

THE ROLE OF AGRICULTURE IN TERTIARY INSTITUTIONS AS A TOOL FOR TRANSFORMING THE NATIONS ECONOMY

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Abstract

The study on the Role of Agriculture in tertiary institutions as a tool for transforming the nation's economy was conducted among citizens of Jos-North Local Government Area of Plateau state with questions limited to the subject of study. It aimed at identifying and discussing the contributions of agriculture to the nation's economy, discussing some agricultural practices that contribute to the nation's economy, identify problems militating against agricultural production, and suggest possible ways these problems can be resolved. The functionalist's theory was adopted and used. The study employed the survey method, 75 questionnaires were distributed and retrieved. Findings were presented using bar charts, while regression analysis was used to indicate the direction of relationship. The study discovered that agriculture and agricultural products contributes significantly to national growth through food production, employments, provision of raw materials etc. It is also discovered that farmers are faced with challenges of poor funding, lack of loan facilities, poor market for their products among others. In order to arrest this situation, recommendations are made to include funding of the agricultural sector, provision of loan facilities, formulation and implementation of policies among others.

*Keywords: Agriculture, Tertiary institutions, Transforming,
Employment, Economy*

Background to the Study

Agriculture has moved from initial meaning or purpose to more advanced and improved stage. The role of agriculture and agricultural products in promoting the nation's economy cannot be over-emphasized most especially the justification of its inclusion in tertiary institutions as a field of study or a course taken by students. Agriculture moved from food production to one of the major employers of labour.

According to Mangyvat (2004), the main concern of agriculture in the past was the introduction of plants, plants survey, and establishment of botanical gardens. Despite the fact that agriculture involves cultivation of land, food production for man, it equally involves, cropping, livestock keeping, forestry, fishing, processing marketing etc. Anyuwu, Oyefusi, Oaikhena, and Dimiwo (1997) observed that the shift from mere production for consumption to the production of cash crops encouraged and promoted foreign trade and exportation. The World Bank first got involved in Nigeria in 1952 and invests in the Nigerian Agricultural Development Projects (ADPs). Dunmoye (1982:10) observed that.

The beginning of the ADPs in Nigeria date back to 1972, when the World Bank assisted officials of Nigeria Federal Ministry of Agriculture and mounted a countrywide agricultural projects identification mission. The mission identified three integrated agricultural projects in the North and fourth small holder cocoa, oil palm, rubber and irrigated rice projects in the South.

These provisions, interventions and interest by foreign and local organisation including the World Bank, caused the Nigerian agricultural sector to loss its pride of place in the economy. The macro-economic indications of this anomalous development include widening food supply-demand gap, rising food import bills, rapid decline in foreign exchange earnings from agricultural exports and rapid decline in agricultural production. This is one of the reasons why the characteristics features of our rural areas and even some parts of the urban setting are lack of good drinking water, lack of electricity, poor health services, falling school building, illiteracy and total object poverty among others.

Ozo-Eson (2002:19) observed that some of the attempts by both military and civilian governments to handle the problems of poverty were through the introduction of Operation feed the Nation (OFN), The Green revolution, The Directorate of Food, Roads and Rural Infrastructure (DFFRI), The National Directorate of Employment (NDE), and The Better Life Programme among others. Despite these efforts by the Nigerian government, the agricultural sector continues to suffer setback. An observation by Fabiyi and Idonu (1989:4) suggests that the farm problem in Nigeria has generated the food and nutrition problems. This simply means the caloric

inadequacy of the ingested food and nutrient inadequacy in terms of protein, fat, vitamins and other essential minerals, makes it necessary for the promotion of other forms of agricultural practices.

Objective of the Study

The objectives of this study are to:

1. Identify and discuss the contributions of agriculture and agricultural education to the nation's economy.
2. Discuss some agricultural practices that contribute to the nation's economy
3. Identify some of the problems militating against agriculture and agricultural education.
4. Identify possible ways these problems can be resolved.

Literature Review

The survival of Nigeria's agriculture highly depends on the youth who are the farmers and leaders of tomorrow. It is important for the youths to be taught in such a way that after graduating, they would be able to launch into agricultural entrepreneurship. Amadi (1989) expressed the need to not only attract, but also retain youth in the agricultural occupation through mobilization. Education is an important aspect in the society, a vehicle for agricultural transformation and the youths as possible agents or target population needs to be mobilized and prepared for such.

