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FOREIGN DIRECT INVESTMENT, AGRICULTURAL PRODUCTIVITY AND FOOD SECURITY IN SUB-SAHARAN AFRICA

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ABSTRACT

This study examines the impact of foreign direct investment in agricultural productivity on food security in sub-Saharan Africa covering the period 2010-2020. The data were obtained from World Bank World Development Indicators, United Nations Food and Agricultural Organization and United Nations Conference on Trade and Development. *The technique used for data analysis is System Generalized Method of Moment. The results of Arrelano-Bond tests show no autocorrelation. The estimated GMM-SYS results show that foreign direct investment in agriculture is positive and statistically significant in influencing food security variables including food consumption score (with the coefficient of 0.042) and dietary energy consumption (with the coefficient of 0.317). The control variables like crop production, food exports, age dependency and rural population are significant determinants of food consumption score. Also, GDP per capita, crop production, age dependency and rural population are significant factors influencing dietary energy consumption in Sub-Saharan Africa. Based on the findings of the study, there is need for regional governments to ensure tenure reforms by formalization of customary rights to enhance tenure security for a more equitable access to land. It is also essential that proper monitoring and impact assessment systems are developed to ensure transparency of the processes associated with agricultural investments. Furthermore, countries with currently high foreign direct investment transaction costs or that have a generally less conducive investment environment can improve agriculture by eliminating these obstacles.*

Keywords: Foreign direct investment, agriculture productivity, food security, System Generalized methods of moment, Sub-Saharan Africa
*JEL classification***:** F32, F21, D25, Q15

1. Introduction

Climate change, population growth and rapid urbanization are increasing the demand for food across the world. Sub-Saharan Africa is facing further pressure in their quest to achieve food security in the content. Investment in agriculture and food systems is not only necessary but vital for the achievement of food security. In the light of sustainable development goals (SDGs) 1-3 (which are to end poverty; end hunger; achieve food security and improved nutrition, and promote sustainable agriculture; and ensure better lives and wellbeing), policies towards enhancing

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agriculture, food security and environmental quality are essential for countries in SSA to focus on. One of the strategies to achieve this objective is to attract foreign direct investment (FDI) in agricultural sector for the purpose of augmenting domestic investment gap in the agriculture value chain.

Foreign direct investment has become an instrument by which countries are integrated in production of goods and services bring bringing package of assets which include capital, technology, managerial expertise or skills, access to foreign markets by domestic producers, enhance local and national tax revenues, and supporting social infrastructure that drives community development. According to UNCTAD (2022) the actual impacts and implications of FDI in agriculture vary across countries, by agricultural produce, and influenced by factors including type of foreign capital and involvement, the institutional environment, and the host country's level of development.

The SSA countries lack substantial domestic financial resources to propel the much-needed economic growth and development. Accordingly, FDI is considered an essential source of external funding that close the funding gap in a manner that increase agricultural productivity and food production. However, the scale of investment projects requires large areas of land which invariably affects a large number of people at the community level (Opoku, et. al., 2019). Furthermore, the sectoral investment flows of FDI to agriculture don't have a steady pattern. The land acquisition is not usually through a transparent process which are either underreported or not reported at all. Its role in achieving desirable social and economic outcomes including food security, job creation, rural community empowerment, and poverty reduction in the host country remains a mirage.

The quantum of investment in agriculture to ensure food security between 2015 and 2030 was estimated to be US$480 billion, with an investment gap of US$260 billion in developing economies (UNCTAD, 2022). Investments that address agricultural productivity, food security and environmental quality enhance growth opportunities in poor and developing economies like SSA, where the contribution of agriculture to the economy tends to be relatively large and sustains a disproportionately large share of the population. FAO (2022) observed that the share of agriculture to global gross domestic product (GDP) is estimated to be 4% but compared to other sectors, the growth in this sector can be 2-4 times more effective in raising incomes among the poorest and 2-3 times more effective in reducing poverty in SSA. The global value added generated by agriculture, forestry and fishing was estimated at US$3.5 trillion in 2018, growing by 73% in real terms between 2000 and 2019. In Africa, the value added more than doubled in the same period and Asia accounted for 64% world total value added

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benefit in global agriculture, forestry and fishing in 2019 (FAO, 2021)..

