

# COLLECTIVE WATER MANAGEMENT IN THE TERRITORIES

El Agua Nos Une – SuizAgua América Latina

MingAgua: Collective Water Project

SDG: 6. Water-dependent ecosystems  
11. Sustainable cities and communities



**Objective:** Promote collective actions for the integral and sustainable management of water in the communities within the area of influence of Holcim (Colombia), executed in its first phase in Boyacá.



**Location:** Protection and recovery of the Guática Andean moorland and management of the Calavernas, Diravita Alto and La Victoria rural aqueducts in Firavitoba. Four educational institutions in the Modeca rural settlement of the Portacheulo sector, the Reyes Patria rural settlement of the El Bujío sector in the municipality of Corrales and in the Patrocinio and El Hato rural settlements in the municipality of Tibasosa and community leaders

**Update:** 26 Feb. 2018



**Results:** Ongoing project, the main expected results are the following:

#### Focus A - Restoration and Conservation of Water Recharge Areas in Rural Aqueducts

- Protection and recovery of the Guática Andean moorland, planting of native species and protective fencing for the protection and conservation of the Andean moorland ecosystem.
- Management of the Calavernas, Diravita Alto and La Victoria Rural Aqueducts in Firavitoba. This includes cleaning streams, planting native species, construction of ecological trails, informative signage describing the flora and fauna of the area.
- Diversification of the types of species and individuals by species in working areas.
- Strengthening of community processes for water management and improvement in water use and exploitation processes.

#### Focus B - Design, Construction and Management of Water Harvest Systems

- Four educational institutions have water harvest systems of at least **2,500 liters** per system.
- Partner families display changes in their water use habits in their daily activities and recognize alternatives for the proper use and management of water.
- Use and exploitation of water harvested for productive purposes in community gardens and productive projects.
- Improvement in school facilities for the recovery and harvesting of rainwater
- Beneficiaries recognize changes in their quality of life.

#### Leading actors



#### Institutions

Municipal Mayors' Offices of Firavitoba, Corrales and Tibasosa  
Corpoboyacá  
Colombian Federation of Municipalities.

#### Community Actors

- Four educational institutions
- 1) Modeca, Portacheulo sector of the municipality of Corrales
- 2) Reyes Patria rural settlement, El Bujío sector of the municipality of Corrales
- 3) Patrocinio rural settlement in the municipality of Tibasosa
- 4) El Hato rural settlement in the municipality of Tibasosa
- Community leaders



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#### Description:

##### Focus A - Restoration and Conservation of Water Recharge Areas in Rural Aqueducts

##### Awareness:

- Joint development of social maps and strategy for the protection and recovery of the Guática Andean moorland and management of the Calavernas, Diravita Alto and La Victoria rural aqueducts in Firavitoba.
- Integrated Network of Water Managers for training and environmental awareness around water culture aimed at children, youth and adults.

##### Integral Water Management - Reforestation and Conservation:

- Construction of reforestation and conservation strategies.
- Cleaning during the Minga with training and technical support.
- Measurement of water quality and quantity in 4 rural settlements: Guática, Calavernas, Diravita Alto, La Victoria.
- Preliminary assessment and organizational coordination for the collective management of water, sustainable management of ecosystems and reforestation material, use and maintenance of supply infrastructure.

##### Water with a Purpose:

- Support for organizational capabilities for collective water management.
- Ecosystem characterization (possible partnership with higher education institutions).
- Sustainable ecosystem management (Fences, plants for the protection of water, wildlife corridors, protection for the micro-basin, informative signage).
- Collaboration with the Efficient Water Use and Savings Plan (PUEEA).

##### Water Festival:

- Minga and community events around the appropriation of the project.
- Recognition of the rural settlement with the greatest decrease in water consumption (Minga to build water harvest facilities).

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## Focus B - Design, Construction and Management of Water Harvest Systems

### Awareness:

- Collaboration among territorial actors, the four educational institutions and the community leaders.
- Engagement with "Computadores para Educar" with installation of the Yaku Adventure game to create training processes around water in these schools. Developed in the framework of the global program of Water Initiative of Swiss Cooperation ([www.aventurayako.com](http://www.aventurayako.com)).
- Creation of a youth group of water managers, trained by local community leaders (2018 - 2019).
- Collaboration with the Network of Water Managers for training and environmental awareness processes around water culture aimed at children, youth and adults.
- **Integral Water Management – Water Harvesting:**
- Collective design of water harvest strategies with the children of the community supported by a Holcim engineer.
- Evaluation of infrastructure, system design and installation of water harvesting systems in each of the rural educational centers in a participatory work with the communities.

### Water with a Purpose:

- Engage the project with community gardens and storage of water in times of drought.
- Engagement with the community: community leaders (community action board, schools' environmental club). Participation in an event for the design of applications and use of water harvests.

### Water Festival:

Minga and community events around the appropriation of the project and execution of other actions in favor of the improvement of the school and community facilities with the support of municipal mayor's offices.

### Context:

At the general level, the communities intended to be supported by the project are farmers that rely on agricultural activities associated with the cultivation of small-scale agricultural products, raising cattle, sheep and other species.

Caring for water sources and the distribution and use of this resource is one of the most relevant issues given the prevalence of agricultural activities in the region.

To protect water adequately and sustainably, this project proposes to work with the representative bodies of the community, such as the Board of Directors of the aqueducts and Community Action Boards, as well as the educational institutions represented by rural schools.

The project proposes the promotion of integral water management based on the intervention of all social actors and with an impact on community processes to manage the resource. Community processes will be strengthened based on the integration of knowledge and practices for the recognition of the environment from the potential of water in areas with water shortages.

### Investments:

- HOLCIM: **\$85,000,000 COP.**
- The communities involved will contribute time and work in the different activities.
- Mayor's Office of Tibasosa: **\$20,000 COP.**
- Mayor's Offices of Firavitoba y Corrales: Investments associated with the maintenance of aqueducts and school environments.

### Sustainability:

Training processes to generate capabilities for the integral management of water in communities based on integration and collective work, as well as impact on the Efficient Use and Water Saving Plans (PUEAA) in community aqueducts and School Environmental Projects (PRAE) and its engagement with municipal management processes.

### References:

[www.holcim.com.co](http://www.holcim.com.co)  
[www.fundacionsocialholcimcolombia.org](http://www.fundacionsocialholcimcolombia.org)