## Semi-Annual Environmental and Social Monitoring Report

Project number: 43524-014

Period: July - December 2016

## NEP: Kathmandu Valley Wastewater Management Project

Prepared by the Project Implementation Directorate (PID), Kathmandu Upatyaka Khanepani Limited (KUKL), Ministry of Water Supply and Sanitation, Government of Nepal for the Asian Development Bank. This document is made publicly available in accordance with ADB's Public Communication Policy (2011) and does not necessarily reflect the views of ADB.

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# Ministry of Water Supply and Sanitation Kathmandu Upatyaka Khanepani Limited (KUKL) Project Implementation Directorate (PID)

Anamnagar, Kathmandu

# KATHMANDU VALLEY WASTEWATER MANAGEMENT PROJECT (KVWWMP)

(ADB Loan No. 3000-NEP)

## SEMI-ANNUAL SOCIAL AND ENVIRONMENTAL COMPLIANCE MONITORING REPORT

for

July - December 2016

DSC04

Dohwa Engineering Co. Ltd
In Association with Sub-Consultants ERMC and BDA

January 2017

#### **ABBREVIATIONS**

ADB – Asian Development Bank

AP – affected persons

BPL – below poverty level

CBO - Community Based Organizations

CDC - Compensation Determination Committee

CDO - Chief District Officer

CFC - Compensation Fixation Committee

CPR – Community Property Resource

DDC - District Development Committee

DOR - Department of Roads

DSC – Design and Supervision Consultants

DUDBC - Department of Urban Development and Building

Construction

EA – Executing Agency

GON – Government of Nepal

GRC - Grievance Redress Committee

HA - Hectares

HH – Households

IA – Implementing Agency

IP – Indigenous People

IR - Involuntary Resettlement

LA – Land Acquisition

LA Act - Land Acquisition Act

MoPPW – Ministry of Physical Planning and Works

MoUD – Ministry of Urban Development

NGO – Non-Government Organizations

NRs - Nepalese Rupees

PBER - Price Bid Evaluation Report

PCO - Project Coordination Office

PD – Project Director

PH - Physically Handicapped

PIU – Project Implementation Unit

PLI – Poverty Level Income

PM – Project Manager

PPTA - Project Preparatory Technical Assistance

PSA – Poverty and Social Assessment

RP/IPP - Resettlement Plan

R&R - Resettlement and Rehabilitation

TA - Technical Assistance

ToR - Terms of Reference

WHH – Women Headed Households

VDC - Village Development Committee

#### **WEIGHTS AND MEASURES**

sq.m – square meter

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#### 1. Introduction

The Kathmandu Valley Wastewater Management Project (ADB Loan No. 3000-NEP) supports the ongoing efforts of the Government of Nepal towards improving the wastewater services in Kathmandu Valley. The project will invest in rehabilitation and construction of new wastewater treatment plants, expansion of sewerage network, and improvement of wastewater management in Kathmandu Valley, which also complement past and ongoing Asian Development Bank (ADB) projects. The project is expected to increase operational efficiency, enhance service delivery, and improve health and quality of life of the inhabitants of Kathmandu Valley. The expected outcome of the project will be improved access to efficient and reliable delivery of wastewater services to the residents of Kathmandu Valley, including the poor. Safeguard policy are the policies that require to "avoid, minimize or mitigate adverse environmental and social impacts" that may result from development projects. The safeguard policies adopt "do no harm" approach. Development projects that change patterns of use of land, water and other natural resources can cause a range of resettlement effects.

#### 1.1 Background and context of the report

This is the consolidated report on implementation of Environmental and Social Safeguard Activities carried out between July to December, 2016 and is prepared in compliance with the ADB Policies. The report comprises activities performed under WWTP package I & II and Interceptors package IS-01 and IS-02. This report consists of the following content:

- The scope of activities and progress An overview of project information
- Implementation and institutional arrangements
- Social safeguard Monitoring checklist
- Monitoring and reporting arrangements for safeguards monitoring
- Social safeguard activities Update on RP and IP plans and implementation status
- Summary of land acquisition (temporary / permanent) Details of ownership of land
- Status of Affected People: Land Requirement, Compensation and Rehabilitation (systems, Plans, Details of affected persons, Validation and Verification of Affected persons (APs), compensation decided / planned and progress on provision of compensation)
- Compliance status loan covenants, policy frameworks
- Gender Action Plan (Activities during the period)
- Public consultations and disclosures

<sup>&</sup>lt;sup>1</sup>Melamchi Water Supply Project (ADB 1820-NEP); Kathmandu Valley Water Supply Improvement Project (ADB 2776-NEP); Bagmati River Basin Improvement Project (ADB PPTA-43448).

- Environmental Safeguards Activities and Monitoring
- Annexure

#### 1.2 Implementation Status of Project Components

The project includes (i) rehabilitation or construction of new WWTP already established in different locations in the Kathmandu Valley; (ii) construction of interceptors; and (iii) improvement in the wastewater network system (rehabilitation, replacing, laying of new sewer and storm water drains, etc.).

The description of different components under this project is given below.

#### i. Wastewater treatment plants (WWTPs)

The work includes the rehabilitation and construction of new WWTPs at Kodku (Lalitpur), Sallaghari (Bhaktapur), Dhobighat (Lalitpur) and Guheshwori (Kathmandu). Now, rehabilitation and expansion of Guheshwori WWTP has been awarded. All WWTPs designed will be rehabilitated or constructed in the land area of existing WWTPs owned by government.

With ADB's concurrence to approve the bid of VA Tech Wabag Ltd., India for the Rehabilitation and Expansion of Wastewater Treatment Plant at Guheshwori with a capacity of 32.4 MLD under Contract No. KUKL/WW/TP/01, PID has awarded the contract to aforementioned bidder signing Contract Agreement on May 19, 2016. The contractor has been mobilized and working on general layout for initial arrangement including camp site, project manager's office. The contractor has also started the Topographical survey and submitted proposal for the assessment of wastewater quality and flow measurement and the comments on the same has been provided by the Project Manager for improvement. This is an EPC contract. So, the contractor is still in design stage as per contractual agreement. Discussion and review on basic designs submitted by contractor is ongoing.

