Due Diligence Report

January 2013

NEP: Secondary Towns Integrated Urban Environmental Improvement Project

Water Supply Sub-Project
Butwal Municipality, Nepal

CURRENCY EQUIVALENTS
(as of 15 Jan 2013)

Currency unit – Nepalese rupee/s (NRe/NRs)
Nre1.00 = $0.0114
$1.00 = Nrs87.55

ABBREVIATIONS

DCS – Design and Supervision Consultant
HP – Horse Power
MLD – Million Liter per Day
RoW – Right of Way
RP – Resettlement Plan
RVT – Reservoir Tank
STIUEIP – Secondary Towns Integrated Urban Environmental Improvement Project
TA – Technical Assistance

NOTE(S)

(i) The fiscal year (FY) of the Government of Nepal and its agencies ends on 15 July. “FY” before a calendar year denotes the year in which the fiscal year ends, e.g., FY 2011 ends on 15 July 2011.

(ii) In this report, "$" refers to US dollars.

This due diligence report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB’s Board of Directors, Management, or staff, and may be preliminary in nature. Your attention is directed to the “terms of use” section of this website.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.
SECONDARY TOWNS INTEGRATED URBAN ENVIRONMENTAL IMPROVEMENT PROJECT (STIUEIP)
PROJECT IMPLEMENTATION UNIT (PIU)
BUTWAL MUNICIPALITY
BUTWAL, NEPAL

DUE DILIGENCE REPORT
WATER SUPPLY COMPONENT, WARD NO. 9 & 10

CONSULTING SERVICES FOR DESIGN AND CONSTRUCTION SUPERVISION OF STIUEIP BUTWAL

ADB Loan No. 2650 –NEP

January- 2013
Table of Contents

TABLE OF CONTENTS ............................................................................................................................. 1
1. INTRODUCTION .................................................................................................................................... 3
   1.1 THE PROJECT .................................................................................................................................. 3
   1.2 THE REVIEW AREA .................................................................................................................. 3
   1.3 DUE DILIGENCE FOR THE AREA .......................................................................................... 4
2. STEPS AND METHODOLOGY ........................................................................................................ 5
3. INFORMATION OBTAINED FROM LOCAL AUTHORITIES ....................................................... 5
4. INFORMATION OBTAINED FROM MEETING WITH HOUSEHOLDS ........................................... 5
5. ADDITIONAL INFORMATION OBTAINED .................................................................................... 5
6. CORRECTIVE ACTION PLAN .......................................................................................................... 5
7. CONCLUSION AND RECOMMENDATIONS .................................................................................. 6

ANNEXES

Annex 1: Location Map of Project Municipality
Annex 2: Location Map of Command Area
Annex 3: Location Map of Borehole Sites
Annex 4: Location Map of RVT Sites
Annex 5: Photo Documentation
Annex 6: Letter from Land Concerned
Annex 7: Blue Print of RVT and Borehole Sites
Annex 8: Minutes of Meetings
1. Introduction

1.1 The Project

The existing water supply system in Butwal Municipality is inefficient and insufficient. The water from the available sources is murky and polluted during rainy season. There are two way problems in existing water supply system in the Municipality. First, there is still need of extension of water supply network, and second, the existing supply system is not perfect and needs improvement. The municipality has created three priority packages for extension and improvement of the system. The packages are prioritized for implementation based on availability of budget. The packages in order consist of ward number 9 and 10 in package 1, ward numbers 12 and 13 in package 2 and the ward numbers 15 and 4 in the package 3. Besides, quality of the water at source and outlet has to be tested and verified for making it usable for all purposes.

The Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP) is one of several such attempts designed to meet the developmental needs while contributing for overall environmental improvement of the municipality. Improvement of the water supply system in the municipality is one of the major components of the STIUEIP Butwal. Therefore, the municipality has made a plan to implement the water supply projects in wards 9 and 10 of the municipality on the first priority basis.

1.2 The Review Area

Butwal is one of the oldest municipalities of Nepal established in 1959 AD. It is located in Rupandehi district of Lumbini Zone, Western Development Region of Nepal. East-West Highway (Mahendra Rajmarg - MRM) and Siddartha Highway (Pokhara to Siddarthanagar), intersect each other at Butwal. Currently, the municipality boundary spreading over an area of 69.3 sq. km.

The municipality with 15 administrative wards is geographically divided into two parts by Tinau River, East and West. Tinau West part consists of 6 wards, i.e. 1, 2, 3, 4, 14 and 15, while Tinau East part consists of the remaining 9 wards, 5 to 13.
1.3 Due Diligence for the Area

The proposed water supply system include tube wells / boreholes, electro-mechanical facilities, treatment facilities, distribution network, house connections, community tap connections, service reservoir, appurtenances and others. Likewise, the required administrative block, guard houses/quarter and boundary wall as well.

