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#### **Agricultural Extension Programs in Ghana**

## Introduction

Is it possible to mass produce agricultural products without high-tech devices? If you are like me, you would think that the answer to this is no. However, it has been proven that a mass amount of agricultural products can be produced without the use of state-of-the-art machinery. In Ghana, 85 percent of farmers use hand tools to grow their crops (Agriculture in Ghana). Agriculture is the most important economic sector in Ghana. They are also the world's largest cocoa producer. Who knew this was possible using hand tools and small machinery.

Ghana's economy is diverse with one of the highest GDP per capita in Africa. They are dependent on international and financial assistance to help build up their economy. Some of their major exports include gold, timber, diamond, cocoa, and bauxite. Their economy continues to revolve around agriculture. Agriculture makes up 50% of their GDP and more than half of employment (Economy of Ghana). Although their currency continues to depreciate as the public sector wage increases, Ghana still remains one of the most economically sound countries in Africa.

Another of Ghana's largest economic sectors is Tourism. What makes Ghana inimitable is its history and heritage, portraying its castles by the sea, bleak relics of triangular trade and its many provincial festivals. All these are becoming a focus of eco-tourism. As such, in 2001, Ecofest, the first event of it's kind, was held in Ghana. Ghana has hundreds of kilometers of uncontaminated beaches, over 10,000 hotel rooms in about 703 hotels, including three, four, and five star hotels. There are cream of the crop restaurants, wildlife parks, and safe streets. Most importantly, Ghana's greatest advantage is its people who are recognized all over the world for their cheerfulness and more than welcoming hospitality.

## Agriculture in Ghana

Ghana's agricultural output has been consistently falling since the drop in commodity prices that began in the 1960's. Farmers have few incentives to produce well, especially with the expensive inputs such as fertilizer. Ghana's food production is also at a low because of drought in many regions. Since the rehabilitation of Ghana's economy, Ghana has invested in agriculture making it the primary source of revenue.

Ghana supplies more than one-third of world cocoa production. The production of cocoa is developed in the Ashanti, Brong-Ahafo, Central, Eastern, Western, and Volta regions. The crop year begins in October and is sold at fixed prices to the Cocoa Marketing Board. Ghana's cocoa production has decreased due to aging trees, diseases, bad weather, and low consumer prices. One-fourth of the cocoa farmers receive just over half of total cocoa production (Ghana).

Ghana produces sugar cane 237,000 per year. Cotton production has risen from 4 percent to 50% in 2000. Twenty thousand hectares of land is used for cotton cultivation. Ghana's food import is estomated at 370,000 tons. Ghana exports over 3.2 billion in commodities; their imports are 5.7 billion in commodities. There two major exports are gold and cocoa. Both cocoa and diamond have increased Ghana's export by 20%. Oil accounts for 20% of Ghana's imports.

# "Typical Farm Family"

The average Ghanaian family consist of a mother, father, brother, and sister. Many families are subsistence farmers; this accounts for the majority of their income. They trade with other locals at various markets and streets. Ghanains are allowed to trade freely amongst each other; this leads to a potential problem. If there is free trade, there is no one to evaluate the sanitation and safety of the crops.

The typical dish that Ghanaians eat is rice with a red sauce containing some sort of meat. The sauce is usually tomato with some good spices. Their meat includes chicken, goat, and cattle; eggs and bread are big there, too. They also eat "Fufu," which consists of cooked cassava and plantains.

Many parents, particularly those who are uneducated, do not understand why their sons should be in school instead of working on the farm to help feed the family. In northern Ghana where cattle rearing is prestigious, parents prefer that their sons take care of cattle rather than go to school. Some parents prefer that their daughters marry early, so they can collect the dowry of three cows.

Every student who is enrolled in school must satisfy the academic requirements and have strong financial backing before gaining access to secondary education. Because of the high poverty levels in northern Ghana, the government now pays for both tuition and boarding costs of students in secondary school; this is a big help. The two main reasons for school drop-out are teenage pregnancies and financial constraints. The average income of family members is \$25 a month.

