikrabandh	Mainul Islam	M	Md. Muktum Ali Halder	Higher Secondary Education (class 12)	48	152	0.0439	0.0439	0.85	0.8939	5%	5	Trade & Business	N/A	35,000.00	0	35,000.00	7,000.00	N/A	Vacant Plot	Boundary Wall	N/A

46	46	(STP-2) Thikrabandh	Kakoli Parvin	F	Abdus Samad Gazi	Graduate	53	1/1, 134	0.0495	0.0495	0.66	0.7095	7%	7	Housewife	Private Service	0	35000	35,000.00	5,000.00	N/A	Vacant Plot	N/A	N/A
47	47	(STP-2) Thikrabandh	shymaul Imam	M	late Sayed Asraf	Graduate	54	1/1, 72	0.0495	0.0495	1	1.0495	5%	6	Private Service	N/A	60,000.00	0	60,000.00	10,000.00	N/A	Vacant Plot	N/A	N/A
48	48	(STP-2) Thikrabandh	Mrs Samsur Nahar	F	Golam Mostofa	Secondary Educated (ClassX)	53	1/1, 134	0.0495	0.0495	0.66	0.7095	7%	3	Housewife	Trade & Business	0	30000	30,000.00	10,000.00	N/A	Vacant Plot	N/A	N/A
49	49	(STP-2) Thikrabandh	Md. Abdul Jalil	M	Late Momin Uddin Shikder	Middle School (Class 8)	55	1/1, 72	0.066	0.066	0.763	0.829	8%	4	Govt. Service	N/A	22,000.00	0	22,000.00	5,500.00	N/A	Residential Structure	Small pucca House	N/A
50	50	(STP-2) Thikrabandh	Rokeya Begum	F	Kholil Haolader	Primary Education (Class V)	55	1/1, 72	0.0495	0.0495	0.66	0.7095	7%	3	Housewife	Auto Rickshaw Driver	0	15000	15,000.00	5,000.00	N/A	Residential Structure	Small pucca House	N/A
51	51	(STP-2) Thikrabandh	Md. Delwar Hossain	M	Late Md. Bodor Uddin Mollah	Middle School (Class 8)	55	1/1, 72	0.04125	0.04125	0.44	0.48125	9%	3	Business	N/A	20,000.00	0	20,000.00	6,666.67	N/A	Vacant Plot	Boundary wall	N/A
52	52	(STP-2) Thikrabandh	Abdus Salam	M	Late Abdus Sattar	Primary Education (Class V)	55	1/1, 72	0.0495	0.0495	0.99	1.0395	5%	3	Rickshaw Puller	Business	7,000.00	8000	15,000.00	5,000.00	N/A	Vacant Plot	Boundary wall	N/A
53	53	(STP-2) Thikrabandh	Md. Solaiman Hossain	M	Late Sultan Ahmed Dhali	Secondary Education (ClassX)	56	56	0.0825	0.0825	0.87	0.9525	9%	5	Pension	Govt. Service	11,500.00	40000	51,500.00	10,300.00	N/A	Residential Structure	Small pucca House	N/A
54	54	(STP-2) Thikrabandh	Md. Ruhul Amin	M	Late Jonab Ali Khan	Middle School (Class 8)	55	1/1, 72	0.04125	0.04125	0.495	0.53625	8%	2	Govt. Service	N/A	25,000.00	0	25,000.00	12,500.00	N/A	Vacant Plot	N/A	N/A
55	55	(STP-2) Thikrabandh	Fatema Begum	F	Late Hasan Ali Bapary	Primary Education (Class V)	55	1/1, 72	0.066	0.066	0.87	0.936	7%	2	Housewife	Skilled labor	0	14000	14,000.00	7,000.00	N/A	Residential Structure	Tin Shed House	N/A
56	56	(STP-2) Thikrabandh	Rashida Begum (Khadija)	F	Late Azaha Kazi	Middle School (Class 8)	54	1/1, 72	0.033	0.033	0.43	0.463	7%	3	Housewife	Private Service	0	18000	18,000.00	6,000.00	N/A	Residential Structure	Tin Shed House	N/A
57	57	(STP-2) Thikrabandh	Md. Monu Mollah	M	Md. Sabu Mollah	Primary Education (Class V)	55	1/1, 72	0.04125	0.04125	0.53	0.57125	7%	4	Business	N/A	25,000.00	0	25,000.00	6,250.00	N/A	Residential Structure	Small pucca House	N/A
58	58	(STP-2) Thikrabandh	Nurjahan Aktar	F	Monir Sikdar	Graduate	55	1/1, 72	0.033	0.033	0.53	0.563	6%	1	Private Service	N/A	12,000.00	0	12,000.00	12,000.00	N/A	Pukur	N/A	N/A
59	59	(STP-2) Thikrabandh	Md.Mizanur Rahman (Nazrul)	M	Late Sahad Ali	Professional Diploma	55	1/1, 72	0.0495	0.0495	0.825	0.8745	6%	5	Private Service	N/A	26,000.00	0	26,000.00	5,200.00	N/A	Garden	N/A	N/A
60	60	(STP-2) Thikrabandh	Md. Nur Alom Molla(Md.Amjad Hossain)	M	Late Abdul khaleK Molla	Higher Secondary Education (class 12)	55	1/1, 72	0.2886	0.1876	3.3	3.5886	5%	6	Business	N/A	45,000.00	0	45,000.00	7,500.00	N/A	Residential Structure	Tin Shed House	N/A
61	61	(STP-2) Thikrabandh	Md.	M	Md. Ukil Mia	Secondary Education	56	56	0.066	0.066	0.73	0.796	8%	4	Auto Rickshaw Driver	N/A	30,000.00	0	30,000.00	7,500.00	N/A	Vacant Plot	Boundary wall	N/A

			Badol Mia			(ClassX)																	
62	62	(STP-2) Thikrabandh	Md.Mujibur Rahman	M	Samser Ali	Secondary Education (ClassX)	56	56	0.0825	0.05	0.562	0.6445	8%	4	Private Service	N/A	25,000.00	0	25,000.00	6,250.00	N/A	Vacant Plot	N/A	N/A
63	63	(STP-2) Thikrabandh	Md. Surat Alam Khan	M	Late Jonab Ali Khan	Secondary Education (ClassX)	56	56	0.0495	0.0495	0.73	0.7795	6%	5	Private Service	Service + Business	18,000.00	22000	40,000.00	8,000.00	N/A	Vacant Plot	N/A	N/A
64	64	(STP-2) Thikrabandh	Hafiza Begum	F	Md. Chunnu Miah	Primary Education (Class V)	55	1/1, 72	0.066	0.066	0.831	0.897	7%	2	Housewife	Skilled labor	0	15000	15,000.00	7,500.00	N/A	Vacant Plot	Boundary wall	N/A
65	65	(STP-2) Thikrabandh	Md. AbdulMannan	M	Late Tazuddin Morol	Graduate	56	56	0.061	0.066	0.795	0.856	8%	3	Business	N/A	15,000.00	0	15,000.00	5,000.00	N/A	Vacant Plot	N/A	N/A
66	66	(STP-2) Thikrabandh	Abdul Barek Morol	M	Abu Baker Ali Morol	Primary Education (Class V)	55	1/1, 72	0.0825	0.0825	1.726	1.8085	5%	5	Business	N/A	40,000.00	0	40,000.00	8,000.00	N/A	Vacant Plot	N/A	N/A
67	67	(STP-2) Thikrabandh	Md. Moniruzzaman	M	Late Abu Hanif Mollah	Higher Secondary Education (class 12)	54	1/1, 72	0.0495	0.0495	0.71	0.7595	7%	6	Govt. Service	Business	20,000.00	25000	45,000.00	7,500.00	N/A	Vacant Plot	Boundary wall	N/A
68	68	(STP-2) Thikrabandh	Jahanara Begum	F	S.M.Jakir Hossain (Husband)	Secondary Education (ClassX)	55	1/1, 72	0.0495	0.0495	0.55	0.5995	8%	3	Govt. Service	N/A	15,000.00	0	15,000.00	5,000.00	N/A	Vacant Plot	Boundary wall	N/A
69	69	(STP-2) Thikrabandh	Shahin Alam	M	Late Rajob Ali Gaji	Post Graduate	55	1/1, 72	0.04125	0.04125	0.5	0.54125	8%	4	Private Service	N/A	20,000.00	0	20,000.00	5,000.00	N/A	Vacant Plot	Boundary wall	N/A
70	70	(STP-2) Thikrabandh	SK.Sirajul Islam	M	Late SK Rezaul Haque	Graduate	55	1/1, 72	0.04125	0.04125	0.9	0.94125	4%	5	Govt. Service	N/A	30,000.00	0	30,000.00	6,000.00	N/A	Vacant Plot	Boundary wall	N/A
71	71	(STP-2) Thikrabandh	SK. AbualHossain	M	Late SK. Abdul Gaffer	Post Graduate	55	1/1, 72	0.0825	0.0825	0.976	1.0585	8%	4	Govt. Service	N/A	54,000.00	0	54,000.00	13,500.00	N/A	Vacant Plot	N/A	N/A
72	72	(STP-2) Thikrabandh	Susanta Adhikary	M	Sudhir Ranjan Adhikary	Post Graduate	55	1/1, 72	0.0495	0.0495	0.99	1.0395	5%	6	Govt. Service	Business	22,000.00	24000	46,000.00	7,666.67	N/A	Vacant Plot	Boundary wall	N/A
73	73	(STP-2) Thikrabandh	FarhanaParvin	F	Sorder Soheb Ali	Graduate	55	1/1, 72	0.0495	0.0495	0.55	0.5995	8%	5	Housewife	Govt. Service	0	50000	50,000.00	10,000.00	N/A	Vacant Plot	N/A	N/A
74	74	(STP-2) Thikrabandh	Md. Julhaz Ahmed	M	Anisur Rahman	Professional Diploma	56	56	0.0634	0.0634	0.895	0.9584	7%	5	Private Service	N/A	50,000.00	0	50,000.00	10,000.00	N/A	Vacant Plot	N/A	N/A
75	75	(STP-2) Thikrabandh	SK. SaidurRahman	M	Sk. Monsur Rahman	Post Graduate	55	1/1, 72	0.12375	0.0825	1.666	1.78975	5%	3	Govt. Service	Govt. Service	30,500.00	30500	61,000.00	20,333.33	N/A	Vacant Plot	N/A	N/A
76	76	(STP-2) Thikrabandh	Md. Shahalom	M	Late Abdul Mazid Gazi	Middle School (Class 8)	55	1/1, 72	0.099	0.099	1.7	1.799	6%	8	Govt. Service	N/A	50,000.00	0	50,000.00	6,250.00	N/A	Vacant Plot	N/A	N/A
77	77	(STP-2) Thikrabandh	SK. AnowarHossain	M	Sk. Abual Hossain	Middle School (Class 8)	55	1/1, 72	0.0495	0.0495	1.2	1.2495	4%	7	Govt. Service	Service + Business	16,000.00	25000	41,000.00	5,857.14	N/A	Vacant Plot	N/A	N/A
78	78	(STP-2) Thikrabandh	Hosneara Parvin	F	Abul Hossain	Secondary	55	1/1, 72	0.0495	0.0495	0.785	0.8345	6%	4	Housewife	Trade & Business	0	30000	30,000.00	7,500.00	N/A	Vacant Plot	Boundary wall	N/A

