LA TRINIDAD WATER DISTRICT YEAR 2016 DEVELOPMENT PROGRAM

GENERAL OBJECTIVE:

To upgrade and expand the present services of the La Trinidad Water District.

SPECIFIC OBJECTIVES:

- A. To ensure adequate, affordable and potablewater supplyfor the District'spresent and future consumers.
- B. To ensure that collection efficiency shall not fall below 94%.
- C. To ensure that non-revenue-water shall not exceed 20% per month.
- D. To assist the Local Government and other concerned agencies in the Reforestation, protection and management of watersheds/forests.

2016 PROJECTS TO BE IMPLEMENTED

I. Expansion Program

A. Source Development

A.1 Development of Water Supply in Barangay Puguis

Location : Barangay Puguis
Project Type : Spring Development

Service Area : Barangay Puguis and Wangal

Project component : Well Drilling

: Construction of Sedimentation

Tank and Reservoir

Installation of Filtration System
 Acquisition/Installation of
 Electromechanical equipment
 Pump house construction

Treatment facilities

Primary power line extension, transformer installation and

metering

: Acquisition of Stand-by generator

set

Source Fund : LTWD General Fund Project Cost : ₱ 13,500,000.00

Implementation Schedule : 3rd Quarter

II. Installation of New Transmission Main

II.1Source: Swamp Deep Well (SDW)

II.1.a Barangay Puguis

ii.1.a.1 Station : from Swamp Deep Well

to Comiles

Pipe size and type : 6" dia. UPVC pipe

Length : 60mtrs

Project Cost : ₱ 180,000.00 Implementation Schedule : 1st Quarter ii.1.a.2 Station : from Comiles (Swamp)

towards Ms. PanicoArea

(Betag)

Pipe size and type : 4" dia. UPVC pipe

Length : 430mtrs

Project Cost : ₱ 860,00.00

Implementation Schedule : 1st Quarter

ii.1.a.3 Station : from Comiles (Swamp)

towards Puguis-Buyagan

Road Area

Pipe size and type : 4" dia. UPVC pipe

Length : 480mtrs

Project Cost : ₱ 960,000.00

Implementation Schedule : 1st Quarter

ii.1.a.4 Station : from SF-JDG Gas Station

towards Mr. Abad (entrance to DW No.3)

Area

Pipe size and type : 4" dia. UPVC pipe

Length : 700 mtrs

Project Cost : ₱ 1,400,000.00 Implementation Schedule : 3rd Quarter

II.2Source: Pico Deep Well (PDW)

II.2.a Barangay Pico

ii.2.a.1 Station : Pico Deep Well (PDW)

towards Hama Lives Stock Area (High Way)

Pipe size and type : 6" dia. UPVC pipe

Length:210mtrsProject Cost:₱ 630,000.00Implementation Schedule:3rd Quarter

II.3Source: Beckel Deep Well

II.3.a Barangay Beckel

ii.3.a.1 Station : from Kinsgtown

Subdivision to Loacan

Marker

Pipe size and type : 3" dia. HDPE pipe

Length: 2,040mtrsProject Cost: ₱ 3,488,400Implementation Schedule: 4th Quarter

III. Installation of New Distribution Main

III.1 Source: Deep Well No. 2

III.1.a Barangay Balili

iii.1.a.1 Station : from Mr. Lucop towards

Mr. Payangdo Area

Pipe size and type : 2" dia. HDPE pipe

Length : 150 mtrs

Project Cost : ₱ 171,000.00

Implementation Schedule : 1st Quarter

III.2Source: Deep Well No. 4

III.2.a Barangay Poblacion

iii.2.a.1 Station : from Barangay Outpost to

Mr. Pasi Area

Pipe size and type : 2" dia. HDPE pipe

 Length
 :
 870 mtrs

 Project Cost
 :
 ₱ 991,800.00

Implementation Schedule: 2nd Quarter

III.3Source: Deep Well No. 6/ Ampasit Spring

III.3.a Barangay Wangal

iii.3.a.1 Station : from LTO to Mr.

