Land Acquisition and Involuntary Resettlement Due Diligence Report

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NEP: Urban Water Supply and Sanitation (Sector) Project – Khalanga Urban Water Supply and Sanitation Subproject - Darchula

Package Number: W-08

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CURRENCY EQUIVALENTS

(as of 8 June 2020)

Currency unit - Nepalese rupee (NRs)

\$1.00 = NRs 121.37

NRe1.00 = \$0.0082

ABBREVIATIONS

ADB - Asian Development Bank

BPL - Below Poverty Line

CBS - Central Bureau of Statistics

DDR - Due Diligence Report

DWSSM - Department of Water Supply and Sewerage Management

HDPE - High Density Polyethylene Pipe

MOWS - Ministry of Water Supply

OBA - Output Based Aid

PPE - Personal Protective Equipment
PMO - Project Management Office

PMQAC - Project Management and Quality Assurance Consultant
RDSMC - Regional Design, Supervision and Management Consultant

RPMO - Regional Project Management Office
SDG - Sustainable Development Goal
SPS - Safeguard Policy Statement

TDF - Town Development Fund

UWSSP - Urban Water Supply and Sanitation (Sector) Project

WUSC - Water Users and Sanitation Committee

WSS - Water Supply and Sanitation
WUA - Water Users Association

WEIGHTS AND MEASURES

cum - cubic meter km - kilometer m² - square meter mm - millimeter

μg/m³ - micrograms per cubic meter

NOTE

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

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I. INTRODUCTION

A. Project Background

- 1. The Urban Water Supply and Sanitation (Sector) Project (UWSSP) will support the Government of Nepal expand access to community managed water supply and sanitation (WSS) in 20 project municipalities by drawing on experiences and lessons from three earlier projects funded by the Asian Development Bank (ADB). The project will fund climate-resilient and inclusive WSS infrastructure in project municipalities and strengthen institutional and community capacity, sustainable service delivery, and project development. Subprojects will be demand driven by Water Users Associations (WUAs) and project municipalities and selected based on transparent criteria²including population growth, poverty index, existing WSS infrastructure, community willingness for cost sharing, and long-term operation and maintenance (O&M) contract.³
- 2. The project will build upon the on-going efforts of the Government of Nepal in providing water supply and sanitation (WSS) services in urban areas of Nepal. It will help the country to meet Sustainable Development Goal (SDG)-⁴ to ensure availability and sustainable management of water and sanitation for all by 2030 and it is aligned with sector objectives laid out by the government's Fourteenth Plan, National Urban Development Strategy, and updated 15-year Development Plan for WSS in Small Towns, which is to improve water supply and sanitation service delivery in urban areas across Nepal.
- 3. The project will have the following impact: quality of life for urban population, including the poor and marginalized, through provision of improved sustainable WSS services. The project will have the following outcome: Inclusive and sustainable access to water supply and sanitation services in project municipalities improved. The project will have two outputs: (i) water supply and sanitation infrastructure in project municipalities improved; and (ii) institutional and community capacities strengthened.
- 4. The Ministry of Water Supply (MOWS) is responsible for planning, implementation, regulation, and monitoring of WSS. The Department of Water Supply and Sewerage Management (DWSSM) under the MOWS supports the provision of WSS facilities in municipalities where large utilities do not exist, and these are operated by WUSCs⁵ or

¹ ADB.Nepal: Small Towns Water Supply and Sanitation Sector Project (2000); Nepal: Second Small Towns Water Supply and Sanitation Sector Project (2009); and Nepal: Third Small Towns Water Supply and Sanitation Sector Project (2014).

² Subproject selection criteria are detailed in the PAM (footnote). Selection of future investments to be designed under the project will follow same criteria, with preference for investments located in Kathmandu Valley, provincial headquarters, and strategic border municipalities.

³ Procurement can only commence after DWSSM and municipality sign management agreement with WUSC for 20 years O&M service. The municipality will own the system and the WUSC will be the operator.

⁴ Government of Nepal. 2009. Urban Water Supply and Sanitation Policy. Kathmandu

⁵ The WUSCs, formed under the Nepal Water Resource Act, 1992, are the elected executive bodies of the Water Users Association.

Municipalities. Shortage of investment funds, skilled personnel, and inadequate operation and maintenance (O&M) budgets, hinders municipalities from providing adequate, cost-effective services. The Local Governance Operation Act, 2017, established municipalities as autonomous government institutions with responsibility for WSS services. While the capacity of municipalities is being built, the government and residents have been receptive to the decentralized, participatory, and cost-sharing service provision model by Water Users Associations (WUAs). Development support for municipal WSS has been channeled through a combination of (i) government grants through DWSS, (ii) loans by the Town Development Fund (TDF), and (iii) contributions from municipalities and beneficiaries. The TDF also supports WUAs in institutional and financial management including the introduction of tariffs.

- 5. The project will be implemented over a five-year period (indicative implementation period is 2018 to 2023) and will be supported through ADB financing using a sector lending approach. The MOWS is the executing agency and DWSSM the implementing agency. The project management office (PMO) established under ongoing Third Small Towns Water Supply and Sanitation Sector Project (footnote 1) will be responsible for the overall management, implementation and monitoring of the project. There will be regional PMOs (RPMOs) to manage day-to-day project implementation at the subproject/municipality level. After construction including a one-year O&M period by the contractor, subprojects will be operated by the WUSC or municipality.
- 6. In terms of financing, 70 percent of the cost will be contributed by GON. With regard to cash contribution to be made by WUSC, the initial cash contribution of WUSC should be minimum 5 percent of the civil works contract in the form of upfront cash contribution. The remaining 25 percent to be borrowed from the TDF as a loan at an interest rate not exceeding 5 percent per annum with a maturity of 25 years including a grace period of five years. The project ensures full participation of Water Users and Sanitation Committee in the formulation, implementation and operation and maintenance of water supply and sanitation.
- 7. The proposed UWSSP is not anticipated to involve any significant resettlement impacts and is classified as Category B. The Resettlement Framework provides guidance for the assessment of involuntary resettlement impacts and for the preparation of resettlement plans / land acquisition and involuntary resettlement due diligence reports for components that are identified or subprojects that are assessed or any changes in design after Board approval. Any proposed future subproject involving significant impacts will not be allowed.

B. Scope of this Report

8. This draft Land Acquisition, Involuntary Resettlement and Indigenous People's due diligence report (DDR) is prepared for the proposed Khalanga Urban Water Supply Project. A due diligence process was conducted to examine land acquisition, resettlement and indigenous peoples issues in detail, in line with ADB Safeguard Policy Statement (SPS) 2009. This report describes the findings and provides copies of available land-related documents

⁶ The DWSSM assists in preparation of investment plans, project design, and establishing sustainable service delivery.

⁷ The TDF is a government-owned entity established under the Town Development Fund Act, 1997. Loans from the government to WUAs or municipalities are generally on-lent by TDF under a subproject financing agreement. 8 WUAs contribute 30% of project costs for water supply subprojects (25% from TDF loan and 5% from users' upfront cash contribution) and 15% for sanitation subprojects(subsidy from municipalities).

and photographs. This DDR was prepared based on the Resettlement Framework for UWSSP.

- 9. Upon project implementation, the Social Safeguards Officer at PMO will be required to undertake a review of this due diligence, prepare a confirmation letter or report documenting any modifications for the subproject and submit to ADB; and receive a 'no objection' confirmation from ADB prior to start of construction in the subproject.
- 10. The Urban Water Supply and Sanitation (Sector) Project (UWSSP) is designed with the principle of community management, making it demand responsive, and adopting a participatory approach. Participatory approach aims for greater community participation in planning, implementation along with their operation and maintenance activities. Demand responsiveness is demonstrated by willingness to pay for improved service delivery and ultimately aims at 30% cost recovery. Community mobilization and participation is essential for making the community empowered so that the community can take full responsibility of financial, technical and managerial aspects of operation and maintenance.

II. SUB-PROJECT DESCRIPTION

A. Location and Accessibility

- 11. Khalanga (Darchula) is a town in Mahakali Municipality in Darchula district in Sudurpashchim province. It was previously located in Api Municipality. Mahakali Municipality was formed by combining Api Municipality and Dattu Village Development Committee in March 2017. It is the district headquarters of Darchula district. It is surrounded by high mountains and is situated in a river basin, on the bank of the Mahakali River at 915 m (3,002 ft.) elevation. The town is located at a distance of 952.12 kilometers north-west from Kathmandu.
- 12. The climate of Darchula district varies widely from subtropical to alpine. In the north, most of the parts, having an alpine climate, remain under snow. In the southern part and valleys, the climate is subtropical. Mid- hills have a temperate climate. The average maximum temperature is 18.6 °C and the minimum temperature is 7.7 °C. The average rainfall is 2129 mm. Most precipitation falls between May and September. About eighty percent of the total annual rainfall occurs during the monsoon season (June to September). The location of district is 80° 22"-81° 9" longitude and 29° 36"-30° 15" latitude. Darchula has the area of 1,867 sq. km. Darchula district is connected with road.
- 13. In general, the local economy of the project area is predominantly agriculture-based, with the surrounding areas having rural characteristics. However the core project area being a market center with compact settlement, the economy is basically business and commercial based. In order to assess the demographic and social features of the project area, socioeconomic survey covering 100% households of service area were carried out and major findings are summarized below:

B. Socioeconomic Profile of Project Area

1. Service Area, Households and Population

14. The proposed project covers ward no. 4 and 5 of Mahakali municipality of Darchula district. Major settlements /Tole of the service area as well as ward-wise household and population are given in Table-1. The data shows that the area accommodates a total population of about 15375; of which 12605 is permanent population and 2770 comprises tenants.

Table-1: Service Area, Households and Population

					Population		
Municip ality	Ward No	Cluster / Settlements	House holds	Perman ent residen ts	Tenants (Floating	Total	Rema rks
Mahakali Municipa lity	4	Bangabagad, Khalanga Bazar, Campus Road, Ghat Bazar, Moti, NayaBasti, Napa Basti, Mohati, TalloSain, TalloSwen, Radha Krishna Chowk, Tinker Kheda, TitalSain	1532	8736	2578	11314	

Municip	Ward	Cluster / Settlements	House		Population		Rema rks
	5	Airan, Chhida, Dhauligad, Dhaulimad, Galfe, Ghatta, Namaskar,	678	3869	192	4061	
Tot	al		2210	12605	2770	15375	

Source: Socio-economic Survey, 2017

2. Population and Household size

15. There are a total of 2210 households in the project service area with an average household size of 5.7, which is higher than national average of 4.8 (CBS census 2011). The distribution of households by ward is presented in Table-2, which reveals that ward no. 4 is densely populated as compared to other wards. Among the total permanent population (12605) in the service area, 6318 are male and 6287 are female. Male (50.1%) and female (49.9%) population is in nearly equal ratio.

Table-2: Population and Household Size

Khalanga	Ward			Population	Average	
UWSSP	Number	Households Male	Male	Female	Total	Household Size
Mahakali	4	1532	4438	4298	8736	5.7
Municipality	5	678	1880	1989	3869	5.7
	Total	2210	6318	6287	12605	5.7

Source: Socio-economic Survey, 2017

3. Caste and Ethnicity

16. The proposed project service area comprises multi caste/ethnic groups. Each caste and ethnicity is characterized by its own customs, traditions, culture and nature of occupation with which they are associated. Table-3 shows that Brahmin and Chhettri, comprising 72.3 percent of total families, are the most prevailing caste group in the service area. Janajati are the next major group with 14.7 percent, followed by Dalit which constitutes about 11.5 percent.

Table-3: Caste / Ethnicity

	Mahakali	Municipality		
Ethnicity	Ward	number		
	4	5	Total	Percentage
Brahmin/Chhettri	1103	493	1596	72.3
Janjati	249	76	325	14.7
Dalit	151	105	256	11.5
Other	29	4	33	1.4
Total	1532	678	2210	

Source: Socio-economic Survey, May 2017

4. Main Occupation of Household

17. Although the economy of the area is gradually shifting from rural agricultural economy to trade/business and service based, majority of the households are still dependent on agriculture. As the socio-economic data shows, 33.9 percent of the households have business as their occupation. Service is another main occupation of 30.4 percent households, followed by agriculture (15.8%).

Table-4: Main Occupation of Household

SN	Occupation	Ward Nu	mber	Total	Percent
		4	5		
1	Agriculture	230	120	350	15.8
2	Business	608	143	751	33.9
3	Services	418	253	671	30.4
4	Industry	1	3	4	0.18
5	Foreign Employment	74	51	125	5.6
6	Wages	145	72	217	9.8
7	Others	16	24	40	1.8
8	Do Nothing	40	12	52	2.4
	Total	1532	678	2210	100

Source: Socio-economic Survey, May 2017

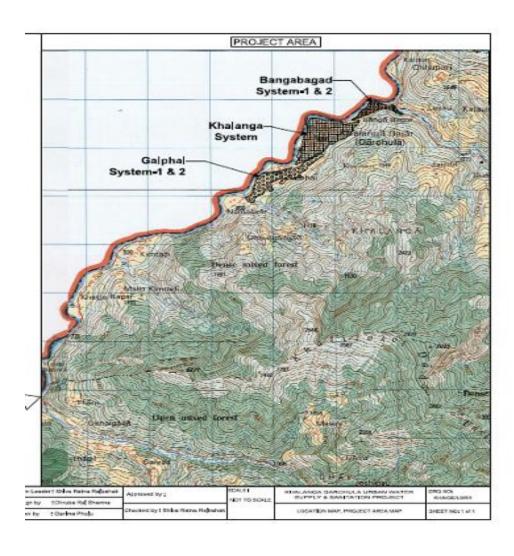


Fig-1: Project Location Map

GALPHAI SYSTEM

KHALANGA DARCHULA URBAN WATER SUPPLY & SAN[TAT]ON PROJECT

DISTRIBUTION SYSTEM DIVISION MAP

BANGABAGAD SYSTEM-1

(DMA-2)

BANGABAGAD SYSTEM-1

(DMA-3)

GALPHAI SYSTEM-2

(DMA-4)

GALPHAI SYSTEM-2

(DMA-4)

LEGEND:

DISTRIBUTION SYSTEM DIVISION

BANGABAGAD SYSTEM

INHALANGA SYSTEM

IN

Feam Leader I Shiva Ratna Rajbahai

esign by

: Dhruba Raj Sharma

Approved by :

SCALE:

1: 23000

BUILDING DESIGN AUTHORITY PVT. LTD.
TV
FLUSH ENGINEERS & ARCHITECTS PVT. LTD.