Basically, African agriculture has lagged behind in development and this has negatively affected the overall economic growth. Dunmoye (1983) observed that apart from the onslaught of capital which is disarticulating the previous productive peasant subsector, there also exist the problems of structural inhabitation which have made it difficult for peasants subsector to adopt the changing pattern of modern agriculture to suit their peculiar circumstances. Factors like unfavourable public policies, neglect of agricultural sector by some government climatic factors such as poor rainfall also affect agricultural production in Nigeria.

Some Contribution of Agriculture and Agricultural Education to the Nation's Economy

Some of the ways which agriculture and agricultural education contributes to the Nation's economy include food supply, employment, trade and industry, personal income and foreign exchange.

Food is important for growth, repair of damage body cell, and provision of energy. Akinsunmi (1994) observed that the bulk of the materials that performs these roles are derived from foods which are taken in the form of plants and animal products

such as fruits, grains, tubers etc. Kelto (2013) contributed those studies shows that urban children whose families own animals are healthier than children whose families do not. This is partly because meat, eggs, and milk have protein and nutrients that are lacking or are not adequate in children who subsist on can meal, cabbage etc.

Agriculture provides ready employment for people who leave in the rural areas. Ilegbune (2013) viewed that agriculture provides employment for approximately 60 percent of the population while about 49 percent of the population engages in agriculture as their major occupation. He also asserts that over 70percent of the rural dwellers are involve in agriculture. Ojebode (2003) contributed that agriculture has provided more women with employment. It is believed that women formed about 60-70percent of agricultural labour force. And they produce two-thirds of the food crops.

Agriculture is the source of raw materials for both local and foreign industries. Agro-industries depend on the agricultural sector for their raw materials ranging from crops to livestock. Akinsunmi (1975) suggests some common agro-based industries to include Canning Industries, Textile Factories, Rubber Factories, Meat Industries, Breweries, Confectionaries, and Bakeries among others. These industries depend on agricultural researches for invention of new agricultural methods, technology, chemicals etc.

The sale of agricultural products such as palm product, groundnuts, cotton, cocoa, yam, cassava, animals and animal products provides income to the farmers. Kelto (2013), reported that small scale famers in Kenya who raised rabbit, goats, chickens and variety of crops earns nearly \$1,000.00 a month while those involved in offering agro-training charge about \$6 per-person. According him, agriculture promotes economic development by increasing the supply of food available for domestic consumption and releasing the labour needed for industrial development, enlarging the size of the domestic market for the manufacturing sector, increasing the supply to domestic savings and providing the foreign exchange earned by agricultural exports.

According to Elanor (2011) various agricultural sectors have provided many people with different forms of employment. Some of these agricultural practices are snail farming, goat multiplication, fish farming, cattle fattening, assorted vegetable production and marketing, cocoa revival, cassava production, processing and marketing, egg and poultry economics among others. These are modernised and improved agricultural practices that are carried out both in the urban and rural settings.

Problems Militating Against Agricultural Production

The agricultural sector has continued to face many challenges despite its relevance and significant contribution to the nation's economy. These effects are widely distributed to affect all aspects of the sector. According to Amadi (2012), the constraints that affect youth's agricultural entrepreneurship development and empowerment are multidimensional. These include; circular constraints, societal value, disorientation, government priority emphasis on non agricultural components of the economy, socio-economic pressure, parental influence, law aptitude disposition, difficulty in assessing resources such as land, finance and market information and promoting agricultural education among others. Akinsanmi (1975) observed that other factors that militate against agricultural production, distribution and marketing include; level of income to the farmer, incentives, tools, standard of education, marketing, storage facilities, level of rural development, communication network, sociological and psychological effects. According to Desmond and John (2009), farmers face varieties of problems and obstacles securing their livelihood. Their income for an entire year is affected by the weather, Farm equipment can cost more than farmland or the entire production processes. Lending and loan policies make it difficult for farmers to purchase or hire land and equipment.

Theoretical Framework

Several theories are used in attempts to explain human behaviours. They help in interpreting the direction, purpose or reasons for certain actions. For the purpose of this presentation, the functionalist theory was adopted. This is based on the contribution of scholars like August Comte (1778-185) Herbert Spencer (1820-1903) Emile Dukheim (1958-1917) as cited in Idyorough (2001).

