

## Comparing Yields and Profits of Seed Varieties in Northern Ghana



Photo: Gopher/Johns Baying/Upbeat

Improved seeds varieties can generate significantly higher agricultural yields for farmers, but recent data indicates that only 20 percent of farmers in northern Ghana use improved seeds. This study, known as the Testing Agricultural Technologies (TAT) project, compared yields and profits of several seed varieties and looked at farmer purchasing decisions to understand the performance and adoption of seed varieties in northern Ghana.

### Key Findings\*

Over the course of one growing season:

- The seed comparison found a wide variety in yields between seeds, with farmers who grew the foreign hybrid seed, Adikanfo, on average yielding more than double that yielded from the local hybrid seed, Mamaba.
- Contrary to expectations, the commonly used local seed, Obatanpa, outperformed the local hybrid seed, Mamaba.
- The study suggests a farmer cultivating one hectare of land who switched from Obatanpa to Adikanfo would harvest about 1.8 tons more maize, translating into an increase in profit of more than 1,600 GHS.
- It is important to note these results are particular to this context and conditions, and during the growing season studied there was ample rainfall. These results cannot speak to characteristics of seeds not tested under these conditions, such as drought resistance.

*\*Results are preliminary and may change after further data collection and/or analysis. Note this study was not a randomized evaluation.*

**Researchers:** Mathias Foua, Damien Karlen, Shashidhara Kolavalli, Christopher Udry

**Partners:** Ghana Agricultural Research Institute (GARI), International Food Policy Research Institute (IFPRI)

**Timeline:** 2015-2016

**Study Sample:** 10 districts in three northern regions of Ghana

# Comparing Yields and Profits of Seed Varieties in Northern Ghana

Improved seeds varieties can generate significantly higher agricultural yields for farmers, but recent data indicates that only 20 percent of farmers in northern Ghana use improved seeds. This study, known as the Testing Agricultural Technologies (TAT) project, compared yields and profits of several seed varieties and looked at farmer purchasing decisions to understand the performance and adoption of seed varieties in northern Ghana.

## Key Findings\*

Over the course of one growing season:

- The seed comparison found a wide variety in yields between seeds, with farmers who grew the foreign hybrid seed, Adikanfo, on average yielding more than double that yielded from the local hybrid seed, Mamaba.

- Contrary to expectations, the commonly-used local seed, Obaatanpa, outperformed the local hybrid seed, Mamaba.
- The study suggests a farmer cultivating one hectare of land who switched from Obaatanpa to Adikanfo would harvest about 1.8 tons more maize, translating into an increase in profit of more than 1,600 GHC.
- It is important to note these results are particular to this context and conditions, and during the growing season studied there was ample rainfall. These results cannot speak to characteristics of seeds not tested under these conditions, such as drought resistance.

\*Results are preliminary and may change after further data collection and/or analysis. Note this study was not a randomized evaluation.

May 01, 2018