How does Trade Partnership, Colonization and Foreign Direct Investments Affect Land Trade? Evidence from West Africa

Sub Theme: Land Based investments, inclusive economic growth and environmental sustainability

Mkpado, Mmaduabuchukwu¹, Arinze Ngube, Ifejirika Chika A. and Joseph Kwaku Kidido

Abstract

The quest for Africa to use land based investments to support inclusive growth and sustainable development can be achieved if the drivers of land investment are determined and policies are made to drive the business in the desired direction. The study examined how trade partnership arrangements, colonialism and foreign direct investments (FDI) affected hectarage of land traded in West Africa. Secondary data; descriptive statistics, Kolmogorov-Smirnov (K-S) test and Pearson correlation were used. Results revealed a total 2,483,888 hectares were involved in the trade with Benin (952300ha), Ghana, (94477ha) and Nigeria (587111ha). With respect to colonialism, Europe traded on 36.5% of the mass of land. And land trade among African firms as those having similar colonial experiences accounted for 29.2%; while Asia and United State of America possessed 26.5% and 7.9% respectively. The K-S test was significant at 5 percent probability level. Trade partnership had significant effects on volume of land trade. African-Asian including China trade agreements accounted for 26.5%. A similar trend characterized land trade with American countries in bilateral trade agreements with Africans, African-European trade and African-Sno (China) trade. The K-S test was significant at 5% probability level. The correlation coefficient between the volume of FDI inflow and mass of land trade in the selected African countries were positive and significant; for Benin republic was 0.5562, Nigeria was 0.7973 and Ghana was 0.5192. This implied that increasing the volume of FDI inflow will lead to increased mass of land trade in Africa. Trade partnership arrangements and FDI are critical to the contemporary land trade in Africa. The paper outlined options through which responsive, inclusive and sustainable land trade can be achieved with contemporary trade partnerships and FDI policies in Africa.

Keywords: Globalisation; Land Trade, Land Policy, Inclusive Growth, Development.

Introduction

African land resources have caught the interest of investors around the World. This is attributable to underdevelopment leading to relatively cheap and abundant land resources in a somewhat conducive climate with minimum natural disasters. OXFAM (2013) showed that an area, the size of London was being sold to investors every six

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days. Sub-Saharan Africa is the most common destination for such investments, accounting for over 60% of the global foreign land deals. For 2009/2010, sub-Saharan Africa possessed 45.2% (201,546 ha) of the total world uncultivated land; while Latin America and the Caribbean had 27.7% (123,342 ha) and the rest had very negligible proportions. Low population density from 2000 to possibly 2050 characterises countries selling more lands like Madagascar, Sudan and Mali (Klaus et al, 2011). According to WAI (2011) with a lot of land mass {13063900km² (FAO, 2004)} in West Africa it is easy to lay claim to the fact that there is enough land within the region. But out of the total land mass only 44.2% of this land is said to be arable. It is this 44.2% that is the source of attraction for these organisations. Many of the problematic contemporary land deals has been reported to be characterised by unprecedented selling/purchasing and or leasing of land occupied by local people to foreign investors both corporations and governments (NAPEU, 2012). Most often, international land trade are devoid of due process, upholding human rights and paying necessary compensations; when any of such occurs, it is appropriately termed land grabbing (Mkpado et al, 2014). So land grabbing is a component of land trade. Land trade has been a common issue and experience in Africa, despite differences in ecosystems of the African regions and countries. This is because over the past few years, large-scale acquisitions of farmland in Africa and other developing countries have made fury headlines in a number of media reports across the world. Available literature has blamed global financial, fuel and economic crises for African land trade. Cotula, (2011) and Deininger et al., (2011) aptly noted that changing economic, political, social and environmental factors have made lands which a short time ago seemed of little interest but are now being sought by international investors to the tune of hundreds of thousands of hectares, (see also Mkpado, 2013; World Bank, 2010). Could there be more reasons other than global financial crises to issues on land trade in Africa? What could account for the easy invasion and grabbing of African land? What factors set a pattern or basis upon which the response to the economic crises/shocks was increased trading and grabbing of African land? Central to these issues which need investigation are the roles played by trade policy, colonisation and foreign direct investment (FDI).

**Problem Statement**

Literature has blamed the global financial, fuel and food crises of 2007 and 2008 for accelerated land trade but is yet to unveil the historic causes of contemporary land trade. Land trade in developing World and Africa in particular has raised a number of issues. One of the bones of contention is management of the phenomenon to achieve social and economic development (Cotula, 2011, WAO, 2009). Economic, financial and fuel crises, poor land laws and corruption were noted to cause inappropriate land trade in Africa (Deininger et al., 2011; WAI, 2011; TNI 2013). Oxfam (2013) noted that land trade has resulted in destruction of livelihood of local people, poverty, chaos and conflicts among elites and their subordinates. Recommendations to bridle land trade such as the OECD (2011) guidelines on land investment have met no success.