In the early days, women were severely disadvantaged in Ghana because of their submission to the men of the households. They were automatically deemed housewives and forbidden to work, unless absolutely necessary. Since then, women have risen to position of professional importance in Ghana. Recently, the status of women in Ghana has risen significantly. Early 1900's data showed that about 19% of the staff at the nation's three universities were in fact female. Women also dominated the administrative assistants and nursing jobs in Ghana. When women were given the same job as men, they were paid equally, and were granted maternity leave with pay.

### Problem

Many Ghanaians farm with small hand tools, expensive fertilizers, and poor farming techniques. Once this problem is reduced, Ghana can improve their production of crops by a significant amount.

## Solution

Ghana can increase their agricultural production by switching from hand tools to high tech machinery. Eighty-five percent of agricultural farmers use hand tools. By building an education extension for farmers, it will be possible for farmers in Ghana to access the right materials for farming. They will have the chance to learn new farming techniques and can increase their produce over the next few years.

Building an agricultural extension in Ghana would not only help any family who uses its services to eat, it will also educate them on ways to properly farm crops for their meals and sell to other locals. Most families in Ghana farm and the vast majority of them don't farm properly. A large number of their crops fail due to lack of growing supplies and a shift in buyer preference from starchy home-grown staples to rice and corn. On the other hand, farmers also suffer from shortages of production inputs, difficulties in transporting said crops to market, and competition from imported foods that were under priced because of the immensely overvalued cedi (The Ghanaian Dollar Value). An agricultural extension program will make these farming supplies accessible.

Building agricultural extensions would mean a growth in agricultural economics as well as agricultural awareness in Ghana. A typical farm family in Ghana will benefit greatly from an extension because it educates them on other farming practices. If we are able to help resolve the financial problems associated with building an extension, the output would be absolutely tremendous. It would increase environmental awareness as well. It wouldn't just benefit the secondary people-women, small farms, and urban dwellers- in their country, but it would greatly affect the entire country for the greater good.

Another solution includes partnering with the Rodale Institute and the University of Ghana to teach the natives better farming techniques. There would be classes on organic agriculture and the farmers will learn new skills that will result in increased production and revenue. Ghana has hot climate, which means rainfall, and water is essential in farming. The rain, however, can bring diseases and pests; after the growing season, animals roam uncontrolled. Ghana's also have red, acidic soil as a result of infertility; four-fifths of the soil is acidic. This extension also teach them how to and the value of composting (Teaching composting for soil improvement in Northern Ghana.)

Increased productivity and yields by a small scale subsistence family farm affects building an agricultural extension immensely, because it means the project would have worked. The goal of building an extension is educating and if the small farmers yield big products, it means they have great instruction from an even greater project. This would definitely improve the livelihood of the subsistence farm because the farmers would know what they're doing and would be doing it correctly.

It is important to have the support of the national government, state government, corporations, universities, and farmers so agricultural education could be spread throughout Ghana. Corporations can fund the maintenance of the extension program; the World Bank and other local banks can fund the program with large-scale donations; the national and state government can give our program grants; and the University of Ghana staff can participate in teaching fundamental farming techniques to the locals. The college professors and staff would control the maintenance of the program. The sponsors will receive monthly updates and newsletter concerning the progress of this program. By doing this, they will remain interested in being apart of this wonderful program.

By improving the food security and income of a farm in Ghana, we are able to teach the farmers new methods and more productive agriculture. Right now, their farming is working for them the way it has been for years. However, if we are able to use an agricultural extension to train them on better methods, their crop return would yield significantly. Also, if more crops are produced in Ghana, there would be a balance between imports and exports; therefore, saving them money on imports.

In conclusion, countries around the world have low agricultural status because products and services are not at their disposal. By implementing and designing agricultural extension programs, their economies and population can build up their financial standings. Ghana is just one country that can heavily benefit from this program. This will build their economy, educate family farmers, and increase revenue. The question now is what will others do to help places like Ghana, with an extension program designed to benefit everyone?

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