Ruth Acolatse Herbert Hoover High School Des Moines, IA Ghana, Factor 16, Education. GHANA: EDUCATION, THE ULTIMATE TOOL TO CONQUER THE FIGHT AGAINST FOOD INSECURITY. THE SUBSISTENT FARM FAMILY;

According to the Ghana Living Standards Survey, it is estimated that a little over half (51.5%) of households in Ghana own or operate a farm.

Families are usually of average size consisting of two or more members. Generally, there is the lack of basic needs such as water, access to medical care, education and many more. In a typical rural village, access to education is one of the consistent challenges being faced. Most children do not attend school. Parents make so little income that they cannot afford to send their children to school. Some parents are also just ignorant of the benefits of education. While in other cases, schools are very scarce and the few available are either too far from the students' home or poorly equipped or both. Most families as well as entire communities rely on dirty ponds, rivers and uncovered hand-dug wells for water for domestic and agricultural use. Health care is another nerve-racking issue to deal with. The unavailability of health care facilities in rural areas is overwhelming. Inability to easily access health care facilities combined with poorly equipped health care facilities have immensely affected the death rate in Ghana. Ghana's death rate can be lower than it currently is (that is at 7.31%) if adequate and efficient health care facilities are made available and accessible.

Farms are usually at least an acre large except for backyard gardens which are smaller or less than an acre. Commonly cultivated crops include but are not limited to cocoa, cassava, yam, plantain, and cereals. Even though major strides are being made to undertake as many as possible agricultural practices such as pest and disease control, pruning, managing soil fertility, water management and reducing post-harvest losses and many others, more work needs to be done.

Lack of education cannot be left out of the numerous barriers impeding improving agricultural productivity in Ghana which include but are not limited to inadequate finance, health related issues, and inadequate labor. Employment and earning living wages are hindered by lack of basic skills. Poorly constructed and maintained roads pose big problems to the easy access to food markets. Access to adequate nutrition is hindered by all the factors above.

The Ghanaian economy is mainly composed of the agricultural services and industry. The agricultural sector is the most dominant in terms of employment, contribution to Gross Domestic Product (GDP) and foreign exchange. According to the University of Ghana's research, in 1997, the sector employed about 70% of the labor force, contributed at least 47% to GDP and accounted for over 57% of foreign exchange

earnings. The percentage of Economically Active Population in Ghana exceeded those recorded for Canada, USA, Brazil, Nigeria and some other African countries but agricultural growth in Ghana has been low and disappointing. According to myjoyonline.com, the contribution of agriculture, the backbone of Ghana's economy, to the country's Gross Domestic Product (GDP) has dropped by an alarming 12.8% in just seven years.

It dropped from 31.8% in 2009 to a mere 19% as of September 2015, a period of seven years. The contribution of the agricultural sector is dropping drastically as government had cut its 2016 expenditure on the sector. The Ghana statistical service estimates that the sector will grow at an average of 3.3% between 2016-2018, indicating that the sector's future remains far from bright as services and industry look to narrow agriculture's contribution to GDP. Low food productivity, agricultural growth and low contribution to GDP results from low education for farmers as well as low income invested into the sector by the government. Currently, lack of education is still posing lots of difficulties to agricultural productivity. Lack of information about the production of agricultural products has led to low yield, insufficient income and malnutrition in other words food insecurity.

Even though considerable amount of progress has been made over the years, farm families till have problems producing healthy agricultural products for both domestic and industrial use. Due to insufficient education on how various farm practices should be carried out and low literacy rate, various chemicals are either over applied or under applied to crops. When this happens, there is a vast decrease in farm yield thereby reducing the overall produce from large acres of farm. Low farm yield leads to insufficient income which further decreases or adversely effects a family's ability to purchase a balanced diet or access adequate nutrition.

Agricultural education in Ghana still needs major advances to reach its full potential. This situation can be seen as bad since Ghana was actually doing better in agriculture than it is currently doing. From a technical standpoint, crop yields are consistently lower than achievable yields. The current hole in agriculture can only be filled if more attention is paid to the agricultural sector. Developing countries such as Ghana are largely disadvantaged in agricultural production since these countries lack the necessary tools for adequate agricultural development.

The trends for agricultural education are increasing but at a very minimum almost unrecognizable rate as not very much improvement is seen in this sector. This can be seen as some junior high schools as well as senior high schools no more run agriculture program in their various schools. The growth rate of the agricultural sector for 2015 was 0.04% according to the 2016 budget presented by the then minister of finance, hon Seth Tekper and the growth rate of crops hit negative (-1.17%). These figures point towards a retrogressing agricultural sector due to lack of agricultural education.

Basic education is needed for every single farmer in Ghana. While major strides have been made to expand enrolments in primary education, there remains major unfinished agenda here, relating to the quality of education, the need for a focus on vocational training as an integral part of the education system, the relative neglect of secondary education and programs of adult literacy that will enable farmers to absorb new methods of agriculture.