						Education (ClassX)																
79	79	(STP-2) Thikrabandh	Md. Tarikuzzaman	M	Late Emlak Uddin	Post Graduate	55	1/1, 72	0.106	0.106	1.37	1.476	7%	4	Govt. Service	N/A	30,000.00	0	30,000.00	7,500.00	N/A	Vacant Plot	Boundary wall	N/A
80	80	(STP-2) Thikrabandh	Moyna Begum	F	Azgar Morol	Primary Education (Class V)	55	1/1, 72	0.0495	0.0495	0.66	0.7095	7%	4	Housewife	Bus Drver	0	20000	20,000.00	5,000.00	N/A	Vacant Plot	N/A	N/A
81	81	(STP-2) Thikrabandh	Mrs. Nurunnahar Mahmud	F	Late Abdus Salam Sikder	Graduate	53	1/1, 134	0.05197	0.05197	0.725	0.77697	7%	7	Housewife	Private Service	0	30000	30,000.00	4,285.71	N/A	Vacant Plot	N/A	N/A
82	82	(STP-2) Thikrabandh	BM Mahmud Hossain	M	Late Delwar Hossain Biswash	Higher Secondary Education (class 12)	53	1/1, 134	0.0528	0.0528	1	1.0528	5%	6	Private Service	N/A	45,000.00	0	45,000.00	7,500.00	N/A	Vacant Plot	N/A	N/A
83	83	(STP-2) Thikrabandh	Sama Hossasin	F	Late Ramzan Ali	Secondary Education (ClassX)	53	1/1, 134	0.05197	0.05197	0.66	0.71197	7%	4	Housewife	Govt. Service	0	35000	35,000.00	8,750.00	N/A	Vacant Plot	N/A	N/A
84	84	(STP-2) Thikrabandh	Smiriti Rekha Saha	F	Late Horendra nath	Graduate	53	1/1, 134	0.10215	0.10215	1.5	1.60215	6%	6	Housewife	Private Service	0	70000	70,000.00	11,666.67	N/A	Vacant Plot	N/A	N/A
85	85	(STP-2) Thikrabandh	Md. Mostafijur Rahman	M	Md. Afsar Uddin Sk	Post Graduate	53	1/1, 134	0.0495	0.0495	0.99	1.0395	5%	6	Agriculture	Private Service	30,000.00	18000	48,000.00	8,000.00	N/A	Vacant Plot	N/A	N/A
86	86	(STP-2) Thikrabandh	Sk. Ejunal Haque Tutul	M	Sk. Fazlul Haque	Middle School (Class 8)	53	1/1, 134	0.05197	0.05197	0.75	0.80197	6%	4	Govt. Service	N/A	30,000.00	0	30,000.00	7,500.00	N/A	Vacant Plot	N/A	N/A
87	87	(STP-2) Thikrabandh	Nahida Rahman	F	Late Khandakar Zillur Rahamn	Post Graduate	53	1/1, 134	0.0495	0.0495	0.66	0.7095	7%	1	Private Service	N/A	22,000.00	0	22,000.00	22,000.00	N/A	Vacant Plot	N/A	N/A
88	88	(STP-2) Thikrabandh	Md. Lavlu Talukder	M	Abdul Haque Talukder	Primary Education (Class V)	53	1/1, 134	0.05247	0.05247	0.752	0.80447	7%	7	Private Service	Service + Business	20,000.00	26000	46,000.00	6,571.43	N/A	Vacant Plot	N/A	N/A
89	89	(STP-2) Thikrabandh	Swapan Kumar Singha	M	Late Sotish Chandra singha	Middle School (Class 8)	53	1/1, 134	0.05197	0.05197	0.99	1.04197	5%	3	Private Service	N/A	20,000.00	0	20,000.00	6,666.67	N/A	Vacant Plot	N/A	N/A
90	90	(STP-2) Thikrabandh	Shaharina Afroj Poly	F	Munsi Ayub Hossain	Higher Secondary Education (class 12)	53	1/1, 134	0.0495	0.0495	0.632	0.6815	7%	4	Private Service	N/A	25,000.00	0	25,000.00	6,250.00	N/A	Vacant Plot	N/A	N/A
91	91	(STP-2) Thikrabandh	Jasmin Akter	F	Late Azhar Ali nSikder	Higher Secondary Education (class 12)	53	1/1, 134	0.0495	0.0495	0.725	0.7745	6%	4	Govt. Service	N/A	20,000.00	0	20,000.00	5,000.00	FHH	Vacant Plot	N/A	N/A
92	92	(STP-2) Thikrabandh	Sk. Hanif Mohammad	M	Late Sk. Mansur Ali	Higher Secondary Education (class 12)	53	1/1, 134	0.1058	0.05197	1.5	1.6058	3%	4	Private Service	N/A	20,000.00	0	20,000.00	5,000.00	N/A	Vacant Plot	N/A	N/A

93	93	(STP-2) Thikrabandh	Mohendranath sen	M	Late Robindro nath Sen	Graduat e	53	1/1, 134	0.050 6	0.0506	0.595	0.645 6	8%	3	Private Service	N/A	50,000. 00	0	50,000 .00	16,66 6.67	N/A	Vacant Plot	N/A	N/A
94	94	(STP-2) Thikrabandh	Moushumi Jaman(Late Kamruzzaman)	F	Late Kamruzzam an	Post Graduat e	53	1/1, 134	0.055 1	0.0551	0.66	0.715 1	8%	4	Housewif e	Private Service	0	35000	35,000 .00	8,750. 00	N/A	Vacant Plot	N/A	N/A
95	95	(STP-2) Thikrabandh	Moushumi Jaman	F	Late Kamruzzam an	Post Graduat e	53	1/1, 134	0.055 1	0.0551	0.99	1.045 1	5%	4	Housewif e	Private Service	0	65000	65,000 .00	16,25 0.00	N/A	Vacant Plot	N/A	N/A
96	96	(STP-2) Thikrabandh	Resma Jaman	F	Late Delowar Hossain	Secondar y Educatio n (ClassX)	53	1/1, 134	0.051 97	0.05197	0.66	0.711 97	7%	5	Private Service	N/A	30,000. 00	0	30,000 .00	6,000. 00	N/A	Vacant Plot	N/A	N/A
97	97	(STP-2) Thikrabandh	Jahanara Begum	F	Late Golam Rabbani Khan	Secondar y Educatio n (ClassX)	48	152	0.033	0.033	0.387	0.42	8%	4	Housewif e	Trade & Business	0	28000	28,000 .00	7,000. 00	N/A	Vacant Plot	N/A	N/A
98	98	(STP-2) Thikrabandh	Md. Raza ullah	M	Late Abdul Hannan	Higher Secondar y Educatio n (class 12)	53	1/1, 134	0.066	0.066	0.86	0.926	7%	4	Agricultur e	N/A	25,000. 00	0	25,000 .00	6,250. 00	N/A	Vacant Plot	N/A	N/A
99	99	(STP-2) Thikrabandh	GM Said	M	Late Alhaz Moslem Uddin	Graduat e	53	1/1, 134	0.049 5	0.0495	1	1.049 5	5%	5	Business	Private Service	25,000. 00	30000	55,000 .00	11,00 0.00	N/A	Vacant Plot	N/A	N/A
100	100	(STP-2) Thikrabandh	MahmudaK hatun	F	Sk. Mahabubur Rahamn	Secondar y Educatio n (ClassX)	53	1/1, 134	0.051 645	0.05164 5	0.66	0.711 645	7%	6	Housewif e	Private Service	0	30000	30,000 .00	5,000. 00	N/A	Vacant Plot	N/A	N/A
101	101	(STP-2) Thikrabandh	Sarif Ajadur Rahman	M	Sarif Hasem Ali	Graduat e	52	1/1, 158	0.048 3	0.0483	0.75	0.798 3	6%	4	Business	N/A	28,000. 00	0	28,000 .00	7,000. 00	N/A	Vacant Plot	N/A	N/A
102	102	(STP-2) Thikrabandh	Shah Md. Akbar Ali	M	Late Eshak Ali	Post Graduat e	52	1/1, 158	0.049 5	0.0495	1	1.049 5	5%	3	Private Service	N/A	28,000. 00	0	28,000 .00	9,333. 33	N/A	Vacant Plot	N/A	N/A
103	103	(STP-2) Thikrabandh	Md. Kamrul Islam	M	Late Md. Rashed	Higher Secondar y Educatio n (class 12)	52	1/1, 158	0.083 9	0.0839	0.925	1.008 9	8%	3	Private Service	N/A	17,000. 00	0	17,000 .00	5,666. 67	N/A	Vacant Plot	N/A	N/A
104	104	(STP-2) Thikrabandh	GM Mostofa	M	Late Md. Ali Hossain	Graduat e	54	1/1, 72	0.132	0.132	1.54	1.672	8%	3	Govt. Service	N/A	42,000. 00	0	42,000 .00	14,00 0.00	N/A	Reside ntial Structu re	Tin Shed House	N/A
105	105	(STP-2) Thikrabandh	Alhaz Hafez Md. Habibullah	M	Late Mawlana Kholilur Rahman	Secondar y Educatio n (ClassX)	56	56	0.181 5	0.0825	0.99	1.171 5	7%	7	Private Service	Business	10,000. 00	30000	40,000 .00	5,714. 29	N/A	Vacant Plot	N/A	N/A
106	106	(STP-2) Thikrabandh	Sk. Nazrul Islam	M	Late Babar ali	Post Graduat e	52	1/1, 158	0.049 5	0.0495	0.66	0.709 5	7%	4	Private Service	N/A	33,000. 00	0	33,000 .00	8,250. 00	N/A	Vacant Plot	N/A	N/A
107	107	(STP-2) Thikrabandh	Mishori Begum	F	Late Munshi bazlur Rahman	Graduat e	52	1/1, 158	0.049 3	0.0493	0.725	0.774 3	6%	2	Pension	Pension	30,000. 00	20000	50,000 .00	25,00 0.00	N/A	Vacant Plot	N/A	N/A
108	108	(STP-2) Thikrabandh	Shahinur Aktar	F	Late Fakir Chnd Sarder	Secondar y Educatio n	54	1/1, 72	0.107 25	0.0495	0.99	1.097 25	5%	4	Housewif e	Business	0	35000	35,000 .00	8,750. 00	N/A	Vacant Plot	N/A	N/A

						(ClassX)																
109	109	(STP-2) Thikrabandh	Mahamuda Akter Panna	F	Late Saka Uddin Ahmed	Higher Secondary Education (class 12)	53	1/1, 134	0.0495	0.0495	0.537	0.5865	8%	4	Housewife	Govt. Service	0	30000	30,000.00	7,500.00	N/A	Vacant Plot	N/A	N/A
110	110	(STP-2) Thikrabandh	Mostofa Kamal	M	Montaz Miya	Post Graduate	48	152	0.04125	0.04125	0.725	0.76625	5%	5	Private Service	N/A	26,000.00	0	26,000.00	5,200.00	N/A	Vacant Plot	N/A	N/A
111	111	(STP-2) Thikrabandh	Hannan gazi	M	Md. Rohomat Ali gazi	Post Graduate	48	152	0.04125	0.04125	0.99	1.03125	4%	3	Private Service	N/A	22,000.00	0	22,000.00	7,333.33	N/A	Vacant Plot	Boundary wall	N/A
112	112	(STP-2) Thikrabandh	Sohidujjaman	M	Md. Abul Majed	Post Graduate	48	152	0.05	0.05	0.66	0.71	7%	3	Govt. Service	N/A	25,000.00	0	25,000.00	8,333.33	N/A	Vacant Plot	Boundary wall	N/A
113	113	(STP-2) Thikrabandh	Rojina Aktar	F	Md. Mosaraf Hossain	Graduate	54	1/1, 72	0.063	0.033	0.99	1.053	3%	3	Govt. Service	Govt. Service	32,000.00	28000	60,000.00	20,000.00	FHH	Vacant Plot	N/A	N/A
114	114	(STP-2) Thikrabandh	Syeda Dilruba	F	Late Badsha ali	Higher Secondary Education (class 12)	55	1/1, 72	0.0495	0.0495	0.725	0.7745	6%	5	Housewife	Private Service	0	25000	25,000.00	5,000.00	N/A	Vacant Plot	N/A	N/A
115	115	(STP-2) Thikrabandh	Afroza Imam	F	Dudarul Imam	Professional Diploma	55	1/1, 72	0.061	0.061	1.495	1.556	4%	3	Housewife	Private Service	0	18000	18,000.00	6,000.00	N/A	Vacant Plot	N/A	N/A
116	116	(STP-2) Thikrabandh	Ismat Ara	F	Late. Munshi Ruhul Mumin	Graduate	52	1/1, 158	0.0495	0.0495	0.99	1.0395	5%	4	Govt. Service	Pension	35,000.00	15000	50,000.00	12,500.00	FHH	Vacant Plot	N/A	N/A
117	117	(STP-2) Thikrabandh	Kakoli parven	F	Abdus Samad Gazi	Graduate	53	1/1, 134	0.0495	0.0495	0.66	0.7095	7%	7	Housewife	Private Service	0	35000	35,000.00	5,000.00	N/A	Vacant Plot	N/A	N/A
118	118	(STP-2) Thikrabandh	Md. Golam Mostafa	M	Late Sk. Abdur Rashid	Higher Secondary Education (class 12)	53	1/1, 134	0.0495	0.0495	0.66	0.7095	7%	6	Business	N/A	30,000.00	0	30,000.00	5,000.00	N/A	Vacant Plot	N/A	N/A
119	119	(STP-2) Thikrabandh	Taslima Akter	F	Late Abdul Majid	Post Graduate	55	1/1, 72	0.061	0.061	0.725	0.786	8%	4	Business	Business	15,000.00	22000	37,000.00	9,250.00	N/A	Vacant Plot	N/A	N/A
120	120	(STP-2) Thikrabandh	Nasima Khatun	F	Late Abdul Majid	Higher Secondary Education (class 12)	55	1/1, 72	0.0495	0.0495	0.99	1.0395	5%	3	Housewife	Trade & Business	0	20000	20,000.00	6,666.67	N/A	Vacant Plot	N/A	N/A
121	121	(STP-2) Thikrabandh	Shamima Yasmin	F	Late Sk. Abdul Majid	Graduate	55	1/1, 72	0.0495	0.0495	0.99	1.0395	5%	4	Housewife	Private Service	0	35000	35,000.00	8,750.00	N/A	Vacant Plot	N/A	N/A
122	122	(STP-2) Thikrabandh	Md. Abdul Rashid Molla	M	Md. Abdul Majid Molla	Post Graduate	55	1/1, 72	0.05775	0.05775	0.66	0.71775	8%	5	Govt. Service	Govt.Service	25,000.00	15000	40,000.00	8,000.00	N/A	Vacant Plot	N/A	N/A
123	123	(STP-2) Thikrabandh	MD. Alamgir Hossain	M	Late Md. Mokhlesur rahman	Higher Secondary Education (class 12)	48	152	0.066	0.066	1.55	1.616	4%	5	Business	N/A	45,000.00	0	45,000.00	9,000.00	N/A	Vacant Plot	Tin shed House,Boundary wall	N/A
124	124	(STP-2) Thikrabandh	Sazia Afrin	F	Abdul khalek kagoji	Graduate	48	152	0.04125	0.04125	0.725	0.76625	5%	6	Housewife	Service + Business	0	38000	38,000.00	6,333.33	N/A	Vacant Plot	Boundary wall	N/A

