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Commercial Agriculture and Rural Development: Evidence from the Zimbabwe Farm Project in Tsonga, Nigeria

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Abstract

When the Zimbabwe Farmers were brought to Kwara State, Nigeria in 2004, the intention of the government was to enable the local farmers benefit from their wealth of experience through commercial farming especially in the area of grain production in Tsonga and its environment. Six years after continuous farming, a survey evaluation was done through sampling of 240 farmers within their environment. Results showed that about 20% of the labour force required by the Zimbabwe farmers was obtained within the local environment and most people were employed as labourers, security guards and other unskilled labours. Similarly 3% of the local farmers were also trained to improve local productions while 18.8% of the farmers observed increased productivity and subsequent increase of income as a result of the commercial activities of these new farmers. Apart from these, the state of rural infrastructures like roads, electricity and potable water supplies were improved upon jointly by the State government and the Zimbabwe farmers. Local production of milk, rice, poultry, soya beans and animal fields for international markets were introduced. This has also affected local market organization in the locality positively. Even though some challenges were identified by local farmers, appropriate recommendations were presented accordingly.

Keywords: Farmers, Production, Markets, infrastructure, income, community, agro-allied

Introduction

In the development of literature, rural development is conceived as a positive term denoting a state of short or long term transformation and improvement in the standards of people living in the rural area of a nation. This transformation may be preceded by specified programmes initiated either by the government or the rural people being planned for or an external bodies with vested interest in the community affairs around the rural environment. This may also be attained inform of initiatives targeting the sources of rural income through infrastructure provision, agricultural development, extension services, capacity building or other forms of development issues that would alleviate the rural problems.

In most developing countries and in Nigeria in particular, the need to designate various programmes towards developing the rural areas arises as a result of past neglect of the rural areas by various planning strategies in favour of the urban areas. This scenario has led to a distinctive and recognized demarcation. Its manifestations include lack of physical necessities, poor accessibility to public goods and services, income insufficient to ensure sustainable and comfortable livelihood, as well as powerlessness, social discrimination and exclusion (Adedayo, 1988; World bank, 1990; Olawepo, 2010).

The conditions of the rural environment in Nigeria have also necessitated unique attentions over the years. Oladipo (1999) and Olawepo (2003) opined that the rural economy in Nigeria is that branch of the statesmanship which place agriculture in the center of economic life of rural communities and it is around that other enterprises revolve/or spring from. Structurally, the rural economies are multi enterprise dominated entities with indefinable boundary lines between major, complementary, supplementary and other seasonally oriented subsidiary enterprises. The rural economy in Nigeria is also known for part time nature of many enterprises, farmers, teachers, and government officials with little or no training in relevant trades often rely on family labour to work on farms and other forms of rural enterprises. A large proportion of the rural people are usually farmers who depend wholly on agriculture with little access to capital inputs like chemicals, fertilizers and modern machineries due to poor financial position and low education. While the arable crops are under traditional small scale cultivation, usually for subsistence commercial and are usually prone to poor yields and low productivity.

Developing the rural areas through attention to the agriculture sector is often seen as a panacea to sustainable rural and community development. Since political independence in Nigeria, definite policy goals and objectives aimed at improvement of the rural areas were formulated to enhance the living standards of the rural poor who are mostly farmers. In the 60s and 70s, most rural development programmes were mainly targeting the rural people through agricultural development

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programmes. It was assumed that this particular strategy definitely obscures other productive activities other than agriculture. Features like income, infrastructure, market, small and medium scale enterprises, human resource development, cash flow, and rural environment would be adversely and positively affected. Thus, various agricultural development programmes were intensified through Agricultural Development Projects, Co-operative Societies, River Basin Development Authorities and some other institutional development. All these were introduced at various levels of rural development programmes in Nigeria.

Although other sectors in the Nigerian Economy have rapidly outgrown the agricultural sector, about 75% of the population still depends directly or indirectly on it for their livelihood.

The people of Tsonga in Edu Local Government Areas of Kwara State are predominantly rice growing farmers, other forms of grain production and sugarcane, groundnut, millet and guinea corn for both subsistence and local markets. The coming of the Zimbabwe farmers to their communities in 2004 could thus be seen as development oriented because it involved a partnership with the State and Local Governments. Fifteen Expatriate farmers from Zimbabwe, in 2004 acquired fifteen thousand hectares of land in Tsonga for commercial agriculture for a twenty five years lease hold. This initiative is the brainchild of the Kwara State Government whose aims were to create youth employment, and resettle the Zimbabwe farmers in an environment where they would be able to impart new production techniques on the local farmers and improve grain productivity in the state. The Zimbabwe farmers were also to train and equip local farmers and produce immense opportunities on local farmers through transfer of skills over the years. The State Government on its part was to be a partner by providing enabling environment for extensive farming, infrastructural development in the areas of electricity in the farm settlement and local communities, provision of earth roads to the farms, and potable water supply for takeoff, while all these would be taken over by the Expatriate farmers over the years. While planting season was officially flagged off on July 8, 2005 the Zimbabwe cultivated 1,500 hectares of maize and soya beans for a start that year.