Dukheim was primarily concern with discovering the laws of social change in the society. He analyzed the society under social statics and social order. Spencer in the order hand likened the society to life of an organism. According to him societies start from simple to complex structures, their parts gradually acquire mutual dependence, which by implication cannot function alone but depends on other parts.

The functionalist school looks at the society as it is made up of various institutions and there exist interdependence, in other word, every institution depend on another. In this study, agriculture is viewed as institution in the society just like education, family, health, law etc. Agriculture as an institution is primarily concern with food production. But over, the years it has increased its scope to provide employment, source for medicinal remedies, field of study among others.

According to the functionalist school if any of the institutions fail to perform his roles, the whole system would be affected. In this case, if the challenges that confront our agricultural sector are not addressed, this would affect other sector of the Nation's economy. Low production of food production would lead to hunger, malnutrition etc. Poor agriculture and agricultural education would negatively affect industries that rely on the sector for provision of new knowledge, inventions, technical abilities and raw materials for industrial productions. Therefore the role of agriculture and agricultural education in the promotion of a nation's economy is of high significance and needs to be fully supported.

Methodology

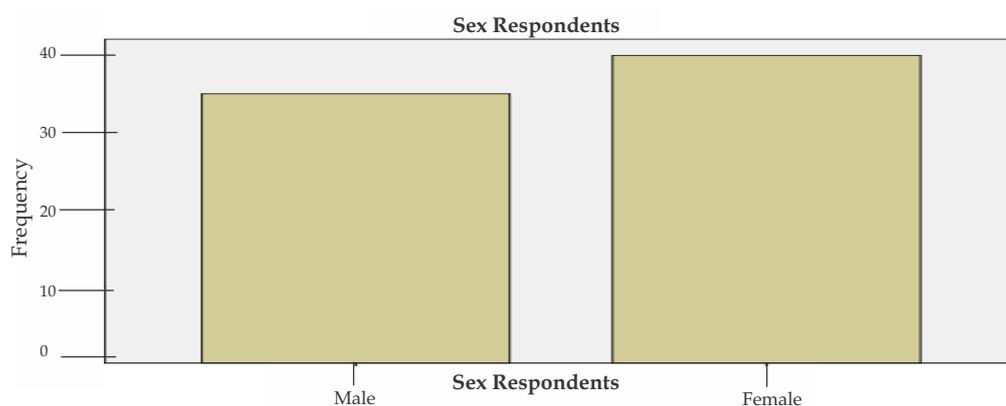
In order to achieve the aims of this study, the survey method was adopted as a major methodology. In order to achieve a success, the purpose convenient sampling method was also employed. A sample size of 75 participants was drawn randomly among the populace of Jos-South local Government Area of Plateau State. Questionnaires were administered to the participant to fill and return. Findings from the analysis were presented in bar charts and scatter plot.

Discussion

This presentation on the role of agriculture on the nation economy adopted the use of questionnaires for collection of data. The study enrolled 75 participant, those who can read and write were administered the questionnaire to fill and submit. The questionnaire also served as an interview tool for the participants who cannot read or write. Their views were collected and presented in bar charts below.

Bar Chart

Chart I; Distribution of Respondents by Sex



The chart above shows the sex distribution of respondents. It shows that female is more represented with a significant percentage of 53.3(%), while the males were represented with 46.7(%).

