

Due Diligence Report

January 2015

IND: Kolkata Environmental Improvement
Investment Program (KEIIP) Tranche 1 - Sewerage
and Drainage (Package SD 07)

FINAL REPORT

Prepared by the Kolkata Municipal Corporation for Asian Development Bank. This is an updated version of the draft originally posted in May 2012 and revised on July 2014 available on <http://www.adb.org/projects/documents/kolkata-environmental-improvement-investment-program-tranche-1-sewerage-drainage-jul-2014-rp>

CURRENCY EQUIVALENTS

(as of 15 August 2012)

| | | |
|---------------|---|------------------------|
| Currency Unit | = | Indian rupee/s (Re/Rs) |
| Re 1.00 | = | \$0.0181 |
| \$1.00 | = | Rs. 55.175 |

ABBREVIATIONS

| | | |
|-----------------|---|--|
| AAI | - | Airport Authority of India |
| ADB | - | Asian Development Bank |
| AP | - | Affected Persons |
| C&P | - | Consultation and Participation |
| CBO | - | Community-Based Organization |
| CSTC | - | Calcutta State Transport Corporation |
| CTC | - | Calcutta Tramways Company |
| DMA | - | District – Metered Area |
| DSC | - | Design and Supervision Consultant |
| EMP | - | Environmental Management Plan |
| FGD | - | Focus Group Discussion |
| GAP | - | Gender Action Plan |
| GIS | - | Geographical Information System |
| GOI | - | Government of India |
| Govt. | - | Government |
| GoWB | - | Government of West Bengal |
| GRM | - | Grievance Redress Mechanism |
| HH | - | Household |
| IPP | - | Indigenous Peoples Plan |
| KEIIP | - | Kolkata Environmental Improvement Investment Program |
| KEIP | - | Kolkata Environmental Improvement Project |
| Km | - | kilometer |
| Km ² | - | square kilometer |
| KMC | - | Kolkata Municipal Corporation |
| KMDA | - | Kolkata Metropolitan Development Authority |
| LAA | - | Land Acquisition Act |
| LHS | - | Left-Hand Side |
| M/F | - | Male/Female |
| m | - | meter |
| M ² | - | square meter |
| MLD | - | million litres per day |
| MM | - | Maheshtala Municipality |
| Mm/mm | - | millimetre |
| MS | - | Mild steel |
| NA | - | not applicable |
| NGO | - | Non Government Organization |
| No. | - | Number |
| NRRP | - | National Rehabilitation and Resettlement Policy |
| NRW | - | Nonrevenue water |
| OBC | - | Other Backward Classes |
| PAF | - | Project Affected Family |
| PAH | - | Project Affected Household |
| PCB | - | Pollution Control Board |
| PD | - | Project Director |
| PDS | - | Public Distribution System |
| PHE | - | Public Health Engineering |
| PID | - | Project Implementation Director |
| PMU | - | Project Management Unit |

| | | |
|-------|---|-------------------------------------|
| PS | - | Pumping Station |
| PST | - | Pre-Setting Tanks |
| R&R | - | Resettlement and Rehabilitation |
| RHS | - | Right-Hand Side |
| ROW | - | Right-Of-Way |
| Rs. | - | Rupees |
| S&D | - | Sewerage & Drainage |
| SC | - | Schedule Caste |
| SDU | - | Social Development Unit |
| SIA | - | Social Impact Assessment |
| SPS | - | Safeguard Policy Statement |
| ST | - | Schedule Tribe |
| STP | - | Sewerage Treatment Plant |
| WBPCB | - | West Bengal Pollution Control Board |

NOTES

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KOLKATA MUNICIPAL CORPORATION



