

CLIMATE CROWD Community-driven solutions to help people and nature in a changing climate

GRAN CHACO BOLIVIA SUMMARY REPORT



ABOUT

<u>Climate Crowd</u> is a bottom-up communitydriven approach. Working with communities and local NGOs, we <u>collect data</u> on climate impacts to communities, <u>analyze the data</u>, present the data back to the communities, and work with them to develop, fund and implement <u>on-the-ground solutions</u> that help people and nature adapt to a changing climate. The Climate Crowd model provides a rapid way to gather data, pilot projects, and mobilize financial resources for the most vulnerable communities, through a participatory method.

BACKGROUND

This report summarizes what was learned from 70 interviews with key informants (36 female, 34 male) from the Indigenous Guaraníes del Alto Isoso communities within the Bolivian Chaco, part of the greater Gran Chaco region. The Gran Chaco—a semi-arid, tropical lowland—stretches roughly 303,782 square miles across parts of Bolivia, Argentina, Brazil, and Paraguay. Interviews were conducted in March of 2025.

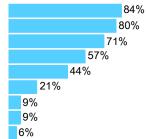
REPORTED CHANGES IN WEATHER AND CLIMATE (n=70)

- 91% Drought
- 57% Increased rainfall
- 57% Heat waves and hotter days
- 34% Flooding
- 33% Decreased rainfall
- 23% Changes in the timing of seasons

IMPACTS ON COMMUNITY LIVELIHOODS

Due to more extreme weather like increased heat and drought, 84% of respondents reported increased cases of illness within their community, particularly fever, cough, and allergies. Similar extreme weather patterns have caused disruptions to children's access to education (reported by 21% of respondents), either by causing school closures or because kids are needed at home to help their parents with impacted agricultural activities. Respondents also noted that the availability of wild food, especially fruit from cupesi trees and bird species, has decreased (reported by 80% of respondents) in addition to crop yields (reported by 71% of respondents) like yuca. These impacts are typically caused by excessive heat, drought, flooding from increased rainfall, and an increase in pests (reported by 44% of respondents). This has resulted in less food being consumed by community members (reported by 9% of respondents).

Increase in illness Decreased availability of wild food Decreased crop yields Decreased availability of freshwater Increase in pests Impacts to education Less food for consumption Decreased availability of pasture Livestock deaths



There has been a decrease in the availability of freshwater, according to 57% of respondents. This has particularly impacted livestock—several respondents noted having to use tap water typically reserved for human-use for livestock.

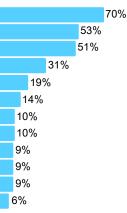
9% of respondents noted that the availability of pasture for livestock has decreased, which, in addition to water scarcity, has led to increased livestock deaths (reported by 9% of respondents).





COMMUNITY RESPONSES TO CLIMATE CHANGE

Change in firewood collection location Purchasing goods at the store Migration Change in crop type Use of hand pumps for water Change in harvest time Reliance on external aid New/improved use of irrigation Stopping agricultural production Change in agriculture area Use of wells Change in pasture location



In response to resource scarcity brought about by changes in weather and climate, 70% of respondents reported having to change the location where they collect firewood, noting the need to travel longer distances. Similarly, respondents reported needing to change agriculture (9% of respondents) and pasture locations (6% of respondents) due to crop failures and pasture scarcity.

53% of respondents reported having to purchase goods like food, water, and firewood at the local store due to the scarcity of these resources in the environment.

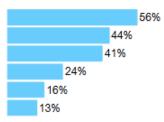
31% of respondents reported changing crop types to more drought-resistant varieties like some types of beans and corn. Respondents also reported changing the time in which they harvest crops in an effort to adapt to changing seasonality (reported by 14% of respondents). Some community members were not able to cope and had to stop their agricultural production (reported by 9% of respondents), often due to lack of financial resources to supply new seeds.

To combat decreased freshwater availability, 19% of respondents reported using hand pumps to transport water and 9% of respondents reported using wells. To better conserve water, 10% of respondents reported new and/or improved use if irrigation.

For some, the impacts of extreme weather were too difficult, resulting in many families moving away, often to bigger cities with more opportunities (reported by 51% of respondents). 10% of respondents also reported an increase in external humanitarian aid.

IMPACTS ON BIODIVERSITY

Increased mortality of trees Decline in wildlife species Wildlife searching for resources Change in plant life cycles Human-wildlife conflict Wildlife range shift



Respondents noticed that changes in weather and climate have been affecting biodiversity as well, notably trees; 56% of respondents reported that trees have been increasingly dying. Similarly, 24% of respondents noticed that the life cycles of plants have been changing, with flowers blooming and trees fruiting at different times than they previously have.

Certain species of wildlife, especially birds, have declined in the area, according to 44% of respondents. Some species have started shifting their range as well (reported by 13% of respondents), with some bird species flying to higher elevations to escape the heat.

Respondents have noticed wildlife like jaguars more frequently searching for food and water (reported by 41% of respondents), often coming into communities to find these resources. This can lead to human-wildlife conflict (reported by 16% of respondents) as people and wildlife are put into closer proximity and competition over resources is increased.



WANT TO LEARN MORE?

Visit the Climate Crowd <u>website</u> to explore and download interview data, view <u>project pages</u>, and read more summary reports like this on our <u>publications page</u>.



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