Depayso Area

Pipe size and type : 2" dia. HDPE pipe

Length : 660 mtrs

Project Cost : ₱ 752,400.00

Implementation Schedule : 4th Quarter

iii.3.a.2 Station : from Mr. Buasen to Mr.

Samuel Area

Pipe size and type : 2" dia. HDPE pipe

Length : 90 mtrs

Project Cost : ₱ 102,600.00

Implementation Schedule : 2nd Quarter

III.4Source: Deep Well No. 9

III.4.a Barangay Poblacion

iii.4.a.1 Station : from DW No.9 towards

Mr. Ducayag Area

Pipe size and type : 2" dia. HDPE pipe

Length : 150 mtrs

Project Cost : ₱ 171,000.00

Implementation Schedule : 4th Quarter

III.5Source: Deep Well No. 12

III.5.a Barangay Pico

iii.5.a.1 Station : from Pico first Bridge

towards SECF Entrance

Pipe size and type : 2" dia. HDPE pipe

Length : 90 mtrs

Project Cost : ₱ 102,000.00

Implementation Schedule : 4th Quarter

III.6Source: JICA 1

III.6.a Barangay Poblacion

iii.6.a.1 Station : from Mr. Flores to Mr.

Puyas Area

Pipe size and type : 2" dia. HDPE pipe

Length : 100 mtrsProject Cost : ₱ 114,000.00Implementation Schedule : 2^{nd} Quarter

iii.6.a.2 Station : from Ms. Angela to Mr.

Agsawal Area

Pipe size and type : 2" dia. HDPE pipe

Length : 180 mtrsProject Cost : ₱ 205,200.00Implementation Schedule : 2^{nd} Quarter

III.7Source: Lubas Spring

III.7.a Barangay Lubas

iii.7.a.1 Station : Mr. Taguibos to Mr.

Victor Area

Pipe size and type : 2" dia. HDPE pipe

 Length
 :
 160 mtrs

 Project Cost
 :
 ₱ 182,400.00

 Implementation Schedule
 :
 2nd Quarter

iii.7.a.2 Station : from Mr. Todenwharth to

Mr. Pontino Area

Pipe size and type : 2" dia. HDPE pipe

Length : 150 mtrs

Project Cost : ₱ 171,000

Implementation Schedule : 2^{nd} Quarter

III.8Source: SDW

III.8.a Barangay Puguis

iii.8.a.1 Station : from SDW towards Agri-

Pinoy Area (comp.)

Pipe size and type : 2" dia. HDPE pipe

Length : 60 mtrs

Project Cost : ₱ 68,400.00

Implementation Schedule : 1st Quarter

iii.8.a.2 Station : from Comiles towards

Ms. Panico Area (comp.)

Pipe size and type : 2" dia. HDPE pipe

Length : 430 mtrs

Project Cost : ₱ 490,200.00

Implementation Schedule : 1st Quarter

iii.8.a.3 Station : from AGRI-PINOY

towards PalmavilleArea

(comp.)

Pipe size and type : 2" dia. HDPE pipe

Length : 420 mtrs

Project Cost : ₱ 478,800.00

Implementation Schedule : 1st Quarter

iii.8.a.4 Station : from Comiles to

Palmaville Area

Pipe size and type : 2" dia. HDPE pipe

Length : 420 mtrsProject Cost : ₱ 478,800.00Implementation Schedule : 1^{st} Quarter

IV. **Extension of Existing Distribution Main**

IV.1 Source: Deep Well No.5

IV.1.a Barangay Ambiong

iv.1.a.1 Station Mr. Labino to Mr. Daniel

(Gulon)

Pipe size and type 2" dia. HDPE pipe :

Length : 660 mtrs Project Cost ₱ 752,400.00 4th Ouarter

Implementation Schedule

IV.2 Source: JICA 1

IV.2.a Barangay Poblacion

Pipe size and type

iv.2.a.1 Station Col. Cenon to Mr. :

Dalupang Area 2" dia. HDPE pipe

Length 420 mtrs Project Cost ₱ 478,800 4th Quarter Implementation Schedule .

Rehabilitation Program V.