Increasing basic education for farmer increases healthy, sufficient and reliable farm yield. This basic knowledge enables the rural farm family to know which crops to grow, when to plant, chemicals to apply, how to apply them, how to effectively get rid of pests, prevent destruction of farm produce, grow to store the farm produce, transport them to the market to earn sustainable income, what to invest that income into to earn considerable profit and many more. This education also goes a long way to enable the farm family to differentiate between chemicals that are environmentally friendly and those that are harmful to the environment as well as know farm practices that protect the environment which include but are not limited to; crop rotation, mixed cropping and mixed farming and farm practices that are hazardous to the environment such as bush burning. This helps to promote sustainable environmental protection. Further advantages of agricultural education for farmers is despite the fact that farmers are receive education and training individually, the entire economy benefits in the long run. The economy is developed since agriculture employs almost half of the entire population. Education increases access to improved health. With education, people are better prepared to prevent diseases and to use health facilities and services effectively. Education also enables people to earn higher wages thereby promoting economic growth. In many poor countries, with each additional year of schooling, people earn 10% higher wages. These earnings in turn contribute to national economic growth. No country has ever achieved continuous and rapid growth without reaching an adult literacy rate of at least 40%. The more education introduced into the system, the less the talk about poverty is heard. Education goes a long way to reduce the illiteracy rate among women thereby empowering them to be self -reliant.

Though the introduction or education to farm families seems a very easy task to undertake, there are some hindrances to a successful undertaking of this project. Population growth being one of the most easily identified problems. Ghana being a developing country requires a lot of foreign aid since her population keeps increasing rapidly. The population census in 2010 reveals 24,317,734 people living in Ghana. That number has increased to a whooping28, 766,463 as of Friday September 8th, 2017, based on the latest UN estimates. If Ghana's population continues to increase at such a fast rate, agricultural education is going to be highly disturbed over the coming years. Because more equipment needs to be adopted to promote and enhance the efficiency of education and a growing population only worsens the problem. Ghana has three untapped advantages when it comes to agriculture. Firstly, human capital is readily available and high levels of youth unemployment could be tackled, in part, by creating opportunities in the sector. Secondly, the FAO estimates that only 43% of Ghana's agricultural land is being cultivated. Lastly, despite the importance of irrigation to facilitate year-long farming only 303.45km square of agricultural land in Ghana out of 140,000km square was irrigated as of 2012.

Agriculture education can be effectively improved in Ghana if and only if the government as well as the nation focuses more resources on improving agricultural education. Given the strong linkage between poverty and agriculture, policies should be hinged on supporting a business model for agriculture that progresses from subsistence. More human resources should be trained to give effective education to farmers. More technology should also be diverted into agricultural education as well as the agricultural sector. Agriculture should be made a core subject in all schools from kindergarten. More respect should also be given to farmers as well as agricultural workers. Agriculture should be addressed as an occupation or profession not just a hobby.

To ameliorate the current agricultural problems by 2030, policies must be made and effectively implemented against the use of chemicals that are toxic to the environment and pose serious danger to food security.

In the last two decades, sustained and inclusive growth has enabled Ghana to reduce her poverty rate by half (that is from 52.6%-21.4%) according to a new world-bank assessment. According to newly released "poverty reduction in Ghana; progress and challenges", report sustained poverty reduction requires a commitment to reducing inequality and improving access to opportunities for all citizens. The poverty reduction project in Ghana focuses on ways through which the poverty rate in Ghana can be reduced to the lowest possible level. In 1995, the government presented "Ghana: vision 2020", aimed at making Ghana a middle income country in 25 years. Vision 2020 focused on human development, economic growth, rural and urban development, infrastructure development and an enabling environment. According to the Africa research institute, poverty remains a challenge and appears to the endemic amongst Ghanaians who depend on agriculture as a primary source of income. To achieve the best results for this project, agricultural education is needed. This will enable, the unemployed population to be employed thereby reducing the dependency rate thus the poverty rate.

The entire Ghanaian community as well as foreign communities play very significant roles in making agricultural education a reality. Agricultural extension officers have the role of undertaking their work very effectively since they are the people who can either break or maintain agriculture. Their role makes it almost inseparable to talk about agriculture and food security without casually considering the enormous inputs of these officers. Farmers also have a role to learn and adopt recommended scientific farming techniques to replace the traditional ways of farming to meet the high demands of today's world. And for farmers to be able to learn and adopt these techniques, they must be properly educated on how best to apply these techniques. The media should also promote the continual education and reeducation of farmers since they have the upper hand. The international support for education also plays the role of ensuring the availability of school buildings, training teachers and providing school supplies. Foreign communities should also invest in the promotion of agricultural education in Ghana. Financial institutions should also readily lend out cash to farmers to enable them undertake important farm practices. Farm families must also make it a point to be able to adapt to the new ways of agriculture in order to promote food security. Farm families can do this by letting go of superstition and paying more attention to the growing to the growing economy and its needs as well as the welfare of the citizens.

CITATION OF SOURCES.

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