Therefore, this study examines the nexus between FDI in agricultural sector and food security in SSA. To achieve this, the paper is structured as follows. Following the introduction as part 1, part 2 is literature review. Part 3 is methodology. Part 4 is empirical analysis and discussion of findings. Part 5 is conclusion and recommendations.

2. Literature Review

2.1 Conceptual clarification

FAO (2021) defined FDI as cross-border direct investment transactions received by the reporting economy over the course of a year. World Bank (2020) defined FDI as the investment made by the citizens of a foreign country in a domestic country. It refers to an investment made to acquire lasting interest in an enterprise operating outside of the economy of the investor. The flow of FDI is viewed as an instrument of growth and development. It helps to accelerate the pace of economic growth by facilitating development programs. It helps to increase country's exports and reduce imports. It facilitates the transfer of technology, knowledge and improve balance of payments, introduction of new products and efficient resource allocation. Romer (1986) stated that FDI contributes to the transfer (spill-over) of technology and improvement of labor and management skills. Sustained increases in FDI inflows are often a sign of an improved investment climate.

The flow of FDI into developing countries through expanding multinational companies brings knowledge and transfer of technology through sophisticated agricultural machinery that indirectly supports agricultural land expansion (Amendolagine, et. al., 2013). Agricultural land expansion increases agricultural production by local farmers. Furthermore, food access increases with greater agricultural output and community income as well as job creation so that this spill-over can improve livelihoods and food security in the host country (Slimane, et. al., 2016; Mihalacha & Li, 2011). FDI represents an important source of capital and potential lifeline for many developing countries especially SSA where there are high poverty levels, low savings culture and relatively weak or non-existing capital markets (Havemann, et. al., 2020).

Agriculture productivity involves the cultivation of crop, rearing of animals and aquatic specifies for human consumption. Agricultural sector has continued to contribute to the economy of SSA through the provision of basic needs of its people, creation of employment, provision of industrial materials both for domestic use and exportation and contribution to foreign earnings. Walkenhorst (2000) defined commercial agriculture as the production, distribution and sale of agricultural products for profit, with either maximization of profit or otherwise as the driving principle.

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Food security on the other hand exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (FAO, 2021). Food security is measured by two indicators to capture two FAO dimensions of food security, namely: (i) the food consumption score to measure access to food; and (ii) dietary energy consumption, to measure the availability of food. The definition of food security by FAO (2022) encompasses the four dimensions of food security, namely: (i) availability; (ii) access; (iii) stability; and (iv) utilization.

2.2 Theoretical review

There are theories that explain the potency of foreign capital to growth and development of countries. For instance, Vernon (1966) developed production cycle theory that explains certain types of FDI made by U.S. companies in Western Europe after the Second World War in the manufacturing industry. The theory stipulates four stages of production cycle i.e., innovation, growth, maturity and decline. In first stage U.S. transnational companies created new innovative products for local consumption and export the surplus in order to serve also the foreign markets. According to the theory of the production cycle has increased demand for manufactured products like those produced in USA.

The monopolistic advantages theory developed by Hymer (1976) that pointed out that in order to survive a foreign firm should have certain specific advantages (technological knowledge, managerial skills and economies of scale,), which are not present to local firms in the host country and aid them to monopolize and control production. Hymer (1976) further argued that FDI is a firm level specific decision and not a capital market financial decision. In developing the monopolistic advantages theory of FDI, Hymer asserts that the motive to perform FDI is explained by the industrial organization and imperfect competition models. The theory assumes that features of market distortions inform of tariffs or trade barriers imposed by the host country government as a way to influence monopolistic advantages also allow firms to engage in FDI. The degree of openness and the trade regime in the host country is considered a major determinant of FDI inflows.

Wimberley (1991) and Boserup (1965) considered FDI as an economic asset to link international markets and internalize transactions within the firm. The theory is based on the assumption that firms choose the least cost location for each activity and that firms grow by internalization up to the point where further internalizing brings in more costs than benefits. Internalization costs include avoiding search costs, captures economies of interdependent activities and control of market outlets. The theory further argued that firms do not need monopolistic

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or oligopolistic advantages when they are at the initial stages of investing but they can be internalized later.