V.1 Source: Deep Well No.2

V.1.a Barangay Balili

v.1.a.1 Station Across BSU PAG-ASA :

towards BSU pasture

land/ meadow

2 1/2" dia. HDPE pipe Pipe size and type :

Length 90 mtrs :

Project Cost ₱ 111,600.00

Pipe size and type 2" dia. HDPE pipe :

Length 90 mtrs :

Project Cost ₱ 102,600.00 2nd Quarter Implementation Schedule

v.1.a.2 Station : Balili Satellite Market

towards Balete Area

Pipe size and type : 2 1/2" dia. HDPE pipe

Length : 240 mtrs

Project Cost : ₱ 297,600.00

Implementation Schedule : 1st Quarter

v.1.a.3 Station : Balili Satellite Market

towards Mr. Gion-an

Area

Pipe size and type : 2" dia. HDPE pipe

Length : 200 mtrs

Project Cost : ₱ 228,000.00

Implementation Schedule : 2nd Quarter

V.1.b Barangay Tawang

v.1.b.1 Station : from Mr. Abibico to Mr.

Buyatan Area

Pipe size and type : 1 ½" dia. HDPE pipe

Length : 480 mtrs

Project Cost : ₱ 463,200.00

Implementation Schedule : 3rd Quarter

v.1.b.2 Station : from Mr. Maske to Mr.

Mendoza Area

Pipe size and type : 1 ½" dia. HDPE pipe

v.1.b.3 Station : from Mr. Domitlong to

Mr. Waytan Area

Pipe size and type : 1 ½" dia. HDPE pipe

Length : 180 mtrsProject Cost : ₱ 173,700.00Implementation Schedule : 3^{rd} Quarter v.1.b.4 Station : from BTBPS to Mr.

Engwet Area

Pipe size and type : 1 ½" dia. HDPE pipe

Length : 240 mtrs

Project Cost : ₱ 231,600.00

Implementation Schedule : 2nd Quarter

V.2 Source: Deep Well No.3

V.2.a Barangay Puguis

v.2.a.1 Station : from Mr. Ligligen to Mr.

Diacos area

Pipe size and type : 2" dia. HDPE pipe

Length : 40 mtrs

Project Cost : ₱ 45,600.00

Implementation Schedule : 2nd Quarter

V.3Source: Deep Well No.5

V.3.a Barangay Ambiong

v.3.a.1 Station : from Engr. Banayat to

Mr. Borcao Area

Pipe size and type : 2" dia. HDPE pipe

Length : 210 mtrs

Project Cost : ₱ 239,400

Implementation Schedule : 2nd Quarter

v.3.a.2 Station : from Mr. Osting to Mr.

Demot Area

Pipe size and type : 1 ½" dia. HDPE pipe

Length : 1020 mtrs

Project Cost : ₱ 984,300.00

Implementation Schedule : 2nd Quarter

v.3.a.3 Station : from Mr. Cosalan to Mr.

Quinomes Area

Pipe size and type : 2" dia. HDPE pipe

Length : 180 mtrs

Project Cost : ₱ 205,200.00

Implementation Schedule : 4th Quarter

Station v.3.a.4 from Mr. Quinomes to

Mr. Insas Area

Pipe size and type : 1" dia. HDPE pipe

Length : 275 mtrs Project Cost ₱ 137,500.00 .

4th Quarter Implementation Schedule .

v.3.a.5 Station : from Ambiong Elem.

School to Mr. Osmen

Area

Pipe size and type 2" dia. HDPE pipe :

Length : 630 mtrs Project Cost ₱ 718,200.00 4th Ouarter Implementation Schedule

v.3.a.6 Station from Mr. Estangki :

towards SLU-SVP Area

Pipe size and type 2" dia. HDPE pipe :

Length 210 mtrs : Project Cost ₱ 239,400.00 4th Quarter Implementation Schedule

v.3.a.7 Station from Mr. Gazmen to Mr.