Chart II: Distribution of Respondents by Age

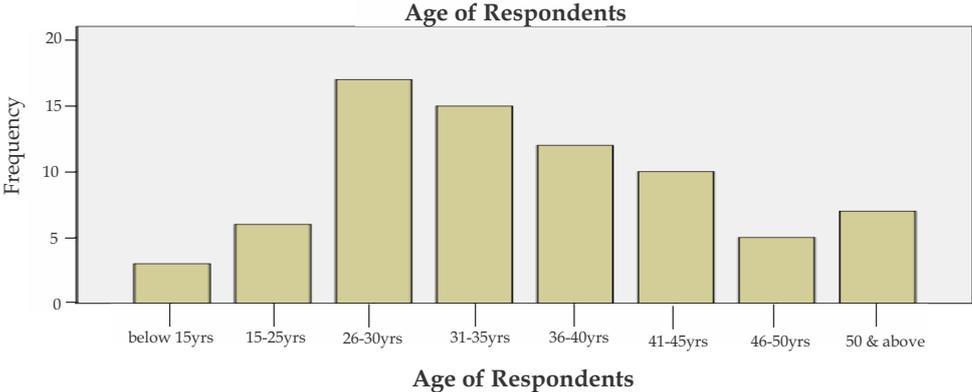
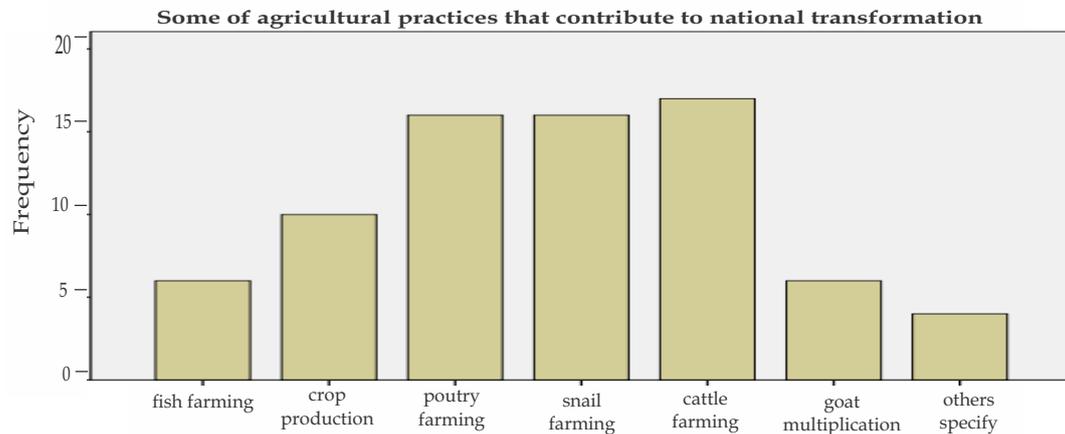


Chart two shows the age distribution of respondents. It revealed a high representation of 22.7(%) of those between age 26-30years. This was followed by respondents that aged between 31-35years with a percentage of 20.0(%). Those between the age of 36-40years formed 16.0(%). Those respondents that ages between 41-45years formed 13.3(%), followed by those who are aged between 50years and above (9.3%).

Other group of respondents represented were those who are between 20-25year old (80%), those between 46-50years are 6.7(%) while respondents who are below 15years formed (4.0%).

Chart III: Distribution of Respondents by Views on Contributions of Agriculture and Agricultural Education



The chart above shows respondents views on the contributions of agriculture to the nation's economy. It shows that a significant number of respondents (37.3%) suggested that the major contribution of agriculture to the economy is food production. This is followed by those who suggested raw materials as a major contribution. About (20.0%) suggested that agriculture is a major contributor to provision of medicine, while those who believed that agriculture provides employment formed (6.7%).

Chart IV: Distribution of Respondents on Educational Qualifications

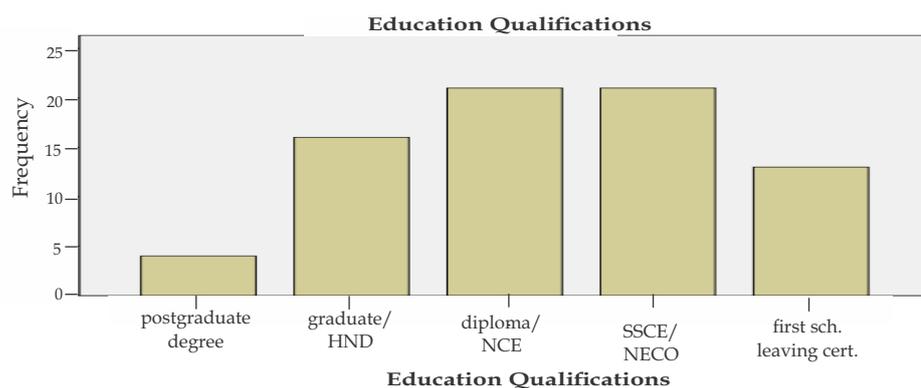


Chart four shows a high representation of NCE/Diploma certificate holders and SSCE/NECO holders with a percentage of (28.0%) respectively. Graduates have a significant representation of 21.3percent. Those respondents with First School Leaving Certificate formed (17.3%). Followed by holders of postgraduate degree (5.3%). This makes the findings valid reliable source a significant number of the respondents are educated.