125	125	(STP-2) Thikrabandh	Md. Imam Hossain	M	Late Belayet Hossain	Graduate	48	152	0.0495	0.0495	0.752	0.8015	6%	4	Private Service	N/A	35,000.00	0	35,000.00	8,750.00	N/A	Vacant Plot	Boundary wall	N/A
126	126	(STP-2) Thikrabandh	Mostofa Belayet	M	Mohammad	Graduate	48	152	0.0495	0.0495	0.66	0.7095	7%	4	Private Service	N/A	40,000.00	0	40,000.00	10,000.00	N/A	Vacant Plot	N/A	N/A
127	127	(STP-2) Thikrabandh	Mala Rani Kar	F	Husband-Tutul Datta	Post Graduate	48	152	0.0495	0.0495	0.587	0.6365	8%	6	Housewife	Private Service (Manager of a corporate house)	0	95000	95,000.00	15,833.33	N/A	Vacant Plot	Boundary wall	N/A
128	128	(STP-2) Thikrabandh	Chaina akter	F	Husband Md. Sohrab Hossain	Graduate	48	152	0.02508	0.02508	0.33	0.35508	7%	4	Housewife	Govt. Service	0	45000	45,000.00	11,250.00	N/A	Vacant Plot	N/A	N/A
129	129	(STP-2) Thikrabandh	Firoza Amzad	F	Husband Md. Amzad Hossain	Graduate	35, 48	57, 152	4.5	0.2529	0.825	5.325	5%	6	Housewife	Govt. Service	0	95000	95,000.00	15,833.33	N/A	Vacant Plot	N/A	N/A
130	130	(STP-2) Thikrabandh	Asraful Kabir	M	Late Mozahar Ali SArder	Higher Secondary Education (class 12)	48	152	0.04125	0.04125	0.66	0.70125	6%	5	Govt. Service	N/A	30,000.00	0	30,000.00	6,000.00	N/A	Vacant Plot	Boundary wall	N/A
131	131	(STP-2) Thikrabandh	Jahidul Alom	M	Anowar Hossain	Post Graduate	48	152	0.04125	0.04125	0.99	1.03125	4%	5	Italy Immigrant	N/A	150,000.00	0	150,000.00	30,000.00	N/A	Vacant Plot	Boundary wall	N/A
132	132	(STP-2) Thikrabandh	Md. Asraf Ali Sheikh	M	Late Tasen Uddin Sk.	Post Graduate	35, 48	57, 152	1.125	0.2661	4.5	5.625	5%	6	Pension	N/A	45,000.00	0	45,000.00	7,500.00	N/A	Vacant Plot	Pond	N/A
133	133	(STP-2) Thikrabandh	Begum Sultana	F	Husband Md. Asraf Ali Sheikh	Graduate	35, 48	57, 152	1.125	0.3332	4.5	5.625	6%	6	Housewife	Govt. Pension	0	45000	45,000.00	7,500.00	N/A	Vacant Plot	Pond	N/A
134	134	(STP-2) Thikrabandh	Md. Amzad Hossain	M	Md. Ali	Post Graduate	35	57	0.83	0.2075	4.5	5.33	4%	6	Govt. Service	N/A	75,000.00	0	75,000.00	12,500.00	N/A	Vacant Plot	Small pond	N/A
135	135	(STP-2) Thikrabandh	Mrs. Samsun Nahar	F	Husband Golam Mostofa	Secondary Education (ClassX)	53	1/1, 134	0.0495	0.0495	0.66	0.7095	7%	6	Housewife	Trade & Business	0	25000	25,000.00	4,166.67	N/A	Vacant Plot	N/A	N/A
136	136	(STP-2) Thikrabandh	Nurul Islam Suman	M	Nurul Haque Chowdhury	Higher Secondary Education (class 12)	53	1/1, 134	0.02607	0.02607	1.5	1.52607	2%	5	Govt. Service	N/A	55,000.00	0	55,000.00	11,000.00	N/A	Vacant Plot	N/A	N/A
137	137	(STP-2) Thikrabandh	Monowar Hossain	M	Late Abdul Hakim Khalifa	Graduate	52	1/1, 158	0.07425	0.07425	3.3	3.37425	2%	4	Private Service	N/A	20,000.00	0	20,000.00	5,000.00	N/A	Vacant Plot	N/A	N/A
138	138	(STP-2) Thikrabandh	Md.Abul Basar	M	Late Md. Sirajul iSlam	Middle School (Class 8)	52	1/1, 158	0.07425	0.07425	1.44	1.51425	5%	4	Private Service	Self Employed	20,000.00	3000	23,000.00	5,750.00	N/A	Vacant Plot	N/A	N/A
139	139	(STP-2) Thikrabandh	Rafsan Munim	M	Md. Moinuddin	Graduate	52	1/1, 158	0.04836	0.04836	0.534	0.58236	8%	4	Private Service	N/A	35,000.00	0	35,000.00	8,750.00	N/A	Vacant Plot	N/A	N/A
140	140	(STP-2) Thikrabandh	Md. Khusbul Alom	M	Abdul Sattar Bhuiya	Graduate	52	1/1, 158	0.0495	0.02418	0.66	0.7095	3%	4	Govt. Service	N/A	25,000.00	0	25,000.00	6,250.00	N/A	Vacant Plot	N/A	N/A

141	141	(STP-2) Thikrabandh	Sarmin Akter	F	Abdus Samad Gazi	Graduate	52	1/1, 158	0.0495	0.02418	0.33	0.3795	6%	4	Housewife	Govt Service	0	25000	25,000.00	6,250.00	N/A	Vacant Plot	N/A	N/A
142	142	(STP-2) Thikrabandh	Sahnaj Akter	F	Late Abul Khayer	Graduate	52	1/1, 158	0.04195	0.04195	0.725	0.76695	5%	3	Housewife	Private Service	0	16000	16,000.00	5,333.33	N/A	Vacant Plot	N/A	N/A
143	143	(STP-2) Thikrabandh	Sahin Ara Begum	F	Soahrab Ali Laskar	Graduate	52	1/1, 158	0.0495	0.0495	0.66	0.7095	7%	3	Housewife	Doctor	0	60000	60,000.00	20,000.00	N/A	Vacant Plot	N/A	N/A
144	144	(STP-2) Thikrabandh	Mst. Razla khatun	F	Late Abdul Gaffer Munshi	Middle School (Class 8)	52	1/1, 158	0.04836	0.04836	0.99	1.03836	5%	8	Housewife	Business	0	35000	35,000.00	4,375.00	N/A	Vacant Plot	N/A	N/A
145	145	(STP-2) Thikrabandh	Sarif Sayed Ahmed	M	Late Amanat Sarif	Middle School (Class 8)	52	1/1, 158	0.04836	0.04836	0.66	0.70836	7%	6	Business	Private Service	25,000.00	25000	50,000.00	8,333.33	N/A	Vacant Plot	N/A	N/A
146	146	(STP-2) Thikrabandh	Tahmina Khatun	F	Late Sarif Sayed Ahmed	Post Graduate	52	1/1, 158	0.04836	0.04836	0.77	0.81836	6%	3	Govt. Service	Bangadesh Navy	35,000.00	50000	85,000.00	28,333.33	FHH	Vacant Plot	N/A	N/A
147	147	(STP-2) Thikrabandh	Sahabuddin Fakir	M	Late Abdul Aziz Fakir	Higher Secondary Education (class 12)	52	1/1, 158	0.0495	0.01	0.33	0.3795	3%	4	House Rent	Private Service	10,000.00	30000	40,000.00	10,000.00	N/A	Vacant Plot	N/A	N/A
148	148	(STP-2) Thikrabandh	Talimur Rahman	M	Munshi Faridur Rahman	Graduate	52	1/1, 158	0.0493	0.0255	0.33	0.3793	7%	4	Business	N/A	38,000.00	0	38,000.00	9,500.00	N/A	Vacant Plot	N/A	N/A
149	149	(STP-2) Thikrabandh	Md. Serajul Islam	M	Md. Solaiman Sk.	Higher Secondary Education (class 12)	52	1/1, 158	0.0495	0.01	0.0825	0.132	8%	5	Govt. Service	Doctor	35,000.00	38000	73,000.00	14,600.00	N/A	Vacant Plot	N/A	N/A
150	150	(STP-2) Thikrabandh	Tahera pervin	F	Late Abdul Mannan Mollah	Post Graduate	52	1/1, 158	0.04836	0.04836	0.99	1.03836	5%	4	Housewife	Govt. Pension and Private Service	0	75000	75,000.00	18,750.00	N/A	Vacant Plot	N/A	N/A
151	151	(STP-2) Thikrabandh	Rukhsana Pervin	F	Sk. Ajiar Rahman	Higher Secondary Education (class 12)	52	1/1, 158	0.195	0.0255	0.33	0.525	5%	4	Housewife	Banker	0	40000	40,000.00	10,000.00	N/A	Vacant Plot	N/A	N/A
152	152	(STP-2) Thikrabandh	Md. Sadek Ali	M	Late Abdul Gani	Post Graduate	52	1/1, 158	0.04836	0.04836	2.5	2.54836	2%	4	Private Service	Fish Firming, Agricultur etc	40,000.00	15000	55,000.00	13,750.00	N/A	Vacant Plot	N/A	N/A
153	153	(STP-2) Thikrabandh	Monir Molla	M	N/A	Higher Secondary Education (class 12)	54	1/1, 72	0.033	0.033	0.66	0.693	5%	3	Govt. Service	N/A	38,000.00	0	38,000.00	12,666.67	N/A	Vacant Plot	N/A	N/A
154	154	(STP-2) Thikrabandh	Sahinur Rahman	M	Late Mofazzel Hossain	Secondary Education (ClassX)	54	1/1, 72	0.0495	0.0495	0.67	0.7195	7%	4	Govt. Service	N/A	35,000.00	0	35,000.00	8,750.00	N/A	Vacant Plot	N/A	N/A
155	155	(STP-2) Thikrabandh	Sahanara khatun	F	Late Khan Abdul Hakim	Higher Secondary Education (class 12)	54	1/1, 72	0.0825	0.0825	0.9735	1.056	8%	4	Govt. Service	Govt. Service	30,000.00	50000	80,000.00	20,000.00	FHH	Residential Structure	Tin Shed House	N/A