Natividad Area

Pipe size and type 1 1/2" dia. HDPE pipe

Length 240 mtrs Project Cost ₱ 231,600.00 2nd Ouarter Implementation Schedule

V.4Source: Deep Well No.8

V.4.a Barangay Balili

v.4.a.1 from Mr. Pacus to Mr. Station

Ambassing Area

Pipe size and type 2" dia. HDPE pipe :

Length 480 mtrs : Project Cost ₱ 547,200.00 5 1st Quarter Implementation Schedule

v.4.a.2 Station : from Mr. Ambassing to

Mr. Sano Area

Pipe size and type : 2" dia. HDPE pipe

Length : 370 mtrs

Project Cost : ₱ 421,800.00

Implementation Schedule : 1st Quarter

v.4.a.3 Station : from BSU Grad sch.

Dorm towards Mr. Bagsan Area

Pipe size and type : 2" dia. HDPE pipe

Length : 330 mtrs

Project Cost : ₱ 476,200.00

Implementation Schedule : 1st Quarter

V.5Source: JICA 1

V.5.a Barangay Poblacion

v.5.a.1 Station : from Mr.Salidao to Mr.

Polon Area

Pipe size and type : 2" dia. HDPE pipe

Length : 120 mtrs

Project Cost : ₱ 136,800.00

Implementation Schedule : 3rd Quarter

v.5.a.2 Station : from Mr. Banyaga to Old

Dump Site Area

Pipe size and type : 2" dia. HDPE pipe

Length : 100 mtrs

Project Cost : ₱ 114,000.00

Implementation Schedule : 4th Quarter

v.5.a.3 Station : from Mr. Salbino to Mr.

Gabino Area

Pipe size and type : 2" dia. HDPE pipe

Length : 270 mtrs

Project Cost : ₱ 307,800.00

Implementation Schedule : 2nd Quarter

V.6Source: Lubas Spring Source

V.6.a Barangay Lubas

v.6.a.1 Station : from Mr. Asiong to Mr.

Damayan Area

Pipe size and type : 2" dia. HDPE pipe

Length : 90 mtrs

Project Cost : $\raiset{102,600.00}$ Implementation Schedule : 3^{rd} Quarter

v.6.a.2 Station : from Mr. Juan to Mr.

Laoyan Area

Pipe size and type : 2" dia. HDPE pipe

Length : 300 mtrs

Project Cost : ₱ 342,000.00

Implementation Schedule : 3rd Quarter

VI. Construction of Pump House

VI.1 Barangay Pico

vi.1.a Location : Barangay Pico

Station : Deep Well No.12

Project Cost : ₱700,000.00 Implementation Schedule : 4th Quarter

vi.1.b Location : Barangay Pico

Station : Pico Deep Well
Project Cost : ₱700,000.00
Implementation Schedule : 4th Quarter

VI.2 Barangay Puguis

vi.2.a Location : Barangay Puguis

Station : Swamp Deep Well

Project Cost : ₱ 700,000.00 Implementation Schedule : 4th Quarter

VI.3 Barangay Lubas

vi.3.a Location : Barangay Lubas

Station : Lubas Filtration Plant/

Reservoir

Project Cost : ₱ 700,000.00 Implementation Schedule : 1st Quarter

VII. Improvement of Pump House

VII.1 Barangay Cruz

vii.1.a Project Description : Extension of Pump House

Station : Cruz Reservoir

Project Cost : ₱ 75,000.00

Implementation Schedule : 1st Quarter

VII.2 Barangay Balili

vii.2.a Project Description : Replacement of Reservoir

Roofing

Installation of Ceiling

Station : Deep Well No.4

Project Cost : ₱ 130,000.00

Implementation Schedule : 1st Quarter

VII.3 Barangay Tawang

vii.3.a Project Description : Extension of Banig

Booster Pump House

Station : Mr. Unos Area

Project Cost : ₱ 500,000.00

Implementation Schedule : 1st Quarter

VIII. Installation of Filtration System

VIII.1 Barangay Poblacion

Project Description viii.1.a Installation of Filtration :