Project Management Office Urban Water Supply & Sanitation (Sector) Project Department of Water Supply & Sewerage Management Panipokhari, Kathmandu

Fig- 2 System Division Map

C. Description of Subproject Components

1. Existing Water Supply Schemes

- 18. There are four existing water supply schemes in the Khalanga, Darchula. The water supply schemes are Bangabagar Scheme, Khalanga Bazar Scheme, Galphai and Kimtadi Scheme.
- i) Bangabagar Scheme serves about 500 households of ward 4 through private taps. The scheme taps Malbela Mul-1 and Malbela Mul-2 spring sources having total safe yield of 6.18 lps and serves the distribution area from 2 reservoirs of 75 cum each made of RCC and masonry. The scheme supplies water for 2.5 hours in the morning and 4-5 hours in the evening. The scheme was completed in 2032 B.S. The transmission main has been replaced with new pipes recently. Intakes, transmission main and reservoirs of this scheme are in good condition and will be utilized in the proposed system of this project. However, the distribution system is damaged at many places. This scheme requires the abandonment of the existing distribution system and its replacement with new distribution pipelines covering additional households.
- ii) Khalanga Bazar Scheme serves about 600 households of ward 4 through private taps. The scheme taps Garaku Mul-1 and Garaku Mul-2 spring sources having total safe yield of 5.08 lps and serves the distribution area from a 150 cum RCC reservoir. The scheme supplies the water 1.5 hours in the morning and 1.0 hours in the evening. The scheme was completed in 2064 B.S. Intakes and reservoir of this scheme is in good condition and will be utilized in the proposed system of this project. However, the transmission main and distribution system is damaged at many places. The leakage from the pipeline is visible. The pipes of the distribution system are small. Small pipes have been laid parallel to each other, in many places. This scheme requires the replacement of existing transmission main and distribution system. A new water source, Garaku Khola needs to be tapped, to serve additional areas.
- iii) Galphai Scheme serves parts of ward 5 through private taps. The scheme taps Dhauligad Mul-1 and Dhauligad Mul-2 spring sources having total safe yield of 9.62 lps and serves the distribution area from a 100 cum RCC reservoir. Both intakes are damaged and require reconstruction. The existing 100 cum reservoir is in good condition and will be utilized in the proposed system of this project. The transmission main and distribution system are damaged at many places with visible leakages from the pipeline and requires replacement.

2. Proposed Subproject Components

19. Based on the topography, settlements and existing structures, four water supply systems based on decentralized distribution system are adopted, which are described below:

a) Water Source: Intake

20. All the proposed sources are spring sources except the Garaku Khola. All the proposed sources are perennial sources from which water can be conveyed by gravity to the distribution areas of the proposed systems. The proposed sources of Khalanga system, Garaku Khola stream source, Garaku Mul-1 and Garaku Mul-2 spring sources are located in ward 3 of the Mahakali Municipality. All other proposed sources are located in ward 5 of the

Mahakali Municipality. The proposed source tapping discharge will be 33.35 lps. The existing and new source in the project area is given below:

Table 5: Proposed Water Source and Location

S.N	System	Source Name	Source Type	Tapped Discharge (lps)	Source Location	Remarks
1	Bangabagar	Malbela Mul-1	Spring	2.65	Mahakali	Existing sources
		Malbela Mul-2	Spring	3.53	Municipality, Ward 5	and being tapped by WUSC
2	Khalanga	Garaku Khola	Stream	13.61	Mahakali Municipality, Ward 3	The Garku Khola is proposed as a new source tapping 13.61 lps of water.
		Garaku Mul-1	Spring	2.95	Mahakali	Existing sources
		Garaku Mul-2	Spring	2.00	Municipality, Ward 3	and being tapped by WUSC
3	Galphai	Dhauligad Mul-1	Spring	4.00	Mahakali	Existing sources
		Dhauligad Mul-2	Spring	4.62	Municipality, Ward 5	and being tapped by WUSC
	Total			33.35		

ii) Reservoir Tank

21. The entire distribution network is to be supplied from six reservoir systems; four exiting reservoirs and two new reservoirs. Two existing RVTs will be connected to the Bangabagar system. One of existing RVTS will be connected to Khalanga sub system and another one to the Galphai sub system. Two new reservoir tanks (RVTs) are proposed, one each for Khalanga and Galphai sub system. The total storage requirement for the system at the end of design period 2039 is calculated as 895 cum. Table-6 summarizes the requirement of reservoir tanks subsystem wise.

Table 6: Requirement of Reservoir

S.N.	Systems	Reservoir Size (Cum)	Туре	Remarks		
1	Bangabagar1 and	150	RCC	Existing		
	Bangabagar 2	75	Stone masonry	Existing		
2	Khalanga	150	RCC	Existing		
		300	RCC	Proposed		
3	Galphai 1 and	100	RCC	Existing		
	Galphai 2	120	RCC	Proposed		
Total		895				

iii) Water Treatment plant

22. Water treatment system consisting of sedimentation, pressure filter and disinfection of 13.61 lps capacity is proposed for Khalanga system to make the water safe for drinking purpose. The water treatment process is selected based on the raw water quality. The raw water quality of the proposed source, Garaku Khola is expected to be high in turbidity in rainy season as a result of surface runoff. The proposed treatment process aims to remove the high concentrations of turbidity present in the raw water. It also kills pathogenic organisms present in raw water and ensures the presence of residual chlorine to kill the

pathogenic organisms during the conveyance of treated water in pipelines. The proposed treatment facilities comprise of following units.

- **a) Sedimentation Tank:** Sedimentation tank is proposed in the surface water of Garaku Khola source to remove the grits and suspended particles. Sedimentation tank will remove the suspended solids including precipitated minerals. The horizontal flow rectangular sedimentation tank made of R.C.C. is proposed. Two sedimentation tanks each with capacity of 6.805 lps are proposed so that at least one of them is working while another one is under maintenance. This will provide continuous water treatment thus increasing the service level. The proposed sedimentation tank is expected to remove 70% of the suspended solids. The dimensions of each sedimentation tank are 12.0 m x 4.0 m x 2.5 m.
- **b) Pressure Filter:** Two numbers of pressure filter of 1.8 m diameter are proposed which are made of mild steel with food grade epoxy coating inside is proposed to remove turbidity and precipitated minerals. The pressure filters is to be packed with sand and gravel as per the design specifications.
- **c)** Disinfection Unit: Disinfection units are proposed to kill coliforms and make water safe to drink. The disinfection is carried out by the addition of bleaching powder in the reservoir. Bleaching powder is to be dosed from chlorine dosing tank through a dosing pump. The chlorine dose of 1 mg/l is proposed for the treatment of water.

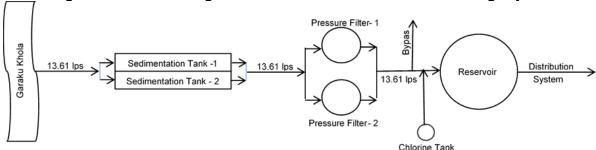


Figure 3: Schematic Diagram of Water Treatment Process for Khalanga System

iv) Distribution Sub System

- a) Bangabagar Sub System: This system is proposed to serve the northern part of Khalanga, Darchula in Bangabagar area. This system is designed to cater to 3,592 permanent and 863 tenant (total 4,455) population. Malbela Mul spring sources will be used to feed two existing reservoirs of 75 cum and 150 cum made of RCC and stone masonry respectively through which water will be distributed to Bangabagar-1 distribution system and Bangabagar-2 distribution system respectively. The existing water treatment plant consisting of sedimentation tank and slow sand filter will be utilized in the proposed Bangabagar System to treat the water from Malbela Mul-1 and Malbela Mul-2 spring sources.
- b) Khalanga Sub System: This system is proposed to serve Khalanga Bazar in the mid-western part of the Khalanga, Darchula and is designed to cater 9,447 permanent and 2,726 rented (total 12,173) populations. Gravity surface sources (Garaku Khola, Garaku Mul-1 and Garaku Mul-2) will be used to feed a 150 cum existing reservoir tank and proposed new 300 cum reservoir will be used for distribution.

c) Galphai Sub System: This system serves area in Galphai which is located south west of the Khalanga Bazar of the subproject. This subsystem is designed to cater 5,594 permanent and 369 rented (total 5,963) population. Dhauligadh Mul-1 spring source will be used to feed 100 cum existing reservoir and 120 cum proposed new reservoir will be used for distribution to Ghaphai-1 distribution system and Gaphai-2 distribution system respectively.

v) Pipe Line Network and House Connection

- 23. This scheme is proposed to build transmission main, distribution network and house connections to distribute safe drinking water in all service area. The proposed pipelines and house connection in this scheme are given below:
 - a) Transmission main: The transmission main conveys the water from the intake at source to service reservoirs. The water flows by gravity from the entire source to the reservoir in all the proposed systems. HDPE, Ductile Iron (DI) and Galvanized Iron (GI) pipes have been used as per the specific site requirements. There is no specific identification of geologically vulnerable areas which need special consideration. The existing transmission main of the Bangabagar system has been recently laid with new pipes and is in excellent condition. This transmission main will be utilized in the proposed Bangabagar system. Hence, transmission main has not been proposed in Bangabagar system. The transmission main of all other existing schemes are in deteriorated condition and proposed to be replaced with new pipes. The length of the transmission mains proposed for various systems is shown in Table-7. The total transmission main pipe length of the proposed system is 8.665 km.

Table 7: Transmission Pipe

	14515 11 1141151111551511 195				
S. N.	Systems	Length of Pipes (m)			
1	Bangabagad	(Existing pipeline will be used)			
2	Khalanga	7245			
3	Galphai	1420			
	Total	8665			

b) Distribution Network: The distribution system comprises a pipe network, which consists of mainly loops and branches. The water is supplied from the service reservoir to the consumers by the distribution pipe network. Distribution pipes are laid both sides of the all metaled and major roads. Single line pipes are proposed in earthen and other roads. HDPE and GI pipes are predominantly used. Pipe of class and size lesser than 6 kg and 50 mm is not proposed. Existing pipes will not be used as these are leaking and found substandard (class of 4 kgf). The length of the distribution network pipes proposed for various systems is shown in Table-8. The total distribution pipe length of the proposed systems is 24.432 km.

Table 8: Distribution Pipe Network

S. N.	Systems	Length of Pipes (m)
1	Bangabagad	3752
2	Khalanga	14101
3	Galphai	6579
	Total	24432

c) House Connections: The system has been designed, predominantly as one with house to house connections. The system has a design capacity of 3429 house

connections at the end of design period. However, initially during construction phase, only 2210 house connections are provided to satisfy the need for the base year population.

Table 9: Pipe Materials for Transmission and Distribution Network

Recommended Materials	Pipe Diameter (mm)	Remarks
PE 100	50-215	IS
HDPE >= 6kg/cm2	50 – 215 mm	NS 40 – 2040; IS 4984 - 1978
Galvanized Iron	50 – 100 mm	NS 199 - 2046; IS : 1239 – 1990
Ductile Iron	150 – 350 mm	ISO 2531

vi. Office Building and Guard House

24. Laboratory room, counters, manager's room cannot be accommodated in the present office building. Thus a new one is proposed to accommodate the required facilities. The new office building will consist of manager's room, cash counters, meeting hall etc. A room for laboratory and a store will be placed in the office building. There is an existing guard house in the Bangabagar system. Two guard houses are proposed in Khalanga Urban Water Supply Project, one each for Khalanga system and Galphai System. These guard houses are to be located at the reservoir sites. The guard house is one storey building with a guard room, a toilet and a bath room.

vii. Sanitation Facility

- 25. In sanitation component as discussed with WUSC and Municipality, one tractor with trailer, ten wheel barrows and fifty plastic bins for collection of solid waste are proposed.
- a) Individual Household Toilet Improvement: Some of the households have prepared pit latrines with bamboo, shrubs cover. The wall of pits is not found properly protected. Similarly, toilets as such were also found made temporarily from bamboo, wooden post etc. Thus, training program will be carried out for the proper construction with the use of local material like cement plaster in bamboo woven to make wall, strengthening pit wall with locally available stone, use of RCC rings and cover and molding methods etc. Accordingly, awareness campaign will also carried out regarding public sanitation and health.
- b) Low Cost Latrines for Low Income Household: There are a few types of latrines that may be adopted for low income household and range from pit latrines to septic tank latrines. The type of latrines the people will construct depends largely on the financial capacity of the consumers. The other factors as culture, tradition of the people, ground condition, climate and availability of space also play a vital role. There are three distinct income groups in the project area. People with higher income tend to build better sanitation facilities with more contribution, people with medium income like to improve sanitation facilities and the low income group will be encouraged to construct toilets through the OBA grant. OBA selection process and Below Poverty Line calculation thresholds sheet is included in appendix- 5
- **c) Public Toilet**: One public toilet is proposed in Buspark area ward no. 4 of Mahakali Municipality. The toilet will have five urinals and two pans for male users; four female units in a separate compartment from the men's toilet and a unit for personal gender use which will also serve persons with disabilities.

