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COMPLEMENTARITY OF FDI AND EMPLOYMENT GENERATION IN THE AGRICULTURE SECTOR OF GHANA: ANALYSIS OF RECENT DEVELOPMENTS

KOMPLEMENTARNOŚĆ BEZPOŚREDNICH INWESTYCJI ZAGRANICZNYCH A ZWIĘKSZANIE ZATRUDNIENIA W SEKTORZE ROLNYM GHANY: ANALIZA OSTATNICH ZMIAN

Abstract

Foreign direct investment inflows into Ghana have been a major source of economic growth transformation. Many investing countries aspire to provide Ghana's economy with new models and direction for development alternatives to foreign aid which will in effect benefit both nations. Given the government's intention of transforming most agriculture products into finished commodities other than exporting these commodities in their raw states, a new set of incentives and policies to attract investors into the agriculture sector have been initiated. This consists of farming for food provision and employment generation in a bid to moderating the high rate of unemployment aside depending on the normal farming methods. This study sets to investigate the impact of foreign direct investment in the agriculture sector on employment generation. The paper argues that employment created in the agriculture sector was attained through the number of registered projects allocated to various sectors within the Ghanaian economy categorized by the Ghana Investment Promotion Centre. Methodologically, this study utilizes a statistical descriptive approach that backs a summary of the complementary analysis of foreign direct investment inflow quantitatively using data on FDI inflows from 2013 to 2018. The result shows that the percentage share of the total number of registered projects allocated and employment created in the agriculture sector through FDI is very low compared to sectors like the manufacturing and service. It was also discovered that the agriculture sector contribution to the Gross Domestic Product (GDP) in the late 90s weighed much higher than the other sectors and continuous decline in the 2000s. It is recommended that investors should enter into the agriculture sector since there are many benefits.

Keywords: *FDI, Agricultural Sector, Employment Generation, Economic Growth*

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Streszczenie

Napływ bezpośrednich inwestycji zagranicznych do Ghany był głównym źródłem transformacji wzrostu gospodarczego. Wiele krajów inwestujących dąży do zapewnienia gospodarce Ghany nowych modeli i kierunków rozwoju, alternatywnych dla pomocy zagranicznej, które w efekcie przyniosą korzyści wszystkim. Biorąc pod uwagę zamiar rządu w kierunku przekształcenia większości produktów rolnych w gotowe towary (inne niż eksport tych towarów w stanie surowym), zainicjowano nowy plan zachęt i polityk mających na celu przyciągnięcie inwestorów do sektora rolnego. Rolnictwo ma zapewniać żywność i tworzenie miejsc pracy dla złagodzenia wysokiego poziomu bezrobocia przy zachowaniu normalnych metod uprawy. Niniejsze badanie ma na celu zbadanie wpływu bezpośrednich inwestycji zagranicznych w sektorze rolnym na tworzenie miejsc pracy. W artykule argumentuje się, że zatrudnienie sektorze rolnym zostało osiągnięte dzięki szeregowi zarejestrowanych projektów przydzielonych różnym sektorom w gospodarce Ghany, sklasyfikowanych przez Ghana Investment Promotion Centre. Metodologicznie w niniejszym badaniu zastosowano statystyczną metodę opisową, która opiera się na streszczeniu uzupełniającej analizy napływu bezpośrednich inwestycji zagranicznych w ujęciu ilościowym, z wykorzystaniem danych dotyczących napływu BIZ w latach 2013–2018. Wyniki pokazują, że procentowy udział w całkowitej liczbie przydzielonych zarejestrowanych projektów i miejsc pracy utworzonych w sektorze rolnym za pośrednictwem bezpośrednich inwestycji zagranicznych jest bardzo niski w porównaniu do sektorów takich jak produkcja i usługi. Ujawniono również, że wkład sektora rolnego w produkt krajowy brutto (PKB) pod koniec lat 90. był znacznie wyższy niż innych sektorów, ale zanotował ciągły spadek w latach 2000-nych. Zaleca się, aby inwestorzy wchodzili do sektora rolnego, ponieważ przynosi to wiele korzyści.

Słowa kluczowe: *BIZ, sektor rolny, wzrost zatrudnienia, wzrost gospodarczy*

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Statement of the problem in general outlook and its connection with important scientific and practical tasks.

