

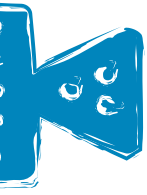
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TIBUSA

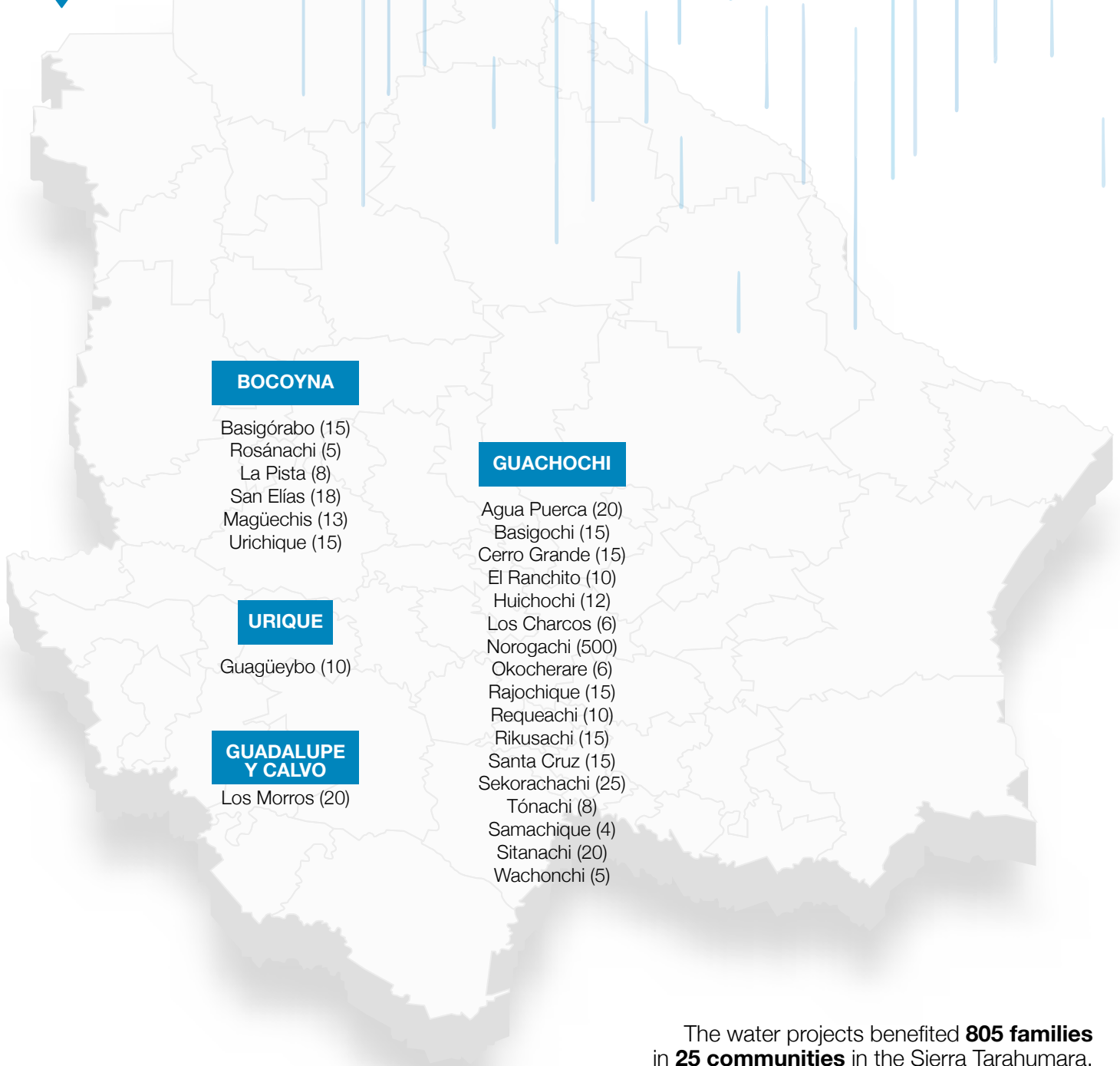
COMPLEJO
ASISTENCIAL
CLÍNICA SANTA
TERESITA, A.C.