The proposed component of Khalanga Urban Water Supply and Sanitation sub project are given below:

Table 10: Proposed Component of Khalanga sub project

S.N	System	Component	Location	Capacity / Length	Remarks
1	Intake	Component	Location	oupdoity / Longin	Nomano
1.1	Khalang a System	Garaku khola stream intake	Mahakali Municipality, ward no3	13.61 lps	Proposed source Intake will be constructed in Garakukhola for khalanga system
1.2		Garaku khola Mul- 1 and 2	Mahakali Municipality, ward no3	4.95 (2.95 + 2.00) lps	Existing source will be used
1.3	Bangaba gad System	Malbela Mul-1 and 2	Mahakali Municipality, ward no5	6.18 (2.65+3.53) lps	Existing source will be used
1.4	Galphai System	Dhauligad Mul-1 and 2	Mahakali Municipality, ward no5	8.61(4.00+4.61) lps	Existing source will be used
2	Treatment				_
2.1	Khalang a System	Sedimenta tion tank, Presser Filter, Disinfectio n unit	Mahakali Municipality, ward no4 and 5	13.61 lps	Treatment units will be constructed for the stream source of Garaku khola only for Khalanga system
3	Reservoir T	anks			
3.1	Bangabag ad System	RVT	Mahakali Municipality, ward no4	150+75=225 cum	Two existing RVT of 150 cum and 75 cum will be use for this system
3.2	Khalanga System	RVT	Mahakali Municipality, ward no4 &5	150+ 300 = 450 cum	150 cum existing RVT and 300 cum proposed RVT will be used for this system
3.3	Galphai System	RVT	Mahakali Municipality, ward no 5	100+120 = 220 cum	100 cum existing and 120 cum proposed RVT will be used for this system
4	Transmissi	on Mains			
4.1	All system	Transmissio n mains	Entire Project Area	Total Length 8.665 km	Right of the Way of Government roads will be used for transmission line
5	Distributio	n Network			
5.1	All system	Distribution Network	Mahakali Municipality, ward no4 &5	Total length 24.432 km	Public road row will be used for distribution network
6	Office Build	ing	Mahakali Municipality,	Manager's room, cash counters, a meeting hall, a	Mahakali Municipality has given consent to WUSC (Appendix- 1b)

S.N	System	Component	Location	Capacity / Length	Remarks
			ward no4	laboratory room and a store will be placed in the office building.	
7	Public Toile	t	Mahakali Municipality, ward no4	5 urinals and 2 pans for male users; 4 female units and a unit for differently abled person	Mahakali Municipality has given consent to WUSC (Appendix-1b)

Source: DEDR ,Khalanga, Water Supply and Sanitation Sub- Project, Darchula, field survey and land records

Note: "Mul" is a Nepali term used for source of water, generally spring/a small stream originating in hills

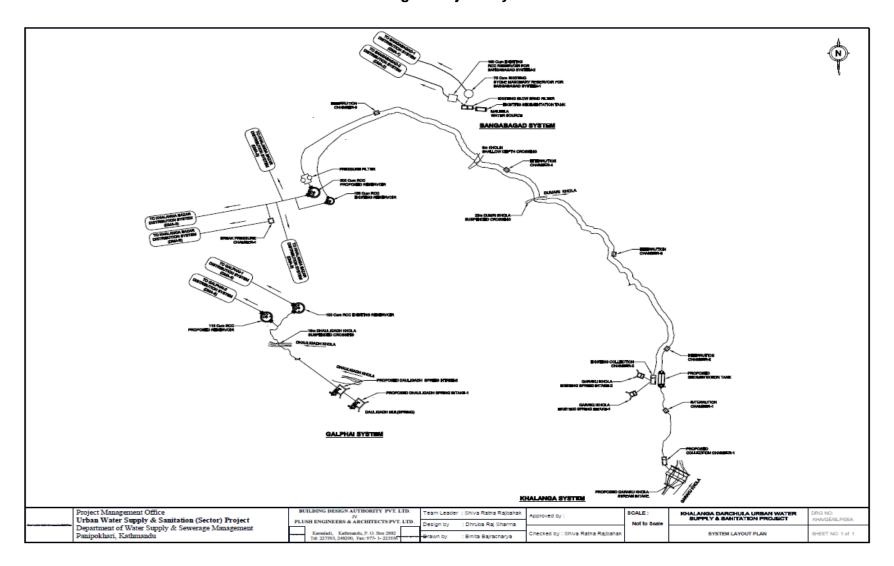


Fig- 4 Project Layout Plan

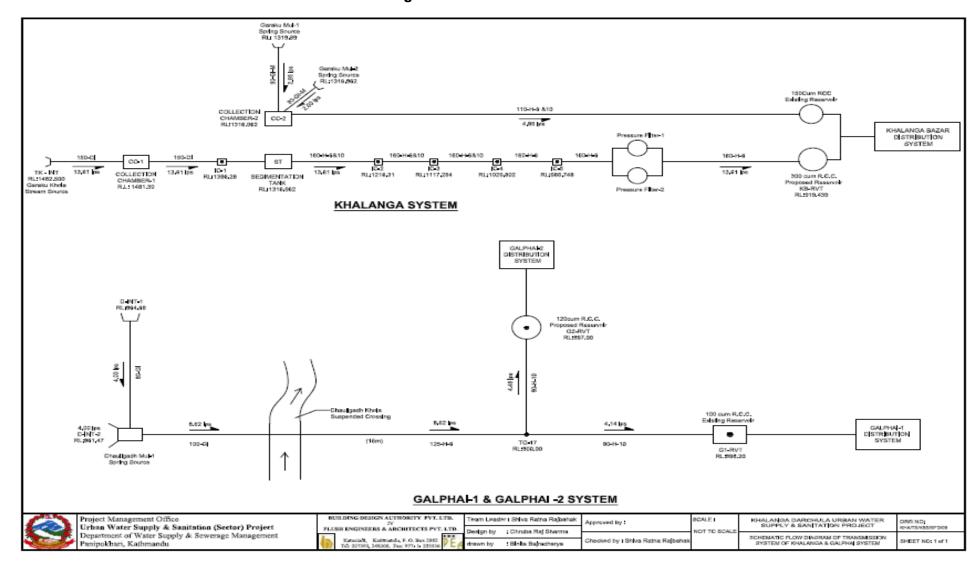


Fig- 5 Schematic flow chart

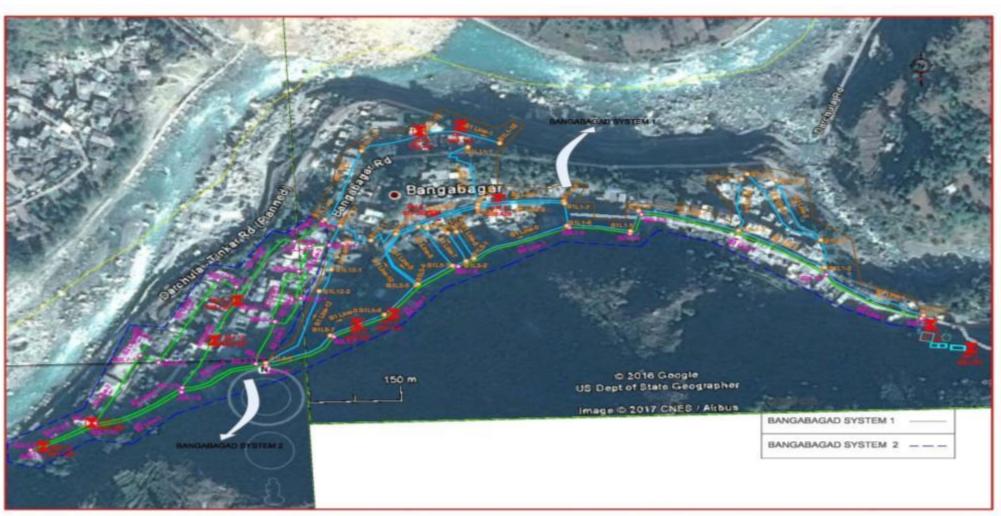
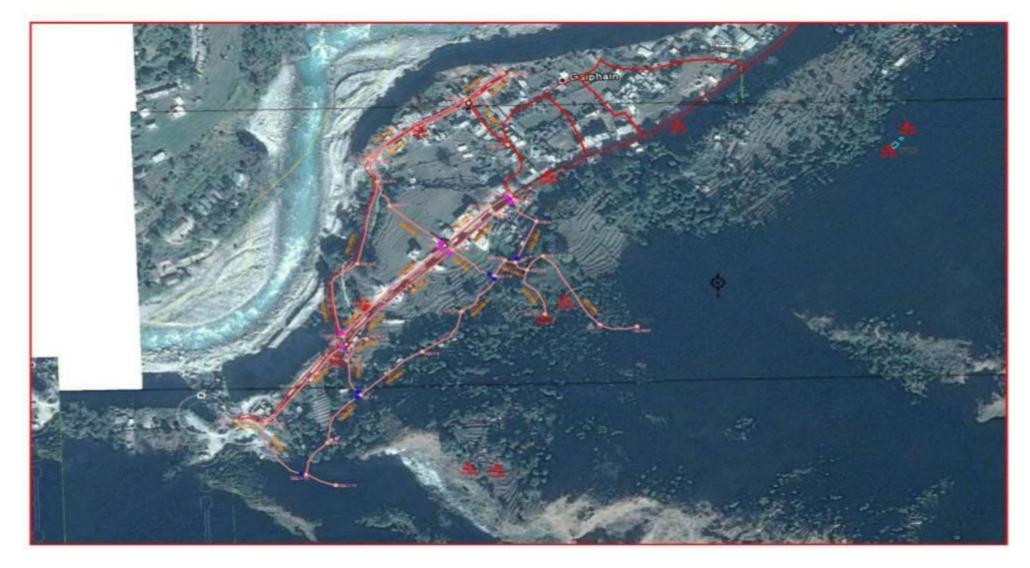
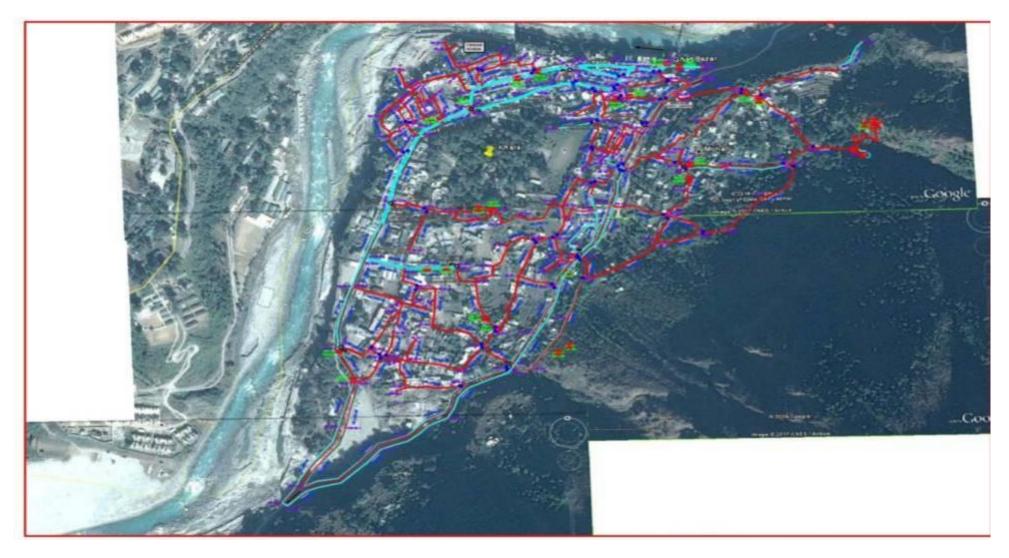


Figure-6: Map Showing Service Area of Khalanga Urban Water Supply and Sanitation Project

Bangabagar System



Galphai System



Khalanga System

III. FIELD WORK: SURVEYS AND PUBLIC CONSULTATIONS

A. Outline of Field Work

26. Desk reviews, field visits and observations; and consultation methodology were adopted for undertaking the resettlement due diligence.

Desk review: Desk review was the main step adopted for the study. Relevant reports and documents available at PMO/DWSS, WRPMO, WUSC office and reports prepare by WRDSMC were reviewed in order to assess the land acquisition requirement and level of likely impact. Followings are the main reports and documents reviewed for the study.

- Detailed Engineering Design Report,
- ▶ Socio-economic profile prepared by WRPMO.
- WUSC minutes and documents
- ADB Safeguard Policy

Field Visit: Field visits to the project site and major settlements/clusters in the service area was another step for the study. Several field visits were made after negotiations were carried on in between PMO and the Regional Design, Supervision, and Management Consultants (BDA) and contract was signed on May 31, 2017 for the variations.

Observation and Interaction: Direct observation and interaction with local people likely to be affected by project construction activities was carried out during field visits. The details of field visit and interaction are presented below in Table-5.

B. Public Consultation

- 27. Consultations with key stakeholders were carried out in line with ADB's requirements pertaining to environmental and social safeguard considerations. During the consultation, key concerns of people related to the project were discussed.
- 28. During field visits to all proposed sites and pipeline alignments, potential impacts and mitigation measures were assessed and discussed with stakeholders. The consultations helped to identify the felt needs/concerns and priorities of the stakeholders.
- 29. Consultation and meetings with the WUSC, local community and different stakeholders were held since project preparation i.e. inception phase to date at different stages to disseminate wide range of project information and to discuss and identify likely issues, problems/constraints, prospects and feedback from the participants. The consultations conducted mainly covered information dissemination about the project and its scope, cost sharing modality, likely positive and adverse impacts, requirement of land acquisition, grievance redress mechanism and concerns of the community people etc.

The major meetings and interactions held during the course of the preparation this report are summarized in Table-11.

Issues Raised No. of S.N. **Date** Location **Topics Discussed Participants** 18 Khalanga 53 (Male-38, . Socio-economic and Detail Minor correction February Bazzar Female-15) Engineering Design Report was suggested in 2018 presentation the presented 1 Construction of sewer report. system in ward no: 5 and 6 of . Detail sewer Mahakali municipality system to be . Preparing constitution for included in the

Table-11: Summary of Consultations

S.N.	Date	Location	No. of Participants	Topics Discussed	Issues Raised
				Water User and Sanitation Committee . Regarding execution of project	water supply project. Consultation participation minute of meting is attached in Appendix-2a
2	27 January 2020	Khalanga Bazar	10 (Male-9, Female-1)	. Sharing information about required land availability . Discussion about environment protection . Field observation at proposed site	Request Municipality for land availability Need field verification of proposed site with participation of WUSC and Consultant. Minute of meting is attached in Appendix-2b
3	28 January 2020	Mahakali Municipal ity, office	24 (Male-16, Female-8)	Field Observation Detail Engineering Design Estimate Sewerage Management	. Field observation in all site and recommend to study further specially on Kimtadi system . Reduce cost estimate. Minute of meting is attached in Appendix-2c
4	29 January, 2020	Tingkari Communi ty, ward no. 4	19 (Male-3, Female-16)	Introduction about Project Gender equality and women health improvement Women participation and employment opportunity Livelihood enhancement training	. Group discussion with community female Female opportunity and sanitation improvement. Minute of meting is attached in Appendix-2d

S.N.	Date	Location	No. of Participants	Topics Discussed	Issues Raised
	5	Khalanga	11 (Male-11,	. Project component and cost	. Remove the
	February,		Female-0)	estimate	kimtadi,
	2020				khetebagar and
					Kholakhet system
					from this project
					. Relocation of
					Sedimentation
					tank
5					. Remove the slow
					sand filter and
					replace the
					presser filter for
					water treatment.
					Minute of meting
					is attached in
					Appendix-2e

IV. LAND AVAILABILITY, INVOLUNTARY RESETTLEMENT AND INDIGENOUS PEOPLE IMPACTS

A. Findings

- 30. Land is available for construction of project components such as intakes, RVTs, treatment unit, office building, guard houses and public toilet in Khalanga, Bangababar, and Galphai areas. All other water supply components such as transmission mains and distribution network are proposed on government land and public road right-of-way.
- 31. Nearly 2357 sq. m land is required for Intakes, sedimentation tank, RVTs with guard house, office building, and public toilet. The project components will be constructed in Government/Municipality land. Mahakali Municipality has provided consent to use 3639 sq. m land for construction of project components. There are some bushes at the site of water sources. No trees exists in proposed sites where project structures will be built. There is no settlement and other structure on and around the site. Therefore, no IR impacts are anticipated. The WUSC has received consent for use of the land from Mahakali Municipality, which is attached in this report (**Appendix-1b**).
- 32. For construction of an Intake, sedimentation tank and pressure filter for Khalanga system approximately 1220 sq. m land is required at Garku khola intake site. This site is located at ward no. 3 of Mahakali Municipality. The land is public vacant land under ownership of Mahakali Municipality. There are no trees in the proposed land so no tree felling or damage is envisaged. Therefore, there is no involuntary resettlement impact due to project construction activities. Mahakali Municipality has given consent to WUSC for use of the land. Letter is attached in **Appendix-1b.**
- 33. The foothill (place/source) from where the Garaku Khola flows is called 'Manakot' by the local peoples. There is no cultivable land in the downstream of this source. There is no activity related to the use of water such as industries, agriculture farms and other commercial activities. Thus no adverse effect on the downstream community is anticipated.
- 34. At Khalanga site, nearly 540 sq. m land is required for the construction of a RVT. The site is vacant Government land under ownership of Mahakali Municipality. The proposed land is located at ward no. 5 of Mahakali Municipality. 540 sq. m land is provided by Mahakali Municipality. Municipality has given permission to WUSC for land use. The letter is attached in **Appendix-1b**.
- 35. For Galphai system RVT, nearly 260 sq. m land is required. The site is vacant Government land under ownership of Mahakali Municipality. The proposed land is located at ward no. 5 of Mahakali Municipality. 260 sq. m land is provided by Mahakali Municipality. Municipality has given consent to WUSC for land use. The letter is attached in **Appendix-1b.**
- 36. For office building, nearly 300 sq. m land is required and identified in ward no. 4 near sport hall under Mahakali Municipality. The land is vacant Government land thus no compensation is required. There are no any encumbrances and no involuntary resettlement impact is anticipated due to use of land for this project. Consent letter by the Municipality to use land for the project is attached in **Appendix-1b.**
- 37. For the construction of a public toilet, 50 sq. m land is identified at the bus park area, ward no 4 of Mahakali Municipality out of which 37 sq. m will be used for the construction of Toilet. The land is vacant Government land/Mahakali Municipality. No compensation is

required. There are no any encumbrances and no involuntary resettlement impacts are anticipated due to use of land for this project. Consent letter by the Municipality is attached in **Appendix-1b**.