The bidding notice for Package II for remaining treatment plants at Sallaghari, Kodku and Dhobighat with the capacity of 14.2 MLD, 17.5 MLD and 37 MLD respectively, KUKL/WW/TP/02, were published on 8th December, 2015. Bid was opened on 6th April, 2016. Now, No objection from ADB on PBER has been received on 20 October, 2016. The intent of Award Notice has also been published on 22 October, 2016. The contract is likely to be awarded by January, 2017. The contract package includes rehabilitation and construction of three wastewater treatment plants with a total capacity of 68.7 MLD. Major components of the facilities in each WWTP include primary and secondary treatment units with activated sludge process, and 204 kW of power generation at Dhobighat WWTP through sludge digestion.

#### ii. Interceptors

Two packages of interceptors, 1) Intercepting sewers on the both sides of Hanumante River (25.3 km), and 2) The package includes construction of Intercepting Sewerage System along both bank of Hanumante River from Jagati of Bhaktapur along the left bank and from Chokin Chilla bridge at Kharipati along right bank of Hanumante upto Manohara confluence downstream. Other major components includes 648 numbers of manhole, 6 numbers of river crossing and 8.7 km of river protection works. Contract No. KUKL/WW/IS-01, has been signed and contract is awarded on 27<sup>th</sup> March 2016. This package is in mobilization and preparatory stage of construction. The construction of Intercepting Sewer System along the Hanumante River is on progress to kick off the construction works.

Further, the package for the construction of Intercepting Sewerage System along Manohara River (11.36 km), Contract No. KUKL/WW/IS-02, has been signed and contract is awarded on 19<sup>th</sup> October, 2016. The package includes extension and construction of intercepting sewer system along both banks of Manohara River from Manohara and Hanumante confluence up to Sun City colony along Manohara. Other major component includes 284 numbers of manhole, 6 numbers of river crossing and 6.98 km of river protection works.

The contractor has not started construction work significantly on both of the package.

#### iii. Rehabilitation and expansion of sewerage network

Sewerage network in Kathmandu Valley is being constructed and expanded by different agencies. Major actors in the construction and expansion of sewer network are concerning municipalities, KUKL, Department of Road and local communities.

Although Project Administrative Manual (PAM) has set targets of i) 100 km of combined sewers rehabilitated, and (ii) 75 km of new sewers network laid in uncovered areas, under the rehabilitation and expansion of sewerage network, it has been agreed to construct Collector along Kodku Khola and Collector at Sallaghari in one package, and to rehabilitate and expand sewerage network in another package.

As part of network package, detailed survey of main collector along both side of Kodku Khola is completed and verification of survey is going on. After the completion of verification, the design of the same will be started.

Designing of river training works and fixing the route for the collector in both side of the Kodku is comparatively difficult due to changing course of river in some places. At many places river has changed its' course and flowing from private lands. The alignment of the main collector should be carefully undertaken with taking the consent of stakeholders and beneficiary as in

some of the places the river is being encroached by the private houses and institutions by raising the compounding wall just on the river bank without any setbacks. All the affected structures have been taken into account during detail survey. The alignment has been diverted in some locations in order to avoid demolition of affected structures constructed along the river bank.

For the second package of Sewerage Network, the asset condition data are being studied with visiting the site for identifications of other areas that can be included in sewerage network package. After the identifications of locations where the Rehabilitation and Expansion of Sewer Network should be done, the detailed survey of same will be carried out and corresponding design work will be started afterward. The contract packaging will be done focusing on the available fund as the remaining fund for the sewerage network package will be very less.

Further, under the rehabilitation and expansion of sewerage network, it has been agreed to construct sewerage network along the riverbank of Khasang Kusung at Bhaktapur. Designing of river training works and fixing the route for the collector in both side of the Khasang Kusung is comparatively easier than other sites. It is because of availability of cultivated land on the both side of the River. There is no any significant obstruction of physical along the proposed Riverbanks throughout the length. However, at the Kalighat Cremation site the sewerage network has been diverted in design in order to protect the cultural heritage site. As the cremation site has its significant cultural importance in the area. The river bank also comprises substantial number of trees growing all along the bank. The dense vegetation has been protecting riverbank along the river alignment. However, some vegetation will be affected with the excavation and installation of sewerage pipelines. Compensation in the ratio of 1:25 for all the affected trees has been proposed as mitigation measures in the EMP.

## 2. Status of Implementation of components under Kathmandu Valley Wastewater Management Project with regards to Social safeguards:

Status of Implementation of components under WWTP package I & II, Interceptors package IS 01 & IS 02 and Sewerage networks with regards to Social safeguards is presented in Matrix form mentioning the scope under respective component, status of implementation with major issues identified, status of work in % and stipulated completion date for providing project information in concise form.