Agriculture is ultimately the pivot of employment generation in Ghana. An estimated number of 745,000 jobs were created along the selected commodity value chains (input distribution, production, post-harvest, marketing, and e-agriculture & extension) under the PFJ campaign in 2017 (MOFA, 2017). The initiative of Planting for Food and job creation has increased the number of employment generated in 2017 in Ghana as compared to the number of jobs in 2016. These and other impressive results detailed in this report translated into a higher growth rate of 8.4% for the agricultural sector in 2017 compared to 3% in 2016 (MOFA, 2017). Improving Ghana's agribusiness sector will lead to higher incomes and more jobs, paving the way for economic growth, structural transformation, and industrialization of the Ghanaian economy. In recognizing the important

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role, the agricultural sector plays in Ghana's economic development, MOFA saw the need to come up with an Agriculture Investment Guide (AIG) to provide guidance and direction for existing and potential agribusinesses (Agriculture, 2018). The inflow of foreign direct investment into the agriculture sector has been declining over the past years. The ability of agriculture in developing economies to meet food requirements by the year 2050, according to FAO estimates, demands an annual investment of USD 83 billion (Hallam, 2009). The reduction in the poverty line in most developing economies is as a result of an improvement in the method practices by most farmers. Meanwhile, the increase in productivity and the growth of the agric sector is critical for reducing poverty and enhancing the sustainability prospects of countries in the developing world (Msuya, 2007). In the year 2016, Ghana Investment Promotion Center (GIPC) registered four agriculture projects worth US$ 6,469, 000 as compared to 2015 registered projects (that is: in 2015 GIPC registered 2 agriculture projects worth US$ 2,520,000) and additionally, from 2008 to 2016, GIPC has registered 110 projects worth US$ 1,303 billion (Agriculture, 2018). This paper, therefore, sought to examine the extent to which the complementarity of FDI inflows and agribusiness facilitates the creation of employment to propel overall economic growth in Ghana. In terms of organization, the paper will present a background and context of the FDI inflows in the agriculture sector in relation to the creation of employment in Ghana. A review of literature on FDI in the agriculture sector and employment creation will then be presented, followed by an overview of the legal framework of investment in Ghana. The impact and implications of investment cooperation in agribusiness development on Ghana's employment will be discussed, before outlining the recommendations of the study in the form of investment policy review and strategies.

Background and Context of the FDI Inflows in the Agriculture Sector: Historical Perspective

The flow of FDI into the agriculture sector in Ghana is essential because growth in agriculture and its productivity are considered essential in achieving sustainable growth and a significant reduction in poverty. Ghana is endowed with abundant natural resources such as gold, diamond, bauxite, iron, and oil. The country is the second-largest economy and market by purchasing power parity and nominal GDP in West Africa. Ghana is the world's second major producer of cocoa and also a major gold producer. In 2010 Ghana started oil production at the offshore Jubilee fields and has recently been producing and processing natural gas. The growing economic prosperity and a stable democratic political system of the country has made it a preferred destination for investors in West Africa. Agriculture plays a vital role in Ghana's economy and has a great impact on poverty reduction. It is also critical for rural development and cultural values, social stabilization, environmental sustainability, and buffering economic shocks. The sector currently employs about 44.7%1 of the total workforce in the formal and informal sectors. The main agricultural commodities include root and tubers, cereals, tree plantation crops such as cocoa, oil palms, and shear, horticultural crops (mainly papaya, pineapples, mango and vegetables), livestock and fisheries. Agriculture in Ghana is predominantly a smallholder activity. About 90% of farm holdings are less than 2 hectares in size, although there are some relatively large farms and plantations, particularly for rubber, oil palm, banana,

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pineapple, and coconut, and to a lesser extent, rice, maize and cocoa. Ghana's primary cash crops are cocoa, oil palm, pineapple, mango, cassava, tomato, banana, citrus, cashew, and vegetables. Various crops are suitable for different soil types in Ghana. Over the years, the government of Ghana has been implementing policies and programs to promote the growth and development of the agriculture sector. These include the Ghana Shared Growth and Development Agenda (GSGDA I and II), Food and Agricultural Sector Development Policy (FASDEP I and II), and Medium Term Agricultural Sector Investment Plan (METASIP I and II). There are many lists of agriculture research institutes that are mainly responsible for the development of improved technologies is provided. The following are some of the research institutes, Crop research institute(CRI), Savana Agricultural Research Institute(SARI), Water Research Institute(WRI), Forestry Research Institute of Ghana(FORIG), Animal Research Institute(ARI), Soil Research Institute(SRI), Plant Genetic Resource Research Institute(PGRRI), Institute for Scientific and Technological Information and Science and Technology Research Institute (STEPRI).

