

## Resilience and Adaptation to Water Scarcity in San Martín de las Palmas, Santiago Tilantongo, Nochixtlán Oaxaca

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**Abstract :** Water scarcity is a worldwide issue, coupled with climate change is a relevant problem, that affect not only large cities, but also rural areas. The Municipality of Santiago Tilantongo belongs to the district of Nochixtlán Oaxaca, it's built up from 14 communities, one of them San Martín de las Palmas. This community was founded in 1900, at that time the inhabitants were supplied with water through rivers of the region which were abundant (they used containers filled in the river for that purpose); However, over the years the level of the rivers began to drop and in 1994 specific wells were located to store water and at the same time make it drinkable, this with support of the state of Oaxaca and the program Procampo. By the year 2000 the shortage of water in the supply sources was notorious, the community requested support from the Oaxaca State government to solve the problem. The government's response consisted in the implementation of ferro-cement tanks (2005) and water wells (2010), both for rainwater collection, However, it was not enough. Now days the community has a population of 60 inhabitants who have resisted and adapted to water scarcity, not only with the programs implemented by the government, but they also have implemented important structural analysis strategies. The objective of this research is to know the adaptation strategies used by the community to analyze them and propose improvements for water conservation and mitigation of this scarcity.

**Keywords :** adaptation, climate change, mitigation, resiliencia

**Conference Title :** ICCCMAR 2023 : International Conference on Climate Change Mitigation, Adaptation and Resilience

**Conference Location :** Paris, France

**Conference Dates :** November 27-28, 2023