

Project:
Construction of a water system for human consumption in the Captaincy of Mokomokal in the municipality of Entre Ríos in the Department of Tarija



Requested amount: 178,347.00 Bs.
Executing Organization:
“Mokomokal Captaincy

Responsible for Execution:
Responsible: Mr. Efraín Ibáñez Corimago: Mburuvicha
Mrs. Olga Castro Cuellar: Kuña Mburuvicha

September 2022
Tarija – Bolivia

1.- SUMMARY OF THE PROJECT

- **Project's name:**

Construction of a water system for human consumption in the Captaincy of Mokomokal in the municipality of Entre Ríos in the department of Tarija

- **Project summary:**

The project is part of the consequences left by the alluvium caused in February of this year, which affected indigenous communities in the municipality of Entre Ríos, among the different consequences was the affection of the water system for consumption and one of the communities most affected in the community of Mokomokal. With the implementation of the project, the construction of a water storage tank with a capacity of 60 M3 and the implementation of an 820 ML water distribution network will be carried out, which will directly benefit 35 families.

- **Requested amount**

The requested amount is: Bs. 178,347.00 (One hundred and seventy-eight thousand three hundred and forty-seven, 00/100 bolivianos) [Current Exchange Rate at \$1 US = 6.94 Bolivianos]

Total in U.S. currency: \$25,700 US

- **Destination of resources (main items)**

The economic resources requested will be allocated to the acquisition of construction materials for a 60 M3 ferro-cement tank and the laying of a 5,000 ml adduction network and distribution of 820 ml of water piping for human consumption.

- **Start date, execution time (in months) and completion date**

The project will have a duration of 4 months from the disbursement of economic resources (September to December 2022)

- **Name of the requesting organization**

Indigenous organization of the Mokomokal captaincy of the municipality of Entre Ríos

- **Address or domicile of the organization**

Municipality of Entre Ríos, the Captaincy of Mokomokal is distant 160 km from the city of Tarija.

- **Names of those responsible or leaders of the organization**

Efrain Ibáñez Corimango Mburuvicha

Olga Castro Cuellar Kuña Mburuvicha.

Cell. 73487792: Efraín Ibáñez Corimango

Cell. 63773517: Olga Castro Cuellar

2. PROJECT

2.1. Background on the organization:

The communal organization of the Mokokokal captaincy was created under Prefectural Resolution No. 39/4/95 dated 4/22/95 and under Municipal Resolution No. 39/4/95 dated 4/10/95, belonging to the municipality of Entre Ríos of the O'Connor Province of the department of Tarija.

Since its foundation, the organization has developed different productive development projects and actions to improve their homes and among others.

Currently there are 35 families affiliated with the indigenous organization in the community, where meetings are held once a month and according to the needs and the call of the captain's organization.

Indigenous families adopt a model of community life, where equality and equity are practiced among families that share a common territory.

The election of their authorities is according to their uses and customs where in a communal assembly and by majority vote the communal authorities of a Mburuvicha, kuña Mburuvicha, a Secretary and a Treasurer are elected.

For the election of its leaders, the equal participation of women is taken into account, where the communal organization is made up of 50% women and 50% men.

Being a captaincy that receives very little support from state institutions, there is a high migration, especially of young people, with a strong presence of children and elderly people in the community, who are the age group that mostly remains in the captaincy. .

The people who were chosen by the organization for the management and administration of economic resources are the following authorities:

Mr. Efraín Ibáñez Corimango – Mburuvicha of the captaincy of Mokokokal.

Mrs. Olga Castro Cuellar – Kuña Mburuvicha from the captaincy of Mokokokal.

2.2. Background on the problem and the context

The initiative to carry out this project arises from the tremendous need that exists in the community due to the lack of water for human consumption, where the organization of the Mokokokal captaincy has carried out different procedures before different instances of the state and not having a favorable response. Negotiations have been made with other organizations such as the Marist Brothers and the ACLO Foundation.

Where, in a community meeting, the steps are taken before the ACLO Foundation so that it can be supported in carrying out a field study of the project and then look for a source of financing for the construction of a water system for human consumption.