### A. The scope and progress of activities under components- An overview of project information and implementation arrangements:

Details of Subproject components are provided in Table 1:

Table 1: Scope and status of RP impact and Work Status

Activity	Site	Scope of IR/RP	Status of Implementation and issues if any	Status of work in %	Completion date/Contrac t Period	
A. Component	A. Component: Wastewater Treatment Plants					
1.Construction of Guheswori WWTP package I	Guheswori	No land acquisition required. All land belonged to govt. No IR Impact.	Contact is awarded on 19 <sup>th</sup> May, 2016. The effective date of Contract is Aug 01, 2016.	Mobilization and excavation started	21, July 2018	
Kodku and Dhobighat WWTPs (package II).	1.Bhaktapur , 2. Lalitpur, 3. Lalitpur	No land acquisition required. Land belonged to Govt. No IR impact.	Bidding process is completed. No objection from ADB on PBER has been received.	Contract will be awarded by January, 2017		
B. Component	: Interceptor	s  1. Consultations with				
1.Construction of Hanumante Interceptor (package IS01)	Both banks Hanumant e River corridor	Ram Mandir Management Committee is ongoing to lay pipelines within temple premises without causing structural damages to avoid land acquisition of private land. 2. Crop compensations on 9.85 ha. of cultivated land is required for losses of crops along both banks as per resettlement plan and is being verified. 3. Compensation to 16 minor structures such as walls, shades, RCC etc. is required to reinstate	The contract is awarded on 27 <sup>th</sup> March 2016 with effective from 3 <sup>rd</sup> May 2016.	Contractor has been mobilized to the site and carrying out preparatory works. The Engineer's and contractor's separate site office and material testing laboratory have been established at Sallaghari.	April 2018	

Activity	Site	Scope of IR/RP	Status of Implementation and issues if any	Status of work in %	Completion date/Contrac t Period
		affected structures as per resettlement plan and is being verified.  4. Budgetary provision has been made for all required compensations.			
2.Construction of Manohara Interceptor in phase I & II	Both banks of Manohara river.	1. Need of land acquisition is not foreseen as interceptors go through RoW. IR imact is not foreseen.  2. Crop compensations on 11.82ha. of cultivated land is required for losses of crops along both banks. Out of which 4.34Ha will be affected in Phase II and 6.98 Ha in Phase II.  3. Compensation to 16 minor structures such as walls, shades, RCC etc. is required to reinstate affected structures.  4. Budgetary provision has been made for all required compensations	The contract is awarded on 19 <sup>th</sup> October, 2016	In mobilization stage	
C. Sewer Netw	ork	, , , , , , , , , , , , , , , , , , ,			•
Rehabilitation and expansion of sewer network	Existing and parts of newly declared municipaliti es of Kathmand u Valley.	1. Rehabilitation and expansions works will be carried out within existing networks and in the area within Right of River, hence, there is no need of land acquisition and IR impact.  2. Compensation for income loss and assistance shifting of hawkers are expected.  3. Budgetary provision will be made after detailed socioeconomic survey	Detail survey and design of Kodku Collector, Sallaghari Collector, and rehabilitation of sewer network is being carried out	Bidding document is under process, EMPs for both of the collectors have been prepared.	Sep 2016

Activity	Site	Scope of IR/RP	Status of Implementation and issues if any	Status of work in %	Completion date/Contrac t Period
		and identification of APs.			

#### B. Implementation and institutional arrangements:

The Ministry of Water Supply and Sanitation (MoWSS) (Formerly Ministry of Urban Development (MoUD)) is the national level executing agency (EA) of the program. Kathmandu Upatyaka Khanepani Limited (KUKL) and Project Implementation Directorate (PID) are responsible for overall program implementation, monitoring and supervision. PID has deputed a Safeguard Unit exclusively for monitoring the programme. The Design and Supervision Consultant (DSC) team is working closely with Safeguard Unit and resettlement specialist for all the planning and implementation activities including internal monitoring and reporting. Roles and responsibilities are identified in the table no.2 below:-

**Table 2: Institutional Roles and Responsibilities** 

Activities	Responsible Agency
Sub-project Initiation Stage	
Finalization of sites/alignments for sub project	PID/DSC
RP Preparation Stage	
Conducting Census of all APs	PID / DSC/CAPC
Conducting FGDs/meeting/workshops during SIA surveys	PID / DSC/CAPC
Categorization of APs for finalizing entitlements	PID
Conducting discussions/meetings/workshops with all APs & other stakeholders for finalizing entitlements and rehabilitation packages	PID / DSC/CAPC
Disclosure of final entitlements and rehabilitation packages	PID / DSC/CAPC
Approval of RP	ADB
Payment of compensation and assistance	PID
RP Implementation Stage	
Implementation of proposed rehabilitation measures	PID/ DSC/CAPC
Consultations with APs during rehabilitation activities	PID/ DSC/CAPC
Grievance Redressal Committee at all level	PID/ DSC/GRC
Internal Monitoring	PID/DSC
External Monitoring	External Agency

AP=Affected person, CAPC=Community Awareness and Participation Consultant, PID = Project Implementation Directorate.

#### 2.1 Social Safeguard Monitoring Checklist

Name of Project & Subproject: KVWMP funded by ADB (Loan No. 3000-NP).

Subproject comprises of:

1 Wastewater Treatment Plants

2 Interceptors

3. Sewer Networks

Monitoring Date July-December 2016

Progress of Civil Works Status (%): About 50 % progress of the total project works in

terms of design & contract award, Civil works is yet

to be started significantly

#### A. Design and Engineering Status

Item	Status (Y/N)	Follow up required	Type of Required Action
Final detailed engineering design of the sub project completed	Y	Υ	■Updated draft IR/IP
Changes in project design/ scope (occurred or envisaged)	N	N	<ul> <li>□ Project re-categorization (IR/IP)</li> <li>□ IR/IP Impact assessment</li> <li>□ New RP/IPP preparation ■NA</li> </ul>

#### **B.** Institutional Status Readiness

No	Item	Status (Ready/Not	Follow up required (Y/N)	Completion Deadline
	Mobilization of civil works contractor	Ready for contract awarded	Y	
	Mobilization of Project Supervision Consultant	Ready	Y	
3	EA's Safeguards Unit with designated staff	Ready	Y	
4	Recruitment of External Monitoring Agency	NA	-	

C. Safeguards Requirements

No	Item	Status (Ready/Not ready/NA)	Follow up required (Y/N)	Completion Deadline
1	Safeguards monitoring included in the project progress report	Ready	Y	Up to full completion of work
2	Final/ updated RP/IPP <sup>1</sup> prepared and submitted	Ready	Υ	
3	Project's Grievance Redress Mechanism established	Ready (at central level)	Υ	Up to full completion of work