The agricultural sector offers a unique set of advantages to investors including a varying range of agro-ecological zones amenable to the production of different crops. Ghana has fertile soil suitable for agricultural production. The total land area of about 23.9 million hectares includes about 14 million hectares of agricultural land area, out of which 6.3 million is under cultivation, (MoFA, SRID 2016). There are adequate water resources, both surface water and underground water, for irrigation. The area under inland waters is about 1.1 million hectares. The agriculture sector is one of the predominant sectors in Ghana's economy. The sector is composed of five subsectors: crops, cocoa, forestry and logging, livestock, and fisheries. Before the Maputo Declaration under the Ghana Shared Growth and Development Agenda (GSGDA), the Ghanaian Government has committed to invest at least 10% of its annual expenditure in the agricultural sector. This is anticipated to attaining a 6% annual agricultural growth. The volume of total government expenditure in agriculture showed an increasing trend from GH¢392 million in 2008 to GH¢1.45 billion in 2011, as indicated in total government expenditure on the agricultural sector by the Ghana Statistical Service. From the outlook of government expenditure, between 2008 and 2011 the Government of Ghana (GoG) met the 10% commitment. However, during the period, the average growth rate of the sector was 5.2%. This incremental trend in agricultural expenditure is commendable evidence of government commitment to the sector but the impacts of these investments on smallholder agriculture need to be enhanced to accelerate agriculture growth and productivity in Ghana. The performance of the agriculture sector in Ghana declined from the point where it used to be the largest contributor to Gross Domestic Product (GDP) until 2005 when the services sector took over. Then, as a result of the oil discovery, the industrial sector topped the agriculture sector in 2011. In 2014, agriculture contributed about 22% of GDP whilst services and industry contributed about 49.6% and 28.4%respectively. The agricultural GDP growth rate in 2014 was 4.6% whereas in 2013 the growth rate was 5.7%.

Trend of FDI Inflows in the Late 90s in Ghana

Ghana's recent massive attraction of foreign direct investment began in 2000 where the country experienced a hundred million United States dollars. Ghana is making a comeback in terms of attracting FDI. An African front-runner in the mid-1990s, Ghana slipped

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into an economic crisis in 1998 and has only recently begun to recover (UNCTAD, 2003). FDI inflows in 1991 was $20 million, $63 million in 1999, $114.9 million and $89.3 million in 2000 and 2001 respectively. There was fear and panic in most foreign investing nations and individual investors of losing their investment and a lack of sound business-friendly environment because of the military system of governance in the 90s. Annual inflows were as high as $68 million for about two years, but were much less in most years, even slipping to negative numbers (net outflows) in the late 1970s, and hovering at under $5 million in the mid-1980s (UNCTAD, 2003). A renewed sense of purpose and optimism emerged following the country's peaceful transfer of power and the first new political leadership in 20 years and the new Government has pledged to create "a golden age" for business through private sector development, regional integration and good governance (UNCTAD, 2003). Ghana ranked 18th in the top 20 nations for foreign direct investment inflows, an annual average for 1992-1996, and 1997-2001 as according to the report issued by the united nations conference on trade and development. FDI flows to Ghana in the second half of the 1990s were less than those to the United Republic of Tanzania, a least developed country that has consistently ranked lower than Ghana in terms of attractiveness and which initiated economic reforms and opened up to FDI much later (UNCTAD, 2003). On a sector-based performance in the 90s, the agriculture sector was contributing a greater percentage share to gross domestic product. The Ghana Investment Promotion Centre (GIPC) provides information based on registered projects – excluding energy and mining – outside the free zones. As of December 2002, the GIPC had registered 410 projects in the services sector, 387 in manufacturing, 165 in tourism, 111 in building and construction, 116 in agriculture, and 204 in trade (UNCTAD, 2003).

Recent Contribution from the Agricultural Sector

Under the current government of the Republic of Ghana has brought many policies and incentives for farmers, both domestic and foreign investors intending to transform the agriculture sector and improve its contribution to the gross domestic product (GDP). One of the government's main objectives in the crops sector is to enhance the competitiveness and profitability of crops through enhanced access to improved technological packages for increased productivity and to ensure sustainable management of the environment (Agriculture, 2018). This sector does not only contribute to Ghana's GDP, but also absorb a lot of labor force and then provides raw materials for industrial growth and development and in Ghana, the GDP growth rate was 4.4%, while that of the agricultural growth rate was 4.2% in the year 2000 – 2003 (Enu, 2014). The biggest contributor to the gross domestic product of Ghana used to be the agriculture sector until the service sector overhaul it in 2005. The Ministry of Food and Agriculture is implementing a new program, the "Planting for Food and Jobs" Campaign in the agriculture sector to increase productivity and, production of selected value chains and create jobs in the agriculture and related sectors and Planting for Food and Jobs Campaign will initially focus on five value chains namely; maize, rice, soybean, sorghum and vegetables (Agriculture, 2018). Statistics indicate that, through the planting for food and jobs have improved productivity and the country imported no maize in 2019 due to its abundance. However, other major foodstuffs like plantains are now being exported to a neighboring country like Burkina Faso. The Agriculture sector expanded marginally from a growth rate of 2.8 percent in 2015 to 3.0

