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**Timeline**

2023

**Study Status**

In Progress

**Study Type**

Randomized Evaluation

**Sample Size**

3,128 maize farmers

**Research Implemented by IPA**

Yes

# Can Text Message Weather Alerts Improve Decision-Making and Investment Outcomes for Farmers in Ghana?



In This Image

A farmer receives an ignitia weather alert ©ignitia

**In collaboration with ignitia, researchers in Ghana are evaluating the impact of**

## **text messaging services providing weather forecast advisories on farmers' investment decisions and outcomes.**

Farmers depend heavily on weather patterns and forecasts to make important decisions regarding their investments, such as determining the optimal timing for planting and harvesting crops or deciding whether to purchase index insurance to protect against adverse events. [1] However, weather information is often unreliable, which can lead to significant negative consequences for farmers when the forecasts turn out to be incorrect.

In Ghana, the impact of climate change has increased the unpredictability of weather patterns, making it difficult to plan their farming activities. The frequency of extreme weather events has also increased, resulting in substantial losses for farmers when they occur. [2] In response to this variability, the agricultural organization ignitia has introduced text messaging services that provide farmers with timely and updated weather forecasts and recommendations, enabling them to make informed decisions promptly. One such service is ISKA, which delivers daily messages to farmers informing them about the probability of rainfall in their communities on the day of the message and the following day.

Researchers are working with IPA and ignitia to evaluate the impact of ignitia's ISKA advisory messages on maize farmers' investment decisions and outcomes. They will evaluate the impacts of ISKA as a standalone service and in combination with ignitia's other agricultural advisory messages. A total of 3,128 maize farmers have been randomly divided into three groups: one receiving daily ISKA weather forecasting messages, another receiving daily ISKA weather forecasting messages along with daily messages providing guidance on the best maize cultivation practices aligned with the expected weather, and a comparison group receiving no messages.

Results will be available later in 2023.

## **Sources**

1. The World Bank, "Improving Weather Forecasts Can Reduce Losses to Development in Africa," The World Bank Group, September 12, 2017, <https://www.worldbank.org/en/news/feature/2017/09/12/improving-weather-forecasts-can-reduce-losses-to-development-in-africa>
  2. James Boafo, "Climate change: farmers in Ghana can't predict rainfall anymore, changing how they work," The Conversation, March 21, 2023, <https://theconversation.com/climate-change-farmers-in-ghana-cant-predict-rainfall-anymore-changing-how-they-work-201493#:~:text=Their%20responses%20showed%20that%20they,specific%20months%20of%20the%20year.>
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# Implementing Partner

**ignitia** TROPICAL  
WEATHER  
FORECASTING

**ignitia**