156	156	(STP-2) Thikrabandh	Rabin Kumar Das	M	Late Suren Chandra das	Higher Secondary Education (class 12)	54	1/1, 72	0.0825	0.0825	0.925	1.0075	8%	4	Private Service	N/A	35,000.00	0	35,000.00	8,750.00	N/A	Vacant Plot	N/A	N/A
157	157	(STP-2) Thikrabandh	Md. Anowar Hossain	M	Late Abdus Samad Mia	Post Graduate	54	1/1, 72	0.066	0.066	1.2375	1.3035	5%	4	Private Service	Teacher	50,000.00	30000	80,000.00	20,000.00	N/A	Vacant Plot	boundary wall	N/A
158	158	(STP-2) Thikrabandh	SM Abdus Salam	M	Late SM Abdul Jalil	Higher Secondary Education (class 12)	54	1/1, 72	0.099	0.099	1.123	1.222	8%	4	Pension	Govt Service	18,000.00	20000	38,000.00	9,500.00	N/A	Vacant Plot	N/A	N/A
159	159	(STP-2) Thikrabandh	Dr. Ayub Ali	M	Late Anowar Hossain	Doctor	54	1/1, 72	0.0825	0.0825	0.923	1.0055	8%	8	Doctor	Teacher	30,000.00	20000	50,000.00	6,250.00	N/A	Vacant Plot	N/A	N/A
160	160	(STP-2) Thikrabandh	Sarifa Sultana	F	Late Rahim Box Gazi	Secondary Education (ClassX)	54	1/1, 72	0.0825	0.0825	0.995	1.0775	8%	4	Housewife	Doctor	0	35000	35,000.00	8,750.00	N/A	Vacant Plot	N/A	N/A
161	161	(STP-2) Thikrabandh	Md. Mozammel Haque Sheikh	M	Late Abdul Kader Sk.	Graduate	54	1/1, 72	0.066	0.066	0.765	0.831	8%	4	Private Service	Agricultur etc	35,000.00	10000	45,000.00	11,250.00	N/A	Residential Structure	Tin Shed House	N/A
162	162	(STP-2) Thikrabandh	Manjuara	F	Husband Abdullah	Higher Secondary Education (class 12)	54	1/1, 72	0.0825	0.0825	0.883	0.9655	9%	4	Housewife	Private Service	0	35000	35,000.00	8,750.00	N/A	Vacant Plot	N/A	N/A
163	163	(STP-2) Thikrabandh	Md. Idris Ali	M	Late Abu Bakkar Sarder	Graduate	55	1/1, 72	0.0825	0.0825	0.91	0.9925	8%	5	Private Service	N/A	45,000.00	0	45,000.00	9,000.00	N/A	Residential Structure	Tin Shed House	N/A
164	164	(STP-2) Thikrabandh	MD. Ruhul Amin	M	Late Abul Hasem	Graduate	54	1/1, 72	0.0825	0.0825	0.9	0.9825	8%	4	Private Service	N/A	30,000.00	0	30,000.00	7,500.00	N/A	Vacant Plot	N/A	N/A
165	165	(STP-2) Thikrabandh	Md. Mobaswar Hossain	M	Md. Mosaraf Hossain	MBA, UK	54	1/1, 72	0.0825	0.0825	0.9075	0.99	8%	4	Business	NGO	65,000.00	30000	95,000.00	23,750.00	N/A	Vacant Plot	N/A	N/A
166	166	(STP-2) Thikrabandh	Yunus Ali	M	Late Yusuf Ali	Higher Secondary Education (class 12)	54	1/1, 72	0.1155	0.05775	0.55	0.6655	9%	5	Driver	Business	15,000.00	25000	40,000.00	8,000.00	N/A	Vacant Plot	N/A	N/A
167	167	(STP-2) Thikrabandh	Samsun Nahar	F	Late Rahim Box	Middle School (Class 8)	54	1/1, 72	0.1155	0.05775	0.55	0.6655	9%	3	Housewife	Business	0	25000	25,000.00	8,333.33	N/A	Vacant Plot	N/A	N/A
168	168	(STP-2) Thikrabandh	Md. Akbar Ali	M	Md. Abdul Gani Dhali	Graduate	54	1/1, 72	0.0825	0.0825	0.8775	0.96	9%	4	Govt. Service	N/A	40,000.00	0	40,000.00	10,000.00	N/A	Vacant Plot	N/A	N/A
169	169	(STP-2) Thikrabandh	Md. Rezaul Hossain	M	Late Molla Amzad	Higher Secondary Education (class 12)	54	1/1, 72	0.0825	0.0825	0.88	0.9625	9%	4	Govt. Service	Fish Firming, Agricultur etc	30,000.00	5000	35,000.00	8,750.00	N/A	Vacant Plot	Boundary wall	N/A
170	170	(STP-2) Thikrabandh	Meherun Nahar	F	Late Sk. Abdul Kader	Secondary Education (ClassX)	54	1/1, 72	0.066	0.066	0.76	0.826	8%	4	Housewife	Private Service	0	20000	20,000.00	5,000.00	N/A	Vacant Plot	N/A	N/A

171	171	(STP-2) Thikrabandh	Sk. Humayun kabir	M	Late Abdul Majid Sk.	Post Graduate	55	1/1, 72	0.0495	0.0495	0.66	0.7095	7%	4	Private Service	N/A	30,000.00	0	30,000.00	7,500.00	N/A	Vacant Plot	N/A	N/A
172	172	(STP-2) Thikrabandh	Sahinur Akter	F	Late Fakir Chnd Sarder	Secondary Education (ClassX)	54, 55	1/1, 72	0.10725	0.10725	1.23	1.33725	8%	6	Housewife	Private Service	0	25000	25,000.00	4,166.67	N/A	Vacant Plot	N/A	N/A
173	173	(STP-2) Thikrabandh	Fayjul Haque Liton	M	Late Hazi Wadud Munshi	Higher Secondary Education (class 12)	55	1/1, 72	0.07425	0.07425	1.15	1.22425	6%	4	Business	Govt. Service	30,000.00	25000	55,000.00	13,750.00	N/A	Vacant Plot	N/A	N/A
174	174	(STP-2) Thikrabandh	Abdul Aziz Chowdhury	M	Abdul Kuddus Chowdhury	Secondary Education (ClassX)	55	1/1, 72	0.0517	0.0517	0.693	0.7447	7%	4	Business	N/A	20,000.00	0	20,000.00	5,000.00	N/A	Vacant Plot	N/A	N/A
175	175	(STP-2) Thikrabandh	Jakia Begum	F	Late Chan Gazi	Secondary Education (ClassX)	55	1/1, 72	0.099	0.0495	0.67	0.769	6%	6	Govt. Service	N/A	50,000.00	0	50,000.00	8,333.33	FHH	Vacant Plot	Boundary wall	N/A
176	176	(STP-2) Thikrabandh	Nazmun Nahar	F	HusbandMd. Mizanur Rahman	Graduate	55	1/1, 72	0.033	0.033	0.66	0.693	5%	4	Housewife	Govt. Service	0	45000	45,000.00	11,250.00	N/A	Vacant Plot	N/A	N/A
177	177	(STP-2) Thikrabandh	Sayeda Kaniz Fatema Lipi	F	Late Sayed Asraf Uddin	Higher Secondary Education (class 12)	55	1/1, 72	0.04125	0.04125	0.66	0.70125	6%	3	Housewife	Private Service	0	30000	30,000.00	10,000.00	N/A	Vacant Plot	Boundary wall	N/A
178	178	(STP-2) Thikrabandh	AsrafUl Islam	M	Abdul Raif Biswas	Higher Secondary Education (class 12)	55	1/1, 72	0.0825	0.0825	0.876	0.9585	9%	4	Govt. Service	N/A	35,000.00	0	35,000.00	8,750.00	N/A	Vacant Plot	N/A	N/A
179	179	(STP-2) Thikrabandh	Md. Ekramul Biswas	M	Late Eshak ALi Biswas	Secondary Education (ClassX)	55	1/1, 72	0.066	0.066	0.78	0.846	8%	4	Pension	Immigrant	20,000.00	30000	50,000.00	12,500.00	N/A	Vacant Plot	N/A	N/A
180	180	(STP-2) Thikrabandh	Md. Awlad Mia	M	Abdul Haque Mia	Middle School (Class 8)	55	1/1, 72	0.0825	0.0825	0.88	0.9625	9%	4	Private Service	N/A	35,000.00	0	35,000.00	8,750.00	N/A	Vacant Plot	Boundary wall	N/A
181	181	(STP-2) Thikrabandh	Md. Mokter Hossain	M	Md. Kawser Ali Sk.	Secondary Education (ClassX)	55	1/1, 72	0.033	0.033	0.41	0.443	7%	4	Business	N/A	40,000.00	0	40,000.00	10,000.00	N/A	Vacant Plot	Boundary wall	N/A
182	182	(STP-2) Thikrabandh	Md. Siddiqur Rahman	M	Md. Abdul Kuddus	Post Graduate	55	1/1, 72	0.0165	0.0165	0.33	0.3465	5%	4	Govt. Service	N/A	25,000.00	0	25,000.00	6,250.00	N/A	Vacant Plot	N/A	N/A
183	183	(STP-2) Thikrabandh	Mst. Nasrin Akter	F	Belayet Talukder	Secondary Education (ClassX)	55	1/1, 72	0.0165	0.0165	0.33	0.3465	5%	4	Housewife	Teacher	0	25000	25,000.00	6,250.00	N/A	Vacant Plot	Boundary wall	N/A
184	184	(STP-2) Thikrabandh	Md. Sariful Islam	M	Belayet Talukder	Middle School (Class 8)	55	1/1, 72	0.033	0.0165	0.66	0.693	2%	6	Farmer	Private Service	15,000.00	25000	40,000.00	6,666.67	N/A	Vacant Plot	Boundary wall	N/A
185	185	(STP-2) Thikrabandh	Md. Ariful Islam	M	Belayet Talukder	Middle School (Class 8)	55	1/1, 72	0.033	0.0165	0.66	0.693	2%	6	Driver	N/A	25,000.00	0	25,000.00	4,166.67	N/A	Vacant Plot	Boundary wall	N/A

186	186	(STP-2) Thikrabandh	Rubel Sk	M	Md. Nazrul Sk	Higher Secondary Education (class 12)	55	1/1, 72	0.1485	0.037125	0.66	0.8085	5%	4	Business	N/A	70,000.00	0	70,000.00	17,500.00	N/A	Vacant Plot	Boundary wall	N/A
187	187	(STP-2) Thikrabandh	Repon Mir	M	Mir Yan Ali	Higher Secondary Education (class 12)	55	1/1, 72	0.1485	0.037125	0.33	0.4785	8%	4	Business	N/A	30,000.00	0	30,000.00	7,500.00	N/A	Vacant Plot	N/A	N/A
188	188	(STP-2) Thikrabandh	Mehedi Hasan Moni	M	Md. Habibur Rahman	Graduate	56	56	0.066	0.066	0.756	0.822	8%	4	Govt. Service	N/A	45,000.00	0	45,000.00	11,250.00	N/A	Vacant Plot	N/A	N/A
189	189	(STP-2) Thikrabandh	Md . Mizanur Rahman	M	Late Sahadadat Ali	Post Graduate	56	56	0.0495	0.0495	0.99	1.0395	5%	4	Govt. Service	N/A	50,000.00	0	50,000.00	12,500.00	N/A	Vacant Plot	N/A	N/A
190	190	(STP-2) Thikrabandh	Md. Mahabubur Rahman	M	Late Md. Sadar Uddin Sikari	Post Graduate	55	1/1, 72	0.0495	0.0495	0.965	1.0145	5%	4	Govt. Service	N/A	50,000.00	0	50,000.00	12,500.00	N/A	Vacant Plot	N/A	N/A
191	191	(STP-2) Thikrabandh	Md. Saiful Islam	M	Farid Uddin Ahmed	LLB	55	1/1, 72	0.1155	0.1155	1.35	1.4655	8%	4	Lawyer	N/A	30,000.00	0	30,000.00	7,500.00	N/A	Vacant Plot	Boundary wall	N/A
192	192	(STP-2) Thikrabandh	Hosneara Begum	F	Late Abdur Rashid	Secondary Education (ClassX)	55	1/1, 72	0.0825	0.0825	0.93	1.0125	8%	3	House Rent	N/A	10,000.00	0	10,000.00	3,333.33	Widow HOH	Vacant Plot	Boundary wall	N/A
193	193	(STP-2) Thikrabandh	Md. Lutfar Rahman	M	late Rais Uddin Sarde	M. Com, DSMS	55	1/1, 72	0.1815	0.1615	1.71775	1.89925	9%	8	Doctor	Private Service	20,000.00	45000	65,000.00	8,125.00	N/A	Vacant Plot	N/A	N/A
194	**1**	**(STP-1) Mathabhanga**	Munir Ahmed	M	Late Insan Uddin	Higher Secondary Education (class 12)	3169	541	2.65	0.333	2.42	5.07	7%	5	Trade & Business	N/A	90,000.00	-	90,000.00	18,000.00	N/A	Vacant Plot	N/A	N/A
195	**2**	**(STP-1) Mathabhanga**	ABM Mostofa Jaman Gang	M	SM Ayub Ali	Higher Secondary Education (class 12)	3171	1, 537, 540	0.9692	0.53	5.45	6.4192	8%	6	Pension	N/A	80,000.00	-	80,000.00	13,333.33	N/A	Vacant Plot	N/A	N/A
196	**3**	**(STP-1) Mathabhanga**	Tazul Islam Gang	M	Late Neyamoyullah	Higher Secondary Education (class 12)	3169, 3170, 3171,	538, 539	19.84	1.387	0	19.84	7%	4	Fish Firm	Market Lease	22000	16000	38000	9,500.00	N/A	Vacant Plot	N/A	N/A
197	**4**	**(STP-1) Mathabhanga**	Jala Farji Gang	M	Late Keramotullah	Middle School (Class 8)	3169, 3170, 3171,	538, 539	0.55	0.24	3.29	3.84	6%	5	Private Service	Business	20000	12000	32000	6,400.00	N/A	Vacant Plot	N/A	N/A
198	**5**	**(STP-1) Mathabhanga**	Maju BiBi and Masud Akunji Gang	M	Late Sultan Akunji	Middle School (Class 8)	3169, 3170, 3171,	538, 539	0.42	0.34	6.25	6.67	5%	8	Fish Firm	Business + Service	25000	35000	60000	7,500.00	N/A	Vacant Plot	N/A	N/A
199	**6**	**(STP-1) Mathabhanga**	Kazi Imam Hossain Gang	M	SM Ayub Ali	Secondary Education (ClassX)	3169, 3170, 3171,	1, 537, 540	2.664	0.32	1.67	4.334	7%	7	Pension	N/A	50000	0	50000	7,142.86	N/A	Vacant Plot	N/A	N/A
200	**7**	**(STP-1) Mathabhanga**	Nurjahan Gang	F	Late Abdul AZIZ	Middle School (Class 8)	3169, 3170, 3171,	1, 537, 540	7	0.53	0.12	7.12	7%	5	Private Service	Business	30000	20000	50000	10,000.00	N/A	Vacant Plot	N/A	N/A
201	**1**	**(SPS#3) Labonchara**	Anzuman Alom	M	Md. Abdullah	Primary Education	7214, 7646,7647	01, 1243, 2790	0.3089	0.1471	2.13125	2.44015	6%	5	Private service	Trade & Business	35000	70000	105000	21,000.00	N/A	Residential	Thatched	N/A