No	Item	Status (Ready/Not ready/NA)	Follow up required (Y/N)	Completion Deadline
	Recruitment of third independent party for negotiated land acquisition	NA	N	NA
5	Project's ESMS established		Υ	Up to full completion of work

#### D. RP/ IPP Monitoring Checklist2

Item No.	Safeguards Related Requirements	Status (Ready/Not ready/ NA)	Completion Deadline	Progress to Date/ Remarks
	AGEMENT ional and Financing Arrangements			
1.1	Financing and budget : (i) safeguard office and staff; (ii) RP/IPP cost	Ready	Completed	
1.2	Establish Safeguard Unit: (i) resettlement offices (ii)resettlement staff as in RP (iii) safeguards' database (iv) facilities	Ready	Completed	PID has established safeguard team
Updati	ng of DD/RP/IPP based on Detailed	Design	l	
1.3	Update DD/RP/IPP: (i) revise based on DMS (ii) revise implementation schedule (iii) revise budget	Ready	Submitted	Up to the completion of project
1.4	Compensation rates: (i) approved by Government; (ii) Adequate as per RP/RF;	Ready	completed	Rates fixed as per current market price in consultation with APs
1.5	Disclose final/updated RP/IPP: (i) to the APs in local language; (ii) in ADB website; (iii) in EA's website	After approval from ADB	To be uploaded in PID website	Translated Copy of RP and IEE is ready.
1.6	Disclose project activities to affected communities: (i) put up a project sign boards; (ii) distribution of project leaflets and GRM to affected communities	Ready	On going	Consultations/information sharing with municipalities and management committee of Ram Mandir and informal dissemination to farmers during site visits
1.7	Grievance redress committees: (i) clear terms of reference; (ii) appointment decree; (iii) publicly disclosed among APs.	Ready	On going	-
1.8	Grievance redress records: (i) list and numbers of grievances received; (ii) numbers of resolved issues; (iii) numbers of cases under GRC review; (iv) outstanding cases (filed to court)	NA	-	This activity will start after GRC formed

Item No.	Safeguards Related Requirements	Status (Ready/Not ready/ NA)	Completion Deadline	Progress to Date/ Remarks
	ring and Reporting Arrangements			
1.9	Set up internal monitoring system : (i) assessment on capacity and staff requirements; (ii) criteria of safeguards assessment; (iii) reporting mechanism	Ready	-	-
1.10	Appoint external monitoring agency (as relevant): (i) recruitment schedule; (ii) TOR; (iv) baseline survey (v) reporting mechanism (vi) action taken by management on reports.	Baseline survey of AP's required	NA	-
1.11	Reporting: (i) frequency; (ii) timeliness; (iii) identified issues; (iv) action taken and/recommendation.	Ready	Ongoing	-
	PP IMPLEMENTATION			
Consu				
2.1	Consultation: (i) responsibility; (ii)stakeholders Identified; (iii) consultation and process; (iv) documentation	Ready	Ongoing	Consultations are ongoing
	ng and Assets Inventory			
2.2	AP Identity cards & affected assets records: (i) issuance and distribution of AP ID cards, (ii) detail measurements survey of affected assets and documentation	NA	-	-
2.3	Land acquisition.	May not require	-	Consultations with stakeholders on going to avoid land acquisition
2.4	Common property/ public assets: (i) final inventory;(ii) restoration plan and schedule; (iii) funding sources	May not require	-	Consultations with stakeholders on going to avoid acquisition of common property/public assets

#### 2.2 Safeguards Loan Covenants

S.N.	Covenants as Mentioned in Schedule 5	Status of Compliance
	Implementation Arrangements	
	Land Acquisition and Involuntary Resettlement	
Loan Agreement Schedule 5, para 3	The Borrower shall ensure, or cause KVWSMB and KUKL to ensure, that all land and all rights-of-way required for the Project are made available to the Works contractor in accordance with the schedule agreed under the related Works contract and all land acquisition and resettlement activities are implemented in compliance with (a) all applicable laws and regulations of the Borrower relating to land acquisition and involuntary resettlement; (b) the Involuntary Resettlement Safeguards; and (c) all measures and requirements set forth in the RP, RF and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	No major land acquisition is involved in the activities of packages of construction of interceptors and wastewater treatment plants of the project.
Loan Agreement Schedule 5, para 4	Without limiting the application of the Involuntary Resettlement Safeguards or the RP, and in addition to paragraph 8 of Schedule 4 of this Loan Agreement, the Borrower shall ensure, or cause KVWSMB and KUKL to ensure, that no physical or economic displacement takes place in connection with the Project until: (a) compensation and other entitlements have been provided to affected people in accordance with the RP; and (b) a comprehensive income and livelihood restoration program has been established in accordance with the RP.	No physical or economic displacement has been taken place.
	Indigenous Peoples	
Loan Agreement	The Borrower shall ensure that the Project does not have any indigenous peoples impacts within the meaning of SPS. In the event that the Project	, , , , ,

S.N.	Covenants as Mentioned in Schedule 5	Status of Compliance
Schedule 5, para 5	does have any such impact, the Borrower shall take all steps required to ensure that the Project complies with the applicable laws and regulations of the Borrower and with the SPS.	involved in the activities
Loan Agreement Schedule 5, para 6	The Borrower shall make available KVWSMB and KUKL to make available necessary budgetary and human resources to fully implement the EMP and the RP.	PID now has Safeguards Unit with full-time officers and CAPC (to be recruited in near future) to fully implement the EMP and the RP.
	Safeguards – Related Provisions in Bidding Documents and Works Contracts	
Loan Agreement Schedule 5, para 7	The Borrower shall ensure, or cause KVWSMB and KUKL to ensure, that all bidding documents and contracts for Works contain provisions that require contractors to:  (a) comply with the measures relevant to the contractor set forth in the IEE, the EMP, and the RP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set forth in a Safeguards Monitoring Report;  (b) make available a budget for all such environmental and social measures;  (c) provide the Borrower with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, and the RP;  (d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and	Complied. All bidding documents are prepared as per ADB Standard Bidding Document (SBD).