Against this background, it is therefore a thing of concern that well over five years after the Tsonga farm project has come into existence, there should be a sort of evaluation to assess its impact on the economy of the people and the rural environment.

The aim of this paper is thus two fold. First, it is to assess the commercial farming system among the Zimbabwe farmers (the Tsonga farm project) with a view to determining its impact on the rural production. Second, it is to assess its impact on rural development within the rural environment where the project is situated. The basic question still remains; who actually benefits from the Zimbabwe farmers project in Tsonga and its environment? Answers to these and others would therefore be the scope of this study. This study therefore examines the effects of Commercial Agriculture as a strategy for rural development. The major focus is upon the implication of the project on employment generation, improvement of skills among farmers, market development and cash flow as well as provision of physical and social infrastructure, firstly by the State government, and later by the Expatriate farmers to the host communities.

Commercial agriculture and rural development: A theoretical approach

Past works and literature on rural development in developing world have shown that the development of agriculture had been paramount in the search for appropriate strategies for rural development. This because a large proportion of the rural dwellers rely on agriculture for their livelihood sustenance, thus experts felt that a boost in agricultural development would turn around lives in the rural areas. In other words, a well conceive agricultural development project will guarantee constant food supply, income enhancement and nutritional development, not only in the rural areas, but in the entire country where agriculture plays a dominant role. In addition, it will open windows of opportunities for other infrastructure and agro-allied industries commensurable to rural economy development (Omole, 2005).

Commercial agriculture refers to any form of agricultural production that is on a large scale with the major aim of producing for local, regional, national or international markets. This means that commercial agriculture produces crops, animals and food mainly for sale. This could be in form of either specialized farm or a form of mixed farming system including plantation and mechanization. A great majority of farmers in developed countries like Canada, The United States, Britain and others in Europe are involved in commercial agricultures. In other words, commercial agriculture can best be described as any form of agricultural practices that involves large field and/or large numbers of animals, high resources input, capital, and a high level of mechanization. Iwena (2007) mentioned plantation agriculture as a form of commercial agriculture that requires a large amount of capital, vast land area, and a high degree of labour. From

all these, it could be said that commercial agriculture produces for sale with a wide distribution to wholesaler's outlets. Crops like wheat, maize, tea, coffee, sugarcane, cashew and cotton among others are often under commercial production, so also ranches involving stock of cattle, piggery and other livestock production.

In addition to the above, Ogazi (1992) indicated that if this form of production resides in the rural areas and among the rural people would turn around the rural life especially in the area of their socio-economic development. This would enhance income development, rural infrastructure, provision of more and better food for the hungry mouths, and provision of efficient work force to take up employment in the rural areas. In the same vein, the raising of the quality of life of the rural people through improved agricultural production would be enhanced. The rural people could also have improved access to public goods and services over the years.

However, the works of Okafor (1981); Adedayo (1988) and Okoye (1992) among others indicated that Rural development is more than all these. For example, Okoye 1992) defined rural development as being concerned with the improvement as well as transformation of the social, mental, economic, institutional and environmental conditions of the low income rural dwellers through the mobilization of their human, natural and institutional for improvement that meets the demand of modern times. This definition is comprehensive and covers all aspects of human livelihood within the rural environment. Ujo (2008) asserted that the process of rural development would be more encompassing if it include participation of the people that are being planned for. This form of development relates to what is generally known as development from below or bottom up approach. Whatever method used, the essential components of rural development should include:

- a fundamental restructuring of rural space and settlement, so as to improve the physical and social access of produces to vital resources;
- the creation of new rural structure that would facilitate substantial re-investment of financial resources in the rural areas;
- mobilization of rural farmers through effective organization framework that would promote mass involvement in development;
- Provision of appropriate technology for raising rural productivity and efficient utilization of resources;
- Provision of basic needs such as food, housing, water supply, health services;
- Creation of efficient transport network for rural areas;
- Agriculture transformation to ensure massive food production and supply of industrial raw materials; and,
- creation of progressive social system in the rural areas.