KOLKATA ENVIRONMENTAL IMPROVEMENT INVESTMENT PROGRAM



FINAL REPORT

DUE DILIGENCE REPORT

JANUARY 2015

Prepared by
Kolkata Municipal Corporation

Table of Contents

| | | |
|--------|--|----|
| 1. | Introduction and Project Background..... | 1 |
| 1.1. | Introduction..... | 1 |
| 1.2. | Project Background | 1 |
| 1.3. | Sub-project details..... | 1 |
| 1.4. | Project at a glance..... | 2 |
| 2. | Sub-Project Areaand Population..... | 2 |
| 2.1. | Land use..... | 2 |
| 2.2. | Population | 3 |
| 2.3. | Objectives..... | 3 |
| 2.3.1. | The objective of the subproject of Package-7 under Tranche 1:..... | 3 |
| 3. | Resettlement Issues..... | 4 |
| 3.1. | Scope of Work and Resettlement Impacts | 4 |
| 4. | Due Diligence Findings..... | 5 |
| 4.1. | The Findings..... | 5 |
| 4.2. | Attitude of People to the Project- A Report on Public Consultation | 6 |
| 4.2.1. | Rehabilitation of GAP sewer along Third Railway line – Karbala Roadincluding allied works in Borough XV | 6 |
| 4.2.2. | Laying of Pumping main along Taratala Road and Santoshpur Road fromTrenching Ground Sewage PS to Santoshpur Main Sewage PS | 6 |
| 4.2.3. | Development of S&D network including one combined pumping station withinSouth Sub-urban East Catchment - Ward – 122(Part) | 7 |
| 4.2.4. | Rehabilitation of South Sub-urban East (SSE) STP | 8 |
| 5. | Conclusions | 14 |
| 5.1. | Conclusions..... | 14 |
| A. | Screening Questions for Resettlement Categorization | 14 |
| B. | Identification of indigenous peoples in project area..... | 16 |

1. Introduction and Project Background

1.1. Introduction

The Kolkata Environmental Improvement Investment Program (KEIIP) is an important environmental improvement program of the Kolkata Municipal Corporation (KMC) presently the implementer of the project. The Program is expected to step forward the urban environment and living conditions in targeted metropolitan segments of the KMC area.

1.2. Project Background

The Program is proposed to be implemented using a multi-tranche financing facility (MFF) and will consist of three phases i.e., the Kolkata Environmental Improvement Projects Phase 2, 3 and 4.

The nodal agency of this loan disbursement is Kolkata Municipal Corporation (KMC) in the form of KEIIP. The nodal agency will be supported by two consultancy services, Project Management Consultant (PMC) and Design and Supervision Consultant (DSC).

1.3. Sub-project details

| | |
|---------------------|--|
| Plan name | Kolkata Urban Sector Investment Plan |
| Program name | Kolkata Environmental Improvement Investment Program (KEIIP) |
| Project name | Kolkata Environmental Improvement Investment Program Tranche 1 Project |
| Subproject name | KEIIP Tranche 1 Subproject for Package-7 : Sewerage and Drainage Work in Borough XIII And Replacement of GAP Sewer In Borough XV |
| Subproject location | Kolkata Municipal Corporation (KMC) , West Bengal, India |
| Financing | ADB, GoWB, KMC |
| Executing Agency | Kolkata Municipal Corporation (KMC) |
| Implementing agency | PMU KEIIP |