The neoclassical growth theory emphasized increase in the quantum of factors of production and in the efficiency of their allocation. In a simple world of two factors, Labor and capital, it is often presumed that low-income countries have abundant labor but scarce capital. This situation arises owing to shortage of domestic savings in these countries, which places constraint on capital formation and hence growth (Solow and Swan, 1956). International capital flows (ICFs) readily become an important means of helping developing countries to overcome their capital shortage problem. One of the components of international capital flows is foreign direct investment (FDI). Economic theory suggests that capital will move from countries where it is abundant to counties where it is scarce (Romer, 1986). The pattern of movement will be informed by the returns on new investment opportunities, which are considered higher where capital is limited. The resultant capital relocation will boost investment in the recipient country with potential enormous social benefits. Tis theory has come to explain the importance of FDI in economic growth process and relevant to this study.

2.3 Empirical review

There are empirical studies that instigated the relationship between foreign direct investment inflow into agricultural productivity and food security in developing economies generally and SSA in particular. For instance, Kinda, et. al., (2022) investigated the impact of investments for biofuel and food crop production. Their analysis indicates that land acquisition for mixed production of biofuel and food crops, and land for other uses contribute to food insecurity in SSA as it decreased cereal production and increased malnutrition, and has no significant effect on food security. Berna (2022) investigated the effect of FDI in agriculture on food security in the host country in 56 developing countries using panel analysis and covering 16-years. The findings show that FDI in agriculture has an inverse effect on food security in the host country. FDI has a more favourable impact where the land governance system is better.

Nyiwul & Koirala (2022) examined the impact of foreign capital inflows in agriculture, forestry and fishing sectors in 16 developing countries. Panel vector autoregression approach was used for data analysis. The findings show that there is bidirectional causality between foreign direct investments in agriculture, forestry and fishing and value added. The effect of FDI on value added in agriculture, forestry and fishing remains positive for up to 5 years. Dhahri & Omri (2020) analysed the impact of FDI in agricultural sector on food security on Belt and Road Initiative (BRI) using panel framework covering the period 2006-2015. They applied correlation analysis, specific-effect and two stage least square (2SLS) approach. The results show

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clear differences in the direction of the association between food security and FDI in agriculture sector. Agricultural FDI has a positive direct and indirect effect on food security.

Similarly, Fajar and Haryanto (2020) evaluated the effect of foreign direct investment in the agriculture sector on food security in developing countries covering the period 2012-2017 using GMM-system approach was used for data analysis. The results show that FDI in the agriculture sector, rural population, GDP per capita, consumer price index, food import, and food export simultaneously are significant determinants of food security in developing countries. Hongxing, et. al., (2020) examined the effect of FDI in agriculture on food security in developing countries using dynamic panel analysis. The findings show that inflow of foreign capital increases the supply of funds, encourage formation of capital in the domestic country to purchase agricultural product inputs. FDI provides transfer of technology and knowledge useful for higher productivity of farmers and domestic production, improving quality, and food supply.

Furthermore, Santangelo (2018) examined the effect of FDI in agriculture on food security in Africa using panel analysis. They found that in Morocco, Ghana, Egypt, Uganda, and Tanzania, FDI contributed significantly to productivity growth in the agricultural sector. The transfer of technology and knowledge is able to produce land that previously could not be fully utilized by farmers. Expansion in crop land resulting from FDI by developed country investors in turn reduces food supply problems and improves food security in host African countries. Gunasekera, et. al., (2015) adopted a dynamic Global Trade Analysis Project model to examine the impact of agricultural productivity and FDI in Africa. The results indicate that combined efforts to improve land productivity and growth in FDI could potentially increase Africa's share in global agricultural output and exports, particularly with respect to oil seeds, sugar, and cotton.

3. Data and Methods

3.1 Model specification

In specifying our model, we used the works of Berna (2022) and Fajar & Haryanto (2020). However, we augment the models to address certain country fundamentals and peculiarities like data availability in the choice of countries and food security indicators (food consumption score and dietary energy consumption).

The model specify for analysis is based on the following reduced-form model:

$$FC_{it} = \alpha + \beta_1 FDIagri_{it-1} + \Gamma X_{it} + \lambda_i + \eta_t + \varepsilon_{it} \quad 3.1$$

where *FSit* is food security indicators of country *i* in year *t*. The coefficient of interest is $\beta 1$ showing the impact of FDI in agriculture productivity on food security indicators. *X* is the vector of control variables affecting the dependent variable. λi

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and η_t are country and time fixed effects, respectively; and ε is the error term.