In all these, one basic fact is that rural people need food, employment, decent housing, education, health care and other public goods and services. This situation indicates that, there is need for special planning to effect the desired changes in the rural areas through various strategies. One of these strategies is the issue of agricultural development through commercial agriculture and other benefits that can come with it whether directly or indirectly. The sectoral agricultural model is often used as a panacea for overall rural development, the proponents of the model believe that if agriculture is developed, capital is generated for investment in industrial and agro allied sector, and which would have consequent influence on the generality of the rural landscape and residents. This was widely practiced in Nigeria in the early 80s through the introduction of Agric Development Projects and the emergence of River Basins Development Authorities in the later years. The targets of the planners are thus to improve on the low productivity due to lack of appropriate technology for storage of farm produce, farmers income as well as the welfare of the rural populace. The coming of the Zimbabwe farmers to Nigeria in 2004 therefore was seen as leap towards positive development of agriculture firstly by the expatriates, and then with relative influence on the productivity of the rural farmers who were supposed to benefit from this strategy either directly or indirectly.

The study area and research methodology

Tsonga is one of the four districts that made up Edu Local Government Area in Kwara State, Nigeria. This district is located between Logitudes 4^0 54''E, and 4^0 57'' and Latitudes 8^0 36'' N and 8^040^0 N of the Equator. The location shares a common boundaries with Patigi, Local Government area to the East, Ifelodun Local Government Area to the South, Moro in the West and Niger State in the North and within the range of about 150 kilometers to Ilorin the State headquarters. The people of Tsonga are predominantly farmers and fishermen with a large proportion of the farmers focusing on the production of indigenous rice, corn and beans among others. The people of Tsonga are Nupe by tribe with some non indigenous people (Yoruba, Hausa, Fulani and Gwari) living among them. Farm production here is the mainstay of the economy, though at peasantry level, a large proportion is also meant for the market after the

home consumption need has been met. Generally in Edu and in Tsonga in particular, the indigenous rice has become a trade mark as they trade in rice with other neighbouring communities both in Kwara and Niger states.

The Zimbabwe farmers were invited by the Kwara State Government in 2004 with aim of establishing commercial agriculture in and around Tsonga. The team of 15 farmers first acquired about 15,000 hectares of farmland in Tsonga and the surrounding villages of Dumagi, Ogodu and Sakpata on a first instance of a 25 years leasehold. This initiative was the brainchild of the State government, it was a high risk initiative to create employment and reduce poverty among the local farmers, as well as developing agriculture in the area. It was also meant to increase accessibility of the local people to public utilities which were to be provided by the state government as their counterpart funding. The expatriate farmers were in return to produce grain crops in commercial standard, first for the international markets, and second to set up rural farmers to expand their production with subsequent training, introduction of farm inputs and supply of improved seedlings. Apart from these, the government felt that over the years, this project would attract more expatriate farmers to the region as well as indigenous farmers who may want to be partners, and thus there could be emergence of agro allied industries such as feed mills, fresh milk, yoghurts production and related farm productions.

This paper draws data from field research on conservation based field observation in which the authors had to visit some of the project locations to ascertain the availability of the project. Apart from this, the study relies heavily on questionnaire administration among the,2405 farm families in the project location villages. 240 farmers who happened to be seasoned farmers were sampled, representing 10% of the local farm families around the project. Secondary data were also obtained from the Kwara State Planning Commission as well as the project data base at Tsonga. This data set was collected on farm productivity, cash-flow, marketing and productivity as well as relationships with and influence from Zimbabwe farmers. Tabulations resulting from simple percentages were used to explain farm productivity while Laurence curves were used to explain income inequalities between the two time frames (before and after the Zimbabwe farm Project). Apart from this, Lawrence curve was used to explain the spread of local farmers' income within a farming season. The limitation of this study however, is seen in the reliability of information obtained from farmers who do not keep records but we rely on their savings record from micro finance banks which some of them were able to present. In as much as they are all adults who are experienced over the years, we believe a high level of reliability on what they presented because the author had to recheck some of these information during return journeys to the study site.

Findings and discussion

This section deals with analysis of data collated from the field work. The major task of this section is to explain farm productivity of the local farmers as well as commercial activities by the Zimbabwe farmers with a view to assessing the impacts of their productivity on the rural farmers and their environment. For the purpose of discussion it is divided into five major sections; these are general characteristics of respondents, farm production and marketing of farm resources, wealth index and farm incomes, the Zimbawe farmers' productivity and Rural Development in the study area.

General characteristics of Respondents

The main effort here is to assess farmers' personal information and questions were exclusively asked regarding their sex, ages, family sizes and educational qualifications. Farming is being undertaken by men and women in the study area. While the men prune and till the ground for continuous production women deal with harvesting, processing and marketing of fish, grains and rice in the study area especially in the core area of Tsonga district and the neighbouring communities. It is clear that the majority of people dealing with farming in the study area are mostly men. About 89.5% of our respondents are men while only 10.5% are their female counterparts. It was however revealed that majority of women farmers here are involved in the processing of local rice, washing, cooking and actual marketing of farm products in the various markets, some of them however do actual farming through hired labour and engagement of itinerant farmers/labourers.