1.4. Project at a glance

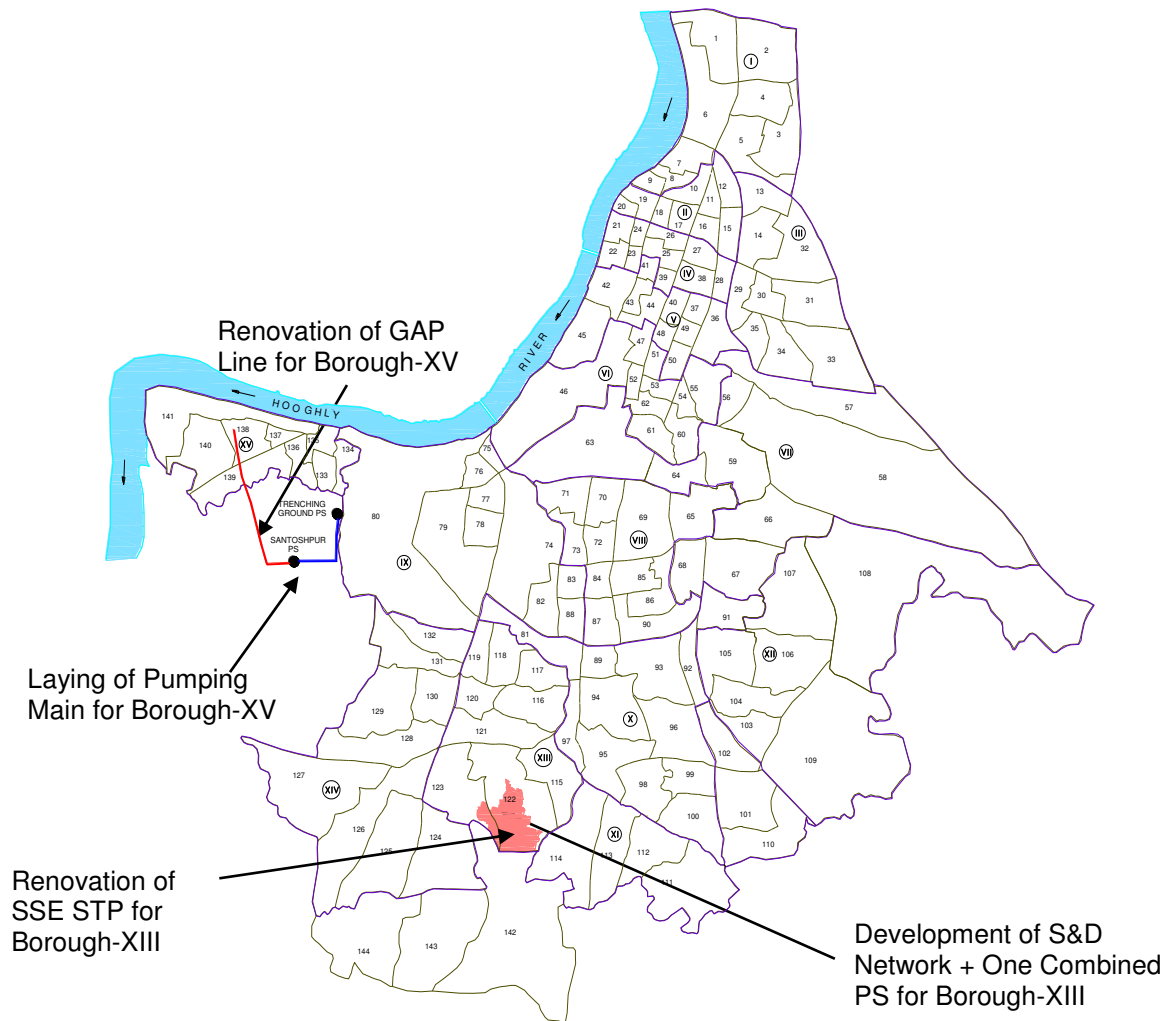


Fig 1.1: Proposed works considered to be taken up under Package 7

2. Sub-Project Area and Population

2.1. Land use

The subproject area is for the most part residential area however; commercial activities and cottage industries also exist. No major institutional, commercial, health, educational facilities are available in the sub-project area.

2.2. Population

The subproject is covering parts of two Borough and area/population as per latest Census has been considered.

- a) Borough XV: Improvement of GAP sewer and laying of pumping main have been considered in Wards 133,134,135,137,138, 139 and parts of Mahestala Municipality. Total benefited population for the proposed scheme is provided in Table -1.

Table 1 Population

| Year | Area (Ha) | Population |
|------|-----------|------------|
| 2001 | 386.3 | 1,87,240 |
| 2015 | 386.3 | 2,21,900 |
| 2031 | 386.3 | 2,66,340 |

- b) Borough XIII: Improvement of S&D system in SSE area has been considered (Ward 122). Total benefited population for the proposed scheme is provided in Table -2.

Table 2 Population

| Year | Area (Ha) | Population |
|------|-----------|------------|
| 2015 | 117.3 | 17,355 |
| 2030 | 117.3 | 21,012 |
| 2045 | 117.3 | 24,642 |

2.3. Objectives

The overall objective of the Kolkata Environmental Improvement Investment Program is to achieve sustainable economic growth through improved quality of urban life and the urban environment.