S.N.	Covenants as Mentioned in Schedule 5	Status of Compliance
	(e) reinstate pathways, other local infrastructure, and agricultural land to	
	at least their pre-project condition upon the completion of construction.	
	Safeguards Monitoring and Reporting	
Loan Agreement	The Borrower shall do the following, or cause KVWSMB and KUKL to do the	
Schedule 5, para 8	following:	Montoring and reporting will be done as
	(a) submit semiannual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission;	per covenants
	(b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, and the RP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and	
	(c) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP or the RP promptly after becoming aware of the breach.	
	Labor Standards	
Loan Agreement	The Borrower and KUKL shall ensure that the contractors comply with all	
Schedule 5, para	applicable labor, health, and safety laws and regulations of the Borrower and,	Complied. PID through its Design and
10	in particular, (a) do not employ child labor for construction and maintenance activities, and (b) provide appropriate facilities (latrines, etc.) for workers at	Supervision Engineer (DSC) is
	construction sites. The Borrower shall require contractors not to differentiate	compliance with labor, health and safety
	wages between men and women for work of equal value. The Borrower and KUKL shall ensure that specific clauses shall be included in bidding	law regulations. The project work is in compliance with ADB's requirements

S.N.	Covenants as Mentioned in Schedule 5	Status of Compliance
	documents to ensure adherence to these provisions, and that compliance are strictly monitored during project implementation.	and national laws & regulations.
	Gender and Development	
Loan Agreement Schedule 5, para 11		Non-Complied. Community Awareness Consultant (CAPC) is yet to be recruited, GESI action plan and CAPP shall be implemented only after CAPC in place.
	Grievance Redress Mechanism	
Loan Agreement Schedule 5, para 16		Partial complied.  Grievance redress mechanism (GRM) was established but is only being partially implemented.

#### 2.3 Monitoring indicators and status report

**Table 3: Monitoring indicators and status** 

SN	R&R Activities	Progress	Remarks
Pre (	Construction Activities and R&R		
1	Assessment of Resettlement impacts due to changes in project design (if required)	-	Assessment will be carried as and when required.
2	Preparation/ updating of Resettlement Plan based on changes in project design	RP revision completed	
3	Approval of updated Resettlement Plan from	Approval Is in progress	Update submitted
4	Disclosure of updated Resettlement Plan	After final approval	
5	Establishment of GRC	GRC established at central level	GRC at field level will be formed in Apr 2017
6	Capacity Building of PID	Not started	Training on Safeguard during the period.
7	Land Acquisition	Not required	Budget available if required
Rese	ettlement Plan Implementation		
1	Payment of Compensation as per replacement value of land &	Not required	NA
2	Disbursement of assistance to title holders	NA	NA
3	Disbursement of assistance to non title	NA	NA
4	Disbursement of assistance to Vulnerable	Vulnerable groups to be identified	
5	Replacement/ shifting of community property	Not foreseen	
6	Reinstallation of public	Not foreseen	Will be done when
7	Records of Grievances Redress		Complaint will be recorded when physical
8	Temporary Relocation of Hawkers and Vendors	Foreseen during rehabilitation and expansion of sewerage networks.	Rehabilitation and expansion of sewerage network is in design stage.
	Social Measures during	Construction as per Contr	act Provisions
1	Prohibition of employment or use of children as labor	Inspection will be carried out at the contractors work site.	

SN	R&R Activities	Progress	Remarks
		Contractor's representatives will be reminded during site inspection regarding the same.	
2	Prohibition of Forced labor or Compulsory Labor	Contract/bid documents include such clauses and contractors will be reminded regarding	
3	Ensure equal pay for equal work to both men and women	Will be ensured. Contractors will be made aware of equal payment for men and	
4	Implementation of all statutory provisions on labor like health, safety, welfare, sanitation and working conditions	Regular monitoring. HIV/AIDS awareness with all the contractors labours will be organized at one of the Contractor's based camp by NGO. There will be health check up and medicines will also be	CAPC will be involved to carry out the tasks.
5	Maintenance of employment records of workers	As part of GAP, Contractors will maintained proper attendance sheet with addition of column showing male female (GAP).	

#### 2.4 Monitoring and reporting arrangements

Regular monitoring activities will be carried out for assessing resettlement progress and identifying potential difficulties and problems. The extent of monitoring activities includes their scope and periodicity to commensurate with the project's risk and impacts.

(i) The status of the sub-project work under the project will be ongoing.

#### Monitoring system will be taken up under the following:

- Administrative monitoring to ensure that implementation is on schedule and problems are dealt with on timely basis.
- b. Socio-economic monitoring during and after resettlement impact utilizing baseline information established through the socio-economic survey undertaken during project sub-preparation.
- c. Overall monitoring to assess status affected persons.
- (ii) Activities involved in implementing safeguard measures and plans, monitoring the

progress of implementation of safeguard plans, verifying the compliance with safeguard measures and their progress toward intended outcomes, document and disclose monitoring results and identify necessary corrective and preventive actions in the periodic monitoring reports, follow up on these actions to ensure progress towards the desired outcomes and submit semi-annual monitoring reports on safeguard measures as agreed with ADB.

(iii) The implementation of the RP monitoring and progress is being recorded. Regular monitoring activities are being carried out. The extent of monitoring activities, including their scope and periodicity, is being examined with the projects risk and impacts.

### 3. COMPLIANCE TO NATIONAL LAWS AND POLICIES (POLICY AND LEGAL FRAME WORK):

The policy framework and entitlements for the Program are based on national laws: The Land Acquisition Act, 1977 which is the core legal document in Nepal; and ADB's Safeguard Policy Statement (2009), to guide resettlement issues.