As regards the age of our respondents, it is evident that a large proportion of our respondents fall within the age range of 25-55, that is about 76.8% of the total number of local farmers involved in farming production. From these findings, inference can be made that the active population makes up the main farming labour force in the study area. The younger age range of 16-25 has a lower percentage of about 10.5%, this indicates that farming is exclusive job for the elderly, especially the men folks. This is evidently shown by the number of people found in the age bracket 55 and above. This group accounts for about 12.7 % of the total labour force. One other implication of this is that most young and able bodied people have moved to the urban areas in search for more lucrative job opportunities. However, this scenario

is pointing to the facts that all our respondents are adults and thus, this would make information obtained from them a bit reliable, basing it on their maturity and experience.

As regards the family sizes of the local farmers, this is important in every aspect of farming production; this is because it affects the labour force as well as per capital output. Like many farming production, the harvesting of grains and local rice is a family labour that involves the parents and the children. These include the numbers of wives, children, dependants and other relations from outside and those living under the same roof.

This study also revealed that majority of the respondents have large family sizes especially those in Tsonga, Dumagi,andSakpata. This is also typical of an average Nupe family. About 46.6% of the respondents have a family of 11 people and above, while 24.3%, 17.4% and 11.7% have family sizes of between 7-9, 5-7 and 3-5 respectively. This implies that there are many more mouths to feed and so far farming is the major occupation of people in this part of the country, many more people would be involved in farming activities especially in rice, fishery and grain production businesses.

In terms of Education, generally a large proportion of the local farmers have no formal education but a substantial of them (52.1%) can read and write in the local languages of Nupe and Yoruba. Table 1.1 shows the breakdown of educational qualifications. In all, 21.6% of them possess primary education , while only 7.5 % obtained higher education and these two groups and those with Adult and tertiary education form the proportion of the literate farmers among the respondents. It has been known from past studies that the level of education has an exponential relationship with the farmer's level of susceptibility to the adoption of innovations and modern farming techniques (see Olawepo 2009). This discretely affects their methods of production as well as acceptability of new information and farm productivity; it is also one of the criteria set by the Zimbabwe farmers for the farmers to benefit from their ventures.

Table 1: Educational Status of Respondents

Education Source	No	%	Cumulative %
None	115	47.9	47.9
Quranic/Adult	30	12.5	60.4
Primary	52	21.6	82
Secondary	25	10.4	92.4
Tertiary	18	7.5	100
TOTAL	240	100	100

Source: Author's own calculation

Farming Production and Annual Yield

Prior to the coming of the Zimbabwe farmers initiatives, Farming activities in the study area are for both subsistence and commercial levels although productions and yield are low due to the fragmentation of land holdings and poor accessibility to modern farm inputs and capital among others. It could be observed that the system of mixed cropping is widely practiced. Apart from rice production, Nupe farmers are involved in the production of tubers, sugar cane, grain production and some root crops in both wet and dry seasons.

As regards types of crops grown in the area, about 20.4% are producing root crops, in conjunction with rice (both upland and fadama cropping) , and 22.6% grew grains and legumes. Similarly about 8.58% are involved in vegetables production, while 43.28% plant all the four types of, crops within an agricultural year. Table 2 shows a breakdown of acreage of land under cultivation during both dry and wet seasons At times these farming systems are produced on full time, while in other times they are to supplement their income. This has shown that a large proportion of farm land is under rice production throughout the year. For example, 66.5% acreage of land is under rice cultivation during the wet seasons while in the dry season, less than 23% of the land is under upland rice cultivation. With regards to wet season cultivation, farm sizes have been reported to increase for sugarcane and rice especially in Dumagi and Ogudu where there large expanse of marshy land for extensive cultivation. A farmer cultivates as large as 4.5 ha of land consisting of several plots. This however reduces in the dry season even for the same crop for as low as 2 ha per farmer except for where local irrigation is being practiced. In the same vein, the areas of land cultivated by the 240 farmers totaled 2,435.62 acres during wet season production compared with 1201.36 cultivated in the dry season cultivation in a typical farm season. These production schedules discussed here is typical of what is currently practiced by the local farmers during the Zimbabwe farmers' tenure.

