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**Faculty of Economics and Management**

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**Extended Abstract of Bachelor Thesis**

**Analysis of Cocoa Production**

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## **Summary**

The aim of the bachelor thesis is to find the factors that affect the production as well as the price of cocoa in the top three cocoa producing countries in the world, namely; Cote d'Ivoire, Ghana and Indonesia. The study used a multiple regression model (Ordinary Least Square) to analyse the determinants of cocoa production and price in the top three cocoa producing countries in the world. The multiple regression was done on a sixteen years' time series data from 2000 to 2016 while considering the difference in development among the countries of the study across the study period. Data used was obtained from the data base of recognized international and local organizations such as Food and Agriculture Organization (FAO), the World Bank (WB) and Ghana statistical services.

Results obtained from the multiple regression analysis showed that, government expenditure, technology improvement, land available for production and the cost of production significantly affects the production of cocoa in all three studied countries. On the price side, exchange rate and the price of a competitive commodity were found to significantly affect the price of cocoa in the countries of study. However, the analysis showed that, inflation had no significant impact on price of cocoa in all three studied countries.

Based on the findings of the study, factors such as government expenditure, technology improvement, land available for production and the cost of production were deemed as determinants of production while exchange rate and the price of a competitive commodity (Coffee) were found to significantly affect the price of cocoa and hence are deemed as determinants of cocoa price. It is therefore important for policy makers of the various countries studied, introduces policies that will revamp the cocoa industry and the agricultural sector as a whole based on the obtained results of the study.

**Keywords:** Cocoa, Cocoa production, World Cocoa Price, Ordinary Least Square, Regression model, Economy, Development, Agriculture, Land, Income.

## **1 Introduction**

Agriculture is extracted from Latin words Ager and Cultura. Ager means land or field and Cultura means cultivation (Manonmani, et al., 2013). It is also referred as the science of producing crops and livestock from the natural resources of the earth (Reardon, et al., 1999). The primary aim of agriculture is to cause the land to produce more abundantly, and at the same time, to protect it from disintegration and misuse. It is synonymous with farming—the production of food, fodder and other industrial materials (Goyal, 2010).

Agriculture enables to meet the basic needs of human and their civilization by providing food, clothing, shelters, medicine and recreation (Goyal, 2010). Hence, agriculture is the most crucial enterprise in the world. It is a productive unit where the free gifts of nature namely land, light, air, temperature and rain water etc., are integrated into single primary unit indispensable for human beings (Dorward & Kydd, 2004). Secondary productive units namely animals including livestock, birds and insects, feed on these primary units and provide concentrated products such as milk, meat, eggs, wool, honey, silk and lac. Agriculture provides food, feed, fibre, fuel, furniture, raw materials and materials for and from factories; provides a free fare and fresh environment, abundant food for driving out famine; favours friendship by eliminating fights (Schultz & T.W., 2007). Satisfactory agricultural production brings peace, prosperity, health, harmony and wealth to individuals of a nation by driving away distrust, discord and anarchy. It helps to elevate the community consisting of different castes and classes, thus it leads to a better social, cultural, political and economic life (Afoakwah, et al., 2008).

Agriculture is the main source of raw materials to major industries such as jute fabric and cotton, tobacco, sugar, edible as well as non-edible oils is agriculture. Moreover, many other industries such as vegetables as well as processing of fruits and rice husking get their raw material mainly from agriculture.

## 2 Objectives and Methodology.

### 2.1 Objectives.

The aim of the thesis is to empirically analyze the factors that affect the production of cocoa in the top three cocoa producing countries; Cote D'Ivoire, Ghana and Indonesia. The study specifically seeks;

1. To analyze agricultural commodities on the market.
2. To analyze the factors that affect cocoa production.
3. To analyze the prices of cocoa production.

### **Conclusion**

In conclusion, the study found out that, factors such as government expenditure, technological improvement, land availability and cost of production are determinants of quantity of production in the three major cocoa producing countries. On the price side, exchange rate as well as the price of alternative agriculture commodity (coffee) can determine the price of cocoa. However, inflation was not deemed to have a significant impact on the price of cocoa. Governments of the studied countries therefore need to implement policies that will bring about a sustainable cocoa industry in the studied area.

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