

Memorandum

To: Prof. Claus Portner

From: Group 05

Date: 12/10/2018

Subject: Ghana Living Standards Survey to interpret agricultural profit at household level

Introduction:

The Ghana Living Standards Survey (GLSS), with its focus on the household as a key social and economic unit, provides valuable insights into living conditions in Ghana. The purpose of this present report is to find factors impacting agricultural profit since ACME Corporation is considering moving into agricultural inputs in Ghana. ACME Corp. wants to maximize their profit and hence they are looking for factors which should be considered for their sale efforts.

The key findings of the survey are as follows:

Education: Higher education levels in any household has direct relationship in determining agricultural profit. A highly educated household member might provide good insights in determining agricultural profit.

Gender: Gender of the household member is significant in determining the agricultural profit. The profit increases by 0.96 cedis when the household member is a male.

Employment: As a major focus of the survey, a wide range of estimates of employment, and working conditions are given in the survey. A household member who has prior experience working on the farm has positive impact in the agricultural profit. The agricultural profit increases by 0.12240 cedis when cash crops are being used in farming as opposed to food crops. Some examples of cash crops used by the household members are cocoa and coffee.

Income: Household members typically derive their income in two ways. First, they sell their labour services to other production units in the economy and receive wages or salaries in return, either in cash or in kind. Secondly, they may receive income from production assets which they own. A positive value indicates that with increase in income of household members the agricultural profit increases.

Community: Following are the categorical variables from the community data which are taken into consideration for regression analysis. The idea behind this is to find out what is the impact of each infrastructure factor on the agricultural profit keeping other independent variables constant.

The below table provide a better understanding of impact of infrastructure factor on the agricultural profit. It can be clearly seen from the data below that agricultural profit increases with the usage of by using extension center, usage of modern equipments and pesticides.

S.N o.	Infrastructure factor	Agricultural Profit (cedis)	Profit increase (Y/N)
1.	Motorable road	1.202	N
2.	Public transport	5.85	N
3.	Electricity	7.887	N
4.	Pipe borne water	7.887	N
5.	Extension centre	3.47	Y
6.	Cooperative	6.47	N
7.	Modern equipments	0.604	Y
8.	Pesticides	1.908	Y

Land size: This has the maximum correlation with the agricultural profit. When land size increases by one percentage point, keeping other variables constant, increase in agricultural profit happens by 0.4 percentage point.

Conclusion:

As per our analysis, we arrived at a conclusion that the more acres of farmland area a household has, the more is the profit. Also education level of the household has a positive effect on agricultural profit. Also the effect is positive if the household is in community where they have access to modern machinery like “rice-husking machine” which reduces human labor and provides support to farmers through extension centers. This could be one domain where ACME can look into.

Moreover, If ACME corporation invests in cash crops and related activities, it will be profitable for them because cash crops are more profitable than the food crops. Insecticide, herbicides and chemical fertilizers can also be considered as another domain where the investment will yield profit because the analysis shows that these factors are affecting agricultural profit in positive way.

Cooperative societies and areas with motorable roads seem to have a marginal negative effect on agriculture profit. Hence, they could be avoided by the corporation.