Table 2: Respondents crops and land areas cultivated in acres
Wet Season Agricultural Production

Crop Type	Acre Crop (Acre)	%	Average Yield (Basket & Sacks	Total Production (Sacks & Basket)	%
Rice	1620.27	66.5	14.92	78,054.50	87.8
Maize /other grains	493.18	20.2	19.07	3,458.44	3.9
Sugar cane	42.05	1.7	28.22 9 (tons)	3,625.87	4.1
Tubers	224.5	9.2	15.52 (tons)	1,836.22	2.1
Vegetables	55.62	2.3	65	965.44	1.1
Sub Total	2435.62	100		87,940.47	100
Dry Season Agricultural Production					
Maize /other grains	362.15	30.1	12.77	2,602.91	3.5
Tubers	195.03	16.2	6.92 (tons)	981.46	1.3
Vegetables	36.5	3	32.33	340.31	0.5
Sugarcane	12.65	1.1	7.39 9 (tons)	1,489.07	2
Rice	595.03	49.5	12.36	68,620.51	92.3
Sub total	1201.36	100		74,034.26	100
G/Total	3636.98			161,974.73	

Source: Author's own calculation

This according to them only changed slightly as some of them are being encouraged to produce mono cropping especially grains in commercial quantities. However, about 5.4% of our respondents indicated that some major transformations were made in the last three years due to the in influence of the Zimbabwe farmers. Such transformation include the introduction of improved seedlings for rice and maize and the introduction of mixed cropping involving soya beans and introduction of wheat production in some localities around Tsonga. Another innovation is that some of their farm products are sold to the expatriate farmers especially those producing soya beans and cassava.

Labour supply on the farm is mostly by family members. About 75% of the farmers use family labours, especially among the Nupes and Fulani farmers in Sakpata. Occasionally commercial labour is used in conjunction with hired labour.

The Zimbabwe farmers farm holdings, and rural development

Efforts here are diverted towards explanation on Zimbabwe Farmers productions and their influence on rural Development in the study area. The aim is to look into the production systems of the farmers first and then to examine their impacts both directly on the farmers and then on the rural communities.

(i) The Zimbabwe Farmers Farm Holdings: Production and Marketing.

The initial planting for the farming season for 2005 was officially flagged off on July 8th and the Zimbabwe farmers cultivated about 1500 hectares of land to plant Maize and Soya beans for a start. During the last quarter of the same year new breed of Cassava brought from South Africa was introduced, first to the expatriate farms and later to a little proportion of the local farmers. In the years following the base year, various large scale farming was introduced. These include production of both upland and Fadama rice with improved seedlings, Poultry and mass production of cattle, mostly imported from South Africa.

As at today, there are thirteen Zimbabwe Farm Operators in Tsonga, they are all involved in large scale grain productions and involved in Small and Medium Scale Enterprises in their farm settlements.

Table 3 shows the breakdown of farm production by the Zimbabwe Farmers during the current farming season. The table revealed that Rice production has dominated the annual farm output of the Zimbabwe farmers during the wet and dry season's production. About 2,320 acres of land were put under rice cultivation, while 1,245 and 900 acres were put under cultivation for production of Cassava and improved Maize respectively. A look at this annual production appeared higher when compared to the total productions of all local farmers put together. This is as a result of large scale production and modern techniques of production introduced by the Zimbabwe farmers.

These also include the use of heavy machines, harvesters, chemicals and improved seedlings introduced by the farmers. Some of their productions are also put under irrigation during the dry season.

Table 3: Wet Season Agricultural Production

Crop Type	Acres	%	Average Yield (Bags /tons 0	Total Production (Bags)
Rice	2,320.50	59.6	892.3 / 44 tons	11,600 bags
Maize	950.22	24.4	584/ 29 tons	7,600 bags
Soya Beans	500	12.8	564/28.2 tons	3,625
Cassava	1,245	31.9	85.52 tons	1,820 tons
Beans	600	15.4	650 /32 tons	6,200 bags
Others	120	3.0	69/ 3 tons	200 bags
Total	3890.72	100.00		

Source: Author's own calculation

(ii) Livestock Production, Agro Allied Industries and Infrastructure.

One of the essences of the Zimbabwe farm Projects is the multiplier effects of the project will have on local productions and agro allied industries in the rural areas where they are located. Apart from farm production, six of the thirteen farm projects are involved in the production of animals in Ranches and two substantial Dairy Factories have been built in Tsonga for the production of Animal Feed, Fresh Milk and Yoghurt. To service these factories, 80 collets of high breed were imported in 2006 for the production of milk and cheese. The fleet in the ranches as at 2011 has increased to over 500 animal breeds. Apart from these four of the Farmers are involved in large scale poultry farms located at Tsonga and Sakpata farm stations. As at today, the two farm stations can boast of over 500,000 broilers and layers ready for both local and international markets. Two Farm companies are also involved in the production of animal feeds also for both local and International markets. Table 5 shows the annual production of the Zimbabwe Farm Project.