Deep tube wells at six locations (total 8 locations for 8 deep tube wells are identified. 2 wells shall be executed by Municipality in later stage) along the foothill of Hill Park and Manakamana Temple area have been proposed, each with expected pumping capacity 15 lps of water for 13.5 hrs of daily pumping. The maximum estimated depth of the wells is 132 m.

The four pumps of capacity 25HP and four of 30HP capacity with an average pumping head of 75 to 100 m (one pump for each well) are proposed. The capacity of the service reservoirs have been calculated on the basis of cumulative surplus and deficit water demand. The total peak demand of both schemes has been calculated as 9.21 MLD with peak factor of 1.7 of the schemes (Scheme I: Hill Park: Total Demand 4.69 MLD and Scheme II: Mankamana: Total Demand 4.52 MLD). The proposed schemes have been formulated to provide reliable and continuous drinking water supply in adequate quantity and quality to the consumers in the service area at the desired service level.

Through the study of TA report, there is no report on the issues of resettlement for social safeguard in the Butwal project. While in similar projects at Biratnagar and Birgunj TA has reported about Resettlement Plan. DSC team of Butwal with concern experts thoroughly revisited the service area and made discussions with the concerned beneficiaries and authorities, further rectifying whether there is need of land acquisition or not. It is identified there is no need of land acquisition in the project area as all the construction activities are going to be implemented in public land. The proposed pipe network are within the RoW of Roads in residential area while the proposed location of RVTs and other infrastructure like deep tubewells have been proposed within the boundary of community forest. Since there is no direct intervention of private properties, the preparation of resettlement plan is not necessary.

The owner of community forest users groups (Shivanagar Samudayik Ban Upbhokta samuha and Butwal Hill Park Council) have no objection for contributing the land for designating RVT sites and borehole sites for the proposed water supply project. The letter from both committee as no objection is attached in annex 6.
2. Steps and Methodology

This due diligence report has been merely prepared for water supply component for ward no. 9 and 10 of Butwal Municipality. Direct observation and public consultation was made to verify the ownership of land where the system is proposed to be constructed. The land is public and fall under the management of community forest user group. Photos and cadastral map of those area was also reviewed before concluding the land as public land. The plot number was verified from the municipality, survey office and malpot office. Several meetings were also conducted for the same. No objection from community forest management committee and local political leaders for construction of water supply scheme in such land was declared. Photos, a copy of blue print is presented in the annex 5 and 7.

3. Information Obtained from Local Authorities

The Butwal municipality is the main local authority to decide the system to be constructed and obtain the consensus from the community forest. They will obtain it before executing the proposed system.

4. Information Obtained from Meeting with Households.

The water supply sub component of Butwal Municipality has no any direct effect to any household regarding the source, its transmission as well as for the construction site of reservoir tank. In this regard, no consultation meeting with the household is carried out.

5. Additional Information Obtained

No any other additional information adverse to the objectives of the project has been noted.

6. Corrective Action Plan

As the various parameters of the project like site, design of the system, water quality, approach and methodology for the construction etc. are socially accepted to the local people and it is environmentally friendly too. Due to the availability of public land for tube well site, transmission line construction as well as for the construction of reservoir site; there is no need of land acquisition for the project. For this reason, there is no need of any resettlement/ relocation plan to address the affected people.
7. Conclusion and Recommendations

The entire proposed system falls under the public land. The supply system is in the RoW of road and deep tube wells and RVT (Reservoir Tank) falls in the community forest. No private land is to be acquired for this water supply system. Hence, no further action of RP is required to prepare.
ANNEXES
ANNEX -1