The community organization has met several times to analyze this problem at the community level and with other captaincies in the area to seek alternatives to solve the problem of lack of water, the captaincy of Mokomokal being the last community as far as the water system reaches piped water, is the place where less water arrives for human consumption and in many cases there are several days that the water does not arrive.

In zone No. 1, where the Mokomokal captaincy is located, there is no similar project that has been executed, which is why it is one of the first projects that would be executed in the zone with the supply of piped water. For human consumption.

The communities of the Guaraní region have been experiencing the consequences of the flood that occurred on February 20 of this year, where boys, girls, adolescents, young people and whole families were directly affected; being overwhelmed in its entirety, affecting the Educational Units, Health Centers, destroying the houses where they live, losing their means of economic income and the most unfortunate thing, losing human lives. The indigenous communities have been severely affected in their family and community economy, the marginalization and neglect of local governments had already plunged them into a lacerating economic and social crisis.

2.3 OBJECTIVE:

The objective of the project is the provision of water for human consumption with the construction of a new water system in the captaincy of Mokomokal.

2.4. RESULTS:

1.- First Result:

Strengthen the indigenous organization of the Mokomokal captaincy through the management and construction of a new water system for human consumption, as the exercise of a vital right that is the availability of water in quantity and quality for the consumption of the families of the captaincy and in this way have a solid organization with project management capacity.

2.-Second Result:

The organization of the captaincy of Mokomokal has achieved the demand to satisfy one of its basic needs, such as the right to the availability of water for the consumption of children, adolescents, young people and older adults.

3.- Third Result:

The construction of a new water system for human consumption has been carried out in the captaincy of Mokomokal, which directly benefits 35 families.

2.5. Beneficiaries:

Nº	Name y Surname	Male	Female	Nº de Dependents	Adults		Youth		Child	
					M	F	M	F	M	F
1	Efraín Ibáñez Corimango	1		4		1		2	1	
2	Martha Maire Corimango		1	4			1	2	1	
3	Jovina Cuellar Lagi		1	1	1					
4	Yolanda Ananti Vaca		1	1		1				
5	Ilario Maire Corimango	1		3		1		1	1	
6	Geovani Acery Tárraga	1		2				1	1	
7	Jorge Cuellar Nasario	1		2		1				1
8	Francisco Cuellar Cuellar	1		5		1	1	1	2	
9	Franz Cuellar Acery	1		0						
10	Mercio Flores Castro	1		2		1		1		
11	Ramon Ibáñez	1		1		1				
12	Oscar Aguilera Aramayo	1		3		1	1			1
13	Marilyn Aldana		1	1	1					
14	Andrés Moscoso	1		2	1		1			
15	Santos Flores Vidaurre	1		2				1	1	
16	Brígida Flores		1	0						
17	Justina Molina Segovia		1	6		1	1	2	2	
18	Valeria Moscoso Corso		1	5	1		1	3		
19	Juliana Quispe		1	4	1			3		
21	Juan de Dios Flores Mercado	1		2		1				1
22	Máxima gallardo López		1	6	1		1	1	3	
23	Heidy Ibañez		1	2						2
24	Aurelio Cuellar	1		2		1				1
25	Yenni Arevayo Corimango		1	4	1					3
26	Anastasio Arevayo Gomes	1		1						1

27	Sandra Arevayo Corimango		1	4				3	1		
28	Eloísa Chuquri Kichi		1	1		1					
29	Crispin Maire Sosa	1		0							
30	Nico Cuellar Rosado	1		0							
21	Juan de Dios Flores Mercado	1		2		1			1		
32	Roly Espíndola Aldana	1		0							
32	Iverth Achuma Leonel	1		3		1		1	1		
33	Cruz Cuellar Lagi	1		4		1	1	1	1		
34	Florentino Zeballos Orquera	1		5		1	1	1	1		
35	Nolver Espíndola Aldana	1		0							
TOTAL		21	14	83		8	14	7	5	26	23

Total Beneficiaries

Beneficiaries	Direct	Indirect	Adults		Youth		Children	
			H	M	H	M	H	M
Total Men	21	41	8		7		26	
Total Women	14	42		14		5		23
Total	35	83	8	14	7	5	26	23

Direct & indirect beneficiaries of the project are 35 people between men and women (Adults, Youth and Children).