#### 4. GRIEVANCEREDRESSED SYSTEMS AND MECHANISMS

Grievance redress Committee (GRC) at the project level is in place. It is a five tier mechanism to address grievances related to APs in the implementation of the project. GRCs at other levels will be formed during the implementation of the project as mentioned in the IEE Report.

## 5. ACTIVITIES CARRIED OUT WITH RESPECT TO PUBLIC PARTICIPATION AND GENDER ACTION PLAN (GAP):

#### 5.1 Gender Action Plan:

A template has been designed for establishing comprehensive information on existing local NGO/CBO/Tole organizations in project municipalities. The template will be used to record required information of the organizations and will serve as a basis for addressing GESI issues and community participation and consultations.

GESI action plan is being implemented only after the recruitment of Community Awareness and Participation Consultants (CAPC). The progress of Gender Equality and Social Inclusion Action Plan (GESI Action Plan) is presented in Annex-1.

#### 6. PUBLIC CONSULTATIONS AND DISCLOSURE:

Public consultation program with key stakeholders has been carried out in in line with the requirements pertaining to environmental and social considerations of ADB. During the detailed design of WWTPs and Interceptors, discussions and consultation meetings were held with Bhaktapur Municipality, Suryabinayak Municipality, Mahalaxmi Municipality and Madhyapur Municipality. During the consultation information about the project including project alignment and location of WWTPs has been discussed with the participants. Minute of Meetings are attached in Annex-2.

During the walk over survey of interceptors, informal discussions and consultations were held with farmers present in the field and disclosed project information. They were also informed the possibilities of some disturbances and crop losses that might take place during construction works. Further consultation will be carried out with local people and their organizations and other stakeholders in due course after CAPC on board. Appropriate tools, checklist, etc will be prepared for consultation and discussion program.

Sn.	Date/ Month	Location	No. of Participa	Topics Discussed	Issues Raised/
1.	23 <sup>rd</sup> Aug, 2016	Bhaktapur Municipality	35	Information dissemination of the project to the all interested stakeholders of the Municipality.	N/A
2.	30 <sup>th</sup> Aug, 2016	Mahalaxmi Municipality	10	Information dissemination of the project to the all interested stakeholders of the Municipality.	N/A

**Table 4: Summary of Public Consultations:** 

## 7. Environmental Safeguards Activities for Kathmandu Valley Wastewater Management Project (KVWMP)

The project is classified category B for environment. An initial environmental examination (IEE) and environmental management plan were prepared and disclosed in accordance with ADB's Safeguard Policy Statement (2009). An environmental assessment and review framework was prepared to guide the environmental assessment of pilot decentralized wastewater treatment systems. The IEE and the environmental management plan is updated, submitted to ADB and incorporated into contract documents of each packages. The IEE shows substantial net positive environmental benefit including

- (i) improved wastewater management to safeguard public health, and
- (ii) cleaner waterways and urban environment through increased sewage treatment.

Additional measures will be taken during sewer network pipe laying stage within roads passing through heritage are as to ensure there are no impacts during construction. Permission from the Department of Archaeology will be obtained prior to commencement of construction, particularly in Temple heritage and cremation sites along the interceptor alignment.

Measures to manage any impacts pertaining to slope stability, erosion, and sedimentation will be implemented prior to laying interceptors along the rivers. As part of the detailed design of the new WWTPs, air quality dispersion modeling is conducted and designed to cover all the primary treatment unit to ensure odor management measures are incorporated into the environmental monitoring system. In addition, perimeter buffers zone left for plantation of trees along the boundaries of the WWTPs to minimize odors released from the premises. To ensure optimal operations of WWTPs at all times, safety plans will be developed during the detailed design of WWTPs by the DBO contractor and will be implemented during construction & operation.

The PID, with assistance from the DSC - 04 is doing the following activities:

- (i) screen all sub- projects for environmental impacts and categorization;
- (ii) IEE/ EMP is updated based on detailed design of interceptor and wastewater treatment plants;
- (iii) EMPs are included in bidding documents and civil works contracts in the interceptors and WWTPs;
- (iv) over sighting on environmental management aspects of the project and ensure EMPs are implemented by DSC and contractors;
- (v) facilitating and confirming overall compliance with all government rules and regulations regarding forest and road permits as well as any other approvals as relevant;
- (vi) will supervise and provide guidance to the contractors to properly carry out the environmental assessments;
- (vii) will consolidate quarterly environmental monitoring reports from DSC and submit semiannual monitoring report to ADB;
- (viii) ensuring timely disclosure of final IEEs/ EMPs in locations and forms accessible to the public;
- (ix) conducting ongoing consultation with the community during implementation of the project; nd
- (x) establish a grievance redress mechanism for all the contract packages interceptor, wastewater treatment plants and sewer networks.

Kathmandu Valley Wastewater Management Project is now entering in implementation phase. The contract of Guheshwori Wastewater Treatment Plant (WW/TP/01) and Hanumante

Interceptor (WW/IS/01) have been awarded to the successful bidders. The contractors are in mobilization process. Bidding for wastewater treatment plant at Sallaghari, Kodku and Dhobighat(WW/TP/02) and Manohara interceptor (WW/IS/02) has been completed and Technical Evaluation Reports have been submitted for review and ADB's concurrence. Remaining packages for the sewer networks are in design stages.

Contract of Guheshwori Wastewater Treatment Plant (WW/TP/01) and Hanumante Interceptor (WW/IS/01) have reviewed the EMP attached in the contract document and were updated by the contractor and forwarded to DSC via client. Those updated EMPs have been reviewed and provided some suggestions to incorporate for the finalization and implementation.

At present, there are not any field activities in the KVWMP and no environmental monitoring is going in the field. Environmental management plan has been attached in all bid packages as an integral part of the contract, after the contract award field monitoring activities will be carried out. The environmental monitoring plans for the interceptor and wastewater treatment plants are attached in the report in Annex-3.

