



Brazil welcomes the opportunity to contribute to the Sharm el Sheikh online portal under the Sharm el-Sheikh joint work on implementation of climate action on agriculture and food security, recognizing its important role in sharing information on projects, initiatives and policies for increasing opportunities for implementation of climate action to address issues related to agriculture and food security.

Cisterns Program (Programa Cisternas) — National Program to Support Rainwater Harvesting and other Social Technologies for Accessing Water

I. Introduction

The Cisterns Program is based on successful social technologies designed to promote access to water for both human consumption and food production through simple, lowcost solutions. In the context of the climate crisis—characterized by prolonged droughts, irregular rainfall, and growing water scarcity—ensuring water access plays a vital role in strengthening resilience and adaptive capacities in rural areas. The program mitigates the impacts of climate variability on vulnerable populations, reduces dependence on unpredictable water sources, and promotes food and nutritional security, productive inclusion and climate justice.

II. The Program / Initiative

Established as a public policy in 2003, the Cisterns Program is regulated by Law No. 12,873 of 2013, Decree No. 9,606 of 2018, and complementary ordinances and normative instructions. It targets low-income rural families (per capita income of up to half the minimum wage) and rural public facilities affected by drought or water scarcity, with priority given to traditional peoples and communities. Participation requires registration in the Unified Registry for Federal Government Social Programs (Cadastro Único).

The program seeks to universalize access to water and promote its

sustainable use among vulnerable populations living in rural areas that lack this essential public service. It finances the construction of cement-plate cisterns for safe drinking water, fosters improved methods of accessing water for food production to promote the productive inclusion of low-income families, and ensures regular access to food and water in sufficient quality and quantity to guarantee food and nutritional security. It also strengthens family farming by expanding water availability for agricultural purposes, supporting greater production diversity, while simultaneously improving health and reducing the time and physical effort required to fetch and carry water, particularly for women and children.

III. Scientific evidence

The Cisterns Program has a proven track record of improving quality of life for its beneficiaries. By offering safe water for consumption, it reduces the incidence of waterborne diseases and infant mortality, while stored water enables backyard agriculture, food diversification, and additional income opportunities that reduce vulnerability and rural-to-urban migration.

Scientific evidence highlights its wide-ranging impacts:

- Reduction of up to 69% in infant mortality due to diarrhea (Silva, 2015);
- Increase of 46 grams in average birth weight among children exposed to cisterns (Da Mata et al., 2023);
- Expansion of individual autonomy and reduction of clientelistic practices such as “water for votes” (Bobonis et al., 2019);
- 82% increase in household income for beneficiaries of water-for-production initiatives (INSA, 2016);
- A 7.5% rise in children’s school attendance following cistern implementation, with an estimated annual economic return rate of at least 4.8% (Febraban, 2007);
- Reduction of up to 90% in time spent fetching water, particularly by women, who could then dedicate more time to education, work, or leisure (Gomes & Heller, 2016).

Moreover, the program’s gender-sensitive approach has amplified its impact: integrating a gender perspective into water policies has contributed to better health, education, and income outcomes, while

enhancing adaptive capacity and reducing vulnerability.

IV. Conclusion

The Cisterns Program stands as a landmark Brazilian public policy that advances social inclusion, public health, and climate resilience. By expanding access to safe and sustainable water through social technologies, it has improved the lives of millions of rural families, reduced inequalities, and strengthened their ability to adapt to the impacts of the climate crisis. Its documented outcomes—lower child mortality, improved nutritional status, higher income, better school attendance, and increased women’s autonomy—demonstrate its transformative potential. As water scarcity intensifies under climate change, the Cisterns Program serves as a concrete example of how rights-based, gender-sensitive, and participatory approaches can deliver structural solutions that safeguard health, food and nutrition security, and dignity for vulnerable populations.

V. References

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