Succinct to explanation of the contemporary land trade is examining how colonisation, trade partnership and FDI affect volume of land trade. Are the colonial masters still the major dealers on African land resources? Or is the emerging trade partnership agreements the culprit? Is the so called FDI perverted to snatch African land resource? There is need to have robust examination of facts about land trade to show all possible
roots underpinning the problem to have polices that will lead to sustainable land investments. The complex and composite nature of issues on land trade in Africa require a number of sound researches. Sound management of the situation will depend on the quality and quantity of information available about the issue.

The purpose of the study is to examine how trade partnership arrangements, colonisation and foreign direct investment affected hectrage of land trade in Africa focusing on experiences from Nigeria, Ghana and Benin. Specifically, the study did examined effects of:

i. trade relations or partnerships on the size of land trade
ii. colonisation on contemporary land trade
iii. amount of FDI inflow on the size/volume of land trade,

The hypotheses guiding the study are:

(i) amount of FDI does affect size of land trade in Africa
(ii) and trade partnerships affects size of land trade in Africa

The Theoretical Framework

The research is based on theory of enterprise risk management/shock absorption. Often a defensive posture is taken towards/against risks especially when such risks can be minimized or avoided. Increasing population, energy and fuel needs for survival constitute risks that can be solved by reaching out, opening borders and taking advantage of other resources somewhere. This is an integral part of the opportunistic side and value creating potential of risks management. Thus, it is possible to manage some risks by increased willingness to precautionary take more risks so as to manage the risks initially perceived.

There is the likelihood that people will always resort to the old places where they do business especially if they had fair treatment. Neo colonial practices like increased trade and Foreign Direct Investment (FDI) are a few opportunities countries have used to economically and financially relate to one another. Externalities associated with trade and investments can boost land trade. Investors can increase their outlet in a given country they are doing business by acquiring more lands. They can also start-up another type of investment/ establishment that will require land among other facilities.

Bandwagon effects may have applied. This can explain the process of going to countries that one’s acquaintances have successfully done business with. The first profound land invaders were the colonial masters. They started as trading partners to colonisation and today trading is an integral part of globalisation. New investors in a foreign country can form alliance with investors in their own country and who will follow them to the foreign land where they do business or use a similar structure that investors in their country have succeeded in using for a particular country to gain access for business. Two similar patterns tend to work together. Even biologically similar cells form a tissue and similar tissues for an organ, while similar organs form system and group of systems make up a complex organism. Corruption and elites struggle for power can increase openness of the society thus making it vulnerable to invasion by unscrupulous land traders. It is possible especially when the legal framework for checks and balances are
poor. The corruption pattern will also take at least two parties, the giver and receiver. A graph showing correlations of the theoretical framework is Figure i.

**Figure i:** Graphical illustration of theoretical framework
**Source:** Authors' composition

**The Methodology**
The study aimed at covering West Africa both the Anglophone and Francophone zones; Nigeria, Ghana and Benin were selected based on the magnitude of land trade they experience. Secondary data from 2000 to 2014 were generated from the UNCTAD data base, Land Matrix data base, GRAIN publications, LandNet: [http://www.landnetwa.org](http://www.landnetwa.org), The Hub Rural: [http://www.hubrural.org](http://www.hubrural.org) and International Land Coalition (ILC) which support human rights defenders working on land rights was also used. The sources were complementary as efforts were made to avoid double counting. The secondary data generated were analysed using the Kolmogorov-Smirnov test, Pearson correlation test and t-test. The Kolmogorov-Smirnov test (K-S test) tries to determine if datasets differ significantly. The K-S test has the advantage of making no assumption about the distribution of data; technically speaking it is non-parametric and distribution free error test.