System and

Electromechanical

Equipment

BES Deep Well Station

₱ 750,000.00 Project Cost 2nd Quarter

Implementation Schedule

IX. Purchase of Support Equipment

Item	Particulars	Cost	Implementation Schedule
1.	Generator 70 KVA, 220V 3 Phase for Pico Well	₱1,350,000.00	3 rd Qtr.
2.	Generator45 KVA, 220V 3 Phase for Deep Well 12	₱1,250,000.00	3 rd Qtr.
3.	Mobile Generator 25 KVA, 220V 3 Phase for Windy Hill and JICA 2	₱1,250,000.00	3 rd Qtr.
4.	Multi-cyclone for BES Deep Well	₱50,000.00	2 nd Qtr.
5.	Various tools, shop & garage equipment	₱600,000.00	1 st Qtr.
6.	Stand-by submersible pumps & motor controllers	₱600,000.00	1 st Qtr.
7.	Acquisition of one(1) unit service vehicle	₱2,000,000.00	1 st Qtr.
8.	Acquisition of FRP Filters for various Pumping Stations	₱ 8,000,000.00	2 nd to 4 th Qtr.

X. Training / Seminars

- 1. Technical seminars and skills training to upgrade Water Resources Facilities Operators and Water Maintenance Staff.
- Other seminars/training which shall be conducted/offered by other Government agencies, local water district training centers and other private firms related to the functions of the District's Staff.

XI. Continuation of the District's Program on the Reduction of Non-Revenue Water

- 1. Meter testing, repairs, replacement.
- 2. Regular leak detection with the use of the District's leak detector.
- Replacement of multiple service line connections into a single Distribution main.
 - 4. Replacement of old and rusty GI transmission, distribution mains.
 - Relocation of pipes located at drainage canals at various areas..
 - 6. Caretaker system

Other Possible Expansion Programs

I. Development of Water Sources

I.aDevelopment of Water Supply in Barangay Tawang

Location : Barangay Tawang (within the lot

of Mr. Bautista)

Project Type : Well Drilling

Service Area : Barangay Alapang, Bahong,

Tawang

Project component : Well Drilling

Acquisition/Installation of

Electromechanical equipment Pump house construction

Treatment facilities

: Primary power line extension,

transformer installation and

metering

: Acquisition of Stand-by generator

set

Source Fund : LTWD General Fund or Loan

Project Cost : ₱ 8,500,000.00

I.bDevelopment of Water Supply in Barangay Shilan

Location : Barangay Shilan Project Type : Well Drilling

Service Area : Barangay Alapang, Cruz,

Bahong

Project component : Well Drilling

Acquisition/Installation of Electromechanical equipmentPump house construction

: Treatment facilities

 Primary power line extension, transformer installation and

metering

Acquisition of Stand-by generator

set

Source Fund : LTWD General Fund or Loan

Project Cost : ₱ 8,500,000.00

I.c Development of Water Supply in Barangay Wangal

Location : Barangay Wangal
Project Type : Well Drilling
Service Area : Barangay Wangal

Project component : Well Drilling

Acquisition/Installation of
Electromechanical equipment
Pump house construction
Treatment facilities

Primary power line extension, transformer installation and

metering

: Acquisition of Stand-by generator

set

Lot Acquisition

Source Fund : LTWD General Fund or Loan

Project Cost : ₱ 9,500,000.00

I.dDevelopment of Water Supply System

Location . Barangay Alapang (Sun Flower

Ridge Subdivision Area)

Project Type Well Drilling :

Service Area Barangay Alapang, Cruz, :

Bahong

Well Drilling Project component

> Acquisition/Installation of :

Electromechanical equipment

Pump house construction

Treatment facilities

Primary power line extension,

transformer installation and

metering

Acquisition of Stand-by generator

Source of fund LTWD general funds/ Sinking :

Funds

Project cost ₱8,500,000.00 :

I.eDevelopment of Water Supply System

Location Barangay Ambiong (within :

LTWD Lot)

Project Type Well Drilling :

Service Area : Barangay Ambiong, Lubas,

:

:

Tawang, Balili

Project component : Well Drilling

Acquisition/Installation of

Electromechanical equipment Pump house construction

Treatment facilities

Primary power line extension,

transformer installation and

metering

Acquisition of Stand-by generator

Source of fund LTWD general funds/ Sinking :

Funds

Project cost ₱8,500,000.00 :

I.fDevelopment of Water Supply System

Location : Barangay Pico (within LTWD

lot)

Project Type : Well Drilling
Service Area : Barangay Pico
Project component : Well Drilling

: Acquisition/Installation of

Electromechanical equipment
Pump house construction

Treatment facilities

Primary power line extension, transformer installation and

metering

Acquisition of Stand-by generator

set

Source of fund : LTWD general funds/ Sinking

:

Funds

Project cost : ₱8,500,000.00

II. Installation of New Transmission Main

II.1 Source: Deep Well No. 2

II.1.a Barangay Pico

ii.1.a.1 Station : from Shell towards Mr.