Recently, the products of the Milk factory (Tsonga Dairy Milk and Soya Milk) are being sold in the local markets at Tsonga, Lafiagi, Patigi, Ilorin and could be found in some of the popular departmental stores at Ilorin, Ibadan and Lagos. Others are also exported to South Africa and some West African countries where West African Manufacturing Company (WAMCO) has branches In the case of the poultry farms, a substantial part of their products are produced for local markets especially at the state headquarters, some of them are sold to International corporations like UAC, KFC and Mr. Biggs in Lagos while more than 80 % are taken for international markets. This performance has added potential for rural development, firstly by the establishment of agro allied industries in the rural areas where they are located; secondly, they give consumers within the vicinity ample opportunities to choose their preferred products from wide varieties in the market. It is however to say at this juncture to say that more than 70% of the grain especially rice and soya are produced for the international markets by the expatriate farmers.

In term of infrastructure development, it could be said that the presence of these multinational farms in the rural areas has raised their accessibility levels. In collaboration with the State government, roads linking the villages to the farm settlements are graded annually, while the roads leading Tsonga to the major towns of Patigi and Lafiagi while the road leading to Ilorin has recently been resurfaced. The Zimbabwe Farm Project has also implemented the infrastructure development of its support programme through the provision of boreholes in neighbouring communities of Sakpata, Dummagi and Ogudu. In the same vein, the Kwara State Government through the World Bank Assisted Programmes has beefed up electricity supplies to some communities.

Communities like Tsonga, and were given additional Transformers as a result of the growing farm settlements and the communities at large.

Table 4: Zimbabwe farmers production

Farm Project	Types of Farm Industries	Types of Products	Quantity in Situ	Average annual Income estimates (N)	Outlets
Helton Estate	Dairy	Fresh and milk, Yoghurt	1,300,000 litres	13,071,910	Local &Int.l markets

Rihunt Farms	Poultry, grains	Eggs, broiler meat	145,000 birds 100 tons of grains	2,200,000	UAC,KFC and Intl. mkets
Pineleigh Farms	Dairy	Fresh milk, Yughurt	2,000,000 litres	6,795,293	Lcal& Intl. markets
Carpe Diem	Grain ,Pouutry	Eggs,Animal feeds, broiler meat	266,000 birds 100 tons of grains	8,680,000	UAC,KFC and Intl. mkets
Hellam Farms	Arable Farming	Cassava, grains,palets	520 tons N.A	3,300,000	International. Markets
Hatty Farms	Arable farming	Cassava,grainspalets	600 tons, 4,000,000 kg	6,459,000	International. Markets
Dixie Farms	Grains ,Poultry	Broiler meat	145,000 birds	3,3000,000	International. Markets
New Ventures	Dairy	Fresh Milk	1,000,000 litres	5,058,000	UAC, Mr. Biggs, Intl. mkets
RoseDare	Dairy	Fresh milk	1,500,000 litres	5,058,000	WAMCO
Danjen Farms	Arable farming	Grains	470 tons	2,500,000	Local and International. Mkets
Time P. Farms	Grains and Poultry	Grains, Broiler meat	200,000 birds	1,680,000	International. Markets
Wona Farms	Grains	Grains	455 tons	3,500,000	nternational. Markets
Mafunzario	Grains	Grains,Animal feeds	615 t0ns	1,500,000	nternational. Markets

Source: Author's survey

From field survey, it is observed that electricity and boreholes and experimental irrigation centers were provided in Sakpata, Tsonga and the health centre at Tsonga is recently equipped by the state government to improve the people's health care. This implies that the host communities were specifically targeted in the provision of infrastructure to enhance both the local farmers and the Zimbabwe farmers' conducive environment. However from the viewpoint of the farm project staff, the people in the host communities derive a lot of benefits from the physical and social services of the Farm Projects. To corroborate this claim, the responses of the field survey on the services provided by the Zimbabwe farmers in collaboration with the state government are given in table 5.

As the table reveals, only about 41.5 % and 40.4% of the respondents point to the positive contribution of the boreholes and feeder roads to community improvement respectively. This represents about one third of the respondents. The respondents however added that there are now peaceful relationships between the foreign farmers and the locals after the initial resistance in 2004.

Table 5: Perception of respondents on infrastructural development in host communities

Services provided	% of Respondents satisfied/benefiting
Boreholes	41.5
Electricity	21.4
Feeder Roads	40.4
Health Facilities	12.5

Source: Author's survey

(iii) Human Resources, Income Development Farm input.