- 38. Transmission mains pipeline of 8.665 km length is proposed within existing Right of Way of government roads/ vacant government land. Likewise, distribution network of 24.432 km is proposed along existing Right of Way of government roads and vacant government land which are free from encumbrances. Hence, no permanent involuntary impacts are anticipated due to laying of transmission mains and distribution lines. No relocation/resettlement impacts or impacts on structures are anticipated along alignment for water supply component of the project.
- 39. Temporary impacts of transmission mains and distribution network laying and house connections will be limited to temporary disturbance in access to shops and residences. The contractor will be required to provide signs at appropriate locations indicating available alternate access routes for movement. The contractor will have to ensure access to shops and residences using simple wooden walkways where required and limit the excavation to 500 m at a time to minimize disruption. No road closures are anticipated during construction; contractor to undertake construction on one side of the road first and on completion of the same start work on the other side to minimize impact on traffic. Provision of house connections may cause temporary disruptions in access to residences during construction. The contractor will be required to maintain access. Construction contracts includes the above provisions.
- 40. Available documents regarding land acquisition, minutes of meeting and photographs of the proposed sites for water supply facilities are annexed to this due diligence report **(Appendix-1, 2 and 3).** Details on land availability are given in Table -12 below.

B. Mitigation Measures

- 41. Impacts on structures are not anticipated at any of the identified sites or alignments for water supply proposed in Khalanga subproject. Temporary impacts of distribution network within rights of way of Government roads and 2210 house connections are limited to potential access disruptions for shops and residences during construction, which will be avoided through good engineering practices. The contractor will undertake construction on one side of the road first and upon completion of the same, start work on the other side to minimize the impact on traffic. The contractor will have to ensure access to shops and residences using simple wooden walkways/planks where necessary and limit the excavation. Hence, loss of livelihood due to temporary loss of access is not envisaged. To minimize disruption where deep trenches and valve chambers are to be constructed, contractor will ensure use of barricade and signage indicating caution of ongoing construction work to avoid potential accidental risks. The contractor will be accountable to provide signage at appropriate locations indicating road closure or available alternate access routes to minimize traffic disruptions. Contractors are responsible for providing Personal Protective Equipment (PPE) to workers and monitor the proper use of it in the site.
- 42. Darchula Urban Water Supply and Sanitation Project is conceptualized as a piped water supply system using surface sources. Its components are proposed considering the topography, land use, settlement pattern and use of existing facilities. This section deals with land requirement for different components of the proposed town project and resettlement impacts. Involuntary resettlement and indigenous people impacts of proposed components are given Table -12.

Table-12: Proposed project components and their Involuntary Resettlement and Indigenous Peoples impact

S.N	Distribution System	Component	Capacit y Length	Require d Land	Availabl e Land	Location	Land ownershi p	Plot Number	IR Impact	IP Impact	Remarks
1	Intake										
1.1	Khalanga System	Proposed Garaku khola stream intake	13.61 lps	300 sq.	2489 sq. m	Mahakali Municipalit y, ward no3	Governme nt land/Muni cipality	Parcel number 240 and 254	Vacant Government land with some bushes at both side around the source. No public or private structure on the site. Therefore, no involuntary resettlement impacts anticipated.	None	Mahakali Municipality has given consent to use land use for construction of a new intake. The consent letter is attached in appendix 1b. Mahakali Municipality, ward 3 provided consent letter to tap and use water source for a new system which is attached in appendix-1d
1.2		Existing Garaku khola Intake Mul- 1 and Mul- 2	4.95 (2.95+2) lps			Mahakali Municipalit y, ward no -3	Governm ent land/Muni cipality		WUSC has been using these sources and land occupied by existing intake for existing Khalanga system. No involuntary resettlement impacts anticipated.	None	Mahakali Municipality has given consent letter to continue tapping and use of water source, attached in appendix-1c

S.N	Distribution System	Component	Capacit y Length	Require d Land	Availabl e Land	Location	Land ownershi p	Plot Number	IR Impact	IP Impact	Remarks
1.3	Bangabag ar System	Existing Malbela Intake Mul-1 and Mul-2	6.18 (2.65+3. 53) lps			Mahakali Municipalit y, ward no3	Governm ent land/Muni cipality		WUSC has been using these sources for existing Bangabagar system. No involuntary resettlement impacts anticipated.	None	Mahakali Municipality has given a consent letter to continue tapping and use of sources, attached in appendix-1c
1.4	Galphai System	Existing Dhauligad Intake Mul-1 and Mul-2	8.61 (4.00+4. 61) lps			Mahakali Municipalit y, ward no5	Governm ent land/Muni cipality		Dhauligad Mul-1 and Mul-2 has been used by WUSC for existing Galphai system and same source will be used for a new system. No involuntary resettlement impacts anticipated.	None	Mahakali Municipality has given a consent letter to continue tapping and use of sources, attached in appendix-1c
2 2.1	Treatment Ur Khalanga System	Sedimentat ion tank	13.61 lps	720 sq. m		Mahakali Municipalit y, ward no3	Governme nt land/Muni cipality	240 and 254 (Same as 1.1)	Vacant Government land with some bushes. No public or private structure on the site. Therefore, no involuntary resettlement impacts anticipated.	None	Consent letter from the Municipality is attached in appendix-1b
2.2		Pressure Filter	13.61 lps	200 sq .m		Mahakali Municipalit y, ward	Governme nt land/Muni	240 and 254 (Same as 1.1)	Vacant Government land with some bushes. No public or	None	Consent letter attached in appendix-1b

S.N	Distribution System	Component	Capacit y Length	Require d Land	Availabl e Land	Location	Land ownershi p	Plot Number	IR Impact	IP Impact	Remarks
3	Reservoir tan	ıke				no3	cipality		private structure on the site. Therefore, no involuntary resettlement impacts anticipated.		
3.1	Khalanga System	Existing -1 RVT and proposed-1 RVT with Guard house	450 (150+30 0) cum	540 sq. m	692+ 540 = 1232 sq. m	Mahakali Municipalit y, ward no5	Governme nt land/Muni cipality	82	Government land with some bushes existing RVT in this location is occupying 692 sq. m of land. No any other public or private structure on the site. Therefore, no involuntary resettlement impacts anticipated.	None	MahakaliMunicipa lity has provided a consent letter to use additional 540 sq. m of land for construction of a new RVT and a guard house. The consent letter attached in appendix-1b. The consent letter by the Ward Office for the same is attached in appendix 1f
3.2	Bangabagar System	2 Existing RVT	225 (150+75) Cum			Mahakali Municipalit y, ward no -4	Governme nt land/Muni cipality		Existing RVT site. No rehabilitation, demolition or construction of new structure proposed. No involuntary resettlement impact	None	

S.N	Distribution	Component	Capacit	Require	Availabl	Location	Land	Plot Number	IR Impact	IP	Remarks
	System		y Length	d Land	e Land		ownershi p			Impact	
									assessed.		
3.3	Galphai System	1 Existing RVT and proposed-1 RVT with a Guard house	220 (100+12 0) cum	260 sq. m	336+260 = 596 sq. m	Mahakali Municipalit y, ward no5	Governme nt land/Muni cipality	877	Vacant Government land with some bushes. There is one existing RVT. No other public or private structure on the site. Therefore, no involuntary resettlement impacts	None	Mahakali Municipality has provided a consent letter which is attached in appendix-1b and a consent letter from Ward Office is attached
									assessed.		in appendix 1e.
4	Transmission	n Mains and Di	stribution	Network	<u> </u>						
4.1	Transmission	mains	8.665 km			Entire project area	Right of the Way of Governme nt roads and Vacant Governme nt land		No encumbrances along the Right of the Way of Government roads and vacant Government lands hence, no involuntary resettlement impact anticipated.	None	-Providing signs at appropriate locations indicating available alternate access routes for movementEnsure continued access to shops and residences
4.2	Distribution No	etwork	24.432 km			Mahakali Municipalit y, ward no4 &5	Right of the Way of Governme nt roads and vacant Governme		No encumbrances along the Right of the Way of Government roads and vacant Government lands hence, no involuntary resettlement impact	None	using simple wooden walkways where required -Limit the excavation to 500 m at a time to minimize disruption -No road closures

S.N	Distribution System	Component	Capacit y Length	Require d Land	Availabl e Land	Location	Land ownershi p	Plot Number	IR Impact	IP Impact	Remarks
							nt land		anticipated.		are anticipated during construction -Undertake construction on one side of the road first and on completion of the same start work on the other to minimize impact on traffic -Minimized the work disruption on coordination with WUSC and Municipality
5	Office building laboratory room hall and cash of the second secon	m, a meeting		300 sq. m	300 sq. m	Mahakali Municipalit y, ward no4	Governme nt land/Muni cipality	84	Proposed land is vacant government land in main Bazar near sports Hall. No any other public or private structure on the site. Therefore, no involuntary resettlement impacts anticipated.	None	Mahakali Municipality and Ward Office has provided consent letters which are attached in appendix 1b and 1e respectively.
6	Public Toilet		5 urinals and 2 pans for male	37 sq. m	50 sq. m	Mahakali Municipalit y, ward no4	Vacant Governme nt land/Muni		Proposed land is vacant government land near New Buspark. No any public or private	None	Mahakali Municipality has provided a consent letter to use of land which

S.N	Distribution	Component	Capacit	Require	Availabl	Location	Land	Plot Number	IR Impact	IP	Remarks
	System		у	d Land	e Land		ownershi			Impact	
			Length				р				
			users, 4				cipality		structures on the		is attached in
			female						site. Therefore, no		appendix-1b
			units						involuntary		
			and a						resettlement impacts		
			unit for						anticipated.		
			personal								
			gender								
			use								
			which								
			will also								
			serve								
			persons								
			with								
			disabiliti								
			es.								
	Total			2357 sq.	3639						
				m	sq. m						

C. Involuntary Resettlement

- 43. As mentioned in ADB's Safeguard Policy, the involuntary resettlement safeguards basically cover 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.
- 44. Nearly 2357 Sq. m of land for construction of different project components is required, which has been acquired by WUSC at 6 different sites. However, no private land needs to be acquired as available land sites are either already owned by WUSC or Public / Government land. For the public land use WUSC has already got consent from Municipality. No settlement will be adversely affected and no need of physical displacement. The adverse impact of the project is minimal and no need of compensation. The details of land requirement and IR/IP impacts are discussed above under separate section-Land Availability and Resettlement Impact.

D. Indigenous Peoples

- 45. According to the ADB's Safeguard policy the Indigenous Peoples safeguards are activated if a project directly or indirectly affects the dignity, human rights, livelihood systems, or culture of Indigenous Peoples or affects the territories or natural or cultural resources that Indigenous Peoples own, use, occupy, or claim as an ancestral domain or asset. The term Indigenous Peoples is used in a generic sense to refer to a distinct, vulnerable, social and cultural group possessing the characteristics such as self-identification as members of a distinct indigenous cultural group; geographically distinct habitats or ancestral territories; distinct customary cultural, economic, social, or political institutions; and a distinct language.
- 46. The proposed project service area comprises multi caste / ethnic groups. Each caste and ethnicity is characterized by its own customs, traditions, culture and nature of occupation with which they are associated. Brahmin and Chhettri, comprising 72.3.2 percent of total families, are the most prevailing caste group in the service area. Janajati are the next major group with 14.7percent, followed by Dalit which constitutes about 11.5 percent and other castes/communities comprise 1.5%.
- 47. The field observation reveals that all the settlements / clusters in the service area are heterogeneous in terms of caste/ethnicity and no specific territory of indigenous people has been observed. Furthermore, in the context of service area, belonging to the indigenous group does not necessarily mean that they are underprivileged. The WUSC policy and rules reflect that all are treated equally and there is no discrimination on receiving water supply service based on ethnicity and caste.
- 48. The impacts on indigenous people will be more positive increasing the access to drinking water and sanitation facilities rather than adverse impacts. No physical displacement and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) of indigenous people is anticipated as a result of land acquisition. Therefore, Indigenous People Plan is not required for this sub-project.

V. CONCLUSIONS

A. Summary and Conclusion

- 49. This Resettlement Due Diligence basically emphasizes on review of safeguard documentation and Involuntary Resettlement and Indigenous Peoples impacts. This report is based on desk review of relevant documents as well as field assessment. The findings of major resettlement due diligence activities are summarized as follows. The impacts of project construction activities will be minimal and there will be no need for physical displacement (relocation, loss of residential land, or loss of shelter) or economic displacement (loss of assets, access to assets, income sources, or means of livelihoods).
- 50. Nearly 2357 sq. m land is required at 6 sites for construction of project structures such as Intakes, RVTs, Treatment units, Office Building and Public Toilet. However, private land acquisition is not required as available land sites are vacant Government land/ Mahakali Municipality and consent letter from the Municipality is provided to use land for construction of required project components which is annexed in this report (Appendix-1). As private land acquisition is not required for the project, no involuntary resettlement and indigenous people's impacts are anticipated.
 - ➤ Though the service area is heterogeneous in terms of caste/ethnicity, no specific territory of indigenous people has been reported. All are treated equally by WUSC and there is no discrimination on receiving water supply service based on ethnicity and caste. Poor indigenous people will be benefitted from OBA service. Therefore, the impact on indigenous people will be more positive increasing the access to drinking water and sanitation facilities rather than adverse impact.
 - There will be no impacts caused by construction activities. If any unforeseen disturbance occurs such impacts will be locally dealt and mitigated, as per the agreed Resettlement Framework. For this, Grievance Redress Mechanism will be effectively implemented and emphasis will be given on information dissemination and frequent interaction with local people and dealing with local issues using a participatory approach.