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percent in 2016 and its share of GDP, however, declined from 20.3 percent in 2015 to 19.1 percent in 2016 whereas the Non-Oil annual GDP growth rate increased from 4.0 percent in 2015 to 4.9 percent in 2016 (GSS, 2017). The Industry sector recorded the highest growth rate of 16.7 percent, followed by Agriculture (8.4%) and the Services (4.3%) sectors and the Industry sector, the highest growing sector with a GDP share of 25.5 percent, had its growth rate increasing from -0.5 percent in 2016 to 16.7 percent in 2017 and the Agriculture sector expanded from a growth rate of 3.0 percent in 2016 to 8.4 percent in 2017 (Service, 2018).

Legal Framework of Investment in Ghana

The investment mechanism in Ghana is effortless for any foreign investor. Under the investment policies in the country, the inflow and outflow of foreign direct investments are governed by three effective regulations. The GIPC Act, 2013 (Act 865) formed the Ghana Investment Promotion Centre to encourage and promote investments in the country. The GIPC Act 1994(Act 478) has been substituted with the Act 2013(Act 865) through the amendment and restructuring of its fundamental rules and regulations. The aim and objective of establishing the Centre is to generate an improved, transparent, and communicative environment that will support the growth of the Ghanaian economy through investment. An Act to provide for the Ghana Investment Promotion Centre as the agency of Government responsible for the encouragement and promotion of investments in Ghana, to provide for the creation of an attractive incentive framework and a transparent, predictable, and facilitating environment for investments in Ghana and related matters (GIPC, 2013). However, under the Technology Transfer Regulation 1992, (LI 1547) granted power to the Board of Ghana Investment Centre by the section 30 of the Investment Code, 1985 (P.N.D.C.L 116) to review and accept the registration of all technology transfer agreements, application of regulations, no restrictions on registration and unenforceable clauses in a technology transfer agreement of which all investments and other top investing countries in the country benefit from it. Ghana's investment regulations allow foreign investors to employ both foreign and domestic workforce with less specific quota been imposed. The country has put in some intensive efforts to attract many private investments after the beginning of the Structural Adjustment Programme (SAP) in 1984 and there have been numerous laws and regulations to promote agriculture attractiveness to investors. There are several laws and regulations guiding investments in the agriculture sector, but the main legislation on investment comprises the Ghana Investment Promotion Centre (GIPC) Act, 2013 (Act 865), which replaces GIPC Act 1994 (Act 478), and the Free Zones Act, 1995 (Act, 504) (Agriculture, 2018). In pursuit of attracting investment into the agriculture sector, MOFA established the Agribusiness Unit (ABU) to facilitate agriculture investment and support local small and medium-scale agribusinesses and some of the laws, regulations, and policies enacted to govern investment in the sector include Plants and Fertilizer Act, 2010 (Act 803); GIPC Act, 2013 (Act 865); Fisheries Act, 2002, (Act 625); Environmental Protection Act, 1994 (Act 490); Public Health Act, (2012); Land Commission Act, 1994 (Act 483); Seed Policy and Fertilizer Policy (Agriculture, 2018).

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Recent contribution from the government of Ghana

With several initiatives and policies outline by the current government set to improve the agriculture sector and other sectors of the Ghanaian economy. Embarking on a massive industrialization to transform the country's economy has brought about the formation of one district-one factory (1D1F). The over-dependence on raw agriculture products for export yields the country an insignificant price on the international market. The commodity price shock of 1999 is a clear example – between 1998 and 2000, a fall in world commodity prices affected the economy with a negative 20% drop in Ghana's GDP growth rate (IMF, 2012). The motive of transforming most of the agriculture raw produces into finished goods or manufactured products for export has been the agenda. The provision of machinery, advanced technological methods, and other modernized equipment for agriculture production is being encouraged and supported by the government. To promote agricultural mechanization the government has provided 220 tractors and accessories comprising 141 Maize shellers, 77 Multicrop threshers were distributed to farmers and service providers and in 2018, the Ministry will distribute 200 tractors and matching implements; 1000 power tillers and walking tractors; 30 tractors mounted rippers; 10 tractor-drawn rear blades; 10 tractors mounted slasher; 60 boom and orchard sprayers; 4000 motorized sprayers; 60 mechanical and pneumatic planters; 50 cereal harvesters; 200 multi-crop threshers; 400 irrigation kits (engine and solar-powered sprinklers sets); and 100 greenhouse technology for horticulture production (MoFA, 2018). The Indian-owned family business, Agricultural Engineering Ltd. (AGRICO), has used its experience in India to introduce an intermediate, appropriate technology to Ghanaian rural workers that suits both the physical and economic conditions of the host country. For example, it costs less and allows for easier maintenance, and AGRICO has designed and produced a wide range of machinery for agricultural industries in Ghana, Guinea, Nigeria, Liberia, Togo, and Upper Volta (UNCTAD, 2003).