**WELLS
AND WATER
COLLECTING
REPORT
2024**



WATER WELLS (DRILLING AND MAINTENANCE) AND RAINWATER COLLECTION SYSTEMS CACSTAC 2024

4 MUNICIPALITIES



The water projects benefited **805 families** in **25 communities** in the Sierra Tarahumara.



MESSAGE FROM THE DIRECTOR

¡Kwira ba!

Creel, Chihuahua, August 30th, 2024

DEAR FRIENDS
OF OUR MISSION,

Receive warm greetings from the Sierra Tarahumara. We hope you all are doing well. We want to thank you for your generous support for our water projects with the Tarahumara people. The rainy season was late this year; however, it is still raining today, which fills us with hope.

After a few years of not drilling wells, we decided to repair some parts as well as air and oil leaks from our old drilling rig. In addition to the rig, CACSTAC has a pickup truck adapted for this work, a trailer and a warehouse.

This year we were able to **drill 2 new wells** in Basigórabo and Rosánachi, thanks to the help of our benefactors, the work of the CACSTAC team with the Rarámuri communities, the advice of Steve Schneider and the help of Antonio Domínguez (who passed away last year but helps us from heaven). Likewise, 21 old wells were maintained, 6 other wells were visited to check their condition, and 70 rainwater harvesting systems were installed in various parts of the Sierra.

The **Water Well Drilling and Maintenance projects**, as well as the **Rainwater Harvesting Systems**, were done from March to July 2024 in **25 communities** in **4 municipalities** of the Sierra Tarahumara, benefiting a total of **805 families: 74 in Bocoyna, 701 in Guachochi, 20 in Guadalupe y Calvo, and 10 in Urique.**

It is important to mention that the Tarahumara communities experience long periods of water scarcity, which causes various illnesses such as dehydration, gastrointestinal and skin diseases. With the work done, we achieved our objective of providing access to water to the Rarámuri families in the highlands.

This program **directly benefited 4,830 people** in the Sierra Tarahumara, considering that each family has an average of 6 members.

Cost of the project: **\$46,000.00 USD**

Next year we expect to drill two more wells in the communities of Rejogochi and Norogachi, as well as provide maintenance to 16 wells in the Choguita region.

A heartfelt thanks to each one of you for joining efforts for the benefit of the people who do not have access to water. May God bless you abundantly,

Fr. Enrique J. Mireles, S.J.