B. Next Steps

- 51. The following items will be incorporated in updated DDR.
 - (i) Consultation meetings with the communities and stakeholders in intake locations will be held and any concerns or issues raised will be addressed before start of construction, and minutes of meetings will be incorporated in the updated DDR.
 - (ii) Records of land ownership of land for new facilities along with plot number and/or a map from land reform and management office will be provided by the Municipality/ward chairman before start of construction.
 - (iii) Transmission lines transverse through Government land/Right of Way of government roads and require consent letter to use for the same before

construction works start

52. Any significant unidentified Involuntary Resettlement impacts found during project implementation shall be addressed as per the agreed entitlement matrix in the Resettlement Framework. The draft DDR will be updated and ADB's No Objection sought, prior to start of construction.

Appendices

Appendix-1 Certificates and documents related to land acquisition

a. WUSC Registration Certificate



Mahakali Municipality
Office of the Municipality
Khalanga, Darchula
SudurPaschim Province, Nepal

Ref. no.: 2075/076

Dispatch no. 24/ 2075/076

Date: 2075/10/22 (5 February, 2019)

WUSC Registration Certificate

Shree Khalanga Water Supply Sewerage and Sanitation Consumer Committee Mahakali Municipality, Khalanga, Darchula

This certificate has been issued as per the decision of the Water Resources Committee constituted in accordance with article 9 of the water Resources Consumption Procedure 2075 of Mahakali Municipality dated 5 February, 2019 (22 Magh,2075). Please operate in accordance with Water Resources Consumption Procedure 2075.

.....

Signature Yagya Raj Lekhak (Acting Chief Administration Officer) b. Letter from Mahakali Municipality for land use (Construction of Khalanga RVT, Galphai RVT, Garkukhola Source and Sedimentation tank, Office building and Public Toilet)



प.स.०७६/०७७ च.न. 926८

महाकाली नगरपालिका

नगर कार्यपालिकाको कार्यालय खलगा, दार्चुला सदरपश्चिम प्रदेश, नेपाल



(स्थानीय प्रशासन शाखा)

मिति:-२०७६/११/१४

विषय:-सहमती सम्बन्धमा ।

श्री खलंगा खानेपानी ढल तथा सरसफाई उपभोक्ता समिति महाकाली नगरपालिका खलंगा,दार्चुला ।

उपरोक्त सम्बन्धमा तहाँ समितिको च.न. २० मिति २०७६/१९/०५ गतेको सहमती सम्बन्धको पत्रमा उल्लेखित तथा यस महाकाली नगरपालिका बडा नं. ३, ४ र ५ बडा कार्यालयबाट सिफारीस भई आएको आधारमा बडा नं. ३ ,४ र ५ स्थित तपशिलका कि.न.हरुमा खलंगा शहरी खानेपानी तथा सरसफाई आयोजनाको भौतिक संरचना निर्माण गर्न आवश्यक जग्गाहरुका लागि सहमती प्रदान गरिएको ब्यहोरा सिफारीस गरिन्छ ।

नगर प्रमुख

तपशिल

९ वडा नं, ४ को कि.न.८२ को सार्वजनीक जग्गा मध्ये ५४० वर्ग मि.

२ व्हा नं. ३ को कि.न. २४० र २५४ को सार्वजनीक जरगा मध्ये २४८९ वर्ग मि.

३ वडा नं, ५ गल्फैना ट्याङ्की निर्माणका लागि पुरानो १०० घ.मि.को ट्याङ्की नजिकको जग्गा मध्ये २६० वर्ग म. सार्वजनीक जग्गा

४ वडा नं. 😮 किन. 🖒 को कवड हल नजिकको सार्वजनीक जग्गा मध्ये ३०० वर्ग मि.

५ सार्वजनीक शौचालय निर्माणका लागि बसपार्क नजिकको ५० वर्ग मि.

होन नं093-420137ईमेल mmdarchula@gmail.com, website www.mahakalimundarchula.gov.np

MAHAKALI MUNICIPALTIY OFFICE OF THE MUNICIPAL COUNCIL KHALANGA DARCHULA SUDURPASHCHIM PROVINCE, NEPAL

Letter No: 2076/077 Date: 26th February 2020

Reference No: 1278

Subject: Regarding Consent/Permission

To,

Khalanga Water Supply and Sanitation User Committee, Mahakali Municipality, Khalanga, Darchula.

As mentioned in the subject matter, we would like to inform that Mahakali Municipality Office provides permission for the use of land as per following details as recommended by ward offices of wards 3, 4 and 5 for the land required for construction of infrastructure for Khalanga Urban Water Supply and Sanitation Project. The details of land are provided below:

Details:

- (1) Ward number 5; Plot number 82: out of this 540 sq. m. of public land
- (2) Ward number 3; Plot numbers 240 & 254: out of these 2489 sq. m. of public land
- (3) Ward number 5; for construction of tank under Galphai system 260 sq. m. of public land near existing $100 \, \text{m}^3$ tank site
- (4) Ward number 4; Plot number 84: out of this 300 sq. m. of public land near the Covered-Hall
- (5) For construction of public toilet, 50 sq. m. land near the bus park

Hansh Raj Bhatta
Mayor
(STAMPED AND SIGNED)

c. Consent letter from Mahakali Municipality to tap water from existing sources



महाकाली तगरपालिका

नगर कार्यभालिकाको कार्यालय खलेगा दार्नुला सदरपश्चिम प्रदेश, नेपाल

प.स.०७६/०७७

च.न. 9683 (क)

(<u>स्थानीय प्रशासन शाखा</u>)

मिति:-२०७७/०२/२२

त्रिषय:-सहमति सम्बन्धमा ।

श्री खलङ्गा खानेपानी ढल तथा सरसफाई उपभोक्ता समिति, खलङ्गा, दार्जुला ।

उपरोक्त सम्बन्धमा महाकाली नगरपालिका वडा न. ४ र ५ मा संचालन हुन गइरहेको खलङ्गा शहरी खानेपानी तथा सरसफाई आयोजनाको लागि महाकाली नगरपालिका भित्र खलङ्गा खानेपानी तथा सरसफाइ उपभोक्ता लिभितिल नै प्रयोग गरिरहेको पुराना मुहानहरूबाट समेत तपसिलमा उल्लेखित आवश्यक पानी प्रयोग गर्न यस नगरपालिकाको सहमति रहेको व्यहोरा जानकारी गराइन्छ ।

तपसिल:-

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- 7	मलवेलामूल १ र २	महाकाली नगरपालिका वडा ३	4.9⊂
1	हौसीगांड मूल १ र र	महाक्राली नगरपालिका वडा ५	c.६१

हेसरीज भेड़ नगर प्रमुख

फोन नं193-120137ईमेल mmdarchula@gmail.com, website.www.mahakalimundarchula.gov.np

MAHAKALI MUNICIPALTIY OFFICE OF THE MUNICIPAL COUNCIL KHALANGA DARCHULA SUDURPASHCHIM PROVINCE, NEPAL

Letter No: 2076/077 Date: 4th June 2020 (2077/02/22)

Reference No: 1793

Subject: Regarding Consent

To,

Khalanga Water Supply and Sanitation User Committee, Khalanga, Darchula.

As mentioned in the subject matter, we would like to inform that Mahakali Municipality has agreed to use of water from the existing source for Khalanga Urban Water Supply and Sanitation Project to be implemented in ward number 4 and 5 of Mahakali municipality. The mentioned existing source is being used by Khalanga water supply and sanitation committee.

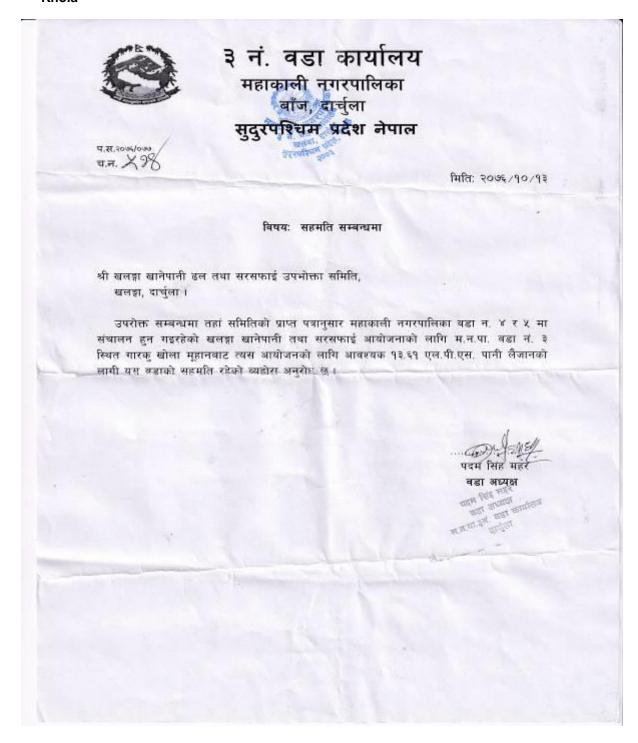
Followings:

S.N	Existing source	Location of source	Quantity of water as per design (lps)	Remarks
1	Garaku Khola Mul-1, Mul -2	Mahakali Municipality ward no. 3	4.95	
2	Malumela Mul-1, Mul-2	Mahakali Municipality ward no. 3	6.18	
3	Dhauligad Mul-1, Mul-2	Mahakali Municipality ward no. 5	8.61	

.....

Hansh Raj Bhatta Mayor (STAMPED AND SIGNED)

d. Consent Letter from Mahakali Municipality, ward no. 3 for tapping water from Garaku Khola



Mahakali Municipality Office of the Ward no. 3 Bajh Khalanga, Darchula Sudurpaschim Province, Nepal

Letter No: 2076/077 Date: 27January, 2020

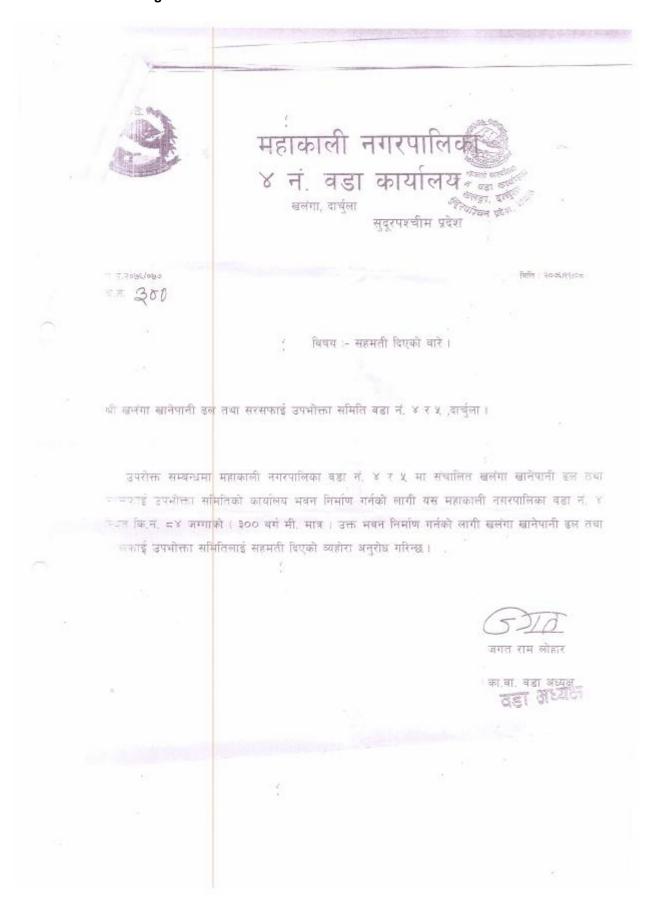
Reference No: 524

Sub: Regarding Consent

Khalanga Water Supply and Sanitation User Committee Khalanga, Darchula

With reference to the above subject matter, according to the letter received from the water user committee, ward No. 3 has agreed to give permission to use 13.61 lps of water from the Garku Khola source of this ward for the Khalanga water supply and sanitation project to be implemented in ward No. 4 and 5 of Mahakali municipality.

Padam Sing Mahar Ward Chairman e. Consent letter from ward no. 4 Mahakali Municipality to land use for construction of office building



Mahakali Municipality Office of the Ward no. 4 Khalanga, Darchula SudurPaschim Province, Nepal

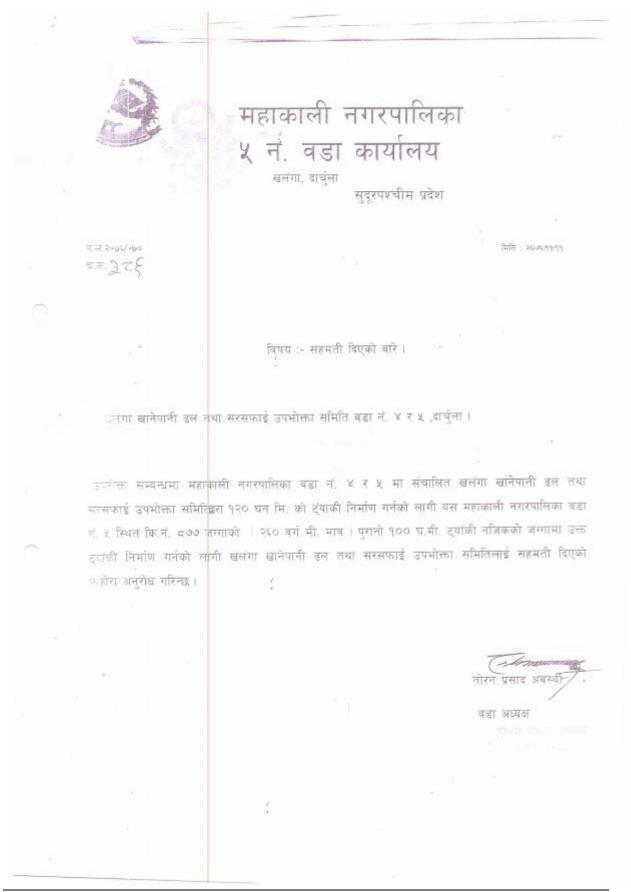
Letter No: 2076/077 Date: 22 February, 2020 Reference No: 300

Sub: Regarding Consent

Khalanga Water Supply and Sanitation User Committee ward no. 4 and 5 Khalanga, Darchula

With reference to the above subject matter, Mahakali Municipality ward no.4 has given permission to Khatanga urban water supply and sanitation user committee for use of the 300 sq.m. public land of plot no. 84 within ward no. 4 for the construction of office building of khalanga water supply and sanitation committee under implementing urban water supply and sanitation project.