**Specifying analytics techniques for objectives:**
Descriptive statistics was employed in all the objectives; while K-S statistics was used in objective i and ii, correlation and t test were used in objective iii.
K-S statistics at a probability level for n number of observations respectively, measured as 
\[|S_n(x) - F_o(x)|\] = absolute value of difference between observed cumulative and calculated probability frequencies respectively. If calculated K-S statistics is less than tabulated one, the political structure has no effect on magnitude of land deals. The format and decision rule are stated as:

\[D^* = \text{Max } |S_n(x) - F_o(x)| \leq D (1 - \alpha; n) \ldots \ldots \ldots \ldots (1)\]

Where: \(\text{Max} = \text{Maximum}\)

\(D^* \text{ and } D (1 - \alpha; n)\) = Calculated and tabulated KS statistics; n is the number of groups analysed.
K – S statistics at \( \alpha \) probability level for \( n \) number of observation respectively,

\[
\frac{|S_{n}(x) - F_{0}(x)|}{Sn(x)} = \text{absolute value of difference between observed cumulative and calculated probability frequencies respectively.}
\]

If \( D^{*} \) is \( \leq D \) (1-5\%, \( n \)), there is no effects of political settlement on hectarage involved in the trade.

Effects of foreign direct investment inflows (FDI) on land trade were examined using correlation test. Data on FDI and hectares of land involved in the trade from the year 2000 was used for the test. This also served as test of its hypothesis. The people's opinion on this issue were also be evaluated.

\[
r = \frac{\sum_{i=1}^{n} xy - (\sum_{i=1}^{n} x)(\sum_{i=1}^{n} y)}{\sqrt{\sum_{i=1}^{n} x^2 - (\sum_{i=1}^{n} x)^2} \times \sqrt{\sum_{i=1}^{n} y^2 - (\sum_{i=1}^{n} y)^2}} \quad \text{......(2)}
\]

Where
\( r \)= correlation coefficient of \( X \) and \( Y \)
\( X \)= FDI values in US Dollar
\( Y \)= Hectarage involved in trade
\( n \)= number of observation

The value of \( r \) is subjected to a t test with the formula as:

\[
t = \frac{r \sqrt{n - 2}}{\sqrt{1 - r^2}} \quad \text{......(3)}
\]

where \( t \)= calculated t value,
\( n-2 \)=the degree of freedom
\( n \)=Number of observations
\( r \)= correlation coefficient

**Results and discussions**

**Trade Partnership in Africa and Volume of Land Trade**
Preferential trade agreements are not new policies. The British and French colonization offers good examples: colonizers settled, mainly in the form of 'military troops', imposed territorial powers, and setup trade policies and preferential trade agreements in order to transfer resources from the colony to themselves and secure favourable markets for their products (Crowder, 1968). First, Africa suffered slave trade and colonial powers seized vast areas of Africa during the 19th and early 20th centuries. Given the stabilising global trend of self governance-independence and national identity, globalization and developments in international and national security systems have helped to standardise international relations including trade. Africa today trades with many parts of the World and many trade partnerships exist; these include bilateral, regional and even China –African Trade. Does trade partnership play roles in the contemporary land trade? The ongoing globalisation is largely underpinned by trade partnerships. Such trade partnership include African-China Trade relation, African–African trade partnership, European-African trade arrangement, Bilateral agreements with some Asian countries (excluding China) and American countries. Trade partnership arrangements are critical to the present land trade in Africa as it proved significant in all the cases! (see Table 1). This is in consonance with the theoretical frame work that increase in trade relations can lead to increase in land trade. The level
of significance obtained in Table 2 is not surprising because contemporary land trade is an intrinsic aspect of globalisation and trade in Africa. Trade Relations/Partnerships actually affects size of land trade in Africa. African Asian including China trade agreements accounted for 26.5% (2.1%+24.4% see Table 1) while trade among Africa accounted for 29.2%. And a similar trend characterized land trade with American countries in bilateral trade agreements with Africa, and African European trade. The K-S test was significant at 5 percent probability level.

Table 1: Trade Partnership Arrangements and Land trade

<table>
<thead>
<tr>
<th>Trade Relations</th>
<th>Hectares acquired from 2000 to 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>China only (African-Sno (China) trade)</td>
<td>Benin 14800 (0.6), Ghana 0.0, Nigeria 36300 (1.5), Total 51100 (2.1)</td>
</tr>
<tr>
<td>African Trade Integration (African partnership arrangement)</td>
<td>Benin 655500 (26.4), Ghana 64446 (2.6), Nigeria 5000 (0.2), Total 724946 (29.2)</td>
</tr>
<tr>
<td>European -African trade</td>
<td>Benin 250,000 (10.1), Ghana 239,063 (9.6), Nigeria 417,479 (16.8), Total 906,542 (36.5)</td>
</tr>
<tr>
<td>Bilateral Agreements with Asian countries excluding China</td>
<td>Benin 32000 (1.3), Ghana 475517 (19.1), Nigeria 98332 (4.0), Total 605,849 (24.4)</td>
</tr>
<tr>
<td>Bilateral Agreements with countries in America</td>
<td>Benin 0 (0.0), Ghana 165451 (6.7), Nigeria 30000 (1.2), Total 195,451 (7.9)</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>1.342, 1.342, 1.789, 1.342</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.055**, .055**, .003**, .055**</td>
</tr>
</tbody>
</table>