2.6. WORK PLAN AND SCHEDULE

Workplan

N°/ Activity / Participant / Responsible / Time

1 /Start of the project/ Beneficiaries and Technical Team of F. ACLO/ Directive/ 1 day

2/ Coordination and activity planning meeting/ Beneficiaries and Technical Team of F. ACLO./ Directive/ 1 day

3/Restatement of field information/ Beneficiaries and Technical Team of F. ACLO./ Technical Team of F. ACLO./3 days

4/ Excavation work for the laying of the distribution pipeline/ Beneficiaries/ Directive/ 15 days

5 / Work for the laying of the pipe/ Beneficiaries/ Directive /10 days

6/ Work to cover the pipe/ Beneficiaries /Directive/ 10 days

7/ Labour installation of connections and laundry/ Beneficiaries/Beneficiaries/ 35 days

8/ Quotation of materials/ Directive/Directive/ 2 days

9/ Acquisition and purchase of materials. / Beneficiaries/ Directive/ 5 days

10/ Construction of a ferrocement tank for water storage./Beneficiaries/ Technical Team of F. ACLO./20 days

11/ Purchase of plumbing tools./ Directive/ Directive/ 2 days

12/ Purchase of work tools (Picks, shovels)/ Directive/ Directive/ 2 days

13/ Preparation of reports/ Management and Technical Team of F. ACLO./ Directive/ 5 days

14/ Reporting /Directive /Directive/ 1 day

Schedule of activities

	Activiities	Month			
		1	2	3	4
1	Start of the project	x			
2	Activity coordination and planning meeting x	x			
3	Field information stakeout	x			
4	Excavation work for the laying of the distribution pipeline	x	x		
5	Work for laying the pipe		x		
6	Work for the capping of the pipe		x		
7	Labour installation of connections and laundry		x	x	
8	Material Quotes	x			
9	Acquisition and purchase of materials.	x			
10	Construction of a ferrocement tank for water storage.		x	x	x
11	Purchase of plumbing tools.	x			
12	Purchase of work tools (pick shovels)	x			
13	Reporting				x
14	Presentation of Report				x

3. -BUDGET

CONSTRUCTION OF A 60 M3 TANK

INVERSION EXPENSE	UNIDAD	QUANTITY	PRICE PER UNIT (Bolivianos.)	TOTAL COST	CONTRAPARTES		
					MARISTS (Bs.)	BENIFICARIES (Bs.)	ACLO (Bs.)
CONSTRUCTION MATERIAK							
Cement Portland	Bags	120	44	5280	2640	2640	
Common Sand	m3	16	100	1600		1600	
Common Gravel	m3	3	100	300		300	
Foundation Stone	m3	8	90	720		720	
Thread Sealant (125cc Bottle)	Pomo	2	35	70	70		
Cleaner	Lt	1	50	50	50		
1/4" Corrugated Iron	Bars	104	23	2392	2392		
5/16" Corrugated Iron	Bars	42	41	1722	1722		
Alambre de Amarre Tie Wire	Kg	24	12	288	288		
Sika 1 Waterproofing	Kg	29	35	1015	1015		
Venesta White 4 mm	Sheets	30	90	2700	2700		
Woven Wire (chicken mesh 40 meters x 0.90	Rolls	5	252	1260	1260		
Fine Sand	m3	2	100	200		200	
Nails 2 1/2"	Kg	1	12	12	12		
1 1/2" Tigre PVC Universal Union	Piece	2	35	70	70		
1 1/2" threaded PVC tee	Piece	1	25	25	25		
PVC Pipe Thread E - 40 of 1 1/2 "	Piece	1	120	120	120		
Látex Paint	Gallon	3	65	195	195		
Tigre PVC elbow 1 1/2" thread	Piece	4	20	80	80		
Unión Universal PVC Tigre of 1 1/2"	Piece	2	35	70	70		
1 1/2" "Fv" Curtain Stopcock	Piece	2	140	280	280		
Teflon tape 3/4	Roll	1	20	20	20		