Planting for food and job campaigns brought forth by the current government has improved the agriculture sector by recruiting graduates and youths into the agriculture sector. As part of the campaign program 201,000 farmers were registered across the country, to enhance extension delivery and create jobs, 2,160 university graduates and 1,070 youth were recruited and also, 121,000MT out a target of 233,356MT of subsidized fertilizers and 4,454.98MT out of a target of 5,767.50MT of subsidized seeds of maize, rice, sorghum, soybean and vegetables were distributed to beneficiary farmers (MoFA, 2018).

Irrigation development should be a factor to consider if the agriculture sector wants farmers to continue operating throughout the year. However, as a campaign promise by the current government to provide one village one dam to improve agriculture production thereby decreasing the importation of some agriculture products. The 'One Village One Dam' initiative is aimed at facilitating the provision of community-owned and managed small-scale irrigation facilities across the country, especially in northern Ghana, the Ministry in 2017 identified 192 small dams and dugouts in 64 districts for development (MoFA, 2018). These dams are set to provide water to farmers, which would reduce the seasonal employment of most farming activities.

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Analysis of latest research where the solution of the problem was initiated.

(Clemens, Xinshen, James, & Ramatu M., 2008), In support of the Comprehensive Africa Agriculture Development Program (CAADP) roundtable in Ghana. The study also takes a fresh perspective on the role of agriculture for development in light of the global food crisis and it addresses two main questions: what are the impacts of Green-revolution type agricultural growth to reach the CAADP goal in Ghana? Given the large investments required to achieve such productivity-led growth, what is the sector's contribution to the overall economy? The outcome of the paper indicated that the dynamic computable general equilibrium model suggests that by closing the existing yield gaps in crop production and supporting essential growth in the livestock sector Ghana can achieve CAADP's 6 percent growth target. However, in the process, agriculture supports the rest of the economy through substantial and largely invisible monetary transfers to the nonagricultural sectors, which are primarily driven by the reduction of domestic food prices.

(Abdul-Aziz, Mustapha, & Babamu-Osman, 2015), the influence of foreign direct investment on the economic growth of host economies has attracted significant debate in the literature with empirical evidence being inconclusive. Sectoral analysis was therefore introduced in the literature to understand the heterogeneous response of the performance of the various economic sectors to changes in the inflows of FDI as opposed to the impact of the latter on the whole economy. A little attention has been drawn to the agricultural sector, which holds the key to food security in the world and poverty reduction in developing economies such as Ghana, where the sector employs the majority of the active working population and the authors discovered that FDI negatively impacts the agricultural sector productivity in the long run but with a positive relationship in the short run. They also found that the depreciation of the Cedi negatively impacts the growth of the agricultural sector, in the long run, the impact of FDI on the performance of the agricultural sector in Ghana with data over the period 1980 - 2013 using a Johansen cointegration test.

(J.G., 2013), examining the relationship between openness and agricultural performance using data covering the period 1995 to 2009 and, representing openness as a foreign direct investment (FDI) and trade openness, the results showed that there is no long-run relationship between FDI and trade openness on one hand and agricultural performance on the other. Conversely, between FDI and trade openness on one hand and agricultural performance on the other. In the short run, trade openness and FDI exerted a statistically significant negative effect on agricultural performance. Though inelastic, the sign of the coefficients showed that increased openness of Ghana's agriculture through trade and FDI does not promote the performance of the sector.

(Kojo Sebastian, 2013), investigating the magnitude, framing and structure of Chinese and Brazilian investments in Ghana and outlining the changing political economy of the agrarian sector, in the context of market liberalization and the rise of agribusiness. China and Brazil have established a significant presence in trade, investment, and international development cooperation in Ghana. Both uphold a framework of South-South cooperation based on respect for national sovereignty and national interests, non-intervention, no imposition of conditionalities, and commonalities based on histories as colonized nations.

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(Enu, 2014), to determine the impact of the agricultural sector on Ghana's economic growth and the effect of the various sub-sectors of the agricultural sectors on Ghana's economic growth. The study uses time series (1996-2006) data on agriculture, service, industry, and the various sub-sectors under agriculture, which includes forestry, fishery, crops/ livestock, and cocoa. The use of the regression model was specified and OLS was employed to estimate the respective impact of agriculture, service, and industry on GDP growth. The outcome of the study shows that the agricultural output had a significantly positive impact on Ghana's growth as compared to the other sectors (agricultural output (0.354515); service output (0.283401); industrial sector (0.303257)).

