





Scaling Up Aguas Firmes

Current situation

Due to the growing population and increased economic and agricultural activity, local aquifers are under water stress. Recent studies suggest that 2 out of 3 Mexican states will suffer water shortages by 2050. Zacatecas, Hidalgo and Mexico City are among the states most exposed to this situation.

Given the importance of groundwater for water supply and storage in the region, water stress and conflicts over water use are expected to increase among industrial, agricultural and community stakeholders. Therefore, improving long-term water security for the population, farmers and local industry will benefit communities and the environment.

After a successful first phase (2021-2024) of the public-private partnership between the German Technical Cooperation (GIZ) and AB InBev Grupo Modelo, in which an infiltration potential of 6 million m3 was achieved for the benefit of the aquifers of Calera and Apan, the Scaling Up Aguas Firmes Project will continue working to improve the sustainable management of the aquifers of Apan, Calera and now Mexico City, adding Coca-Cola as an implementing partner.

Other results of the first phase include a water governance model, with a permanent dialogue among the main users of the Calera (Zacatecas) aquifer for its sustainable management and the design of a flexible financial scheme for the implementation of more efficient drip irrigation and/or conservation agriculture technologies, which contributed to water security.

General Objective

To improve the sustainable management of the Calera, Apan and Mexico City aquifers by expanding the model of the first phase of Aguas Firmes.

Project Name	Scaling Up Aguas Firmes
Commissioned by the	German Federal Ministry for Economic Cooperation and Development (BMZ)
Project Region	Mexico City, Hidalgo and Zacatecas
Executing Agency	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Other Party	AB InBev Grupo Modelo and Coca-Cola
Duration	2024 -2027

Contribuciones a la Agenda 2030







Territorios donde se implementa el proyecto:







Left Photo: Producers in Calera, Zacatecas.

Right Photo: Town of Cocinillas, Apan, Hidalgo

Lines of action

Nature-based solutions (NBS)

-Through natural infrastructure works, we seek to improve water infiltration and reduce soil erosion. We expect to achieve an increase in infiltration potential of 6 million m3 through NBS.

Sustainable agriculture

-Through conservation agriculture practices and irrigation technification, we train farmers to take care of water and make efficient use of their resources. We plan to implement sustainable agricultural practices in 8,500 hectares in addition to the hectares of the first phase of the project.

Financial Inclusion

-We promote a financing scheme for agricultural producers to have access to credit for technification, insurance and technical subsidies to carry out sustainable agricultural practices. The goal is for 890 producers to make use of financial solutions to improve their resilience and move toward biodiversity-friendly agriculture.

Hydrological monitoring

-Through monitoring and evaluation, we seek to certify the levels of infiltration and water savings as a result of actions carried out.

Territorial governance

-We promote changes related to water management through collaborative collective governance initiatives. We expect to strengthen 5 governance structures or instruments.



Improvements in irrigation technification in Calera, Zacatecas.



Nature-based solutions in Apan, Hidalgo.

Systematization of results of the first phase of Aguas Firmes: https://www.bivica.org/file/view/id/7100

Other communication products of the first phase: https://www.aguasfirmesgrupomodelo.com/es/biblioteca

Published by Deutsche Gesellschaft für

Internationale Zusammenarbeit (GIZ) GmbH

Registered Offices in Bonn and Eschborn,

Germany

Scaling Up Firm Waters Project Av. Miguel Hidalgo No 286 Col. La Concepción, Coyoacán,

México

Telephone +52 55 56 69 22 97 www.giz.de/mexico

Update March 2025

Photo credits Aguas Firmes Archive:

pages 1 and 2

Text María Ana Rodríguez

GIZ is responsible for the content of this publication.

Commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ).

In cooperation with