General director of CACSTAC / TCHF



DETAIL 2024

Municipality/ Community	Program	People benefited	Date	Depth of the well (feet)	Water column (feet)	# of containers and capacity (gallons)
BOCOYNA						
Basigórabo	Well drilling	90	05/23/24 to 06/01/24	108.27	49.21	-
Rosánachi	Well drilling	30	05/30/24 to 06/08/24	134.51	68.90	-
La Pista	Well maintenance	48	03/06/24	124.67	36.09	-
San Elías	Well maintenance	108	03/04/24	196.85	147.64	-
Magüechis	Rainwater harvesting	78	04/15/24	-	-	13 x 290 gal.
Urichique	Rainwater harvesting	90	03/06/24	-	-	15 x 660 gal.
GUACHOCHI						
Agua Puerca 1	Well maintenance	60	07/10/24	190.29	49.21	-
Agua Puerca 2	Dug well maintenance	60	07/10/24	9.84	9.84	-
Basigochi 1	Dug well maintenance	30	07/25/24	19.69	3.28	-
Basigochi 2	Dug well maintenance	30	07/25/24	19.69	3.28	-
Basigochi 3	Dug well maintenance	30	07/25/24	19.69	3.28	-
Cerro Grande	Well maintenance	90	07/10/24	114.83	42.65	-
El Ranchito	Well maintenance	60	07/11/24	131.23	114.83	-
Huichocho	Well maintenance	72	07/23/24	78.74	39.37	-
Los Charcos	Well maintenance	36	07/12/24	75.46	42.65	-
Norogachi 0	School well visit	102	07/25/24	196.85	65.62	-
Norogachi 1	Well maintenance	483	07/09/24	131.23	104.99	-
Norogachi 2	Well maintenance	483	07/24/24	98.43	78.74	-
Norogachi 3	Well maintenance	483	07/24/24	95.14	49.21	-
Norogachi 4	Well maintenance	483	07/23/24	88.58	82.02	-
Norogachi 5	Well maintenance	483	07/24/24	137.80	101.71	-
Norogachi 6	Hospital well maintenance	483	07/25/24	39.37	29.53	-
Okocherare	Well maintenance	36	07/12/24	88.58	52.49	-
Rajochique	Dug well maintenance	90	07/26/24	19.69	3.28	-
Requeachi 1	Well maintenance	30	07/13/24	82.02	68.90	-
Requeachi 2	Well maintenance	30	07/13/24	55.77	39.37	-
Rikusachi	Well maintenance	90	07/23/24	62.34	49.21	-
Santa Cruz	Well maintenance	90	07/13/24	78.74	36.09	-
Sekorachachi	Well maintenance	150	07/09/24	82.02	19.69	-
Sitanachi	Well visit	120	07/09/24	196.85	N/A	-
Wachonchi	Well visit	30	07/09/24	114.83	19.69	-
Tónachi	Rainwater harvesting	48	03/12/24	-	-	8 x 660 gal.
Samachique	Rainwater harvesting	24	03/12/24	-	-	4 x 660 gal.
GUADALUPE Y CALVO						
Los Morros	Rainwater harvesting	120	06/15/24	-	-	12 x 290, 8 x 660 gal.
URIQUE						
Guagüeybo	Rainwater harvesting	60	03/12/24	-	-	10 x 290 gal.
TOTAL NUMBER OF PEOPLE BENEFITED		4830				



TECHNICAL DATA

Water Well Drilling

When an indigenous community requests the drilling of a water well, our team goes to the site to look for the underground aquifer water flow with the help of copper rods. We also check the conditions of the land, the roadways for the drilling rig and study the optimal position for drilling, considering the inclination of the land and the direction of the wind. Taking these factors into account, the location and feasibility of the water well is defined.

The materials and equipment are prepared in the mission's workshops. Afterwards, everything is moved to the community where the water well will be drilled; the drilling machine is installed and leveled, and when everything is ready, drilling begins with a drill bit and placement of PVC pipe, drilling with an air hammer until water is found or until the depth limit allowed by the length of the pipes is reached. Finally, cleaning is done with a compressor using soap and dispersant.

Afterwards, a pouring of cement is made for the base of the well, which must be left to dry for 2 days. Then the system of pipes, pump and lever are installed with the help of the pick-up lift. The depth of the well, water level and geographic coordinates are corroborated to fill out the record book. Finally, the operation and basic care of the water well is explained to the community.

Drilling times vary depending on the land or due to the breakdown of the drilling rig or any other part. With favorable conditions the drilling of a well takes from 1 to 2 weeks. With unfavorable conditions it can take up to 2 months of work.

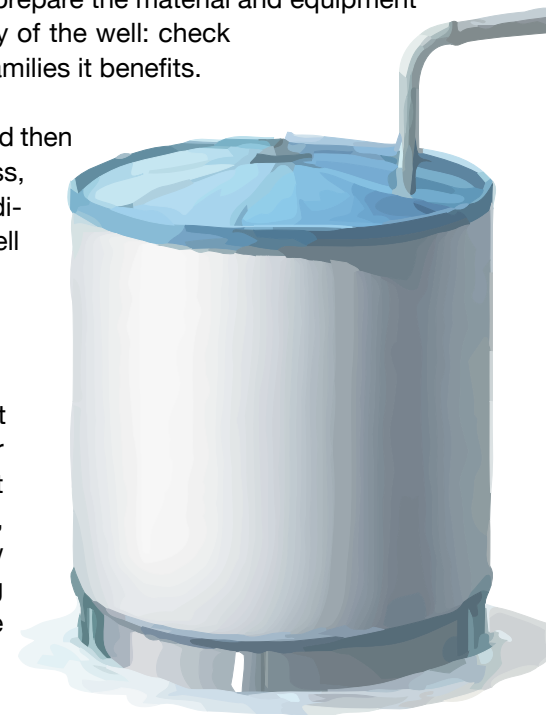
Water Well Maintenance

Over the years, wells can become clogged, or parts of the well may break, which requires maintenance. Some communities send us a written request indicating the failure of the well. Our team prepare the material and equipment necessary to carry out the work, go to the community and make a physical study of the well: check coordinates, depth of the well, water level, condition of the parts and how many families it benefits.