## **Annexes**

Annex - 1

#### PROGRESS OF GENDER EQUALITY SOCIAL INCLUSION (GESI) ACTION PLAN

Activities	Indicator and Targets	Progress till IV Quarter 2016	Responsibility	Time
Output 1: Sewerage Network rehabilitated a	and expanded	I		
1.1 Build community awareness and encourage stakeholder participation through public education activities, consultations and information dissemination on good wastewater management practices, health and hygiene, and 3R's, etc. using various mechanisms such as mass media, Tole committees, Community Based Organizations (CBOs), women's and youth groups, vendor associations, labor union federations, schools, ad hoc political representative committees of municipalities, and ward citizen groups within project areas with a gender focus;	<ul> <li>Effective pro-poor and gender-sensitive audio and visual materials developed and disseminated through mass media in Nepali language (radio &amp; television, newspapers, leaflets, magazines, posters, hoardings, etc.) and other relevant means</li> <li>At least 20% of total citizens participate (target: at least 30% of participants are women) during consultation sessions within Tole and wards; 50 consultations conducted every year (target: at least 15 in low-income areas and clusters of poor and socially- excluded residents)</li> <li>At least 20 community mobilizers trained and employed (part-time) to engage with target communities and to raise awareness on public health, environment and project issues (target: at least 50% are women)</li> <li>At least 50 orientation programs on wastewater management, good practices, 3R's and community health and hygiene conducted by community mobilizers every year to train members of communities (target: 50% participants are women)</li> <li>Public education strategy involving school children developed and activities conducted in at least 50 schools every year (at least 30% are girls)</li> <li>Public education activities conducted to cover all the core areas (target: 50% women)</li> <li>Proper record of all consultations and activities prepared, including list of participants and photographs.</li> </ul>	All these activities will be implemented thoroughly after the recruitment of Community Awareness Participant Consultant (CAPC). Upon the mobilization of existing Social expert in DSC04 and CAPC, following activities are being carried out. community awareness and encourage stakeholder participation through public education activities, consultations and information dissemination on good wastewater management practices	• PID • DSC • CAPC	Years 1-5
1.2 Disseminate information and consult regularly with communities to raise	At least 20% of total citizens participate (target: at least 30% of participants are women) in activities conducted in areas	Upon the mobilization of existing Social		

	Activities		Indicator and Targets	Pı	rogress till IV Quarter 2016	R	esponsibility	Time
	awareness about project activities such as objectives, activities, rationale and improvement of service delivery due to WWTPs, and sewer network works; and to answer questions and address concerns	•	where project-related activities are going on  Proper record of consultations and activities prepared, including list of participants and photographs		expert in DSC04 and CAPC, following activities are being carried out. community awareness and encourage stakeholder participation through public education activities, consultations and information dissemination on good wastewater management practices	•	PID DSC CAPC	Years 1-5
1.3	Conduct consultations with affected groups regarding compensation for land acquisition, resettlement and temporary displacement (including economic) ensuring that FHHs and other affected women are included and appropriately compensated.	•	All FHHs affected by the project assured of equal compensation (target: 100% women);  Affected households compensated by cash in joint accounts of husband and wife (wherever feasible).	•	No issues raised upto now	•	PID DSC CAPC	Years 1-5
1.4	Ensure individual household connection to sewer system for the poor, socially excluded households, and FHHs	•	58,850 new sewer connections (168,900 households) (target: 100% coverage of FHHs, poor and socially excluded households identified after socio-economic survey in relevant sewer area)	•	Not yet due	•	PID DSC KUKL	Years 2-5
1.5	Include gender relevant clauses of core labor standards in the bidding documents (e.g., equal wages for work of equal value)	•	Relevant gender-specific clauses on core labor standards are included in bidding documents of all contracts and enforcement of these clauses included in the terms of reference of DSC	•	All bidding documents are prepared as per ADB Standard Bidding Document (SBD).		PID DSC	Years 1-5
1.6	Orient staff of PID, DSC, contractors and laborers on core labor standards including gender-related aspects (e.g., equal wages), intolerance for sexual harassment, occupational health and safety during construction, awareness on public perspective and work efficiency to	•	All PID, DSC staff and contractors including laborers to be oriented on gender-related aspects of core labor standards Women workers receive equal wages as men for work of equal value  Safety measures and separate women/men toilets exist in places of construction	•	All bidding documents are prepared as per ADB Standard Bidding Document (SBD).	•	PID DSC CAPC	Years 1-2

Activities	Indicator and Targets	Progress till IV Quarter 2016	Responsibility	Time
reduce public grievances  1.7 Mobilize inclusive CAPC team for project information dissemination, community consultations, giving more focus on poor	PID to develop NGO selection criteria for proposal evaluation, including scores for inclusiveness and quality of methodology		• PID • CAPC	Years 1-2
consultations, giving more focus on poor and socially excluded households and FHHs	methodology			
Employ local people as construction workers with priority to those living in low-income areas	Women are given equal employment opportunity (Target: 30% women)	Not yet due		

Activities	Indicator and Targets	Progress till IV Quarter 2016	Responsibility	Time
Output 2: Wastewater treatment plants m	nodernized and expanded			
2.1 Employ local people as workers and operations staff in WWTPs with priority to those living in low-income areas and with equal opportunity for female workers.	Women are given equal employment opportunity (Target: 30% women)	Not yet due	<ul><li>PID</li><li>DSC</li><li>CAPC</li></ul>	Years 2-5

Output 3: Capacities strengthened; and op	perational and financial reforms institutionalized			
3.1 Form and operate customer grievance redress committees in each KUKL branch	<ul> <li>Active grievance redress committees, comprising consumers and KUKL staff (target: with 30% women and fairly represented poor and socially excluded groups)</li> </ul>	Not yet due	PID     KUKL	Years 1-5
3.2 Provide GESI sensitization training/workshop to PID and KUKL staff.	<ul> <li>50 staff of KUKL and PID trained every year (target: 50% participants are women)</li> </ul>	Construction activities just started in site	• PID • DSC	Year 1