The model is further expressed using food security indicators adopted in the study as follows:

$$lnFCS_{it} = \alpha_0 + \beta_1 lnFDIAGR_{it} + \beta_2 lnGDPC_{it} + \beta_3 lnCPR_{it} + \beta_4 lnFEXP_{it} + \beta_5 lnADEP_{it} + \beta_6 RPOP_{it} + \beta_7 lnFCS_{it-1} + \mu_{it} \quad 3.2$$

$$lnDEC_{it} = \beta_0 + \alpha_1 lnFDIAGR_{it} + \alpha_2 lnGDPC_{it} + \alpha_3 lnCPR_{it} + \alpha_4 lnFEXP_{it} + \alpha_5 lnADEP_{it} + \alpha_6 RPOP_{it} + \alpha_7 lnDEC_{it-1} + \mu_{it} \quad 3.3$$

Where FCS is the food consumption score, ln is natural logarithms; FDI is foreign direct investment in agriculture; GDPC is GDP per capita; CPR is crop production; FEXP is food export; ADEP is age dependency, RPOP is rural population; and DEC is dietary energy consumption. The *α* is the intercept, *β1* - *β7* is the regression coefficient and μ is the error term.

3.2 Data and variables

The variable of interest of the analysis is FDI in agriculture and food security. The main source of data is FAO's foreign investment database which reports FDI flows in agriculture following ISIC Rev.4 category on "agriculture, forestry and fishing" (FAO, 2022).. The food security indicators (food consumption score and dietary energy consumption) are obtained from world development indicators various issues by World Bank. The control variables include GDP per capita; crop production; food export; age dependency; and rural population. The data were collected from the World Development Indicators (World Bank, 2022a) and FAO (2022, 2021).

Table 3.1: Description of the variables

Variable	Nature of variable	De
Food consumption Score (FCS)	Dependent	All the people, economic acces to meet their di active and healt
Dietary energy consumption (DEC)	Dependent	Food available f of all non-food industrial use, kilocalories per
FDI in agriculture productivity (FDI)	Independent	Share of net I (agriculture, for Foreign Investm
GDP per capita (GDPC)	Control	Gross domestic dollars) divide Development In
Crop production (CPR)	Control	Agricultural pro period 2016– 20
Food exports (FEXP)	Control	Share of food (World Develop
Age dependency (ADEP)	Control	Ratio of depend than 60 – to th 18–60 (World D
Rural population (RPOP)	Control	The total popu (World Develop

Source: Authors' Computation, 2023

3.3 Technique of data analysis

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This study employs dynamic panel regression method of System Generalized Methods of Moment (GMM-SYS) and using STATA 13 software for model estimation. Two types of dynamic GMM panels namely difference GMM and GMM system (Holtz-Eakin, et. al., 1988). Our study used the GMM System because the estimation results were more efficient by adding instrument variable (IV) which produce a consistent estimator. The GMM specifications and statistical tests were also carried out. The study covers the period 2010-2020.

4. Empirical Analysis

4.1 Description of statistics

The food consumption score has an average of 31.73 with a standard deviation of 12.41, a minimum value of 29.16 and maximum value of 56.92. The dietary energy consumption average is 136.72, and standard deviation of 417.8. The FDI in agricultural sector have an average of 673,473 and a standard deviation of 2,214.19.

Table 4.1: Summary of Statistics

Variable	Number of Observations	Mean	Std. Deviation	Min.	Max
FCS	*118*	*31.734*	*12.41*	*29.16*	*56.92*
DEC	*118*	*136.72*	*417.8*	*63.75*	*133.01*
CPR	*118*	*20997.9*	*12,318.36*	*5,7753.85*	*33..442*
FDI	*118*	*673,473*	*73,786.25*	*112,334*	*766,754*
GDPC	*118*	*3 7,729*	*2,214.09*	*134.76*	*18,254*
FEXP	*118*	*123, 279*	*23,274*	*104, 891*	*179, 968*
ADEP	*118*	*56.89*	*8,377*	*4,281*	*19, 234*
RPOP	*118*	*12,733*	*16,685*	*22,708*	*166,741*

Source: Author's computation from STATA 13 software

4.2 Correlation matrix

The correlation matrix shows there is a positive correlation between dietary energy consumption and food consumption score. FDI in agriculture is positively correlated with FCS and DEC. GDPC is positively correlated with FCS and DEC but negatively correlated with FDI in agriculture. FEXP is positively correlated with FCS and negatively correlated with DEC. RPOP is negatively correlated to FCS, DEC and FDI.