** = significant at 5% probability level; values in parenthesis are percentages

Sources: Computed from GRAIN (2012) and Land Matrix database (2015)

Colonization and Land trade

The Europeans and Americans colonised Africa, thus African countries had related colonial experiences which differed from those of Asia at least with respect to administrative procedures and nature of trading. Often during the colonial experiences, the Europeans and Americans are partners. This concept formed the basis of preparing Table 2. Colonization had provided the opportunity for foreigners to take possession of African land during the colonial experiences and shortly after words, facts indicates the contrary with respect to contemporary land trade. Table 2 showed that colonization played limited roles in the contemporary land trade as it is only significant in Nigerian case and the gross data. It is possible because globalization is driving modern national policies and programmes. With respect to colonialism, Europe traded on 36.5% of the mass of land. Although this value is skewed with most components from trade in Nigeria it is not significant in Benin and Ghana. And land trade among African firms as those having similar colonial experiences accounted for 29.2%; while Asia and United State of America possessed 26.5% and 7.9% respectively. The K-S test was significant at 5% probability level for Nigeria and sum for the three countries. This showed that colonial experiences in the contemporary land trade cannot be taken for granted.
Table 2: Describing Colonization and land trade with Kolmogorov-Smirnov tests

<table>
<thead>
<tr>
<th>Region</th>
<th>Colonization</th>
<th>Hectares acquired from 2000 to 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Benin</td>
<td>Ghana</td>
</tr>
<tr>
<td>Asia Including</td>
<td>Non Partnership with</td>
<td>46800</td>
</tr>
<tr>
<td>China</td>
<td>Colonial Masters</td>
<td>(1.9)</td>
</tr>
<tr>
<td>Africa</td>
<td>Related Colonial Experience</td>
<td>655500</td>
</tr>
<tr>
<td>Europe</td>
<td>Direct Colonization</td>
<td>250000</td>
</tr>
<tr>
<td>USA</td>
<td>Partnership With Colonial Masters</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.0)</td>
</tr>
<tr>
<td>Sum</td>
<td></td>
<td>952300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(38.3)</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td></td>
<td>1.000</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td></td>
<td>.270</td>
</tr>
</tbody>
</table>

** = significant at 5% probability level; values in parenthesis are percentages

**Sources:** Computed from GRAIN (2012) and Land Matrix database (2015)

**Foreign Direct Investment (FDI) and Hectrage of Land Trade**

Foreign Direct Investment (FDI) is one of the experiences associated with globalisation. FDI as an economic activity is required to yield some benefit to or serve some interests of the investors. Table 3 shows that FDI had positive and significant relationship with hectarage of land acquired through land trade in Africa. This is critical as it is significant in all the three countries. The result indicates that the higher the FDI, the more likely will African land be traded. This is true in all the examples noted even in countries with smaller land mass like Benin Republic. Mkpado, (2013) aptly noted that African countries receiving higher FDI experienced higher land trade. The Ghana Investment Promotion Centre report (GIPC, 2014) on FDIs covering the period 2007-2014, indicates that over 2,632 foreign investments were registered in Ghana. In 2009 for example, a total of 256 projects were registered by GIPC. The FDI component of the estimated value of the projects registered was US$551.30 million with the country recording 7 dealings covering about 434,055 ha of land in 2009 alone. In 2007, FDI to sub-Saharan Africa amounted to over US$ 30 billion. It was about US$ 22 billion in 2006 and US$ 17 billion in 2005 (UNCTAD, 2008a). The distribution of FDI stock flows in Africa are highly uneven and may be shaped by cross-country differences in resource endowments. Nigeria retained its position as African number one destination for FDI. According to UNCTAD (2012) World Investment Report; Nigeria recorded $7.03bn in 2012 to beat other African countries. In Benin Republic, major part of the foreign investments on lands concerns mainly bio-fuels production and oil palm (Gbagnoudi, 2010). The main bio-fuels are the bio-diesel produced from jatropha or castor-oil plants, and the ethanol produced from the sugar cane, the sweet sorghum and cassava floor (Nonfodji, 2011). FDI had positive and significant relationship with hectarage acquired through land trade in Africa. The paper has reviled that trade partnership arrangements and foreign direct investment (FDI) are critical to the contemporary land trade in Africa. The concern is how can West Africa manage the trend?
Sum of FDI and Land trade FDI and Hectarage Acquired in Benin, Ghana and Nigeria with correlations coefficient