						(Class - V)															Structure		
202	**1**	**(SPS#4) Nirala**	Abul Hossain Gang	M	Haji Raes Uddin	Higher Secondary Education (class 12)	34576	897	0.572	0.2471	2.5	3.072	8%	3	Trade & Business	N/A	95,000.00	-	95,000.00		N/A	Vacant Plot	N/A	N/A
203	**1**	**(SPS#5) Kashim nagar**	Sk Harun rashid Ding	M	Late sk. Mamu ar Rashid	Post Graduate	29595	7590, 2993, 10329	0.4007	0.2965	2.35	2.7507	11%	3	Lawyer	N/A	75,000.00	-	75,000.00		N/A	Vacant Plot	N/A	N/A
204	**1**	**(SPS#6) Sonadanga**	Md. Mohammad Ali Khan gang	M	Saritullah Khan	Higher Secondary Education (class 12)	3002	1331	0.848	0.2471	1.8	2.648	9%	5	Trade & Business	N/A	75,000.00	-	75,000.00		N/A	Vacant Plot	N/A	N/A
205	**1**	**(SPS#7) Karim nagar**	Akhter Hossain	M	Afsar Uddin Ahmed	Graduate	3463	81	0.1774	0.035	0.366	0.5434	6%	3	Trade & Business	N/A	70,000.00	-	70,000.00	23,333.33	N/A	Renting cow shed	Semi pucca	N/A
206	**2**	**(SPS#7) Karim nagar**	Md. Faizaer Rahman	M	Late Abdul Karim	Post Graduate	3462	1318	0.06	0.06	0.637	0.697	9%	3	Govt. Service	Plot rent	33,000.00	22,000.00	55,000.00	18,333.33	N/A	Furniture Factory	Semi pucca	N/A
207	**3**	**(SPS#7) Karim nagar**	Sahana Yasmin Ding	F	Husband	Secondary Education	3460, 3462,	1522	0.2471	0.055	0.43	0.6771	8%	6	Business	N/A	50000	0	50000	8,333.33	N/A	Residential Structure	Kacca Tin shed House	N/A
					Altaf Hossain	(ClassX)	3463, 3464																	
208	**4**	**(SPS#7) Karim nagar**	MA Rashid Gang	M	Abdul gani Morol	Secondary Education	3460, 3462,	60,	0.2471	0.0156	0.13	0.3771	4%	5	Private Service	N/A	55000	0	55000	11,000.00	N/A	Vacant Plot	N/A	N/A
						(ClassX)	3463, 3464	1318																
209	**5**	**(SPS#7) Karim nagar**	Ramicha Khatun Gang	F	Husband	Secondary Education	3460, 3462,	10,	0.3072	0.0615	0.43	0.7372	8%	8	Business	Trade & Business	100000	100000	200000	25,000.00	N/A	Vacant Plot	N/A	N/A
					Sahidul IslamBiswas	(ClassX)	3463, 3464	1314																
210	**1**	**(SPS#8) Islamia College road**	Sirajul islam Ding	M	Mohammad Kinu Sk.	Graduate	7594, 7673	01, 3028	0.7513	0.1271	1.65	2.4013	5%	6	Trade & Business	N/A	1,00,000.00	-	100,000.00	16,666.67	N/A	Vacant Plot	N/A	N/A

Source: Socioeconomic survey, 2020, PMU
DC office will provide the photograph during giving compensation money.

Appendix 3: Socio-economic Profile of Affected Persons facing Structure Loss Other than Landowners (9 Caretakers, 8 Tenants, 2 Businessmen)

3.A. 9 Caretakers:

Sl. No.	Land Site	Name of AP	Sex	HH size (No. of persons)	Primary occupation	Income sources of HH (other than primary occupation)	Total HH income per month (BDT)	Per Head income per month (BDT)	Use of the affected property	Name of owner	Type of house Kutcha/ pucca /semi- pucca	Size (sq ft) affected property (sq ft)	Cost of affected property as per latest applicable SOR, adjusted for inflation as required (to be filled by project engineer) in BDT[2]	Estimated market price of affected property in BDT[3]	Whether any other structure owned (Yes/No) If yes, type (use) and size sq ft	Total private land holdings of AP (at the location and other places)	Whether vulnerable/If yes, type of vulnerability	Photo of AP along with affected structure[3]
1	Sewerage Treatment Plant(STP-2) Tikrabandh (STP-2)	Md.`Nurul Islam Gazi (Nuru)	M	4	Shop Keeper (tea Stall)	N/A	15,000.00	3,750.00	Residential	Md. Nurul Islam	Thatched	400	75,000.00	150,000	N/A	N/A	Yes	-
2		Abdus Sattar	M	4	Rickshaw Van Puller	Private service	22,000.00	5,500.00	Residential	Sahanara Khatun	Tin Shed House and Boundary (Pucca)	617 and 172ft	75,000.00	150,000	N/A	N/A	Yes	-
3		Md.Amjad Hossain	M	5	Unskilled Labour (Daily Waged)	Business	22,000.00	4,400.00	Residential	Nur AlomMollah	Tin Shed House	396	75,000.00	150,000	N/A	N/A	Yes	-
4		Al Amin	M	5	Unskilled Labour (Daily Waged)	N/A	10,000.00	2,000.00	Residential	GM Golam Mostofa	Tin Shed House and Boundary (Pucca)	260 and 227ft	75,000.00	150,000	N/A	N/A	Yes	
5		Md. Idris Ali	M	4	Small Business of Cloth	N/A	15,000.00	3,750.00	Residential	Md. Idris Ali	Tin shed House	488	75,000.00	150,000	N/A	N/A	Yes	-
6		Md. Mozammel Haque Sheikh	M	3	Self Employment	N/A	12,000.00	4,000.00	Residential	Md. Mozammel Haque Sheikh	Tin shed House and Boundary(Pucca)	420 and 216ft	75,000.00	150,000	N/A	N/A	Yes	-
7		Rokeya Khatun	F	5	Housewife	Auto Rickshaw Driver Trading business Fish seller	28,000.00	5,600.00	Residential	Rokeya Khatun	Pucca House	594	75,000.00	150,000	N/A	N/A	Yes	-
8		MonirujjamanLintu	M	4	Private service (Caretaker)	Van Rickshaw	25,000.00	5,000.00	Residential	SK Asadur Rahman	pucca House	1490	75,000.00	150,000	N/A	N/A	Yes	-
9		Yusuf Gazi	M	4	Unskilled Labour (Daily Waged)	Trading business	16,000.00	4,000.00	Residential	Fatema Begum	Tin Shed House	370	75,000.00	150,000	N/A	N/A	Yes	-

Source: Source: Socioeconomic survey, 2020, PMU
DC office will provide the photograph during giving compensation money.

3.B. 8 Tenants and 2 Businessmen

Sl. No.	Land Site	Name of AP	Sex	HH size (No. of persons)	Primary occupation	Income sources of HH (other than primary occupation)	Total HH income per month (BDT)	Per Head income per month (BDT)	Use of the affected property	Name of owner	Type of house Kutcha/ pucca /semi-pucca	Size (sq ft) affected property (sq ft)	Cost of affected property as per latest applicable SOR, adjusted for inflation as required (to be filled by project engineer) in BDT[2]	Estimated market price of affected property in BDT[3]	Photo of AP along with affected structure[3]
1	Labonchara Sluice gate (SPS#3)	Younus (2)	M	5	Unskilled Labour (Daily Waged)	Trading	15,000.00	3,000.00	Residential	Anzuman Alom	Thatched	280	50,000.00	100,000.00	-
2		Younus	M	4	Rickshaw / Auto Rickshaw Driver	Fruit Seller	14,333.00	3,583.25	Residential	Anzuman Alom	Thatched	280	50,000.00	100,000.00	-
3		Rezaul	M	5	Rickshaw / Auto Rickshaw Driver	Trading	15,000.00	3,000.00	Residential	Anzuman Alom	Thatched	280	50,000.00	100,000.00	-
4		Md. Kuddus	M	4	Rickshaw / Auto Rickshaw Driver	Mechanic	15,000.00	3,750.00	Residential	Anzuman Alom	Thatched	280	50,000.00	100,000.00	-
5		Md. Abdullah	M	5	Private Service & House rent	N/A	20,000.00	4,000.00	Residential	Anzuman Alom	Thatched	280	50,000.00	100,000.00	-
6		Mostofa	M	4	Rickshaw / Auto Rickshaw Driver	Fish Seller	14,000.00	3,500.00	Residential	Anzuman Alom	Thatched	280	50,000.00	100,000.00	-
7		Shundory	F	5	Unskilled Labour (Daily Waged)	N/A	9,000.00	1,800.00	Residential	Anzuman Alom	Thatched	280	50,000.00	100,000.00	-
8	Islamia College Road (SPS#8)	Akhter Hossain	M	3	Business	N/A	40,000.00	8,000.00	Residential	Akhter	Semi pucca	1000	250,000.00	500,000.00	-
9	Karim Nagar, Sonadanga (SPS#7)	Omor Faruk	M	6	Business	N/A	100,000.00	16,666.67	Furniture shop	MD. FaizerRahamn	Semi pucca	N/A	50,000.00	150,000.00	-
10	Karim Nagar, Sonadanga (SPS#7)	Akhter Hossain	M	3	Business	N/A	40,000.00	8,000.00	Cowshed	Akhter	Semi pucca	N/A	45,000.00	135,000.00	-

Source: Source: Socioeconomic survey, 2020, PMU
DC office will provide the photograph during giving compensation money:

Appendix 4: Socio-economic Profile of Affected Persons facing Livelihood Loss (22 Traders, 3 sharecroppers & 3 Employees)