Activities	Indicator and Targets	Progress till IV Quarter 2016	Responsibility	Time
3.3 Collect and analyze sex-, caste- and ethnicity- disaggregated, and poor and FHH data in project monitoring and evaluation following the activities outlined in the GESI Action Plan and report accordingly	<ul> <li>Data of poor, FHHs, and sex-, caste- and ethnicity- disaggregated beneficiaries collected, compiled, analyzed and reported in quarterly and annual progress reports and poverty mapping/socio-economic survey; GESI plan and project implementation refined based on the analysis</li> </ul>	Construction activities just started in site	PID     DSC     CAPC	Year 1-5
3.4 Provide qualified experts in PID Safeguards Unit and DSC to monitor implementation of GESI Action Plan and CAPP			PID KUKL	Year 1-5
3.5 Establish customer care helpline to address questions related to the project.	<ul> <li>An effective help line is functional in KUKL or PID</li> <li>Calls received on the helpline are properly addressed</li> </ul>	Not yet due	PID KUKL	Year 1-5

CAPC=Community Awareness and Participation Consultant, CAPP=community awareness and participation plan, DSC=design, supervision and management consultant, FHHs= Female-headed households refer to households without adult males (This includes households of widows, separated/divorcee women, unmarried women, and women whose husbands have gone abroad for long term jobs. Reference to FHHs will include both de jure and de facto FHHs), GESI=gender equality and social inclusion, KUKL=Kathmandu UpatyakaKhanepani Limited, KV=Kathmandu Valley, NGO=nongovernment organization, PID=Project Implementation Directorate, and WWTP=waste water treatment plant.

#### **Minutes of Meetings**

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#### **Environmental Management and Monitoring Plan for Design & Preconstruction Phase**

Impacts/Project Activities	Monitoring Plan							
Impacts due to	Mitigating Measures	Parameters to be monitored	Measurements	Means of verification/Location	Frequency	Responsibility		
DESIGN PHAS	SE							
Soil erosion and slope instability	Incorporate drainage system in final design	Review if detailed drainage systems with plans have been designed	None	Design document, Technical specifications	Twice(once after first draft and once before final approval)	DSC/KUKL/PID experts as required and Contractor		
Flooding and earthquake	Design of sewerage network using flood data and designed as an underground system. Sufficient drainage at WWTPs. Wastewater infrastructure to be designed as per Nepal's earthquake codes and standards	Review if wastewater infrastructure has been designed as per appropriate standards and codes	Design considerations	Design document, Technical specifications	Twice(once after first draft and once before final approval)	DSC/KUKL/PID experts as required and Contractor		
Sludge disposal	In corporation of optimum sludge reduction using digestors & gasification in design for power generation.	Review if designs for sludge management have been made	Design considerations	Design document, Technical specifications	Twice(once after first draft and once before final approval)	DSC/KUKL/PID experts as required and Contractor		
Odor emission	Conduct air quality dispersion modeling during design of plants to determine odor control measures and equipment. Incorporate appropriate environmental buffers to be maintained along the periphery of the WWTPs	Air quality modeling results and analysis.  Review if design of WWTP include odor control measures	Design considerations	Design document, Technical specifications	Twice(once after first draft and once before final approval)	DSC/KUKL/PID experts as required and Contractor		
Health and safety of	Prepare training manuals in Nepali(or local languages)	Review information for	Number of training records	Notes and sketches	Twice(once after first draft and	DSC/KUKL/PID experts as required		

Impacts/Project Activities	Monitoring Plan							
Impacts due to	Mitigating Measures	Parameters to be monitored	Measurements	Means of verification/Location	Frequency	Responsibility		
community and workers	with notes and sketches on Community Health and Safety and Potential Occupational Health and Safety	errors and quality	and Minutes		once before final approval)	and Contractor		
Treatment plant inefficiency	Develop and Implement HACCP plans as part of the O&M manuals and provide in Nepali with sketches and regular training to the staff	Operation of plant as per HACCP Plan and O&M Manual.	Audit of HACCP Plans and O&M manuals (Audit reports)	Treatment Plants	Annually	DSC/KUKL/PID and Contractor		
		Operational reports (including incidence reports)	Submission of operational reports		Quarterly	DSC/KUKL/PID and Contractor		
PRE-CONSTRUC	TIONACTIVITIES	I						
Permits and Approval	Consult with relevant government authorities and municipalities and obtain required permits and approval and agreement for disruption of utilities, working in heritage sites, digging roads and cutting trees	Letters of Approval, Permits and submitted to DSC for information/action	Whether approval have been received from authorities	Project Office/Site Office	Once	KUKL/PID/DSC / Contractors		
Lack of public consultations and awareness programs	Develop and implement a project communications plan to make the stakeholders feel they are part of the project	Implementation of communications plan throughout the project.	Audit of communicatio ns plan(Audit reports)	Project sites	Bi-annually for the first 2 years of the project then	KUKL/PID/DSC		

Impacts/Project Activities	Monitoring Plan							
Impacts due to	Mitigating Measures	Frequency	Responsibility					
	and it belongs to them.				annually.			
		Arrange meetings, workshops and group discussions to disseminate project final designs, plans and activities	Number of meetings,  Awareness programs held	Project sites	As required throughout the Project duration	KUKL/PID/DSC		
Workforce camps	Establish temporary workforce camps with sanitary amenities at designated sites only	Ensure temporary workforce camps are established within designed area with sanitary facilities and first-aid facilities	Visual inspections of wastewater disposal, solid waste management, noise and air pollution, health of workforce, potable drinking water, kerosene availability	Project site	Monthly	Contractors and DSC		