Chart V: Distribution of Respondents by Contributions of Agriculture

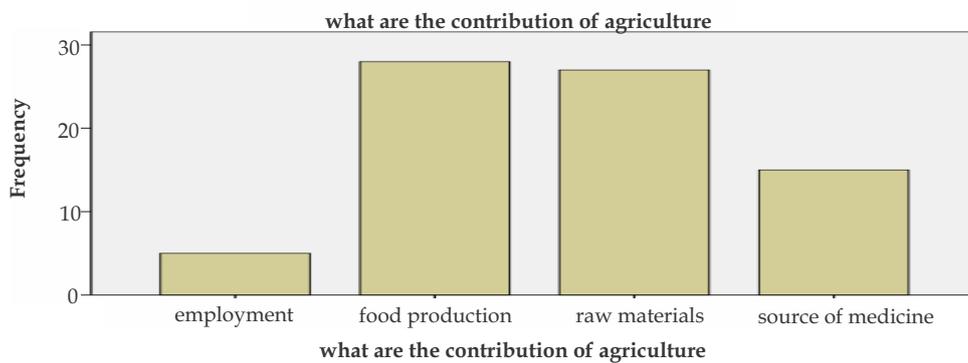
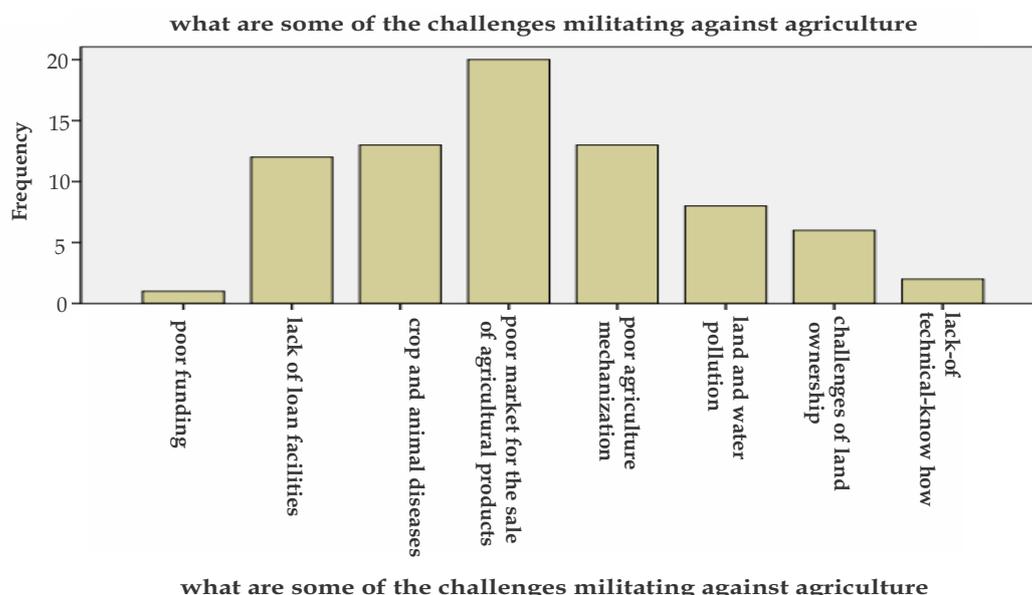


Chart five shows respondents views on agricultural practices or form of agriculture that contribute to national growth and development. It reveals a significant response of (22.7%) for cattle rearing. Poultry farming and snail farming formed (21.3%) respectively. This was followed by crop production with (13.3%). Fish farming and goat multiplication scores (8.0%) respectively, while other contributions were represented by 5.3percent.s