The main objective of KEIIP is:

- 1) To provide affordable access to water supply, sewerage and drainage services in KMC
- 2) To enhance quality and sustainability of urban service delivery by institutional reforms and capacity building

2.3.1. The objective of the subproject of Package-7 under Tranche 1:

- 1) To develop S&D network facilities on Priority basis which in turn helps to improve environmental condition?
- 2) To provide relief from water logging conditions within the project area
- 3) Last but not the least, for proper functioning of existing S&D system efficiently.

To meet the above objectives the following project components are considered

1) Rehabilitation of GAP sewer along Third Railway line – Karbala Road including allied works in Borough XV.

Most of the areas become waterlogged due to non functional portion of GAP sewer. The replacement is urgently required.

2) Laying of Pumping main along Taratala Road and Santoshpur Road from Trenching Ground Sewage PS to Santoshpur Main Sewage PS.

It had been noted that running of more than one pump results overflowing at the manhole. Laying of new pipelines to take away waste water from Trenching Ground SPS to Santoshpur MSPS will be advantageous.

3) Development of S&D network including one combined pumping station within South Sub-urban East Catchments - Ward – 122(Part)

The present study area which is a part of the 'Added Areas' but not covered under the KEIIP is almost devoid of any organized sewerage and drainage system. Some of the areas are water logged and that too prolonged.

4) Rehabilitation of South Sub-urban East (SSE) STP

For the following reasons the rehabilitation is essential.

- a) The side slope of embankment in ponds is in poor condition.
- b) Embankment protection work is not provided.
- c) Water hyacinth and aquatic weeds growth is observed in the water body.
- d) There is no periodical cleaning & thus sludge has been deposited in anaerobic pond and aerated lagoon.
- e) Floating aerators are not working in full capacity.

3. Resettlement Issues

3.1. Scope of Work and Resettlement Impacts

It is noted that this is mostly rehabilitation work. An attempt was made to observe the situation in the city along the supply systems and also probe into the resettlement issues in various locations by a reconnaissance visit and consecutive visits. The following situation was found at/around places.

Table 3.1: Scope of Work Proposed in Tranche-I and Resettlement Impacts

| Component | Location | Remarks |
|---|---|--|
| Rehabilitation of GAP sewer along Third Railway line – Karbala Road including allied works in Borough XV. | From Gandhi Maidan to Karbala Unnayan Samity and up to Santoshpur Main Road). | There will be temporary inconvenience due to laying of pipe below the middle of the road. |
| Laying of Pumping main along Taratala Road and Santoshpur Road from Trenching Ground Sewage PS to Santoshpur Main Sewage PS | Laying of Pumping main along Taratala Road and Santoshpur Road from Trenching Ground PS to Santoshpur PS | There will be temporary inconvenience due to laying of pipe below the middle of the road. . |
| Development of S&D network including one combined pumping station within South Sub-urban East Catchment - Ward – 122(Part) | Rehabilitation of GAP line along Third Railway line – Karbala Road including allied works in borough XVSTP is existing in Dhalipara | There will not be any encumbrances. The Pumping Station will be constructed on municipal land. |
| Rehabilitation of South Sub-urban East (SSE) STP | Development of S&D network including one combined pumping station within south sub – urban east area (Ward – 122) | There is no resettlement issue |

The Subproject will involve no physical displacement as the constructions will be done within the vacant Government land. Though pipes will be laid along the road there will be impermanent disturbances and not of enduring nature like displacement and relocation.

4. Due Diligence Findings

4.1. The Findings

It has been found that no additional land will be required for this Subproject and no structure will be affected; hence there is neither any land acquisition issue nor any resettlement issue involved in it. So no resettlement planning is required for this.

Detailed discussion was held with the people who are residing and/or having temporary business in the Subproject locations. The residents are aware of the problems they are facing and are willing to cooperate in the project activities.

4.2. Attitude of People to the Project- A Report on Public Consultation

4.2.1. Rehabilitation of GAP sewer along Third Railway line – Karbala Road including allied works in Borough XV

Here beneficiaries were consulted on the road side. They opined they would cooperate wholeheartedly.