Jagat Ram Lohar Acting Ward Chairman f. Consent letter from ward no. 5 Mahakali Municipalty to land use for construction of RVT of Galphai system



Mahakali Municipality
Office of the Ward no. 5
Khalanga, Darchula
SudurPaschim Province, Nepal

Letter No: 2076/077 Date: 23 February, 2020

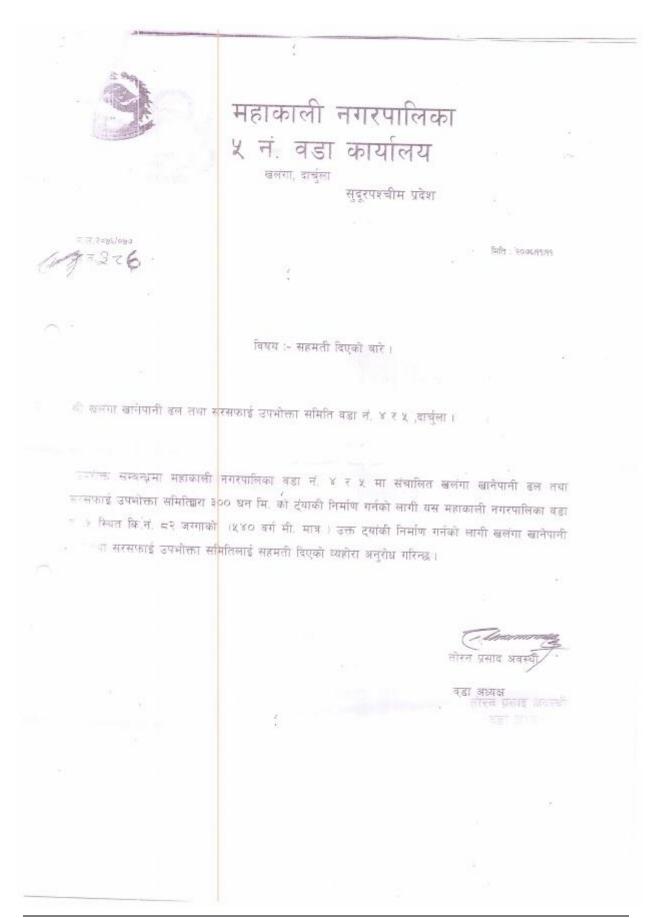
Reference No: 386

Sub: Regarding Consent

Khalanga Water Supply and Sanitation User Committee ward no. 4 and 5 Khalanga, Darchula

With reference to the above subject matter, Mahakali Municipality ward no. 5 has given permission to Khalanga urban water supply and sanitation user committee for use of260 sq. m public land of plot no. 877 nearest of existing 100 cum RVT located at ward no. 5 for the construction of 120 cum RVT under implementing khalanga urban water supply and sanitation project.

Toran Prasad Awasthi Ward Chairman g. Consent letter from ward no. 5 Mahakali Municipalty to land use for construction of RVT of Khalanga system



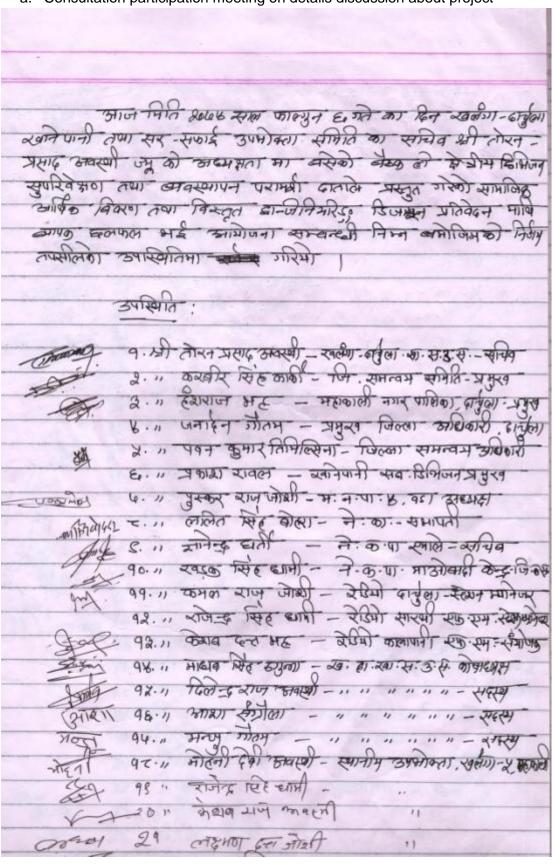
Mahakali Municipality Office of the Ward no. 5 Khalanga, Darchula SudurPaschim Province, Nepal

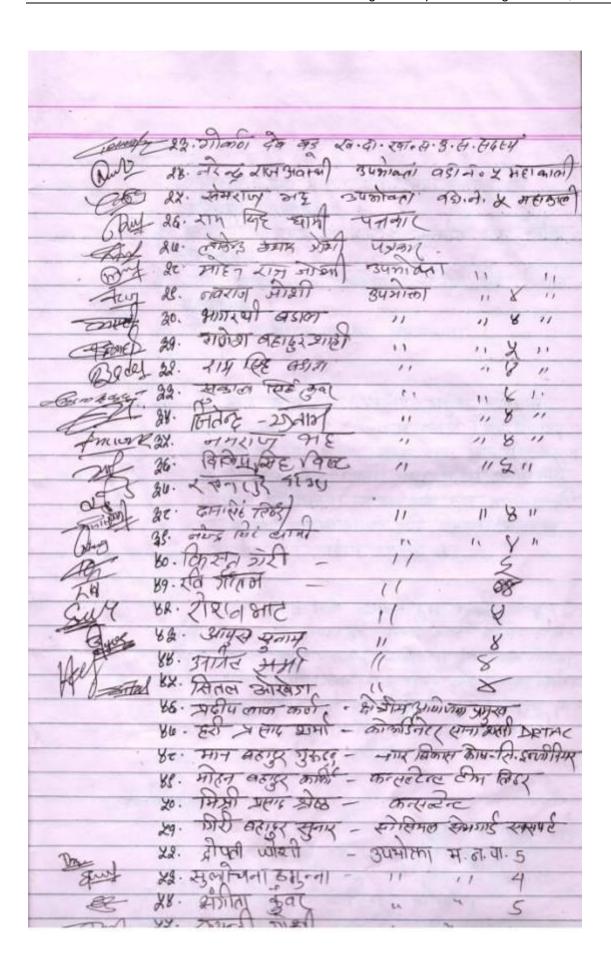
Letter No: 2076/077 Reference No: 387	Date: 23 February, 2020
Sub: Regarding Consent	
Khalanga Water Supply and Sanitation User Committee ward no. 4 and 5 Khalanga, Darchula	
With reference to the above subject matter, Mahakali Murpermission to Khalanga urban water supply and sanitation sq.m public land of plot no. 82 located at ward no. 5 for the under implementing khalanga urban water supply and sanitat	user committee for use of 540 e construction of 300 cum RVT

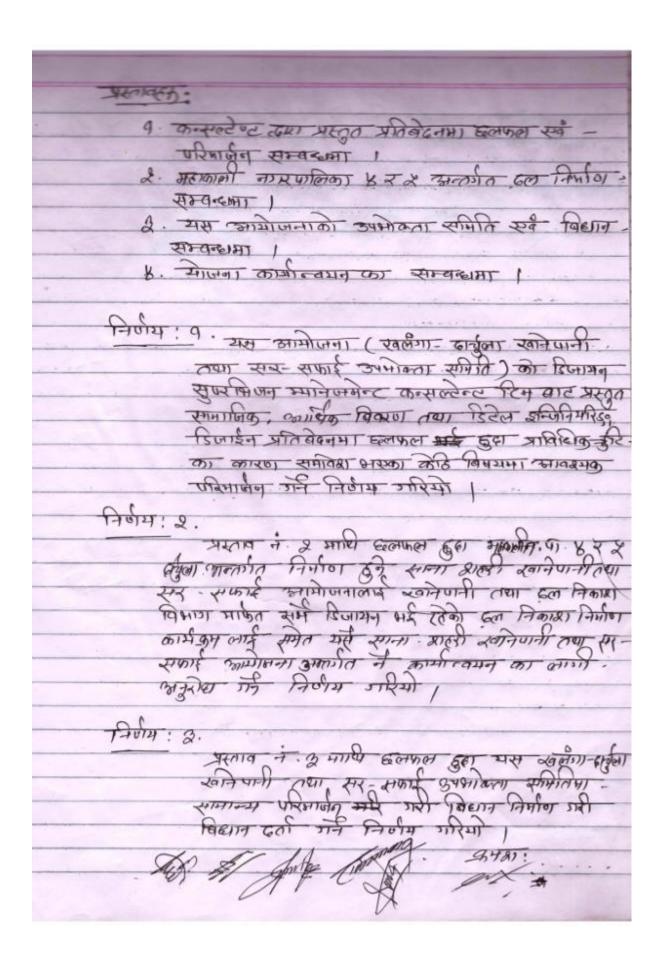
Toran Prasad Awasthi Ward Chairman

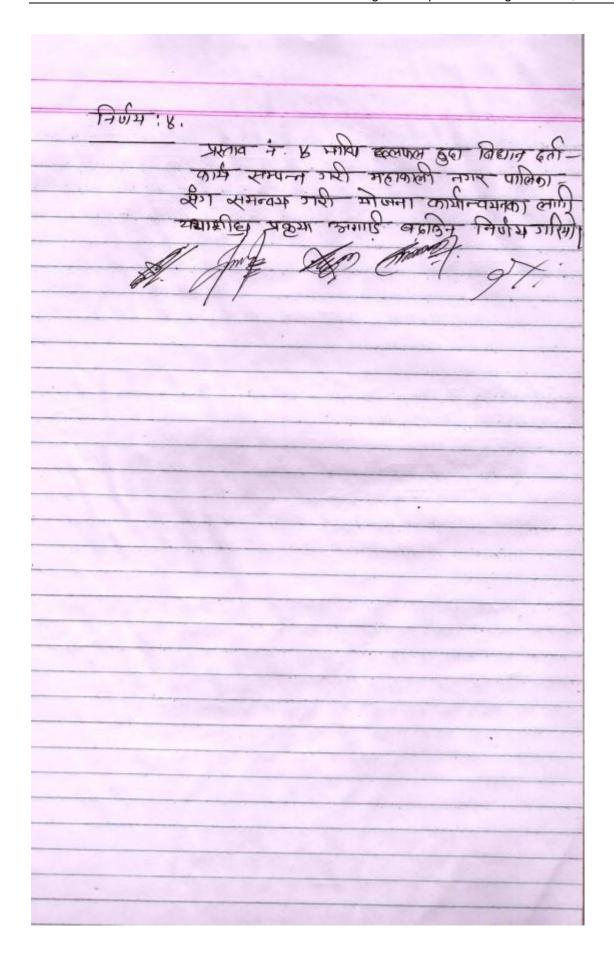
Appendix-2 **Minutes of Meeting related to Land Acquisition**

a. Consultation participation meeting on details discussion about project









Today on 18 February, 2018, a meeting was held in the leadership of Mr. Toran Awasthi, secretary of Khalanga-Darchula Drinking Water User and Sanitation Committee and following participants had acquired information of Detail Engineering Design Report including Socio-economic Report presented by regional design and supervision consultant team.

Attendance:

- 1. Toran Prasad Awasti, Secretary WUSC
- 2. Karbir Singh Karki, Head of district coordination committee
- 3. Hari Raj Bhatta. Mayor-Mahakali Municipality
- 4. JanardhanGautam, Chief District Officer
- 5. Pawan Kumar Timalsina, Officer of district coordination committee
- 6. PrakashRawal, Division Chief of Water Supply and Sanitation
- 7. Puskar Raj Joshi, Ward Chairman of Mahakali Municipality-4
- 8. Lalit Singh Bohara, Chairman of Nepali Congress
- 9. GynandraGharti, Secretary of Nepal Communist Party Ma.Le.
- 10. Khadak Singh Dhami, Nepal Communist Party Maoist
- 11. Kamal Raj Joshi, RedioDarchula station manager
- 12. Rajendra Singh Dhami, Radio sarthi FM
- 13. Keshav Datta Bhatta, Radio Kalapani FM
- 14. Madhav DattaThagunna
- 15. Dilendra Raj Awasti
- 16. Asha Sangraula
- 17. Manju Gautam
- 18. Mohani Devi Awasti
- 19. Rajendra Singh Dhami
- 20. Keshab Raj Awasi
- 21. Laxman Dutta Joshi
- 22. Gokarna Dev Badu

- 23. Narendra Raj Awasti
- 24. Khem Raj Awasti
- 25. Ram Singh Dhami, Journalist
- 26. Lokendra Joshi, Journalist
- 27. Mohan Raj Joshi
- 28. Nawaraj Joshi
- 29. Bhagrathi Badal
- 30. Ganesh Bahadur Sahai
- 31. Ram Singh Badal
- 32. Sakal Singh Kunwar
- 33. Jitendra Sunam
- 34. Nawaraj Bhatta
- 35. Dilip Singh Bista
- 36. Rajan
- 37. Dhan Singh Tiwari
- 38. Narendra Singh Dhani
- 39. Kisan Gauri
- 40. Rabi Gautam
- 41. Roshan Bhatta
- 42. Aapush Sunam
- 43. Anit Sharma
- 44. Shital Okheda
- 45. Pradip Lal Karna, Regional Project Manager
- 46. Hari Prasad Sharma, coordinator DRTAC
- 47. Man Bahadur Gurung, Senior Engineer TDF
- 48. Mohan Bahadur Karkee, Team Leader Design and Supervision Consultant
- 49. Mishri Prasad Shrestha, GESI Expert BDA

- 50. Giri Bahadur Sunar, Social Safeguard Specialist BDA
- 51. Dropati Joshi
- 52. Sulochana Thagunna
- 53. Sangita Kunwar

Agendas

- 1. Regarding discussion and editing of presented consultant reports
- 2. Regarding construction of sewer system in ward no: 5 and 6 of Mahakali municipality
- 3. Regarding the preparing of constitution of Water User and Sanitation Committee
- 4. Regarding execution of project

Decisions

- 1. It was decided to edit some of the missing part in the presented report of design and supervision consultant appointed for Khalanga-Darchula Water supply project.
- 2. Department of Water Supply and Sanitation is doing survey for the management of sewer system in Mahakali municipality so third water supply and sanitation sector project should include the sewer system in the project.
- 3. It was decided to reform the existing water user committee of Khalanga-Darchula and prepare its constitution.
- 4. After the preparation of constitution, it was agreed to register it in the concerned office and consult and coordinate with Mahakali municipality to execute the project work.

b. Short discussion meeting with WUSC

मन मिति २०६६/१०/१६ जोत्ना वित रवलद्वा (यानीला) शहरी रवानेपानी नवा सरमापाई आत्रोजना को Detail Design को अभाग मार्शिक क्या वानावरंगीय विषयहत दलका पर्न तथा पिलड मिरिअएमा लाजि। तथा DDR प्रतिबेध्न र 100 प्रतिबेधन लागि जानका काजावपत्र मुखाइन यस रक्तु (रार्क्स) सामेग्री उपभोक्ता या गितेको कार्यालयमा भिन्तापुसाले उपस्थितिमा क्लिम्ल बायल क्यों. क मं नाम/मंद्रशा 9. 5120 2)3] (maxisn) 52247229 L 2. 120-5 2101 310101 (31124744) SERCESICES = 3. 22-2 213 6013401 - 8682232XX 8. 200 2101 3101-X (15514311) 96X8X20807 4. 310181 QUET (YIB Fam) 9864646 इ. हीरदिवीस्री (कमचारी) SEXECSE3SS 6. Girian 21m 313241 (") SEEE884372 र राजे-इ विह बडाल (उपनावता) 9868466190 3 मोजेंग माक्स , वस्ताल मिनम (हाम) १८४३२०३३३) १० कराव बुद्धाना , भागतिम मिलिम (८००) १९५१८१८ ५१८ 99 द्यमणलका विकाहय 9. यस ह्याओडमाना संस्थाता निर्माण सम्त्या द्वी दमनत ठारी सो में लाशि क्षावरत्रक जन्मा सिमितिले प्राथमी हा निकालि गरी कारणती न्यामित्वमा लिन्दु पोर जात्मारी अराहिमी। २. वात्रवाणीय अवरका सम्भातताहरूम प्राथमिन कनमान जारी नरिमाली और भग, खरवन निमन्त्रमा, नाममारको सरमा ज्याना विषयम विस्तृत बन्दल अटियो। 3.10 रा का तथा व अभोता स्वीधानिका अतिनिक्ति साहमार्गियामा Design Team की समामले पूर्व स्थालाम अवभागत र स्थानीत विक भेटहार अने निर्वाध अरिमी

Today on 27 January, 2020, a discussion meeting was held in the office of Khalanga urban water supply and sanitation committee with the following participation and meeting has made a discussion about collection of essential document for DDR and IEE, regarding the subject matter of Social and environment.