4.A. 22 Traders

Sl No	Land site	Name of APs	Sex	Education	Name of Business	Monthly income (BDT)	No of Family members	Per Head income per month (BDT)	Any Vulnerability	Photograph
1	Custom Ghat (SPS #1)	Md. Dulal Mallick	M	HSC	stock and supply of bricks and sand	20,000.00	5	4,000.00	x	Not Available
2	Custom Ghat (SPS #1)	Ayub Ali Sardar	M	Graduate	stock and supply of bricks and sand	20,000.00	6	3,333.33	x	Not Available
3	Custom Ghat (SPS #1)	Majid Sardar	M	Graduate	stock and supply of bricks and sand	20,000.00	3	6,666.67	x	Not Available
4	Custom Ghat (SPS #1)	Masum Sardar	M	Graduate	stock and supply of bricks and sand	25,000.00	4	6,250.00	x	Not Available
5	Custom Ghat (SPS #1)	Sharif Sardar	M	HSC	stock and supply of bricks and sand	25,000.00	4	6,250.00	x	Not Available
6	Custom Ghat (SPS #1)	Mukarram Sardar	M	SSC	stock and supply of bricks and sand	20,000.00	5	4,000.00	x	Not Available
7	Custom Ghat (SPS #1)	Aziz Sardar (son)	M	SSC	stock and supply of bricks and sand	25,000.00	6	4,166.67	x	Not Available
8	Custom Ghat (SPS #1)	Majid Saheb	M	HSC	stock and supply of bricks and sand	25,000.00	7	3,571.43	x	Not Available
9	Custom Ghat (SPS #1)	Mozammel Hossain	M	SSC	stock and supply of bricks and sand	20,000.00	5	4,000.00	x	Not Available
10	Custom Ghat (SPS #1)	Abdus Sattar	M	SSC	stock and supply of bricks and sand	25,000.00	6	4,166.67	x	Not Available
11	Custom Ghat (SPS #1)	Idris Ali Zamdar	M	HSC	stock and supply of bricks and sand	20,000.00	5	4,000.00	x	Not Available
12	Custom Ghat (SPS #1)	Pias	M	SSC	stock and supply of bricks and sand	25,000.00	6	4,166.67	x	Not Available
13	Custom Ghat (SPS #1)	Ibrahim Haldar	M	HSC	stock and supply of bricks and sand	25,000.00	4	6,250.00	x	Not Available
14	Custom Ghat (SPS #1)	Gopher	M	SSC	stock and supply of bricks and sand	20,000.00	3	6,666.67	x	Not Available
15	Custom Ghat (SPS #1)	Salam Jamadar	M	SSC	stock and supply of bricks and sand	25,000.00	3	8,333.33	x	Not Available
16	Custom Ghat (SPS #1)	Babul Sardar	M	HSC	stock and supply of bricks and sand	25,000.00	5	5,000.00	x	Not Available
17	Custom Ghat (SPS #1)	Delwar Hossain	M	SSC	stock and supply of bricks and sand	20,000.00	4	6,666.67	x	Not Available
18	Custom Ghat (SPS #1)	Zahidul Islam	M	Up to Class Eight	stock and supply of bricks and sand	20,000.00	6	3,333.33	x	Not Available
19	Custom Ghat (SPS #1)	Abdur Rashid	M	HSC	stock and supply of bricks and sand	25,000.00	4	6,250.00	x	Not Available
20	Custom Ghat (SPS #1)	Mintu Saheb	M	SSC	stock and supply of bricks and sand	20,000.00	5	4,000.00	x	Not Available
21	Custom Ghat (SPS #1)	Farid Sheikh	M	SSC	stock and supply of bricks and sand	20,000.00	3	6,666.67	x	Not Available
22	Custom Ghat (SPS #1)	Shahidul Islam	M	SSC	stock and supply of bricks and sand	25,000.00	3	8,333.33	x	Not Available

4.B. 3 Sharecroppers

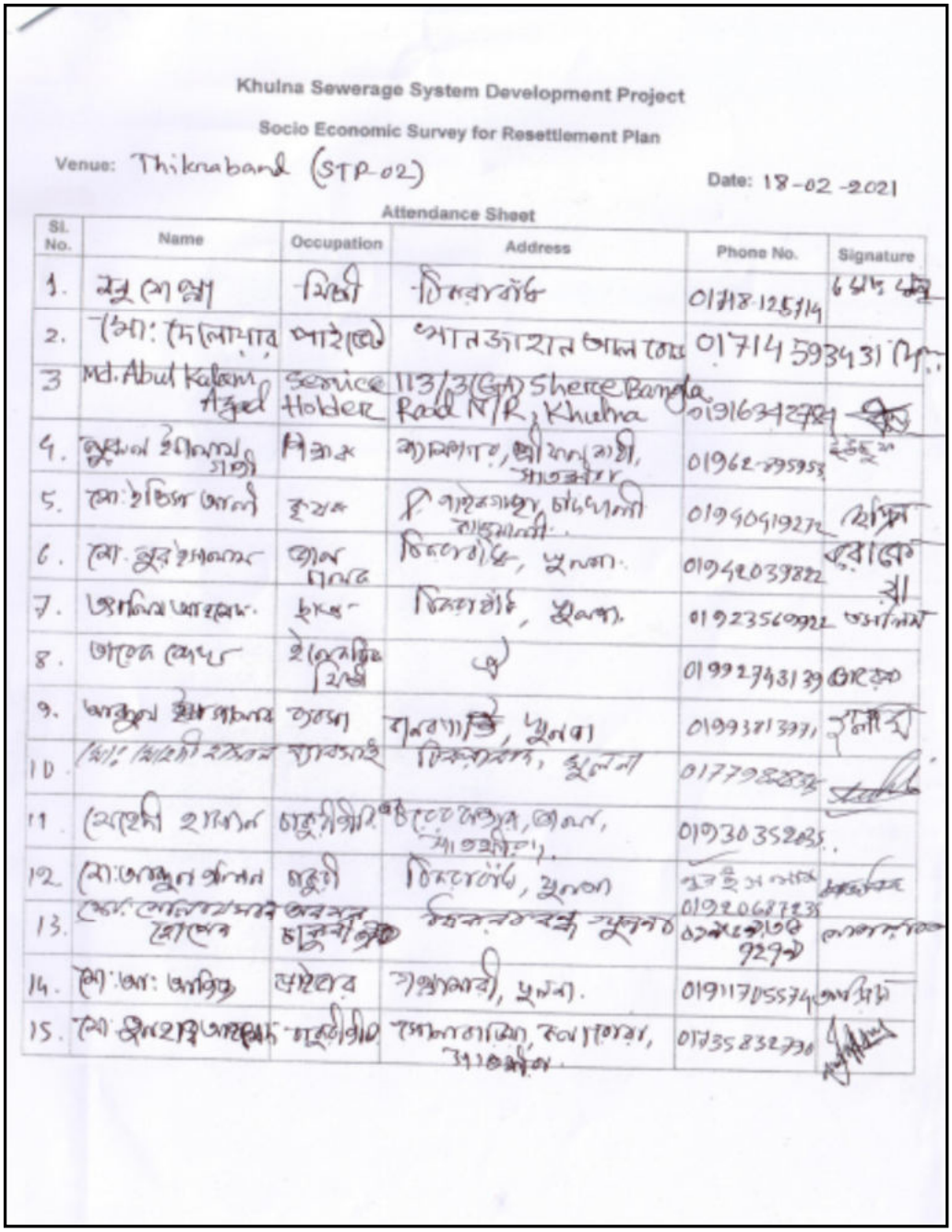
Sl No	Land site	Name of APs	Sex	Education	No of Family members	Primary Occupation	Secondary Business	Monthly income from seasonal business (BDT)	Monthly average family income	Per Head income per month (BDT)	Any Vulnerability	Photograph
1	Mathabhanga (STP-1)	Ali Hossain Hawlader	M	Informally Literate (Without Attending School)	6	Skilled Worker	Seasonal fish cultivation Private Service	25,000.00	35,000.00	5,833.33	Nil	Not Available
2		HemayetHawlader	M	Informally Literate (Without Attending School)	4	Van Rickshaw puller	Seasonal fish cultivation	15,000.00	22,000.00	5,500.00	Nil	Not Available
3		Md.Asad Sheik	M	SSC	3	Van Rickshaw puller	Seasonal fish cultivation	20,000.00	27,000.00	9000.00	Nil	Not Available

Source: Source: Socioeconomic survey, 2020, PMU
Note: DC office will provide the photograph during handing over of compensation
*Monthly income for four months in a year, as it is seasonal fish cultivation.

4.C. 3 Employees

Sl No	Land site	Name of APs	Sex	Religion	Education	Occupation	Monthly income (BDT)	No of Family members	Any Vulnerability	Type of Vulnerability	Photograph	Remarks
1	Karimnagar (SPS-07)	Anowar	M	Islam	Up to Class 8	Cow Shade Caretaker	12000	5	Yes	Poor income of family & permanent loss of livelihood	Not Available	Owner: Akter Hossain
2		Rafik	M	Islam	Up to Class 5	Carpenter	10,000	4	Yes	Poor income of family & permanent loss of livelihood	Not Available	Owner: Omar Faruk
3		Sumon	M	Islam	Up to Class 5	Carpenter	10,000	4	Yes	Poor income of family & permanent loss of livelihood	Not Available	Owner: Omar Faruk

Appendix 5: Signature Sheet Of Participants Of Public Consultation During Socio-Economic Survey in 2021



Khulna Sewerage System Development Project

Socio Economic Survey for Resettlement Plan

Venue: Thikrubandh (STP-02) Date: 18-02-2021

Attendance Sheet

Sl. No.	Name	Occupation	Address	Phone No.	Signature
1.	মঃ মোস্তফা	মিস্ত্রী	ঠিকরাবাঁধ	01718-125714	
2.	মোঃ দেলোয়ার	ব্যবসা	খানজাহান আলী রোড	01714 593431	
3	Md. Abul Kalam Azad	Service Holder	113/3(GA) Sheikh Bangla Road M/R, Khulna	01916342784	
4.	মুহাম্মদ ইলিয়াস	শিক্ষক	[illegible]	01962-795953	
5.	মোঃ ইকবাল আলী	কৃষক	[illegible]	01940419274	
6.	মোঃ নুরুজ্জামান	ব্যবসা	ঠিকরাবাঁধ, খুলনা	01942037822	
7.	আফরিদা আহমেদ	ছাত্রী	ঠিকরাবাঁধ, খুলনা	01923560922	
8.	আবেদ মোল্যা	ইলেকট্রিক মিস্ত্রী	[illegible]	01992743139	
9.	আবুল হোসেন	ব্যবসা	বানরগাতি, খুলনা	01993713997	
10.	মোঃ মোস্তফা হাওলাদার	ব্যবসায়ী	ঠিকরাবাঁধ, খুলনা	01779888[illegible]	
11.	মোছাঃ হাসিনা খাতুন	গৃহিণী	[illegible]	01930352835	
12.	মোঃ আব্দুল করিম	গৃহী	ঠিকরাবাঁধ, খুলনা	01924068735	
13.	মোঃ সোলায়মান হোসেন	অবসর চাকুরীজীবী	ঠিকরাবাঁধ, খুলনা	01911729274	
14.	মোঃ আঃ আজিজ	সুপারভাইজার	শিপইয়ার্ড, খুলনা	01911705574	
15.	মোঃ শিরোজ আকন্দ	চাকুরীজীবী	[illegible]	01735832730	

Khulna Sewerage System Development Project

Socio Economic Survey for Resettlement Plan

Venue: STP-1 : Mathabhanga Date: 10.01.2021.

Attendance Sheet

Sl. No.	Name	Occupation	Address	Phone No.	Signature
1.	Md. Mofazzol Hossain	Farmer	Mathbhanga Batiaghata, Khulna.	01718-350144	
2.	Md. Nasser Ali Molla	Business man	Labanchara Shire Gate. Labanchara.	01713-442148	
3.	Md. Abul Hossain Akondi	Business man	Rokon Uddino Sarak Dolkhola, Khulna.	01736-538735	
4.	Md. Tarul Islam Fonari	Business man	Lackpur, Fakirhat Bagerhat	01712155043	
5.	Md. Masud Hossain	Business man	Lackpur, Fakirhat Bagerhat.	01303151684	
6.	Ali Hossain Haulader	Business man	Pulinani, Jalma, Batiaghata., Khulna.	01729952730	
7.	Md. Moniruzzaman	Business man.	Bari Mahsin Road Khulna	01711312297	

Khulna Sewerage System Development Project

Socio Economic Survey for Resettlement Plan

Venue: Nirala (SPS-4) Site Date: 13/02/2021

Attendance Sheet

Sl. No.	Name	Occupation	Address	Phone No.	Signature
01	Abdul Jabbar Howlader	COOK/Cook	Nirala.	01921-729337	
02	Babu Hari Sadhan	Cook/Cook (Cook)	Nirala.	0158-377310	
03.	(illegible) (Land Broker)	Advocacy	Khulna.		