(G. Djokoto, 2012), investigating the effects of FDI on food security in a developing country, Ghana of which a double logarithm functional form was employed. Daily energy consumption (hunger) was negatively related to agricultural FDI and significant in both the short run and long run. Likewise, daily protein consumption (nutrition) was negatively related to agricultural FDI and statistically significant in the short run and long run. The results established a detrimental effect of agricultural FDI inflow on food security in Ghana.

From the above literature, most of the authors failed to outline the magnitude at which the agriculture sector benefits from foreign direct investment inflow into the Ghanaian economy. However, this did not also capture the number of employments generated over the years from FDI inflow in the agriculture sector. In this situation, I seek to provide much insight into the recent development in the agricultural sector which has helped transformed the sector, the government vision to increase the efficiency level of the agricultural sector. Considering the impact of foreign direct investment flow and its impact on employment in the agriculture sector helps to determine the current contribution from FDI and the government of Ghana to transform its economy.

Aims of paper. Methods

The paper utilizes the statistical descriptive approach that backs a complementary summary analysis of foreign direct investment inflow in a quantitative way. This was done through the compilation of quarterly reports of FDI inflows from foreign investing countries in the various sectors of the Ghanaian economy from the Ghana Investment Promotion Centre. Conversely, the analyses used data on inward foreign direct investment from 2013 to 2018. The data were collected from the Ghana Investment Promotion Centre since it's the sole institution established by the government of Ghana under the Act, 2013 (Act 865) to encourage, regulate and promote investment activities in the country. However, the total number of registered projects distributed among all the sectors, the number of employment expected to be generated were also considered. Conversely, the number of jobs created through FDI in 2017 was much centered on the first to third-quarter reports.

Exposition of main material of research with complete substantiation of obtained scientific results. Discussion

Impact of Foreign direct investment flow into the Agriculture sector.

According to the Ghana Investment Promotion Centre, an estimated number of 4714 registered projects with a total cost of US$29,067.07 were recorded through foreign direct

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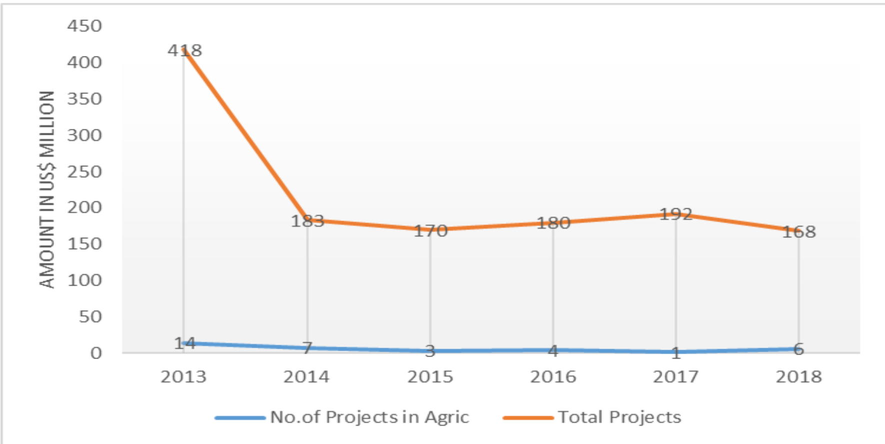
investment inflows between September 1994 and June 2013, of which the agriculture sector received 243 of the registered projects with a total value of US$1,323.79. The percentage share absorbed by the agriculture sector with regards to the total registered projects and cost were 5.15% and 4.55% respectively. Despite a decrease in the amount of capital involves in the foreign direct investment component of the registered projects by foreign investing countries, the cost of projects in the agriculture sector seems to decline every year. Between 2013 and 2018 there has been a total estimated cost of US$ 16,116.77 billion of all the registered projects FDI projects, of which the agriculture sector percentage share accounted for 5.54% reflecting a less amount of money injected into the agriculture sector by investors. Table 1 below shows a breakdown of the cost of all registered projects in the agriculture sector between 2013 and 2018 whiles figure 1 shows the cost of projects in the agriculture sector verse the total cost.

Table 1. breakdown of the cost of projects in the agriculture sector between 2013-2018.

Year	Cost of Project in agric sector ($M)	Total cost of all projects ($M)	% Share
2013	154.44	4,261.22	3.62
2014	22.95	3,121.45	0.73
2015	16.48	2,680.60	0.61
2016	9.68	2,433.5	0.39
2017	6.91	3,620	0.19
2018	8.58	2,870.76	0.33

Source: Author's Calculation based on the quarterly reports from GIPC

Figure 1. The cost of projects in the agriculture sector verse the total cost.



