TO: Claus Portner, ACME Corporation Board Executive

FROM: Jomaica Alfiler, Business Analyst; Shruthi Dakur, Business Analyst; Natasha Kacoroski, Business Analyst; Daizy Koech, Business Analyst

DATE: March 11th, 2022

SUBJECT: Sales Recommendations from Ghana Agricultural Profit Analysis

To inform ACME corporation's decision of moving into agricultural inputs in Ghana, our team analyzed what determines agricultural profit using the Ghana Statistical Service's fourth Living Standard Survey and associated aggregate tables prepared for a World Bank report. For determining factors, we focused on educational attainment and local area characteristics. Agricultural profit was calculated per acre to allow for regional comparison.

Our analysis states that the average agricultural profit is 133,690 cedis per acre, with most households ranging between 42,835 and 334,029 cedis per acre. Households where the highest educational attainment is a basic education level or less are associated with higher average agricultural profits (Table 1). These findings are in agreement with our model results.

Table 1. Average agricultural profit per acre by highest household educational attainment.

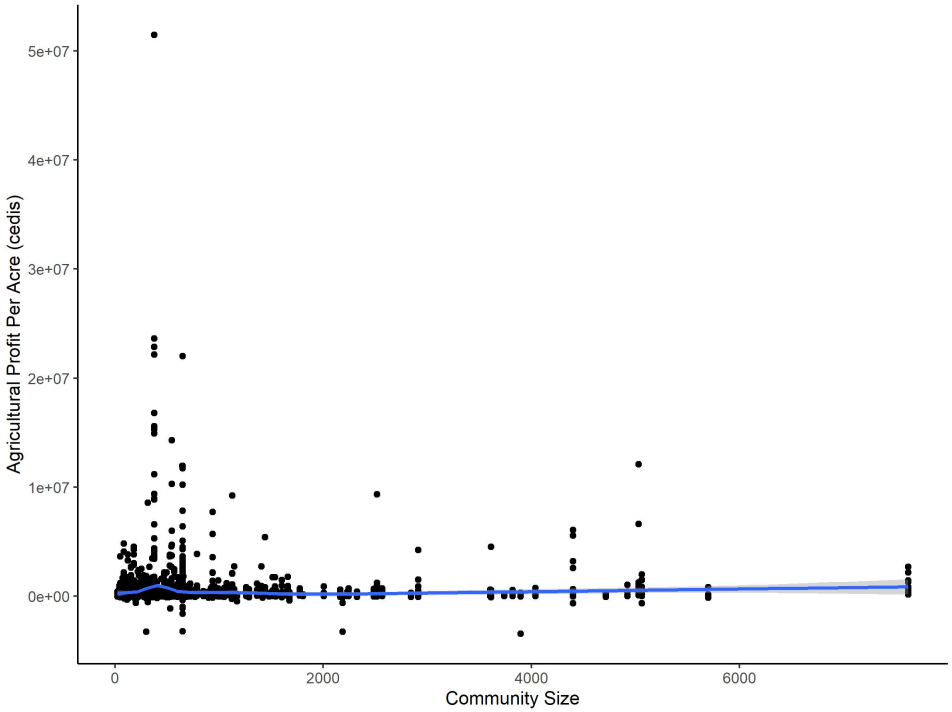
Highest Household Educational Attainment	Average Agricultural Profit per Acre (cedis)
Never attended school	101,665
Less than basic education	137,675
Basic education qualification	157,563
Secondary or higher education qualification	121,002

Households in a forest ecological zone have a higher average agricultural profit than other ecological zones (Table 2), which although does not directly match with our model results, is our conclusion after comparing ecological zone by several metrics.

Table 2. Average agricultural profit per acre by ecological zone.

Ecological Zone	Average Agricultural Profit per Acre (cedis)
Forest	171,092
Savannah	107,758
Coastal	62,388

And a larger household community size may slightly decrease agricultural profit per acre.



Overall, little of the variation in the agricultural profit per acre is explained by highest household educational attainment, ecological zone, and community size.

Based on our findings, it seems like a forest ecological zone in a small community where the highest educational attainment per household is between no education and a basic education is associated with the highest agricultural profit per acre.

Further research is needed to build a model that accounts for more variation in agricultural profit per acre. There are additional variables within the data provided that have not been evaluated yet. Some of these variables are associated with agriculture and may provide additional insights, such as presence of a local market or presence of irrigation. It is also important to note that there is a wide range of climatic factors not captured in the data that might be important too, such as rainfall and temperature.

Attachments: Ghana Agricultural Profit Analysis, Project Repository