Bahingawan Area

Pipe size and type : 4" dia. UPVC pipe

Length : 160 mtrs
Project Cost : ₱320,000.00

II.2 Source: Swamp Deep Well (SDW)

II.2.a Barangay Puguis

ii.2.a.5 Station : from Mr. Abad to Hama

Livestock (entrance to Pico Deep Well) Area

Pipe size and type : 4" dia. UPVC pipe

Length : 450 mtrs

Project Cost : ₱ 900,000.00

II.3 Source: Pico Deep Well (PDW)

II.3.a Barangay Pico

ii.3.a.2 Station : Hama Lives Stock

towards Trading Post Area (High Way)

Pipe size and type : 4" dia. UPVC pipe

Length : 1,200mtrs

Project Cost : ₱ 2,000,000.00

II.4 Source: Ambiong Deep Well

II.4.a Barangay Ambiong

ii.4.a.1 Station : from Mr. Madino to

Lubas Outpost Area

Pipe size and type : 4" dia. UPVC pipe

Length : 2500mtrs

Project Cost : ₱ 5,000,000.00

III. Installation of New Distribution Main

III.1 Source: Deep Well No. 3

III.1.a Barangay Puguis

iii.1.a.1 Station : from Mr. Bulasao to Mr.

Batori Area

Pipe size and type : 2" dia. HDPE pipe

Length : 90 mtrs

Project Cost : ₱ 102,600.00

IV. Extension of Existing Distribution Main

IV.1 Source: Deep Well No.4

IV.1.a Barangay Cruz

iv.1.a.1 Station : Mr. Oras to Mr. Damortis

Pipe size and type : 2" dia. HDPE pipe

Length : 540 mtrs

Project Cost : ₱ 615,600.00

V. Rehabilitation Program

V.1 Source: Deep Well No.4

V.1.a Barangay Poblacion

v.1.a.1 Station : from D&L to Als Area

Pipe size and type : 8" dia. UPVC pipe

(comp)

Length : 180 mtrs

Project Cost : ₱ 720,000.00

v.1.a.2 Station : from Mr. Narvaez to Mr.

Leano Area

Pipe size and type : 4" dia. UPVC pipe

 Length
 :
 90 mtrs

 Project Cost
 :
 ₱ 180,000.00

V.2 Source: Deep Well No.14

V.2.a Barangay Pico

v.2.a.1 Station : from Mr.Ireneo Building

to Mr. BeswelanArea

Pipe size and type : 2" dia. HDPE pipe

Length : 90 mtrs

Project Cost : ₱ 102,600.00

VI. Construction of Pump House

VI.1 Barangay Ambiong

vi.1.a Location : Barangay Ambiong

Station : Beside Mr. Madino's

Residence

Project Cost : ₱ 700,000.00

VI.2 Barangay Pico

vi.2.a

Location

: Ba

Barangay Pico Deep Well No.12

Station Project Cost

₱ 700,000.00

VII. Improvement of Deep Well 2 and 14

VII.1 Barangay Balili and Pico

vii.1.a

Project Description

Installation of turbidity

meters and controls

Station

Deep Well No.2/Deep

Well No. 14

Project Cost

₱ 700,000.00

VIII. Installation of Filtration System

VIII.1 Barangay Balili

viii.1.a

Project Description

Installation of Filtration

System (automatic back

wash operation)

Station

:

:

:

Deep Well No.2

Project Cost

Ð

₱ 2,800,000.00

IX. Installation of Roof and Sidings of PPSS Building (4th Floor)

Project Cost

₱ 2,500,000.00

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