1 1/2" Thread nipples	Piece	2	7	14	14		
1 1/2" thread couplings	Piece	2	10	20	20		
SUBTOTAL MATERIALS, Bs				18503	13043	5460	0
WORKFORCE							
Construction worker	Glb	1	7100	7100	7100		
Assistant	Days contracted	30	80	2400		2400	
Agronomist (part time))	Month	4	5998	11996			11996
SUBTOTAL (MAT + LABOUR				21496	7100	2400	11996

ADDUCTION OF WATER SYSTEMS

COST OF INVERSION	UNIT	QUANTITY	PRICE PER UNIT	TOTAL COST	CONTRAPARTES		
					AID AGENCY	BENEFICIARIES	ACLO
					(Bs.)	(Bs.)	(Bs.)
Adduction MATERIALS							
2" PVC clamp with reduction to 1 1/2" PVC	Piece	1	120	120	120		
C-9 PVC pipe 1 1/2" Pza	Piece	840	115	96600	96600		
1 1/2" FG galvanized steel tube	Piece	17	450	7650	7650		
1 1/2" FG galvanized steel couplings	Piece	12	40	480	480		
Steel cable N° 8	ML	120	8	960	960		
Steel Cable N° 6	ML	100	6	600	600		
Shoes N° 8	Piece	120	4	480	480		
Cement	Bag	10	44	440	440		

PVC stopcock without thread 1 1/2"	Piece	1	60	60	60		
PVC stopcock without 1" thread	Piece	2	40	80	80		
TC-12 PVC pipe 1"	Piece	470	80	37600	37600		
Labor for excavation	Daily Wage	100	80	8000		8000	
Labor for laying the pipe	Daily Wage	20	80	1600		1600	
Labor for covering	Daily Wage	50	80	4000		4000	
Labor for the assembly and placement of the bridges	Daily Wage	20	80	1600		1600	
Glue	Liter	2	50	100	100		
Medium galvanized tensioner	Piece	8	25	200	200		
DISTRIBUTION MATERIALS							
1" bell tee with 1/2" PVC outlet	Piece	35	8	280	280		
1" elbows with reduction to 1/2" PVC	Piece	4	6	24	24		
1/2 thread couplings	Piece	70	4	280	280		
1/2" elbows	Piece	70	4	280	280		
1/2" faucet fv	Piece	35	70	2450	2450		
Llave de paso de 1/2 fv 1/2 fv stopcock	Piece	35	35	1225	1225		
1/2" E-40 pipe	Piece	35	25	875	875		
Laundry	Piece	35	150	5250	5250		
Cement	Bags	35	44	1540	1540		
Brick	Piece	420	1,5	630	630		
Excavation labour	Daily Wage	15	80	1200		1200	
Pipe laying labour	Daily Wage	10	80	800		800	
Labour capping of the pipe	Daily Wage	10	80	800		800	

Labr installation of connections and laundry	Daily Wage/plummer	35	150	5250		5250	
SUBTOTAL (MAT + LABOUR)				181454	158204	23250	0
TOTAL				221453	178347	31110	11996
% of contribution					81%	14%	5%