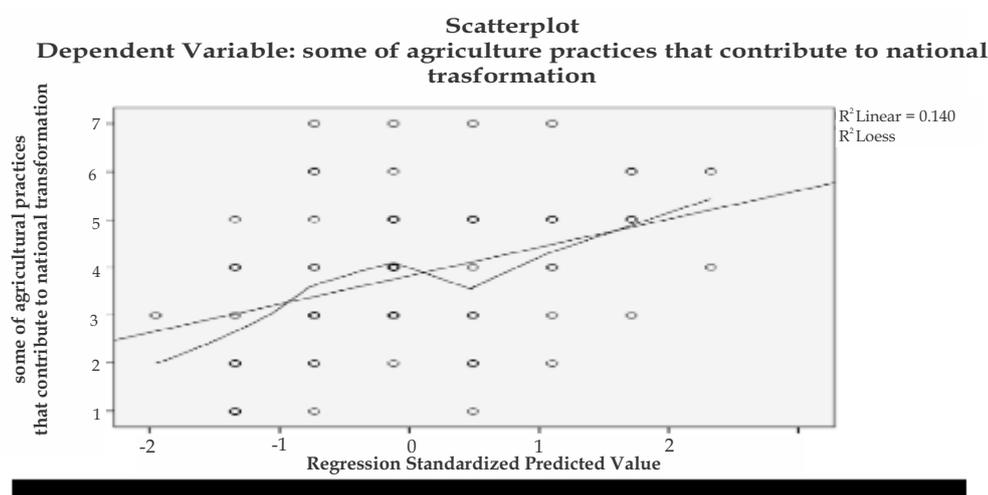
Chart VI: Respondents View on Challenges Militating Against Agriculture and Agricultural Education



The bar chart above shows respondents views on some of the challenges militating against agriculture. It revealed a high rating of 26.7percent for poor market and market conditions for the sale of agricultural products. Poor agricultural mechanization and crops and animals diseases formed (17.3%) of the response. Lack of loan facilities as a challenge to agriculture received a score of 16.0 percent. Challenges of land ownership and land tenure system scores 8.0 percent. Another factor that causes serious challenge to agriculture is lack of technical know-how with a percentage of 92.7(%). While poor funding received a score of 1.3 percent.

In order to address these challenges facing the agricultural sector, chart seven shows possible solutions as proffered by the study pollution. Creating conducive environment for all agricultural processes received a high rating of 28 percent. This is followed by suggestion on the needs to increase the funding of the agricultural sector with (26.7%). About 13.3 percent of the respondents suggest making available loan facilities to farmers and others involve in agro allied-business. Prevent land water pollution received a score of 10.7 (%), while checking and improving problems of land ownership was supported by 9.3(%). Provision of drugs and arresting both crops and animal diseases scored 6.7(%), while providing good roads received 5.3(%).

Table: 4.7 Scatter plot



Ikoh (2012) observed that, simple linear regression is used when a variable is to be predicted or explained with another variable. The scatter plot above shows how important various methods or agricultural practices are in relations to economic growth. The upward movement of the line shows that agriculture and agricultural products are of a good significance and hence its promotion is non-negotiable.

Conclusion

Agriculture and agricultural services remains relevant in every nation's economy, it is the bedrock foundation or the most necessary tool for the survival, growth and advancement of every society. The study involves participants both male and female from age below 15years to those above 50years. Findings from this study are considered to be valid and reliable based on the fact that that the educational qualifications of the respondents is significant with the highest representation of holders of Diploma/NCE certificates and those who have SSCE/NECO certificates.

The study revealed that agriculture and agricultural education significantly contributes to national growth through employment, food production, provision of raw material, for industries and it also serve as a source of herbs and medicine among others, many Nigerians are involved in one form of agriculture or the other. These include; fish farming, crop production, poultry farming, snail farming, cattle rearing, and goat multiplication among others. Despites efforts by the farmers they are faced with different challenges of poor funding, lack of loan facilities, diseases of both crops and animals among others.

Based on the findings presented above, it becomes necessary for all able individuals, groups, organizations, corporate bodies to support the agricultural industry. We should also support the inclusion of agricultural education and all those involve in agricultural production and other agro allied-businesses. Government should create an enabling environment to promote and sustain all forms of agricultural education and other agricultural practices for the growth of the economy.

Recommendations

In order to achieve the goals of agriculture in Nigeria, the following points are presented as areas of concern, which calls for possible intervention. These include;

1. The government should provide adequate funding for all agricultural sectors
2. The government, Banks and other able bodies and organisations should make loan facilities available for farmers in both urban and rural areas.
3. Government should formulate, implement or regulate laws on and ownership and land reengage. This would enable farmers to access land for their production.
4. The government should provide and maintain good road network, most especially in the rural areas to enable the farmers transport their grain produce to the urban areas.
5. Agriculture and other forms of agric-entrepreneurship should be taught in all levels of education.
6. The use of mass media e.g Newspapers, Magazines, Journals, television, radio, internet etc. should be adopted is promoting agriculture, agricultural services and its products.

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