Location Map of Project Municipality
ANNEX -2

Location Map of Command Area
ANNEX -3

Location Map of Borehole Sites
Location of Ground RVT at Hillpark

Location of Ground RVT at Manakamana

Surveying in wards for supply line

Meeting with community people for sub projects
A view of Hill Park

A view of community forest
श्री तुल्पल नगर पालिका कार्यालय
तुल्पल - कप्पडेहुँ

विषयः सहजैत भाषा-भागी

प्रस्तुत विषयमा तुल्पल नगर पालिका को दिनित २००८/०९/१४ को दिन न ९६० को प्राचार्य पनालुङ्सङ्ग तुल्पल नगर पालिकामा श्री - नाशित मोहनलाल गुप्तकृष्णकल अस्थि कालवर्षिक शुद्धि -
अम्नेरपुरा अन्तर्गत दैल-चालन दुखे स्वतंत्रता वितरण नाटक का स्थान
- जस्तो लग्दै बनेर ९ देखि ६ पटक आने वालो फण अंकित नगर दामसः
- चालकको लागि चुनिन्दै र देखि पटकहरू न ७ हो फिक्ताको दिन र दोस्त
(१) हिलिङ्गाङ्कका आकारमा आगामा ४५००० रुः की रिप्लाकार
- र तेस्रो र चौथो देखि कुल १० लाख रुपैया नजीकी लागि अवा। श्री नेपाल
- गाउँ ब्यापारी खोज न ३ हो फिक्ताको दिन र दोस्त
(२) एक अन्तर्ज्ञात अन्तर्भाषा आकारमा आगामा ४५००० रुः की रिप्लाकार
- र तेसरो र चौथो देखि कुल १० लाख रुपैया नजीकी लागि अवा। श्री नेपाल
- गाउँ ब्यापारी खोज न ३ हो फिक्ताको दिन र दोस्त
- आर्थिक स्थितिलागि सल्लादिपि दिइँदै।

मानिसी योगी अम्बुसेके

जोगा वाहाङ्गु माना
श्रेयुर्वतनपालीका आयोजना
पुस्तक उपदेशी।

विषयः सहभागी संबोधना।

महोकेय:
पहलूत्तिर्निःशुक्ला पुस्तक नापालीका आयोजनामा र श्रेयुर्वतनपालीका आयोजनामा सहभागणि स्मृति जान्तुहो । श्रेयुर्वतनपालीका आयोजनामा मात्र र श्रेयुर्वतनपालीका आयोजनामा सहभागणि स्मृति जान्तुहो ।

मात्र श्रेयुर्वतनपालीका आयोजनामा मात्र र श्रेयुर्वतनपालीका आयोजनामा सहभागणि स्मृति जान्तुहो ।

श्रेयुर्वतनपालीका आयोजनामा मात्र र श्रेयुर्वतनपालीका आयोजनामा सहभागणि स्मृति जान्तुहो ।

मात्र श्रेयुर्वतनपालीका आयोजनामा मात्र र श्रेयुर्वतनपालीका आयोजनामा सहभागणि स्मृति जान्तुहो ।

श्रेयुर्वतनपालीका आयोजनामा मात्र र श्रेयुर्वतनपालीका आयोजनामा सहभागणि स्मृति जान्तुहो ।
ANNEX - 7
Landfill Site: The Landfill Site is located in the area designated as the Landfill Site. The site is designed to handle solid waste generated from various sources, including residential, commercial, and industrial waste. The site is equipped with state-of-the-art facilities for waste stabilization and treatment, ensuring minimal environmental impact. The Landfill Site is managed by a team of experienced professionals who are committed to maintaining the highest standards of waste management and environmental protection.

Fisheries: The Fisheries activity in the area is focused on the cultivation of various fish species, including tilapia and catfish. The fish ponds are managed using sustainable practices to ensure the health of the aquatic ecosystem. The fish are harvested periodically, ensuring a steady supply of fresh fish for local consumption.

Biogas: The Biogas project aims to harness the energy from organic waste to produce biogas, a renewable energy source. The project involves the construction of biogas digesters that convert organic waste into biogas, which can be used for cooking and heating purposes. The project is supported by various government and international organizations, aiming to promote sustainable development and reduce carbon emissions.
નિર્જીઝન નેટ અટેક અને પાલ્યો સંગઠની સંબંધી કોઠા મિલે આ પ્રતિનિધિત્વ સાથે કરવામાં આવ્યું. જ્યારે અટેકે પાલ્ સંગઠની સંબંધી કોઠા મિલે આ પ્રતિનિધિત્વ સાથે કરવામાં આવ્યું તે સંગઠની સંબંધી કોઠા મિલે આ પ્રતિનિધિત્વ સાથે કરવામાં આવ્યું. જ્યારે અટેકે પાલ્ સંગઠની સંબંધી કોઠા મિલે આ પ્રતિનિધિત્વ સાથે કરવામાં આવ્યું તે સંગઠની સંબંધી કોઠા મિલે આ પ્રતિનિધિત્વ સાથે કરવામાં આવ્યું. જ્યારે અટેકે પાલ્ સંગઠની સંબંધી કોઠા મિલે આ પ્રતિનિધિત્વ સાથે કરવામાં આવ્યું તે સંગઠની સંબંધી કોઠા મિલે આ પ્રતિનિધિત્વ સાથે કરવામાં આવ્યું. જ્યારે અટેકે પાલ્ સંગઠની સંબંધી કોઠા મિલે આ પ્રતિનિધિત્વ સાથે કરવામાં આવ્યું તે સંગઠની સંબંધી કોઠા મિલે આ પ્રતિનિધિત્વ સાથે કરવામાં આવ્યું.