

Executive Summary Aqueduct of the Indigenous Tikuna Community of San Juan de Los Parentes

On the 9th of October 2020, Fundación Entropika inaugurated the aqueduct of the Tikuna indigenous community of San Juan de Los Parentes. The aqueduct consists of a 9 meters high concrete tower that draws water from an artesian well and distributes it to each house of the community as well as its school, benefitting a total of 124 people.

Today, San Juan de Los Parentes is one of the very few indigenous communities in the Southern Colombian Amazon to have an aqueduct, improving access to clean drinking water, basic sanitation and hygiene.



Inauguration of the aqueduct in San Juan de Los Parentes on the 9th of October 2020

The construction of a community aqueduct consists of various steps. The first step was the perforation of an 18-meters deep artesian well, from where a submergible pump draws water to be stored in the plastic tanks of the tower. The construction of the concrete water tower was then started on the 18th of July and finished on the 26th of August 2020. The tower then had to dry for 3 weeks before putting any weight on it.





Example of some steps of the construction of the concrete tower.



Example of some steps of the construction of the concrete tower.





Example of some steps of the construction of the concrete tower.



During these three weeks, the distribution network of pipelines was installed to connect the four 2.000 liters plastic tanks on top of the tower to each household and the school of the community. In each house, the pipelines are connected to the kitchen, the bathroom and to a Sawyer micro-membrane water filter that was installed as a previous initiative from Entropika's water project. The micro-membrane filters are used to provide clean drinking water to each household.



Example of the distribution network of pipelines reaching individual households.





Sawyer micro-membrane filters installed in each household of San Juan de Los Parentes.

It is important to mention that the construction of the concrete water tower and the installation of the distribution network was done by Entropika's water team together with the help of the community who financed the unqualified workforce. See below for a summary of expenses.

*On the 6th October 2020, Entropika received \$ 11.324.610,00 COP from 1064 Givers.

| Item | Total | Paid by | | |
|--|---------------|-----------------|---------------|--------------|
| | | Ankarstiftelsen | 1064 Givers* | Community |
| Construction materials | | | | |
| Tower | 19.356.180,00 | 8.213.920,00 | 11.142.260,00 | - |
| Distribution network | 6.530.610,00 | 6.530.610,00 | - | - |
| Transport of materials | 1.474.757,00 | 1.334.757,00 | 140.000,00 | - |
| Submergible pump | 1.250.000,00 | 1.250.000,00 | - | - |
| Payment of professionals | | | | |
| Perforation of artesian well | 1.415.000,00 | - | - | 1.415.000,00 |
| Construction of concrete tower | 5.200.000,00 | 700.000,00 | - | 4.500.000,00 |
| Installation of water pump | 200.000,00 | 200.000,00 | - | - |
| Elaboration and installation of stairs | 750.000,00 | 750.000,00 | - | - |
| Others | 175.000,00 | 175.000,00 | - | - |
| Others | 118.760,00 | 118.760,00 | - | - |
| Sub-total | 36.470.307,00 | 19.273.047,00 | 11.282.260,00 | 5.915.000,00 |
| Bank taxes (4*1000) | 145.881,23 | 77.092,19 | 45.129,04 | 23.660,00 |
| Total | 36.616.188,23 | 19.350.139,19 | 11.327.389,04 | 5.938.660,00 |



This initiative also includes setting up a community water service to collect a monthly fee from each user to cover the costs of an operator, maintenance of the system, as well as electricity to power the water pump. This process, which started after the inauguration of the aqueduct, is done with indigenous authorities in order to empower the community and make it autonomous in guaranteeing its access to clean drinking water. We expect to be doing capacity-building workshops as well as the follow-up of the water service until August of 2021.



Inauguration of the aqueduct in San Juan de Los Parentes.



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