PHOTOGRAPHIC ANNEX



Damage caused to the drinking water system



Families of the capitania of Mocomokal



Environmental damage caused by the flood



Visits to Mokokal families

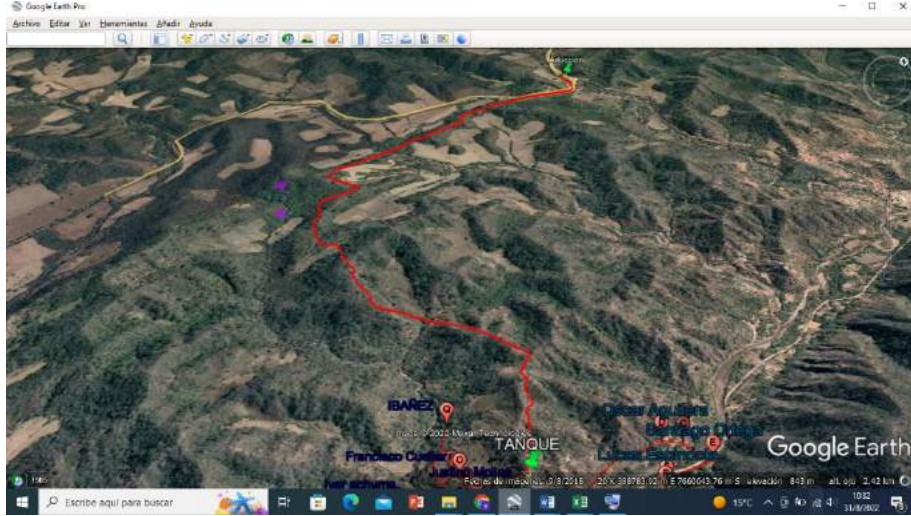


Community Meeting



Children of the Mokokomal Community

DIAGRAM OF THE SYSTEM AND TANK ADUCTION



DISTRIBUTION NETWORK

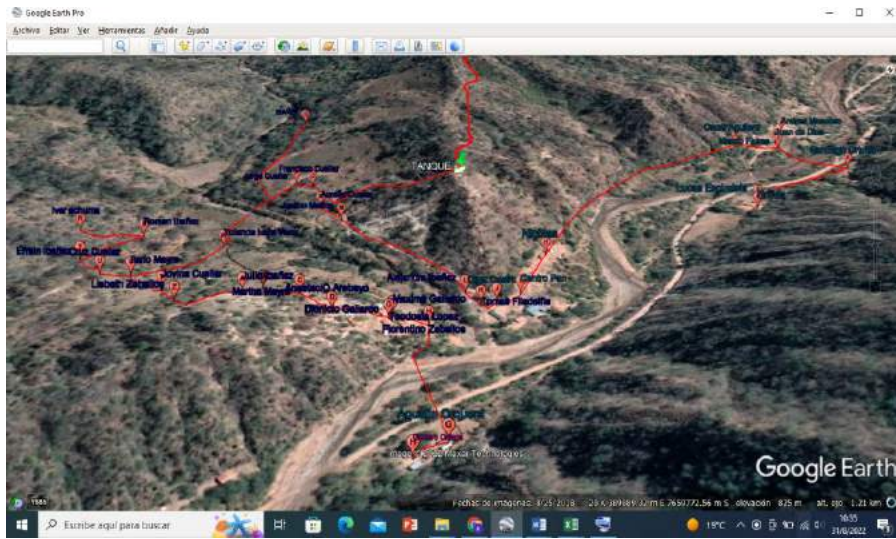
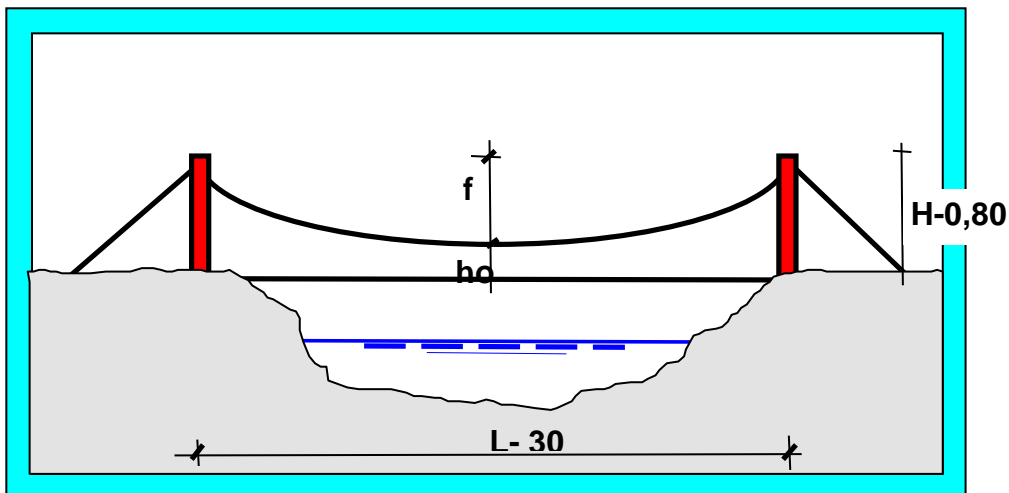


Diagram of bridge No. 1



CONSTRUCCIÓN PLANS