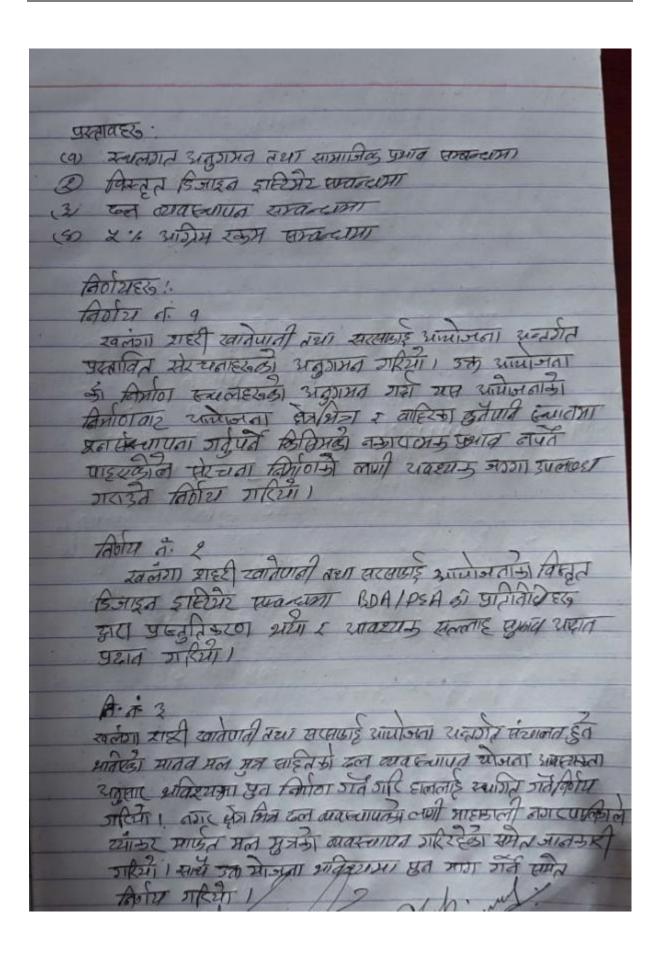
Attendance:

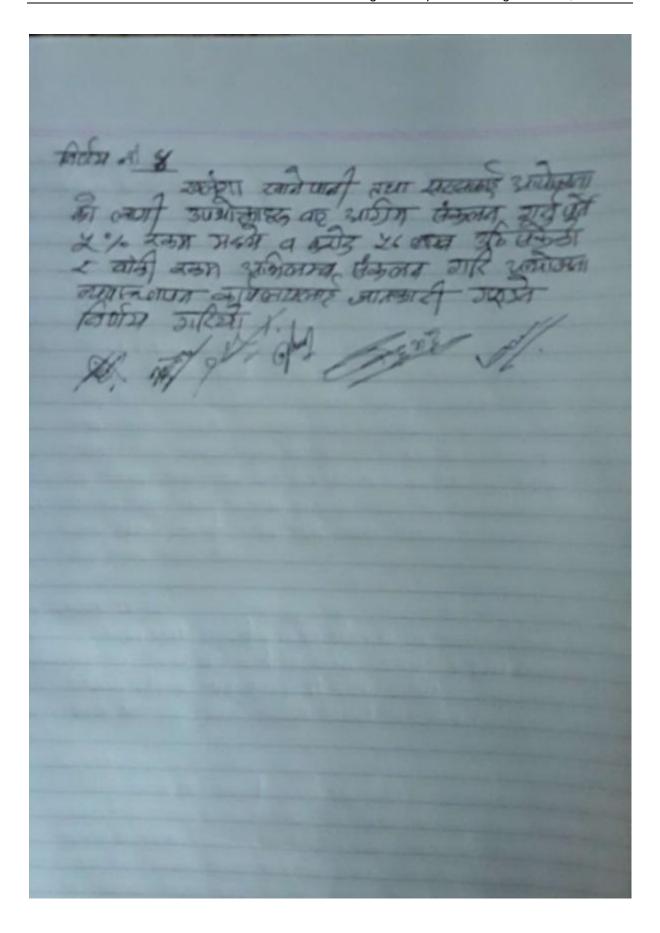
- 1. Jayadev Joshi Chairparson, Khalanga WUSC
- 2. Dilendra raj Awasthi- Vice Chair person, Khalanga WUSC
- 3. Devendra Bhatta, Member, Khalanga WUSC
- 4. Bhupendra raj Awasthi- Member, Khalanga WUSC
- 5. Ganesh Shahi- Tecnician, Khalanga WUSC
- 6. Hiradevi Airi- official, Khalanga WUSC
- 7. Janak raj Awasthi- Official, Khalanga WUSC
- 8. Rajendra Sing Badal- Consumer
- 9. Yogesh Shakya- Consultant, BDA/PEA
- 10. Keshav Dhungana- Consultant, BDA/PEA

Subject of Discussion:

- Information sharing with each other about the required land was undertaken. It was decided to finalize the required land and that it should be under the ownership of WUSC.
- 2. Initially, discussion was held about the probability of environment impact and meeting participants held detailed discussions about the preservation of greenery, control of environment pollution, protection of labor.
- 3. It was decided that field visit would be undertaken by design team along with the representatives of Khalanga urban water supply and sanitation committee to observe and interact with community at proposed water component area.

c. Consultation and participation meeting with WUSC and Municipality officials 2068/90/48 गर्म खलेगा राहर 6 10 213, 2017 3110 वाहोरा, नगट उपभुमुख म सिंद महर, वडा अहरात (5) (9) 211021 UCINZISIAI BDAIDEA) (81





Today on 28 January 2020, a meeting was held in the leadership of Mr. Jayadev Joshi, Chairman of Khalanga Water Supply and Sanitation User Committee, Meeting has made following discussion and decision in participation of following:

Attendance:

- 1. Jayadev Joshi Chairparson, Khalanga WUSC
- 2. Dilendra raj Awasthi- Vice Chair person, Khalanga WUSC
- 3. Khadak Sing Dhami- Secretary, Khalanga WUSC
- 4. YasodaTikari- Treasurer, Khalanga WUSC
- 5. DevendraBhatta, Member, Khalanga WUSC
- 6. Bhupendra raj Awasthi- Member, Khalanga WUSC
- 7. Madhav Sing Thagunna-Member, Khalanga WUSC
- 8. HansaShahu-Member, Khalanga WUSC
- 9. AashaSadashankar- Member, Khalanga WUSC

Special Guest:

- 1. Hansa Raj Bhatta- Mayor, Mahakali Municipality
- 2. SunaBohara- Deputy Mayor, Mahakali Municipality
- 3. Padam Sing Mahar- ward Chairperson- Ward no. 3
- 4. Puskar Raj Joshi- ward Chairperson- Ward no. 4
- 5. Toran Prasad Awasthi- ward Chairperson- Ward no. 5

Others guest:

- 1. YogeshShakya- Consultant- BDA/PEA
- 2. KeshavDhungana-Consultant- BDA/PEA
- 3. Gopal Sing Dhami- Local Consumer
- 4. Hira Devi Airi- Local Consumer
- 5. Gahar Sing Shahu- ward Chairperson, ward no. 2
- 6. Ram lalChunara- Member, Mahakali Municipality
- 7. Tikendra Prasad Awasthi- Member, Mahakali Municipality
- 8. PradeshiSunar Member, Mahakali Municipality
- 9. Nara Karki Member, Mahakali Municipality

Agendas

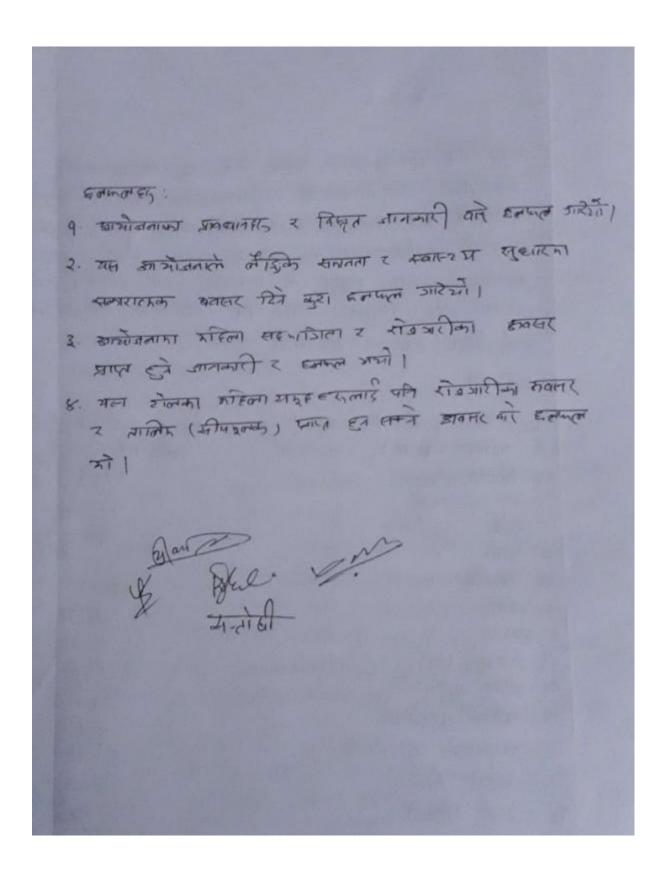
- 1. Regarding the field monitoring and social impact
- 2. Regarding the detail design estimate
- 3. Regarding the sewerage management
- 4. Regarding the 5% upfront cash contribution.

Decisions

- 1. Site visits under proposed Khalanga urban water supply and sanitation project were conducted. It has been observed by consultant team along with WUSC representative that there will be no social impact to the community and people. So, it was decided to provide the required land for proposed site.
- 2. Presentation about the detailed engineering design estimate of Khalanga urban water supply and sanitation project was presented by BDA/PEA representatives and interaction and discussion meeting allowed some suggestion to be given to each other about the design of the project.
- 3. It was decided to do close the sewerage program under Khalanga urban water supply and sanitation project in the present situation, as the sewerage management program of Khatanga Bazar is under implementation by Mahakali Municipality, through tankers. Hence, the demand for the sewerage program will be presented to concerned office for reimplementation in future.
- 4. Rs. 15700000 has been collected as 5 % upfront cash for Khalanga urban water supply and sanitation project until this day. Meeting (participants) decided to collect the remaining amount as per need and inform to project management office as soon as possible.

d. Consultation and participation meeting with community women

d. Consultation and participation meeting with con	Timumity Women
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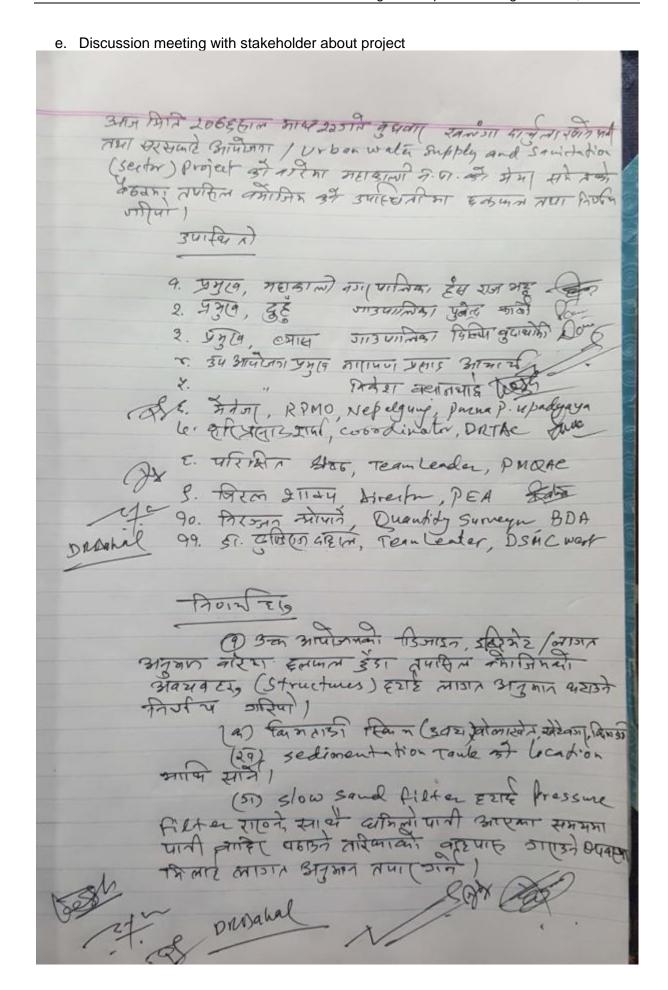
Today on 29 January, 2020, meeting was held in the ward no.4 TikarkhedaTole in the following participation and meeting has made discussion about the what probability can be of an opportunity and affect towards women and whole society from implementing the water supply and sanitation program under Khalanga urban water supply and sanitation project.