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Source: Author's Calculations based on the data from GIPC

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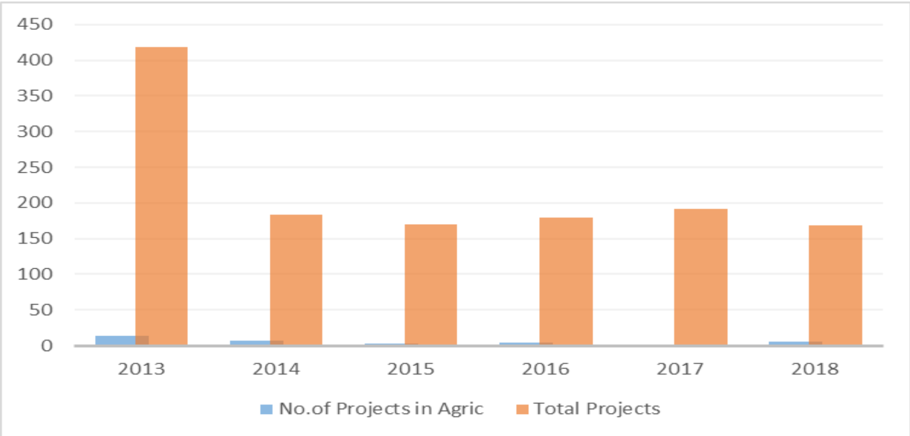
Table 1 and figure 1 above show that between 2013 and 2018 there has been a decline in the total cost of registered projects. One the other hand, there has been a total number of 1312 registered projects through foreign direct investment distributed among the various sectors categorized by the Ghana Investment Promotion Centre (GIPC) within the Ghanaian economy with regards to FDI inflows. The agriculture sector received 29 total projects within these periods. However, this represents a percentage share of 2.53 absorbed by the agriculture sector. Table 2 shows a breakdown of the registered projects whilst figure 2 indicates the number of projects in the agricultural sector verse the total projects.

Table 2. breakdown of the registered projects between 2013-2018.

Year	No. of project in Agric sector	Total number of projects	% Share
2013	14	418	3.3
2014	7	184	3.81
2015	3	170	1.76
2016	4	180	2.22
2017	1	192	0.19
2018	6	168	3.57

Source: Author's Calculations based on the data from GIPC

Figure 2. the number of registered projects in the Agricultural sector verse total projects.



Source: Authors calculations base on the data from GIPC

Impact of FDI Inflow on Employment in the Agriculture Sector

Table 3 and figure 3 below show that a total number of 141,412 jobs have been created through investment from 2013 to 2017. The expected jobs to be generated in the agriculture sector were 9,923 representing 7.01% within these periods. However, 4,548 expected

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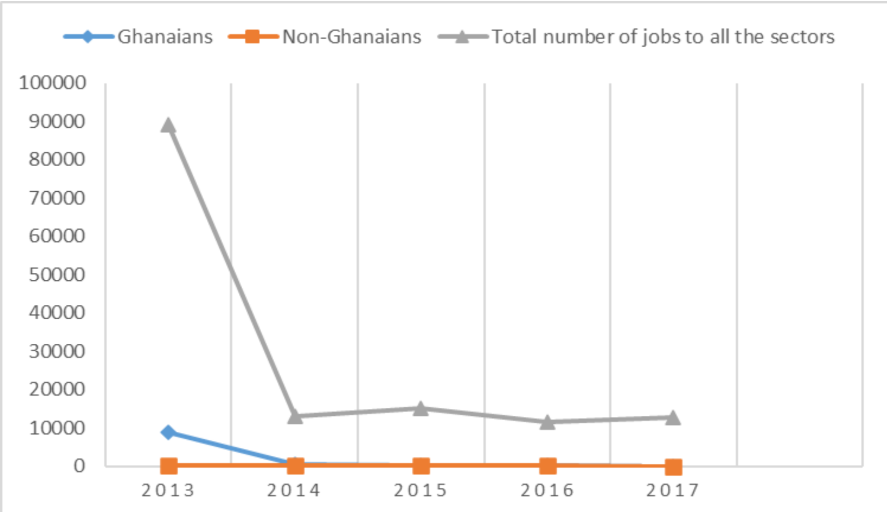
number of jobs were generated in the fourth quarter of 2017 with no specification of the number of jobs to Ghanaians and Non-Ghanaians. There were no records of employments created within the first three quarters of 2017 in the agriculture sector. Conversely, 40 jobs were allocated to the agriculture sector in the fourth quarter of 2017 without any indication as to whether these employments were being generated through local investment or foreign direct investment as recorded by the Ghana Investment Promotion Centre.

Table 3: Breakdown of employment the Agriculture Sector between 2013 and 2017.