One area from which the multiplier effects of the Zimbabwe Farm projects could be assessed is in the area of human resource development and farm labours supply. Prior to the coming of the Zimbabwe farmers, family labour on farm is heavily family dependent, and on occasional itinerant farmers who work as labourers on sugar cane plantation and local family farms. However, the emergence of the Zimbabwe project has brought a slight reduction in the importance of children labour on farms. 6.7% of our respondents

reported that some of their children now work with the Zimbabwe farmers. Apart from this 12.3% of the respondents also indicated that they once worked as part time farmers especially during the harvesting periods on the Zimbabwe farms. Evidence from official documents with the expatriate farmers revealed that despite the fact that heavy machineries are used on the farm, over 20% of the labour force on these farms are supplied by the local residents. Most of the people were employed as attendants, security guards, farm workers, cleaners and messengers. Some of the skilled labours found on some of the farms are also residents from the Local Government Areas. The implication of this is that some of the farmers' children and others working with the Zimbabwe farmers may have improved incomes and may one day bring back more farm innovations for their own local development. This may eventually help their parents' productivity over the years.

In addition to the above, the multiplier effects of the Farm Project are in term of employment provided in commercial and service enterprises for small traders, shopkeepers, grain millers, transporters, vulcanizers, cobblers and electricians. About 45% of our respondents confirmed the growth of off farm employment due to the presence of the Zimbabwe farmers in their locality. Apart from this, 3% of the farmers interviewed indicated that they enjoyed local training on keeping farm records and farm management from interactions with the foreign farmers during organized farm awareness workshops development at the end of each farming season, thus the issue of human resource development is positively affected.

In order to assess the level of incomes, the gross sales from previous agricultural years and farmers income were collated. Table 4 shows the average income of the producers based on the sale from the previous agricultural year. In the area of farm income and cash flow, an average local farmer earn between 5,000 to 80,000 Naira per annum from local production ,while those involved in large scale production could earn as high as N100,000 per annum.

Table 6: Farm income among the respondents

Income group	Tsonga	Dumagi	Ogudu	Sakpata	Total	%
N1-10,000	3	5	2	4	14	5.8
11,000-20,000	6	8	7	9	30	12.5
21,000-30,000	12	10	10	8	40	16.7
31,000-40,000	25	17	16	12	70	29.2
41000-50,000	13	11	10	8	42	17.5
51,000-100,000	11	5	3	4	23	9.6
Above 100,000	10	6	3	2	21	8.8
TOTAL	80	52	61	47	240	100

Source: Author's Research

Income generally is low from agricultural production as a result of low capital input into production, low level of education, low price level of farm produce, and poor accessibility to credit facilities among others. From Table 6, it is observed that income level rises rapidly from low income of N1-10,000 until income of between N40,000-50,000 when it descends again. Within an agricultural year as observed, 28.4% of our respondents earned above the median income of N40,000. When considered in the context of average National per capita income, this is virtually low. From this distribution it is possible to infer on the level of income generally in the study area. This is generally low when compared to the standard poverty line of 1 dollar per day. This might also be as a result of the circular flow of poverty among farmers.

It is difficult to compare the income of farmers generally before and after the coming of the Zimbabwe farmers. However, 18.8% of the respondents agreed there have been improvements on their earning capacities since the coming of the expatriate farmers. This increase according to them, results from additional earnings from increased sales as some of them supply grains and cassava to the milling and animal feeds production. It may also be from farm payment they received from services rendered while 17% of them believed it came from increased production as a result of improved seedlings obtained at subsidized rates from the foreign farmers.

Despite the spread of low income from farming activities, it was evident that there is a great in-equality in the distribution of farm income even among the farmers despite the introduction of commercial agriculture in the locality. The Lorenz curve in Figure 1 shows a depiction of current in-equality among farmers in the study area. For instance it shows that the lower half of the population receives only about 22% of the total income; conversely, half the income goes to only 32% of the population.

Similarly about 91% of the population earns 62% of the total income. The in-equality gap curve is farther away from the equality line in most part of the graph until the high income level is reached. This is characteristically of the poverty nature among rural farmers and the general vicious circle among local farmers throughout the country.