Replacement of GAP

4.2.2. Laying of Pumping main along Taratala Road and Santoshpur Road from Trenching Ground Sewage PS to Santoshpur Main Sewage PS



PM Route – TGPS – SMPS PM Route – TGPS – SMPS

Due Diligence Report

Community people are enthusiastic and ready to extend help if required. They informed they would bear transitory inconveniences as it would be advantageous in the long run.

A stakeholders meeting was conducted intrenching ground pumping station with the operators.



Ongoing stakeholders meeting

They opined that this pumping station is basically for transporting waste water generated from area surrounding Paharpur Road and Dhankheti Khal to Santoshpur MSPS. If more than one pump gets operational then overflowing is evident. So laying of new pipeline will be beneficial.

4.2.3. Development of S&D network including one combined pumping station within South Sub-urban East Catchment - Ward – 122(Part)



Ramkrishna Nagar (Kalipur Road)

Due Diligence Report

Two public consultations were held at Ramkrishnanagar.(Kalipur Road)

The participants informed that

- a) During rainy seasons the roads get waterlogged, even after light showers also.
- b) It is very difficult for the school children to go to school during that situation.
- c) Water logging even lasts for days.
- d) Sometimes houses in low lying areas get flooded and they have to suffer most
- e) They were happy as the work would take place
- f) They welcomed the project



Proposed STP site

It will be constructed on municipal land. There will not be any rehabilitation issue.

4.2.4. Rehabilitation of South Sub-urban East (SSE) STP

A stakeholder's discussion had been conducted in the office (existing STP) with the STP operators. They felt the renovation work is urgently needed.



Ongoing stake holder's meeting

Consultation Records:

| Date | Location | Attendance sheet | Issues | Addressed by the project |
|----------|-----------------------------------|------------------|--|--|
| 7.11.14 | Ramkrishna Nagar | Attached | <ul style="list-style-type: none"> - Problem regarding water-logging, inadequate drainage system, absence of sewerage system of the project area - Discussion on proposed project and its benefits for the local people - Problem during construction activities for S&D works regarding access to house, shop premises etc. including traffic movement - Existing open drains which are discharging at low lying areas causing breeding ground of mosquitoes. | <p>DSC explained the components of S&D Works and likely benefits like enhancing living condition of people.</p> <p>DSC explained to stakeholders that proper measures would be taken to provide adequate access to house, shop premises etc., during construction.</p> <p>DSC ensured that closed conduit will be proposed.</p> |
| 10.11.14 | Trenching ground PS, Garden Reach | Attached | <ul style="list-style-type: none"> - Discussion on proposed project and its benefits for the local people - Problem during construction activities for S&D works regarding access to house, shop premises etc. including traffic movement - Water-logging and stagnation of waste water due to non-functioning of Trenching Ground pumping station and its delivery system | <p>DSC explained the components of S&D Works and likely benefits like enhancing living condition of people.</p> <p>DSC ensured to stakeholders that proper measures would be taken to provide adequate access to house, shop premises etc., during construction. It was also explained that proper functioning of pumping station and delivery system would substantially reduce water logging and would result in abating waste water stagnation.</p> |
| 10.11.14 | SSE STP and surrounding | Attached | <ul style="list-style-type: none"> - Problem regarding water-logging, inadequate drainage system, absence of sewerage | <p>DSC explained the</p> |

Due Diligence Report

| Date | Location | Attendance sheet | Issues | Addressed by the project |
|------|----------|------------------|---|--|
| | areas | | <p>system in the project area</p> <ul style="list-style-type: none"> - Discussion on proposed project and its benefits for the local people - Problem during construction activities for S&D works regarding access to house, shop premises etc. including traffic movement - Existing open drains which are discharging at low lying areas causing breeding ground of mosquitoes. | <p>components of S&D Works, construction of a new pumping station for proper discharge of storm and waste water from the project area and likely benefits in enhancing living condition of people.</p> <p>DSC ensured to stakeholders that proper measures would be taken to provide adequate access to house, shop premises etc., during construction.</p> <p>DSC ensured that closed conduit will be proposed.</p> |

