DATE: December 4th, 2020

TO: The ACME Corporation

FROM: OMSBA5112 division DTC-4

SUBJECT: re: Agricultural Profits in Ghana

To the ACME Corporation Board,

Thank you for tasking us with this project. After weeks of hard work, we have concluded that the factors that have the largest effects on agricultural profit per an acre is the crop being grown and the (regional) location of the farmland. The impact of these two factors led us to believe that the average expected profit per acre of land is ¢1,094,000 in Ghana Cedi (about $187,168.51 in US Dollars).

We are confident that our conclusion is correct which is best illustrated with the attached graphs. When looking at Figure 1 one can see that the data, we used for such findings was distributed normally which when modelling shows that most data seems appears to at least lie in and around the same points which makes it easier to draw such conclusions as to profitability.

Further, looking at Figure 2 will also provide additional context to our confidence as you will see that the variance is low meaning that not many data points lie outside the mean of the data. Due to the close distribution of our data, we are confident that the margin of error within our findings is low and that we can safely draw such conclusions.

If you wish for information beyond what has been stated here please be sure to read through the Statistical Analysis, we have attached that details our methodology and provides greater insight into our findings.

Best,

The OMSBA DTC-4 Team

Glen Lewis   Sohrab Rajabi

Rosalie Sherry   Tamlyn Tamura

Figure 1: Distribution of Normality
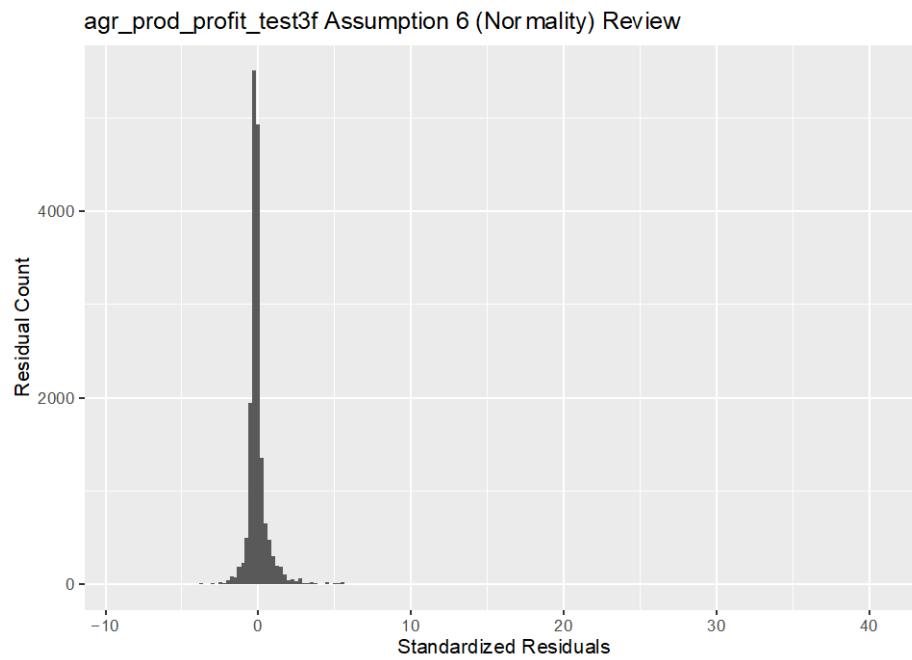
agr_prod_profit_test3f Assumption 6 (Normality) Review

Figure 2: Variance using Fitted vs. Standard Residuals

agr_prod_profit_test3f Constant Variance Review

Memorandum DTC-4 Figures & Tables