<table>
<thead>
<tr>
<th>Year</th>
<th>FDI Benin Rep ($m)</th>
<th>Hectares Benin Rep.</th>
<th>FDI Nigeria ($m)</th>
<th>Hectares Nigeria</th>
<th>FDI Ghana ($m)</th>
<th>Hectares Ghana</th>
<th>FDI Total ($m)</th>
<th>Total Hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-04</td>
<td>278.7231</td>
<td>4800</td>
<td>16115.84</td>
<td>7795</td>
<td>705.33</td>
<td>10668</td>
<td>17099.9</td>
<td>12595</td>
</tr>
<tr>
<td>2005-09</td>
<td>612.5656</td>
<td>262000</td>
<td>24498.84</td>
<td>392984</td>
<td>5407.29</td>
<td>65163</td>
<td>30518.69</td>
<td>654984</td>
</tr>
<tr>
<td>2010-14</td>
<td>939.5175</td>
<td>685500</td>
<td>28922.22</td>
<td>186332</td>
<td>12269.36</td>
<td>282246</td>
<td>42131.1</td>
<td>871832</td>
</tr>
<tr>
<td>Total</td>
<td>1830.806</td>
<td>952300</td>
<td>69536.9</td>
<td>587111</td>
<td>18381.98</td>
<td>944477</td>
<td>89749.69</td>
<td>1539411</td>
</tr>
</tbody>
</table>

Correlation coefficients: 0.5562, 0.7973, 0.5192, 0.7086

Prob > t: 0.0389**, 0.0006**, 0.0571**, 0.0046**

** = significant at 5% probability level

Sources: Computed from GRAIN (2012) and Land Matrix database (2015)

Options for Achieving Responsive, Inclusive and Sustainable Development via Land Trade with Contemporary Trade Partnerships and FDI Policies

The voluntary guidelines on land trade and investments should be part of African trade negotiations (UN, 2012). This requires the relevant ministers and agencies of Governments and other institutions interested in African development to understand the guidelines. The commitments to following the guidelines need to be a prerequisite for signing trade deals. This is very necessary for handling the positive and negative effects of the environmental and social impacts of land investments. Towards this goal, certain key issues must be clarified and appropriately addressed within the policy and legal discourse. For instance, are the land investors committed to ensuring best practices to avoid accelerating climate change/global warming? Are they committed to ensuring end of gas flaring if they are dealing with oil and gas industries? Are they committed to implementing environmentally friendly agricultural practices? Are there penalties if any default? Have they shown reasonable commitment to upholding the required standards?

Inclusive land trade and land investments mean that the local communities are empowered. The empowerment need to take care of gender peculiarities such as paternal and maternal inheritances system as well as the youth and aged groups. One will like to know how inclusive is the process of acquiring land either by trade or lease? Are the relevant local people and institution aware of the processes? Is the process open and fair to every one? Is it dominated by non-transparent methods? Have the demands of local people been met?

FDI in Africa have been associated with corruption. The motives of such FDI need to be ascertained. It is quite unfortunate that many of what is termed FDIs in Africa are not really FDIs (Nyari, 2009). FDIs are meant to empower the people, to remove bottle
necks to socio economic development and most importantly without commitments and exploitations on the recipients. But sad to say African FDI needs to be re-scrutinised as they are largely resource focused either with respect to commodity booms and or oil and gas business. It has been asked “Does Africa really benefit from foreign investment?” given the millions of Dollars quoted to be in Africa where underdevelopment, youth unemployment and poverty have characterised for decades. The need for Africa to take needed action to make sure that FDI are really for development is thus highlighted.

The responsive, inclusive and sustainable trade and investments in African which definitely will affect the present and future generation cannot be given to chance. Proper legislation and supervision for ensuring that contracts for land investments in Africa business need to be recognized and respect the rights of future generation is needed.

**Conclusion and recommendations:**
Land trade and grabs in developing world and Africa in particular have raised a number of issues. The global financial and food crises that occurred in 2007/2008 worsened the phenomenon. Understanding how trade partnership and foreign direct investment affect land trade will help to inform policy for effective management of the phenomenon to achieve social and economic development. The study has shown that trade partnerships and FDI affect land trade in Africa as these factors are significant in all the countries and with respect to the total volume of land trade in selected West African Countries. The study urges:
African Governments need to increase their investment capacity on development of the region as there is the need to examine the nature of FDI inflow and its ambitions to safeguard African land heritage. Again, African Governments need to re-scrutinise African trade partnerships and nature of FDI inflows to preserve African land heritage as well as support inclusive growth and sustainable development

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