Table 4.2: Correlation matric and test of significance

	FCS	*DEC*	*FDI*	*GDPC*	*CPR*	*FEXP*	*ADEP*	*RPOP*
FCS	*1000*							
DEC	*-0.43**	*1000*						
FDI	*0.12**	*-0.07**	*1000*					
GDPC	*0.21**	*0.09**	*-0.03**	*1000*				
CPR	*0.23**	*0.74**	*0.30**	*0.04**	*1000*			
FEXP	*0.37**	*0.75**	*0.15**	*0.01**	*0.16**	*1000*		
ADEP	*0.16**	*0.16**	*0.01**	*0.01**	*0.16**	*0.16**	*1000*	
RPOP	*-0.16**	*-0.16**	*-0.01**	*-0.01**	*-0.16**	*-0.16**	*-0.16**	*1000*

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CPR	*0.240 4**	*0.028 8**	*-0.262 9**	*0.076 31**	*1000 0*			
FEXP	*0.386 7*	*-0.329 3**	*0.195 4**	*0.067 2**	*0.039 5*	*1000 0*		
ADEP	*0.033 4**	*-0.142 8*	*-0.102 4**	*--0.043 9*	*-0.708 4**	*0.2362*	*1000 0*	
RPOP	*-0.426 0**	*0.179 9*	*0.063 2*	*-0.220 9*	*0.259 8**	*-0.0997*	*0.0079*	*1000 0*

*Source: Authors' computation from STATA 13 software; Note: * denotes correlation significance at 5% level*

4.3 Identification of GMM-SYS regression results

The study conducted Arrelano-Bond for AR (2) test used to verified correlation between variables. If the AR (2) value is not significant ($p > \alpha$) then this indicates that there is no autocorrelation between variables. Also, the Sargan/Hansen test is used to for the validity of the instrument. If the p-value of the test is greater than α, the instrument or model used is valid. In this case, the greater the p-value, the more valid the model is. *Table 4.3* shows the regression results of food security model using GMM-SYS.

4.4 Specification and autocorrelation tests

The study conducted an overidentifying restriction identification test to determine the model validity. Hansen test is used where it is distributed with chi-square statistics. In the GMM-SYS regression results with a Hansen test value of 0.3781 (*Table 4.3*), Prob > chi square is not significant. We therefore, accept H_0 and conclude that the model used is valid.

The Arrelano-Bond for AR (2) is used to test for autocorrelation between variables with z-statistic distribution. In the GMM-SYS regression results with an AR (2) value of 0.8714 shows that Pr > z and not significant signifying no autocorrelation between variables.

4.5 Partial test results

The partial test of GMM-SYS in *Table 4.3* has estimated results of food security indicators (food consumption score model (I) and dietary energy consumption model (II)). The results show that the lag value of FCS and DEC are positive and statistically significant. In model I, FDI is positive and significant in influencing FCS. This finding is supported by the findings of Berna (2022) and Dhanri & Omri (2020). The control variables that are significant include CPR, FEXP (positive) while ADEP and RPOP (negative). In model II, FDI positively and significantly influence dietary energy consumption. The finding is supported by Fayar & Hanyanto (2020) and Santangelo (2018). The significant determinants among

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control variables include CPR, ADEP and RPOP (positive) while GDPC (negative).

The GMM-SYS simultaneous test, the F test results show the probability value of F statistical or Prob > F of 0.000 (< 0.010). These results indicate the null hypothesis is rejected while we accept that FDI in agriculture simultaneously have a significant effect on food security in SSA..

AR (2)	*0.8714*
Sargan test	*0.0000*
Hansen test	*0.3781*
Hansen test (GMM)	*0.0936*
Hansen test (Diff GMM)	*0.9624*
Hansen test (IV)	*0.3123*
Hansen test (Diff IV)	*0.6549*

*Note: *, **, *** significant level at 0.01, 0.05, and 0.10; Figures in parenthesis ( ) are t-values.*