All the parts are removed so that special tubes with soap can be put into the well and then connected to the compressor to clean the well. At the end of the cleaning process, the parts that had been previously removed are replaced, if they are in good condition; otherwise, they are replaced with new parts. The approximate time for a well maintenance is 8 hours, plus travel time to and from the communities.

Rainwater Collection Systems

This system consists of installing water gutters on the roof of the houses to collect rainwater in a container. When a community requests one of these systems, our team locates the houses and verifies that they meet the necessary requirements. It is important that they have an area of land in the lowest part to install the container, whose center is a maximum of 13 feet away from the house; the roof must allow the fixing of the gutter supports and must not be made of absorbent or polluting materials, such as straw or cardboard. The material is prepared and taken to the community for installation. Likewise, its operation is explained to the families.



WATER WELL DRILLING

Drilling in Rosánachi



Drilling in Basigórabo





WATER WELL MAINTENANCE



Santa cruz, Norogachi, mpio. de Guachochi



Los Charcos, Norogachi, mpio. de Guachochi



Requeachi, Norogachi, mpio. de Guachochi



El Ranchito, Norogachi, mpio. de Guachochi



Okocherare, Norogachi, mpio. de Guachochi



Agua Puerca, Norogachi, mpio. de Guachochi

RAINWATER COLLECTION SYSTEMS



Magüechis, mpio. de Bocoyna



Samachique, mpio. de Guachochi



Los Morros, mpio. de Guadalupe y Calvo



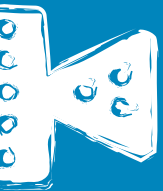
Guagüeyvo, mpio. de Urique



Tónachi, mpio. de Guachochi



Urichique, mpio. de Bocoyna



THANKS TO OUR BENEFACTORS

¡Matétera ba!

Our heartfelt thanks to our friends:

Tarahumara Children's Hospital Fund of Oregon
Tarahumara Children's Hospital Fund of Michigan
Tarahumara Children's Hospital Fund of Louisiana
Tarahumara Children's Hospital Fund of El Paso
Comité Épiscopal France - Amérique Latine (CEFAL)
Rotoplas S.A. de C.V.
United Nations Development Programme (UNDP) Mexico
Friends, benefactors, individuals



HOW CAN I HELP?

Tarahumara Children's Hospital Fund
is a nonprofit tax-exempt corporation 501(c)(3) and proceeds
go to the different projects of our Mission in Tarahumara.
Please log on to:

www.tchforegon.org

Portland, OR.

Peggy Brockamp and David Klosterman
pyjb@comcast.net | davidklosterman@yahoo.com
Phone (503) 659 4342

Detroit, MI.

Veronica Cattivera
tarahumarainfo@gmail.com
Phone or Text (586) 219 4706

New Orleans, LA.

Armand Bertin
armandhb@aol.com
Phone or Text (504) 610 1601

San Diego, CA.

Iberoamericana University Foundation
Fr. David Ungerleider, S.J.
ungerlei@uia-foundation.org
on-line donations: www.uia-foundation.org
Phone or Text (619) 980 5997

Complejo Asistencial Clínica Santa Teresita, A.C.

Calle Parroquia # S/N
Creel, Chihuahua, México, C.P. 33200
Fr. Enrique Mireles, S.J.
gawi.tibusa@gmail.com
www.cacstac.org

Phone Office +52 635 456 0150 | Phone or Text +52 614 427 0432

Complejo Asistencial Clínica Santa Teresita, A.C. is a social work of the
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Gawí

TIBUSA