Attendance:

- 1. Jayadev Joshi Chairparson, Khalanga WUSC
- 2. Yasoda Tinkari-Treasurer, Khalanga WUSC
- 3. Bishni Tinkari- User of ward no. 4
- 4. Santoshi Tinkari- User of ward no. 4
- 5. Sumitra Budhathoki- User of ward no. 4
- 6. Puspa Budhathoki- User of ward no. 4
- 7. Basanti Budhathoki- User of ward no. 4
- 8. Aasha Budhathoki- User of ward no. 4
- 9. Chhambar Budhathoki- User of ward no. 4
- 10. Bagmati Tinkari- User of ward no. 4
- 11. Mina Budhathoki- User of ward no. 4
- 12. Bhagita Budhathoki- User of ward no. 4
- 13. Shakuntala Budhathoki- User of ward no. 4
- 14. Anti Tinkari- User of ward no. 4
- 15. Usha Tinkari- User of ward no. 4
- 16. Saraswoti Tinkari- User of ward no. 4
- 17. Parbati Tinkari- User of ward no. 4
- 18. Keshav Dhungana- Consultant, BDA/PEA
- 19. Yogesh Shakya- Consultant, BDA/PEA

Subject of Discussion:

- 1. Discussion has made about the implementation process and details information of project.
- 2. Discussion has held on positive aspect of project in health improvement and Gender equality.
- 3. Discussion has held to obtain the employment opportunity and women participation in project.
- 4. Discussion has held to achieve the opportunity of livelihood enhancement training for women.



Today on 5 February, 2020, meeting was held in the participation of Mayor of Khalanga Municipality and other following respective and discussion and decision has made about the Khalanga-Darchula water supply and sanitation project under urban water supply and sanitation project.

Attendance:

- 1. Hansa Raj Bhatta Mayor, Mahakali Municipality
- 2. Pulendra Karkee- Chairperson, Duhu Rural Municipality
- 3. Dilip Budhathoki- Chairperson, Byans Rural Municipality
- 4. Narayan Acharya- Deputy project Director, UWSSSP
- 5. Bikesh Wadandhyachhya- Deputy project Director, UWSSSP
- 6. Purna Prasad Upadhyaya- Regional Project Manager, Nepalguni
- 7. Hari Prasad Sharma Coordinator, DRTAC
- 8. Parichhit Shrestha-Team Leader, PMQAC
- 9. Tri ratna Shakya- Director, PEA
- 10. Niranjan Neupane- Quality Surveyor, BDA
- 11. Dr. Dhundi Raj Dahal- Team Leader, TSTWSSSP

Decision:

- Meeting has discussed aabout the project design and cost estimate and It was decided to reduce the project cost and remove the following structure from this project design:
 - Kimtadi sub system (3 skim Khetebagar, Kholakhet and Kimtadi)
 - Replace the location of Sedimentation tank to upper side
 - Include the pressure filter in the replacement of slow sand filter and managed the washout system to avoid the turbidity of water and prepare the cost estimate as per the decision.

Appendix-3

PHOTOGRAPHS





Darchula Bazar

Existing Structure of Galphai System ward no. 5



New Proposed site for RVT in Gulphai System ward no. 5



Existing Khalanga Bazar System ward no. 4&5



Existing RVT of Khalanga Bazar System at ward no.



Proposed site for RVT construction at ward no. 4



Existing Bangabagar System ward no. 4



Existing Bangabagar System ward no. 4



Existing Bangabagar System ward no. 4



Proposed Intake site at Garakukhola for Khalanga



Existing Intake site at Garaku Mul-1 and Mul-2 located at ward no. 3,



Interaction meeting with Municipality officials



Proposed land for WUSC office building located at ward no.4



Proposed land for public toilet located at ward no. 4



Consultation Meeting with WUSC, Ward Chair Person and Municipality officials



Consultation meeting with Women's group



Location of Proposed alignment for transmission main pipeline



Right of Way where distribution distribution pipes will be laid

Appendix-4

SOCIAL SAFEGUARDS SCREENING CHECKLIST

Country	Nepal	
Subproject Name	Khalanga Urban Water Supply and Sar	nitation Sub- Project
Date	04 May 2018 (updated date: March, 20	020)

I. Resettlement Impact Checklist

(Note: Involuntary Land Acquisition is not required for the town project)

A.	Probable Resettlement Effects	Yes	No	Not Known	Remarks
Ac	quisition of Land	1	T	•	
1.	Will there be land acquisition?	V			Nearly 2357 sq. m of land is required for different project components such as intake, Treatment units, RVTs, office building, guard houses and public toilet. Mahakali Municipality has provided consent to use land for construction of project components. No acquisition of private land is envisaged.
2.	Is the site for land acquisition known?	V			
3.	Is the ownership status and current usage of land to be acquired known?				The ownership of lands is under the municipality. Six sites of land for construction are already owned by WUSC. For the use of public land, WUSC has got consent from Mahakali municipality
4.	Will easement be utilized within an existing Right of Way (ROW)?				
5.	Will there be loss of shelter and residential land due to land acquisition?		V		There will be no loss of shelter and residential building/houses due to land acquisition.

6.	Will there be loss of agricultural and other productive assets due to land acquisition?	,	V		Since the acquired land is non- agricultural land, there is no impact on agriculture and other productive assets.
7.	Will there be losses of crops, trees, and fixed assets due to land acquisition?		V		The proposed land is vacant with some bushes. Hence crops, trees and fixed assets are not affected.
8.	Will there be loss of businesses or enterprises due to land acquisition?		V		
9.	Will there be loss of income sources and means of livelihoods due to land acquisition?		V		Loss of income source and means of livelihoods will not be affected due to vacant government land use.
Inv	oluntary restrictions on land rks and protected areas	use or or	n ac	cess to	legally designated
	Will people lose access to natural resources, communal facilities and services?		V		There is no any designated park and protected area in or near to the project. The obtained land is vacant with some bushes on the site. Since loss of vegetation will be insignificant, local people will not lose access to natural resources.
11.	If land use is changed, will it have an adverse impact on social and economic activities?		V		Construction of small structures on small size of public/government vacant lands will not result chance in land use, and hence adverse impact on social and economic activities will not occur.
12.	Will access to land and resources owned communally or by the state be restricted?		V		There is no any land and Resources owned by community.
	ormation on Displaced Persons	•			
	y estimate of the likely number of placed by the Subproject?	persons th	at wi	ill be	[√]No [] Yes
If y	ves, approximately how many?				N/A
	e any of them poor, female-heads verty risks?	of househo	olds,	or vulne	erable to [√]No [] Yes
	e any displaced persons from indiq nority groups?	genous or e	ethni	С	[√] No [] Yes

2. Indigenous Peoples Impact Screening Checklist

(Key Concerns (Please provide elaboration of the Remarks column)	Yes	No	Not Known	Remarks
Ind	ligenous Peoples Identification				
1.	Are there socio-cultural groups present in or use the subproject area who may be considered as "tribes" (hill tribes, schedules tribes, tribal peoples), "minorities" (ethnic or national minorities), or "indigenous communities" in the subproject area?		√		The service area of the subproject is heterogeneous in terms of ethnicity/caste and culture, and no specific territory of indigenous people or socio-cultural groups has been observed. Most Janajati and Dalit in sub-project areas are socially, economically and politically integrated into the mainstream society, and no adverse impacts on indigenous peoples groups or communities are assessed.
3.	Are there national or local laws or policies as well as anthropological researches/studies that consider these groups present in or using the subproject area as belonging to "ethnic minorities", scheduled tribes, tribal peoples, national minorities, or cultural communities? Do such groups self-identify as being part of				Not applicable Not applicable
J.	a distinct social and cultural group?				
4.	Do such groups maintain collective attachments to distinct habitats or ancestral territories and/or to the natural resources in these habitats and territories?				Not applicable
5.	Do such groups maintain cultural, economic, social, and political institutions distinct from the dominant society and				Not applicable

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	culture?	
6.	Do such groups speak a distinct language or dialect?	Not applicable. The ethnic groups in the service area speak their own distinct languages among their members, but Nepali is spoken as common language.
7.	Has such groups been historically, socially and economically marginalized, disempowered, excluded, and/or discriminated against?	Not applicable
8.	Are such groups represented as "Indigenous Peoples" or as "ethnic minorities" or "scheduled tribes" or "tribal populations" in any formal decision-making bodies at the national or local levels?	Not applicable

B. Identification of Potential Impacts

(1	Key Concerns Please provide elaborations of the Remarks column)	Yes	No	Not Known	Remarks
9.	Will the subproject directly or indirectly benefit or target Indigenous Peoples?		√		100% of the population in the coverage area will be benefited.
10.	Will the subproject directly or indirectly affect Indigenous Peoples' traditional socio-cultural and belief practices? (e.g. child-rearing, health, education, arts, and governance)		V		
11.	Will the subproject affect the livelihood systems of Indigenous Peoples? (e.g., food production system, natural resource management, crafts and trade, employment status)		V		
12.	Will the subproject be in an area (land or territory) occupied, owned, or used by Indigenous Peoples, and/or claimed as ancestral domain?		√		
	dentification of Special Requirements I the subproject activities include				

13.	Commercial development of the cultural resources and knowledge of Indigenous Peoples?	V	
14.	Physical displacement from traditional or customary lands?	√	
15.	Commercial development of natural resources (such as minerals, hydrocarbons, forests, water, hunting or fishing grounds) within customary lands under use that would impact the livelihoods or the cultural, ceremonial, spiritual uses that define the identity and community of Indigenous Peoples?	√	
16.	Establishing legal recognition of rights to lands and territories that are traditionally owned or customarily used, occupied or claimed by indigenous peoples?		
17.	Acquisition of lands that are traditionally owned or customarily used occupied or claimed by indigenous peoples?	V	

Appendix-5

OBA selection process and BPL calculation threshold sheet

Proposed Poverty Threshold for Identification of Poor Household in UWSSP

The proposed threshold has been revised as per the data received from Nepal Living Standard Survey-III (NLSS-III-2010/2011) conducted by National Planning Commission, Nepal. Based on the results of the survey, the poverty line for Nepal, in average 2010-11 prices, has been estimated at Rs. 19,261; the food poverty line is Rs. 11,929 (per capita consumption 2,220 Kcal per day) and the non food poverty line Rs. 7,332.

Poverty indicator has been refined based on the annual data of Consumer Price Index which has been published by Nepal Rastra Bank. Calculating the increased annual ratio of index against the estimated poverty line of Rs 19261 adopted from NLSS-2010/2011, poverty line has been revised and proposed for UWSSP.

The revised poverty line will be utilized as major indicator of poverty. It shall be used in selection of poor household within the community for delivering OBA service and free subsidized tap connection. Similarly, upfront cash shall be reimbursed after verification of poor household within the urban project. The data shows that average 4.2 to 9.9% of increment has been observed annually. Hence, annually increment since the base year of 2010-11 has been adopted and poverty threshold has been proposed.

Hence, poverty line is estimated NRs.13500 (round figure) monthly for a household and average household size is 4.8 which have been adopted from census survey results of CBS -2011.

The below table has presented incremental trend of price index in each year.

Table No: 1 Consumer Price Index and Annual Increment (Nepal Rastra Bank, Nepal) :

S.N.	Year	Amount as per Consumer Price Index (Annual Per Person)	Price Index (Annul Increment Ratio)	Total Amount as per index(Food & Non Food Items) of a Household (Annual)	Total Amount of a Household (Monthly)	Amount Per Person (Monthly)	Remark
1	2010/11	19261	0	92452.80	7704.40	1605.08	Adopted from NLSS-III, 2010/11
2	2011-12	20859	8.3	100123.20	8343.60	1738.25	
3	2012-13	22925	9.9	110040.00	9170.00	1910.42	
4	2013-14	25010.92	9.1	120052.43	10004.37	2084.24	

(V)X

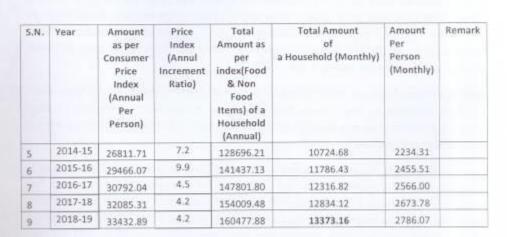


Table No: 2 Threshold Amount for Poor Household

5.N.	Information	Amount NRs.
	Base Year(Adopted from Nepal Living Standards Survey-NLSS-III, 2010-11)	19261
2	Increment of Consumer Price Index from 2011-12 to 2018-19)	33432.89
3	Household Size 4.8	160477.88
4	Monthly Income Level (Poor HH)	13373.16
5	Per Capita Income (Monthly)	2786.07

Proposed range of income level for OBA grant.

Table No: 3 Range of Income Level in Four Categories:

5.N	Income Range	Category	Remarks/ Justification
1	<13500	Poor	Based on result of NLSS-III 2010/ 2011 and calculating annual Price index of NRB 2010/11-2018/19
2	13501-20000	Average	Based on salary range and market price, adopted as average range.
3	20001- 35000	Medium income	Based on salary range and market price, adopted as medium range.
4	>35000	High Income	This is highest range category of income and adopted as highest basis of income and market price.





S.	Particular	Provision in TSTWSSSP	UWSSP	Remark
N.	Threshold of the Poor	<rs. 7,500="" monthly<br="">Income of a Household</rs.>	<rs. 13,500="" monthly<br="">Income of a Household</rs.>	Data of National Living Standard Survey (NLSS), 2011 is adopted as baseline and annual consumer Index of Nepal Rastra Bank is used for analysis.
2.	Verification Team for Recommendation to WUSC (For Reimbursement)	Independent Verification Agent	Verification Team	The team members remain same.Only term has changed. Project staffs cannot be independent agent.
3.	Verification for 20% Reimbursement to WUSC	Verification After 3 Months	Verification after 1.5 Month	
4.	Cross-check, Validations of Final List of OBA/Subsidized Tap Connection	WUSC, RDSMC, RM/M WASH CC	WUSC, RDSMC, RM/M WASH CC and PMQAC(Social Development-GESI Specialist)	After preparation of final list by team, it will be validated by PMQAC.
5.	Chapter of Design and Cost Estimate of Household Latrine	12 types of pit latrine design and cost estimate was provided in Annex	framework for safety	and types RDSMCs are requested for development of site specific
6.	Construction of Household Latrine and Compost Pit by OBA	Construction of Both (Household Latrine and Compost Pit)	Construction of Household Latrine	Now compost pit is optional
7.	Subsidized Tap Connection to Poor/Vulnerable	- Compose Fig.	During the First stage of the contract (Before entering the Second stage)	The service should be provided during first stage of the contract.
	The part of the pa	TOTAL STATE OF THE PARTY OF THE	P Achaya	