Table 4.3: GMM-SYS Regression Results

Variable	*Food Security Indicators*			
	Food consumption score model (I)		*Dietary energy consumption model (II)*	
	Coefficient	*p-value*	*Coefficient*	*p-value*
FCS_{t-1}	*0.041** (5.354)	*0.0000*	-	
DEC_{t-1}	-		*0.034** (3.891)	*0.0002*
FDIAGR	*0.042*** (2.783)	*0.0056*	*0.217*** (3.995)	*0.0018*
GDPC	*0.017 (0.290)*	*0.1016*	*0.079** (3.008)	*0.0034*
CPR	*3.680*** (1.980)	*0.0591*	*2.126** (3.835)	*0.0023*
FEXP	*0.062*** (2.320)	*0.0522*	*0.789 (0.677)*	*0.2281*
ADEP	*--0.010*** (-2.104)*	*0.0643*	*0.024*** (-1.995)*	*0.0602*
RPOP	*-0.020*** (-2.153)*	*0.0401*	*0.066** (3.910)*	*0.0461*
Constant	*8.101 (0.956)*	*0.0419*	*0.035** (2.807)*	*0.0395*
Prob > F	*0.0000*		*0.0000*	
AR (1)	*0.3146*		*0.4218*	

The results have shown that foreign direct investment in agriculture is vital for achieving food security as all the food security indicators have positive and significant relationship with FDIAGR. This makes it very important to provide conducive environment and friendly agricultural policies to attract foreign capital into the sector. The low GDP per capital in many countries of SSA seems to impact negatively on food security. The growth of rural population is having negative impact on food security. In the light of lack of modernization of the sector occupation of most land which would have been for farming. Age dependency over time shows increase in dependency ratio without commensurate increase in agricultural productivity leading to hunger and malnutrition or undernutrition. The food exports correlates with both FCS and DEC with potential for increasing income and wellbeing.

The positive relationship between foreign direct investment in agriculture and

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food security shows that inflow of foreign capital into the agricultural sector value chain impact on food security in Sub Saharan Africa. This is imperative because of the food insecurity that many SSA economies like Nigeria, Niger, Mozambique, Sudan, and so on are facings as a result of climate change and decline in investment in agricultural value chain in most countries. The result is supported by Berna (2022) and Slimane et. al., (2016). To address the food insecurity and nutrition issues in SSA more investment is needed in the sector.

The control variables including crop production, food export, age dependency and rural population influences food consumption score which implies that more variety of crop production, more productive population especially in the rural or agricultural sector is required to scale up food production. This finding is supported by Nyiwul &Koirala (2022) and Fajar & Haryanto (2020).

Furthermore, dietary energy consumption is influence by control valuables like GDP per capita, crop production, age dependency and rural population. The implication is that increase in per capita income impact significantly on dietary energy consumption by households as supported by Havemann et al., (2020) and Santangelo (2018). Diversification of crops production enhances food security which requires investment across the value chain. Age dependency and rural population negatively impact on dietary energy consumption. This cannot be unconnected to underdeveloped nature of agricultural productivity in rural communities across SSA given low level of technology and high dependency ratio. These have made it difficult for households to provide adequate food for dietary energy as supported by Opoku et. al., (2019) and Dhari & Omri (2020). Thus, the need for appropriate policies and reforms to attract inflow of foreign capital to augment sectoral investment-gap in the sub-region to address food security, nutrition and resilience.

5. Conclusion and Recommendations

This study examines the impact of foreign direct investment in agricultural productivity on food security in sub-Saharan Africa covering the period 2010 - 2020. The data were obtained from world development indicators, FAO and UNCTAD. The technique used for data analysis is the Generalized Method of Moments Systems (GMM-SYS). The food security variables include food consumption score and dietary energy consumption. The control variables include food exports, GDP per capita, crop production, and age dependency. The results show that foreign investment in agricultural productivity is positive and significant for both food consumption score model and dietary energy consumption model. The control variables show that crop production, food exports, rural population, and age dependency are significant factors influencing food security. FDI in the agricultural sector is a significant tool for

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increasing food security and reduce poverty in SSA as government are required to put in place appropriate policies to facilitate economic openness to support FDI inflows.

It is imperative for governments to ensure tenure reforms by formalization of customary rights to enhance tenure security for a more equitable access to land. It is also essential that proper monitoring and impact assessment systems are developed to ensure transparency of the processes associated with agricultural investments. Furthermore, countries with currently high FDI transaction costs or that have a generally less conducive investment environment can improve agriculture by eliminating these obstacles. This is because FDIs has the potential to improve technologies and technical expertise, practices, management and other systems that benefit the host countries. The foreign capital is required across agricultural value chain.

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