5. Conclusions

5.1. Conclusions

The Due Diligence Report confirms that the subproject under Package -7 will have no adverse social impacts associated since land acquisition and resettlement (LAR) is not required. According to this information this Subproject comes under Category B of Resettlement Categorization. So no resettlement planning is required for this. The resettlement screening and categorization checklist and Indigenous People’s categorization checklist are presented below:

Table 5.2: Involuntary Resettlement Categorization Checklist

A. Screening Questions for Resettlement Categorization

| Probable Involuntary Resettlement Effects* | Yes | No | Not Known | Possible | Remarks |
|---|-----|----|-----------|----------|----------------|
| Will the project include any physical construction work? | √ | | | | |
| Does the project include upgrading or rehabilitation of existing physical facilities? | √ | | | | |
| Are any project effects likely leads to loss of housing, other assets, resource use or incomes/livelihoods? | | √ | | | |
| Is land acquisition likely to be necessary? | | √ | | | |
| Is the site for land acquisition known? | | | | | Not Applicable |
| Is the ownership status and current usage of the land known? | √ | | | | |
| Will assessments be utilized within an existing Right of Way? | √ | | | | |
| Are there any non-titled people who live or earn their livelihood at the site or within the Right of Way? | | √ | | | |
| Will there be loss of housing? | | √ | | | |
| Will there be loss of agricultural plots? | | √ | | | |
| Will there be losses of crops, trees, and fixed assets? | | √ | | | |

Due Diligence Report

| Probable Involuntary Resettlement Effects* | Yes | No | Not Known | Possible | Remarks |
|--|------------|-----------|------------------|-----------------|----------------|
| Will there be loss of businesses or enterprises? | | √ | | | |
| Will there be loss of incomes and livelihoods? | | √ | | | |
| Will people lose access to facilities, services, or natural resources? | | √ | | | |
| Will any social or economic activities be affected by land use-related changes? | | √ | | | |
| If involuntary resettlement impacts are expected: | | | | | |
| • Are local laws and regulations compatible with ADB's Involuntary Resettlement policy? | | | | | Not Applicable |
| • Will coordination between government agencies be required to deal with land acquisition? | | | | | Not Applicable |
| • Are there sufficient skilled staffs in the Executing Agency for resettlement planning and implementation? | | | | | Not Applicable |
| • Are training and capacity-building interventions required prior to resettlement planning and implementation? | | | | | Not Applicable |
| <p>Information on Affected Persons: Any estimate of the likely number of households that will be affected by the Project? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, approximately how many? None Are any of them poor, female-heads of households, or vulnerable to poverty risks? N.A <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, please briefly describe their situation _____ _____ Are any APs from indigenous or ethnic minority groups? If yes, please explain? Not Applicable</p> | | | | | |

Indigenous Peoples Impact Categorization Form

A. Project Data

Country/ Project Title:

Department/ Division:

Categorization Status:

B. Identification of indigenous peoples in project area

| Impact on indigenous peoples (IPs)/ ethnic minority(EM) | Not known | Yes | No | Remarks or identified problems, if any |
|---|-----------|-----|----|--|
| Are there IP groups present in project locations? | | | ✓ | |
| Do they maintain distinctive customs or economic activities that may make them vulnerable to hardship? | | | | In a metropolis they are assimilated with the mainstream |
| Will the project restrict their economic and social activity and make them particularly vulnerable in the context of project? | | | ✓ | |
| Will the project change their socioeconomic and cultural integrity? | | ✓ | | It will improve their socioeconomic situation |
| Will the project disrupt their community life? | | | ✓ | |
| Will the project positively affect their health, education, livelihood or social security status? | | ✓ | | |
| Will the project negatively affect their health, education, livelihood or social security status? | | | ✓ | |
| Will the project alter or undermine the recognition of their knowledge, preclude customary behaviors or undermine customary institutions? | | | ✓ | |
| In case no disruption of indigenous community life as a whole, will there be loss of housing, strip of land, crops, trees and other fixed assets owned or controlled by individual indigenous households? | | | ✓ | |