Khulna Sewerage System Development Project

Socio Economic Survey for Resettlement Plan

Venue: Truck Terminal, Sonadanga (SPS) 66 Date: 13/02/2021

Attendance Sheet

Sl. No.	Name	Occupation	Address	Phone No.	Signature
01	Md. Kamrul Hasnat	Daily worker	Banargati, Khulna.	01714-871239	
02	Md. Ashraf Hossain	Farmer / Daily worker	Banargati, Khulna.	01917-863136 (Mobile SDN)	
03	(illegible) (Land owner)	(Land Business owner)	Banargati, Khulna.	(illegible) (SDN)	Bakkar

Khulna Sewerage System Development Project

Socio Economic Survey for Resettlement Plan

Venue: Islamia College - (SPS-08). Date: 13.02.21

Attendance Sheet

Sl. No.	Name	Occupation	Address	Phone No.	Signature
1.	Sk. Mezbah Uddin	Service	Boyra, Khulna.	01929-609836	
2.	Aldad Hossain	Business	Boyra, Khulna.	01923-371703	

Appendix 6: SAMPLE GRIEVANCE REGISTRATION FORM

(To be available in Bangla and English)

The _____Project welcomes complaints, suggestions, queries, and comments regarding project implementation. We encourage persons with grievance to provide their name and contact information to enable us to get in touch with you for clarification and feedback.
Should you choose to include your personal details but want that information to remain confidential, please inform us by writing/typing *(CONFIDENTIAL)* above your name. Thank you.

Date	**Place of registration**	**Project Town** **Project:**			
Contact information/personal details					
Name		**Gender**	* Male * Female	**Age**	
Home address					
Place					
Phone no.					
E-mail					
Complaint/suggestion/comment/question Please provide the details (who, what, where, and how) of your grievance below: If included as attachment/note/letter, please tick here:					
How do you want us to reach you for feedback or update on your comment/grievance?					

FOR OFFICIAL USE ONLY

Registered by: (Name of official registering grievance)
Mode of communication: Note/letter E-mail Verbal/telephonic
Reviewed by: (Names/positions of officials reviewing grievance)

Action taken:	
Whether action taken disclosed:	Yes No
Means of disclosure:	

Appendix 7: OUTLINE OF SOCIAL SAFEGUARDS MONITORING REPORT

1. Following requirements of the ADB Safeguard Policy Statement (2009) and the *Operations Manual* section on safeguard policy (OM F1), borrowers/clients are required to establish and maintain procedures to monitor the status of implementation of safeguard plans and ensure progress is made toward the desired outcomes. For projects categorized as A or B in Involuntary Resettlement and/or Indigenous People, the Borrowers/clients are required to submit biannual monitoring reports for ADB review. The level of detail and comprehensiveness of a monitoring report is commensurate with the complexity and significance of social safeguards impacts (IR and IP). A safeguard monitoring report may include the following elements:

A. Executive Summary

2. This section provides a concise statement of project scope and impacts, key findings and recommended actions.

B. Background of the Report and Project Description

3. This section provides a general description of the project, including:
   a) Background/context of the monitoring report which includes the information on the project, project components, safeguards categorizations, and institutional requirements
   b) Information on physical progress of project activities, scope of monitoring report and requirements, reporting period, including frequency of submission and changes in project scope and adjusted safeguard measures, if applicable
   c) Summary table of identified impacts and the mitigation actions.

C. Scope of Impacts

4. This section outlines the detail scale and scopes of the project's safeguards impacts, vulnerability status of the affected people/communities, entitlements matrix and other rehabilitation measures, as applicable, as described in the approved final Resettlement Plan(s) /IPP(s).

D. Compensation and Rehabilitation

5. This section describes the process and progress of the implementation of the safeguards plan and other required activities as determined in the plan. This includes payment of the affected assets compensation, allowances, loss of incomes, etc. to the entitled persons; provisions of other types of entitlement as described in the matrix and implementation of livelihood rehabilitation activities as determined in the plan. Quantitative as well as qualitative results of the monitoring parameters, as agreed in the plan, should be provided.

E. Project disclosure, public participation and consultation

6. This section describes project disclosure mechanism, public participation and consultations activities during the project implementation as agreed in the plan. This includes, numbers of activities conducted, issues raised during consultation and responses provided by the project team, implementing NGOs, project supervision consultants, contractors, etc.

F. Grievance Redress Mechanism (GRM)

7. This section described the implementation of project GRM as design in the approved Resettlement Plan/IPP. This includes evaluations of its effectiveness, procedures, complaints receive, timeliness to resolve issues/ complaints and resources provided to solve the complaints. Special attentions should be given if there are complaints received from the affected people or communities.

G. Institutional Arrangement

8. This section describes the actual implementation, or any adjustment made to the institutional arrangement for managing the social safeguards issues in the projects. This includes the establishment of safeguards unit/ team and appointment of staff in the executing or implementing agencies; implementation of the GRM and its committee; supervision and coordination between institutions involved in the management and monitoring of safeguards issues, the roles of NGO and women's groups in the monitoring and implementation of the plan, if any.

H. Monitoring Results-Findings

9. This section describes the summary and key findings of the monitoring activities. The results are compared against previously established benchmarks and compliance status (e.g., adequacy of IR compensation rates and timeliness of payments, adequacy and timeliness of IR rehabilitation measures including serviced housing sites, house reconstruction, livelihood support measures, and training; budget for implementing EMP, resettlement plan, or IPP, timeliness and adequacy of capacity building, etc.). It also compared against the objectives of safeguards or desired outcomes documented (e.g. involuntary resettlement impacts avoided or minimized; livelihood restored or enhanced; IP's identity, human right, livelihood systems and cultural uniqueness fully respected; indigenous people not suffer adverse impacts, environmental impacts avoided or minimized, etc.). For FI projects this includes the effectiveness of the Environmental and Social Management System (ESMS) managed by the FI and its participating institutions. If noncompliance or any major gaps identified, include the recommendation of corrective action plan.

I. Follow up Actions, Recommendation and Disclosure

10. This section describes recommendations and further actions or items to focus on for the remaining monitoring period. It also includes lesson learned for improvement for future safeguards monitoring activities. Disclosure dates of the monitoring report to the affected communities should also be included. A time-bound summary table for required actions should be included.

Appendix 1

(i) List of Affected Persons and Entitlements
(ii) Summary of Resettlement Plan/IPP with entitlement matrix

Appendix 2

(i) Copies of affected persons' certification of payment (signed by the affected persons)
(ii) Summary of minutes of meetings during public consultations
(iii) Summary of complaints received and solution status.

Appendix 8: Assessment of Temporary Impacts

To identify potentially affected persons for proposed 269.67 kms of sewer network, a sample survey was carried out in July 2020 at three representative stretches of 1Km each in high density, medium density and low-density areas. The survey identified a total of 33 APs in representative areas whose business will be temporarily affected during pipe laying, as they carry their activities within/very close to ROW. Based on the distribution of high and medium density roads along which sewer pipes will be laid, in the total proposed sewer network of 269.67 km, the total number of APs are projected at 2,640.

8A: Results of Transect Walk along Sample Stretches of Sewer Network for Identification of Potential Temporary Impacts

SL. No.	Name of Road where sewer pipe laying proposed and Width	Length of stretch (Km) and Proposed Manhole width (Dia. in feet)	Number of shops and Movable vendors.	No. of religious place	Daily income of movable vendor	Density	Remarks	Sample Picture of Alignment
1	Hazi Mohsin Road (Road width avg. 40 feet)	Length:0.2 Km Manhole dia: 4.5 ft	About 10 nos. shops, but no shop will be affected; only 4 nos. movable vendors likely to be temporarily affected (temporary income loss).	Nil	BDT 300-500 Avg: BDT 400	Medium	In front of each shop, there is 4 to 5 feet width footpath, where no construction work will take place.	

2	Ahsan Ahmed Road (Road width avg. 50 feet)	Length:0.2 Km Manhole dia: 4.5 ft	About 12 nos. shops, but no shop will be affected; only 4 nos. movable vendors likely to be temporarily affected (temporary income loss).	Nil	BDT 300-500 Avg: BDT 400	Medium	In front of each shop, there is 4 to 5 feet width footpath, where no construction work will take place.	
3	Khulna-Jessore Road beside Mina Bazar Shopping mall (Road width avg. 60 feet)	Length:0.3 Km Manhole dia: 5.75 ft	About 28 nos. shops, but no shop will be affected; only 8 nos. movable vendors likely to be temporarily affected (temporary income loss).	Nil	BDT 300-500 Avg: BDT 400	High	In front of each shop, there is 6 to 8 feet width footpath, where no construction work is proposed.	
4	Majid Sorani Road (Road width avg. 80 feet)	Length:0.3 Km Manhole dia: 4.5 ft	About 30 nos. shops, but no shop will be affected; only 5 nos. movable vendors likely to be temporarily affected (temporary income loss).	Nil	BDT 300-500 Avg: BDT 400	High	In front of each shop, there is 5 to 6 feet width footpath, where no construction work is proposed.	

5	M.A Bari Road (Road width avg. 80 feet)	Length:0.2 Km Manhole dia: 5.75 ft	About 15 nos. shops, but no shop will be affected; only 4 nos. movable vendors likely to be temporarily affected (temporary income loss).	Nil	BDT 300-500 Avg: BDT 400	Medium	In front of each shop, there is 5 to 6 feet width footpath, , where no construction work will take place.	
6	She-E-bangla Road (Road width avg. 60 feet)	Length:0.2 Km Manhole dia: 4.5 ft	About 15 nos. shops, but no shop will be affected; only 3 nos. movable vendors likely to be temporarily affected (temporary income loss).	Nil	BDT 300-500 Avg: BDT 400	Medium	In front of each shop, there is 8 to 10 feet free space. No access disruption to the permanent shops is anticipated.	
7	Nirala Road (Road width avg. 60 feet)	Length:0.4 Km Manhole dia: 4.5 ft	About 20 nos. shops, but no shop will be affected; only 4 nos. movable vendors likely to be temporarily affected (temporary income loss).	Nil	BDT 300-500 Avg: BDT 400	High	In front of each shop, there is 10 to 12 feet free space. No access disruption to the permanent shops is anticipated.	

8	Gagon Babu Road (Road width avg. 40 feet)	Length:0.2 Km Manhole dia: 4.5 ft	About 6 nos. shops, but no shop will be affected; only 1 no. movable vendors likely to be temporarily affected (temporary income loss).	Nil	BDT 300-500 Avg: BDT 400	Medium	In front of each shop, there is 4 to 5 feet footpath, which will not be disturbed during construction.	

Source: Transect walk and field survey.

Note: (1) The transect walk covered 1Km of high density, 1 km of medium density roads and 1Km low density roads of Khulna city, and no impacts to permanent shops were observed. Possible temporary economic impacts to hawkers and vendors were identified, which will be confirmed based on detailed measurement survey and detailed design. No potential impacts were observed in low density areas of the city.

(2) Sewer lines will be laid within the black top portion (carriage way) of government roads.

Estimated Temporary Economic Impacts[29] of Sewer Pipe Laying (including manhole construction)

	Category	Sample Road Length/Pipe Alignment	Assessed Temporary Impact for Sample Road Length (No. of Vendors)	Proposed Road Length / Pipe Alignment in Density Category (Km)	Estimated Total Temporarily Affected Hawkers and Vendors (No.	Remarks
1.	High Density	1	17	80.0	1360	Assessed income loss: 2-5 days each
2.	Medium Density	1	16	80.0	1280	

[29]Any temporary economic impacts that cannot be avoided or mitigated during construction, will require to be compensated. If vendors are enabled to continue their business without access loss, they will not be eligible to receive compensation. Based on initial assessment a provisional sum has been allotted in resettlement budget for temporary income loss during laying sewer pipe lines. Final involuntary resettlement impact will further reassessed in sections ready for construction work.

3.	Low Density	1	0	109.67	0	
				269.67	2640	

Source: Transect walk and field survey.

8B: Results of Transect Walk along Sample Manhole Pumping Station (MPS) Locations

	Road width	No. of potentially affected hawkers	Income per day (range)	Remarks
Manhole pumping station locations surveyed				
MPS at KDA Avenue road	80 feet	5	BDT 300-500	Income per day is variable, depending on sales. Reported average income is BDT 350/day
MPS at Khan Jahan Ali Road	80 feet	5	BDT 300-500	
Average no of affected persons per MPS		5		
Estimated no. of temporarily affected persons at 5 MPS locations		25	BDT 300-500	Reported average income=BDT 400/day
Estimated no. of days of disruption per MPS, during construction		14		

Source: Transect walk and field survey.