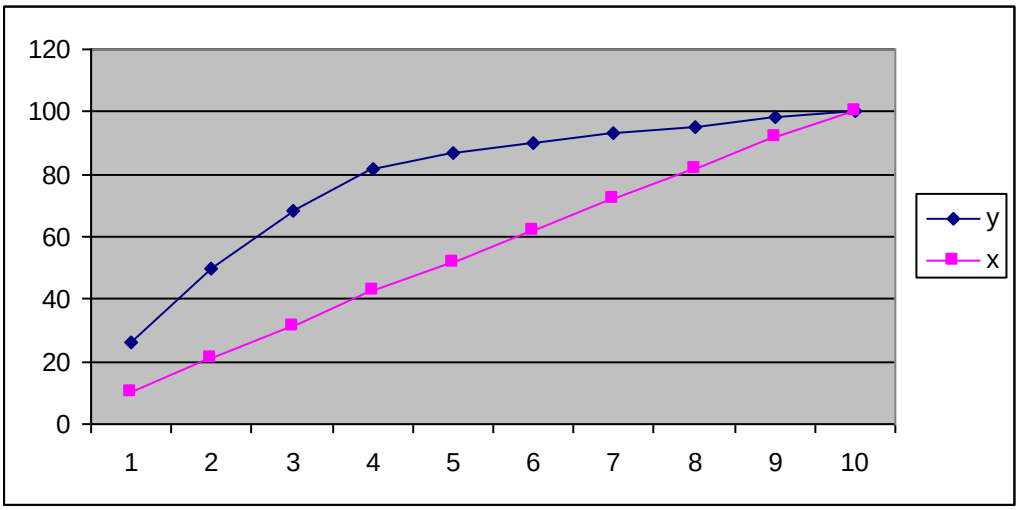

Fig 1: Lorenz curve showing current distribution of farmers' income

(iv) Farm input and Extension Services.

The Zimbabwe farmers have also implemented partially, the farm input development aspect of its support zone programme in collaboration with the State Ministry of agriculture. Some of the farmers, apart from working on the Zimbabwe farms on part time basis; they were given some elementary training through local workshops, especially in the areas of monocroping and in improved accessibility to farm inputs. However from the view point of the interviewed farmers, only few people in the support zone derive benefits from their extension services. To support this claim, the responses of the respondents on the extension services provided by the Zimbabwe farmers are given in Table 7.

Table 7: Extension services provided by the Zimbabwe project

Services provided	Respondents benefiting
Training and Local Workshops	3%
Farm input (Fertilizer, insecticides and weeding chemicals)	10%
Improved seedlings (grains)	17.7%
Tractor hiring programmes	2.2%
Accessibility to farm produce	8%

Source: Author's own calculation

As the table reveals, only about 17.75 of the respondents have access to improved seedlings from the Expatriate farmers while 10% had access to farm inputs from them at a subsidized rates. Generally, it could be deduced that only few farmers benefit from the extension services associated with the project.

The Zimbabwe project and local challenges

Despite the fact that the Zimbabwe Farm Project supposedly affected the lives and production of the local farmers positively, a substantial part of the local farmers saw the whole thing as a threat to their local production. This is because by their tradition, farmers in this part of the country are known for grain production, especially the local Rice called *Tapa's Rice*. According to one of the farmers in Tsonga:

"all the benefits promised our people by the government before they took our land for the foreigners are not fulfilled. It is only the rich farmers among us that are their friends and are benefiting from them, even their productions are not found in our local markets, but among the rich in the city".

The researcher was reliably told that apart from these complaints, there were clashes between the

government agencies and the local communities at the initial take off of the programme in 2004. The communities initially resisted the release of their lands for the government. They however succumb to the government after due compensation were paid to them through the intervention of the elites and their traditional rulers. While the State Government kept on monitoring the project, the local communities were promised future developments and they were assured that apart from the benefit they will derive over the years, most production from the projects would be meant for international markets. From the Zimbabwe farmers point of views and production records, the project is not only successful, it is beneficial to the local communities.

Conclusion

This paper has attempted to highlight the linkage between commercial agriculture and rural development through the introduction of the Zimbabwe Farms project in Tsonga. Even though the main aim of the project was not for rural development *per se*, it argues that there is a growing evidence to show that the surrounding communities have benefited from the project positively. Results showed that about 20% of the labour force required by the Zimbabwe farmers was obtained within the local environment and most people were employed as labourers, security guards and other unskilled labours. Similarly 3% of the local farmers were trained to improve local productions while 18.8% of the farmers observed increased productivity and subsequent increase of income as a result of the commercial activities of these new farmers. Apart from these, the state of rural infrastructures like roads, electricity and potable water supplies were improved upon jointly by the State government and the Zimbabwe farmers. Local production of milk, rice, poultry, soya beans and animal fields for international markets were introduced. Despite all these, it has been discovered that there were some challenges facing the local farmers and they are not widely satisfied. Also, the impacts of the projects are minimally felt by the local communities, and this scenario can be improved upon over the years. While it may be difficult presently to draw firm conclusions on the overall success of the Zimbabwe farm Project as a people oriented strategy to effect rural and agricultural development, some evidence of development, particularly infrastructures, off farm employment and human resource development can be observed in its catchment areas. We therefore recommend evolving an approach which will emphasize State government participation in the commercial production provision of infrastructure and involving a policy which will guarantee technical transfer to the local farmers over the years. This should also include provisions which will improve accessibility to farm input on the part of the local farmers.

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