Year	Ghanaians	Non-Ghanaian	Total no.of jobs to all the sectors	% Share
2013	8,710	272	89,194	10.07
2014	381	61	13,122	3.36
2015	186	25	14,948	1.41
2016	225	23	11,419	2.17
2017	-	-	12,729	-
Total	9,502	381	141,412	17.01

Source: Author's Calculation base on the data from GIPC

Figure 3. Breakdown of employment the Agriculture Sector between 2013 and 2017.



Source: Author's Calculations base on the data from GIPC

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Discussions

From the breakdown of the total cost of registered projects through foreign direct investment inflow in Ghana, the agricultural sector performance toward FDI is very low compared to the other sectors of the Ghanaian economy. The total number of registered projects in the agricultural sector recorded its lowest in 2017. However, the objective of the government of transforming the agricultural sector into a modernized one is on the process but, the sector is seen to be unattractive to foreign investors as the sector continues to witness less impact of FDI. Conversely, the method of farming by farmers and lack of mechanized equipment turns to reduce the quantity of harvest. Ghana's agricultural sector stills need a massive investment as the sector's contribution in the 90s was far better than the 2000s. Many farmers continue to produce on a small scale due to the lack of availability of credit facilities. Acquiring a loan or getting access to capital from the banks and other financial institutions have become a hindrance to mass-scale production. Moreover, the illiteracy rate has also been a major issue on the side of most farmers since a majority of them lack formal education which teaches some best methods and practices of farming which would yield a bumper harvest during the farming season.

Conclusions

The study provides much insight into recent development in the agriculture sector over the years. Foreign direct investment inflows and domestic investment in the Ghanaian economy has grown massively over the past years, but its impact on the number of registered projects and employment creation seems to be insignificant in the agriculture sector. The contribution to the gross domestic product (GDP) from the agriculture sector has been reduced as a result of much attention gained by the service and manufacturing sectors toward FDI inflows into the country. It also seeks to provide more information on the current incentives provided to investors willing to invest in the agriculture sector. However, this may not adequately apprehend the class of people who benefited from the number of registered projects allocated and the number of employment generated through foreign direct investment. The agenda of the government to re-energized the impact of the agriculture sector and improve upon the standard of living of farmers sever as a key way of transforming the economy of Ghana.

References:

1. Abdul-Aziz I., Mustapha I., Babamu-Osman H., (2015). *The Impact of Foreign Direct Investment (FDI) on the performance of the Agricultural Sector in Ghana*. International Journal of Academic Research in Business and Social Sciences *, 5* (7).
2. Agriculture M.O., (2018). *Investment Guide for the Agriculture Sector in Ghana.* Accra: MOFA.
3. Clemens B., Xinshen D., James T., Ramatu M.A.H., (2008). *Agriculture for Development in Ghana;New Opportunities and Challenges.* International Food Policy Research Institute.
4. Enu P., (2014). *Analysis of the Agricultural Sector of Ghana and Its Economic Impact on Economic Growth*. Academic Research International *, 5* (4).

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5. Gdjokoto J., (2012). *Effects of Foreign Direct Investment Inflows into Agriculture on Food Security in Ghana*. Journal of Economics and Sustainable Development , 3 (2).
6. GIPC. (2013). *The Eight Hundred and Sixty-Five ACT*. Ghana Investment Promotion Centre.
7. GSS. (2017). *Provisional 2016 Annual Gross Domestic Product. Ghana Statistical Service.* . Ghana Satistical Service.
8. Hallam D., (2009). *Foreign Investment in Developing Country Agriculture – Issues, Policy Implications and International Response. Global Forum VIII on International Investment.* OCED.
9. IMF. (2012). *"World Economic Outlook: Growth Resuming, Dangers Remain".* Washington DC: International Montary Fund.
10. J.G.D. (2013). Openness and Agriculture Performance in Ghana. *Journal of Science and Technology , 33* (2), 24-36.
11. Kojo S.A., (2013). Expanding Agribusiness: China and Brazil in Ghanaian Agriculture,IDS Bulletin, 44.4. *http//onlinelibrary.wiley.com/journal/10.11 11* .
12. MOFA. (2017). *Agriculture Sector Progress Report.* Accra: Ministry of Food and Agriculture.
13. MOFA. (2018). *Medium Term Expenditure Framework(MTEF).* Accra: MINISTRY OF FOOD AND AGRICULTURE.
14. Msuya E., (2007). *The Impact of Foreign Direct Investment on Agricultural Productivity and Poverty Reduction in Tanzania.* http/mpra.ub.uni.muenchen.de/3671/.
15. Service G.S., (2018). *Provisional 2017 Annual Gross Domestic Product. Ghana Statistical Service.* GSS.
16. UNCTAD. (2003). *Investment Policy Review Ghana.* Geneva: United Nations.

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