Photographs of Sample Manhole Pumping Station Locations

	
Manhole Pump Station Location within road RoW of Khan Jahan Ali Road	Manhole Pump Station Location within road RoW of KDA Avenue Road

Source: Transect walk and field survey.

Note: (1) The transect walk covered 2 sample manhole pumping station locations in Khulna city, and no impacts to permanent shops were observed. Possible temporary economic impacts to hawkers and vendors were identified, which will be confirmed based on detailed measurement survey and detailed design.

(2) Manhole pumping stations will be constructed well within the ROW of government roads.

8C: Format for Survey Report on Temporary Impacts to Businesses[30]

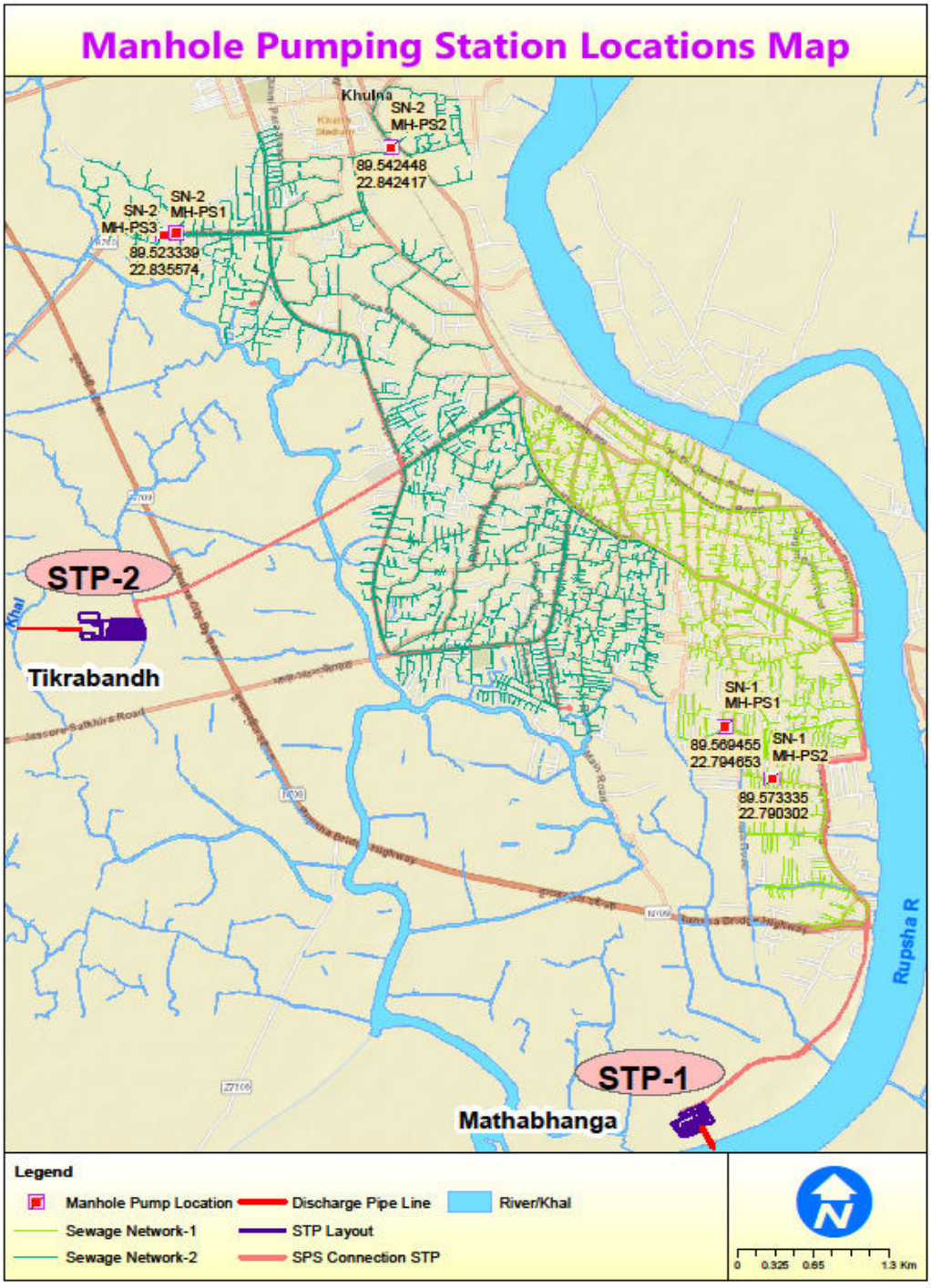
Sr. No	Area & Location	RHS/LHS	Name of Business Owners, Hawker/street Vendor	Sex M/F	Age	Caste/ ethnic community	Education	Type of Structure	Nature of business	Net Income Monthly from the business (BTD)	Income from Other sources	No. of Dependents in the family	Any Vulnerability	No. of Employees (if any)	Wages paid to employees (in BDT)	Assessment of Loss 1. Temporary shifting required 2. Temporary economic Impact 3. Any other loss, specify	Photograph
1																	
2																	
3																	
4																	
5																	

[30] Survey to be conducted along proposed pipe alignments and details of temporarily affected businesses to be recorded and reported using the above format in the updated Resettlement Plan.

Sr. No	Area & Location	RHS/LHS	Name of Business Owners, Hawker/street Vendor	Sex M/F	Age	Caste/ ethnic community	Education	Type of Structure	Nature of business	Net Income Monthly from the business (BTD)	Income from Other sources	No. of Dependents in the family	Any Vulnerability	No. of Employees (if any)	Wages paid to employees (in BDT)	Assessment of Loss 1. Temporary shifting required 2. Temporary economic Impact 3. Any other loss, specify	Photograph
6																	
7																	

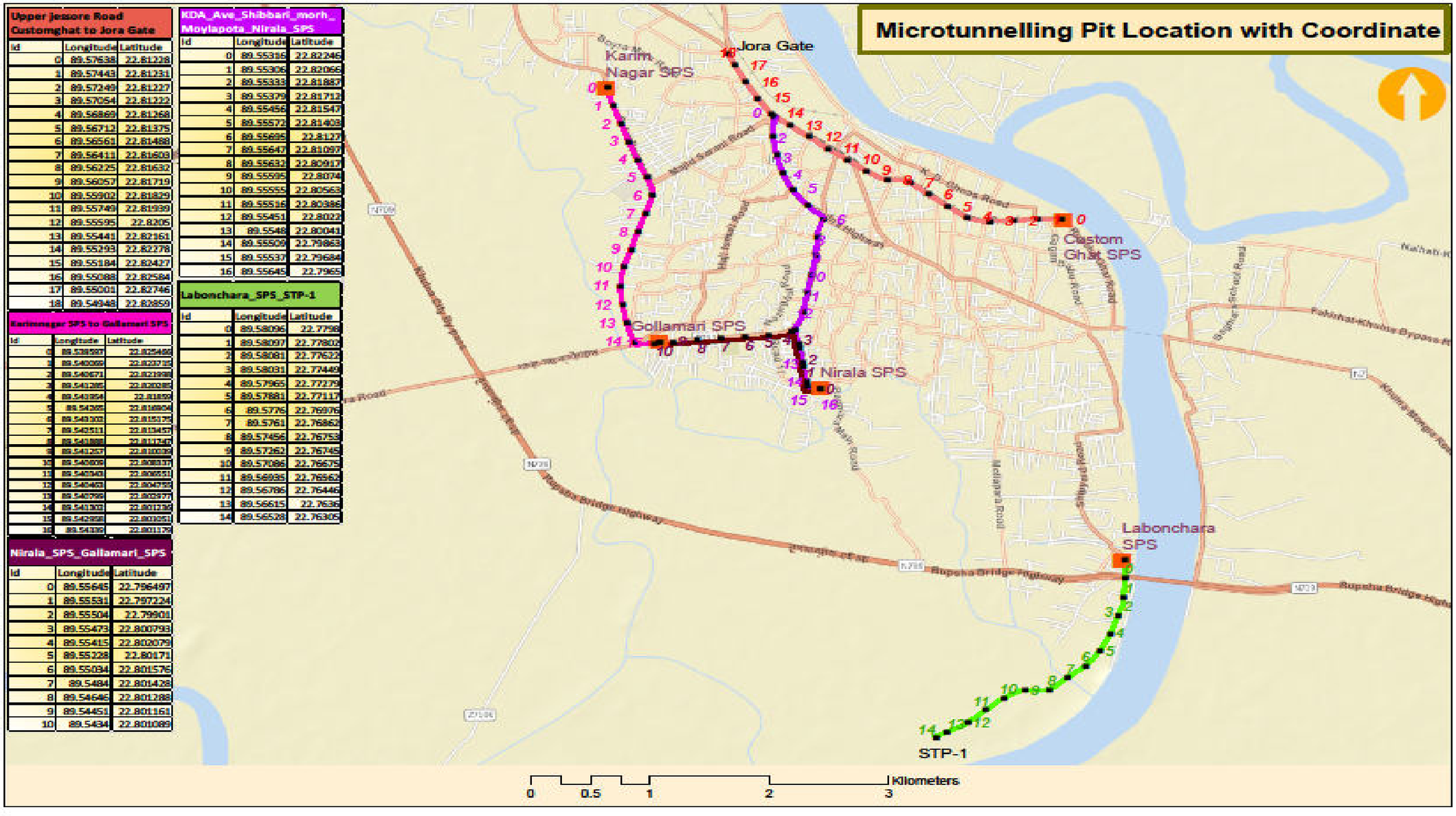
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8.D: Manhole Pumping Station Locations Map



Source: Project Management Unit, KSSDP

Appendix 9: : **Micro-tunnelling Pit Location with Coordinates**



Upper jessore Road Customghat to Jora Gate		
Id	Longitude	Latitude
0	89.57638	22.81228
1	89.57443	22.81231
2	89.57249	22.81227
3	89.57054	22.81222
4	89.56869	22.81268
5	89.56712	22.81375
6	89.56563	22.81488
7	89.56411	22.81603
8	89.56225	22.81632
9	89.56057	22.81719
10	89.55902	22.81829
11	89.55749	22.81939
12	89.55595	22.8205
13	89.55441	22.82161
14	89.55293	22.82278
15	89.55184	22.82427
16	89.55088	22.82584
17	89.55001	22.82746
18	89.54948	22.82859

KDA_Ave_Shibbari_morh_ Moylapota_Nirala_SPS		
Id	Longitude	Latitude
0	89.55316	22.82246
1	89.55306	22.82066
2	89.55333	22.81883
3	89.55379	22.81713
4	89.55456	22.81547
5	89.55572	22.81403
6	89.55695	22.8127
7	89.55647	22.81097
8	89.55632	22.80917
9	89.55595	22.8074
10	89.55555	22.80563
11	89.55516	22.80386
12	89.55451	22.8022
13	89.5548	22.80041
14	89.55509	22.79863
15	89.55537	22.79684
16	89.55645	22.7965

Labonchara_SPS_STP-1		
Id	Longitude	Latitude
0	89.58096	22.7798
1	89.58097	22.77802
2	89.58081	22.77622
3	89.58031	22.77449
4	89.57965	22.77279
5	89.57881	22.77117
6	89.5776	22.76976
7	89.5761	22.76862
8	89.57456	22.76753
9	89.57262	22.76745
10	89.57086	22.76675
11	89.56935	22.76562
12	89.56786	22.76446
13	89.56615	22.7636
14	89.56528	22.76305

Karimnagar SPS to Gallamari SPS		
Id	Longitude	Latitude
0	89.538597	22.825468
1	89.540069	22.825735
2	89.540671	22.821998
3	89.541265	22.820285
4	89.542054	22.818899
5	89.54205	22.816904
6	89.542303	22.815179
7	89.542511	22.813457
8	89.541888	22.811747
9	89.541257	22.810039
10	89.540606	22.808337
11	89.540340	22.806551
12	89.540463	22.804755
13	89.540788	22.802937
14	89.541303	22.801236
15	89.542058	22.801051
16	89.54206	22.801179

Nirala_SPS_Gallamari_SPS		
Id	Longitude	Latitude
0	89.55645	22.796497
1	89.55531	22.797224
2	89.55504	22.79901
3	89.55473	22.800793
4	89.55415	22.802079
5	89.55228	22.80171
6	89.55034	22.801576
7	89.5484	22.801428
8	89.54646	22.801288
9	89.54451	22.801161
10	89.5434	22.801089

Source: Project Management Unit, KSSDP

Appendix 10: Photographs of Outfall Locations

	
STP-1: Rupsa River	**STP-2: Hogladanga cannel**