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International Rural

Spotlight
African Farmland

Spring 2013

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Notes about the publication

This document was published in May 2013. The data used in the charts and tables is the latest available at the time of going to press. Sources are included for all the charts.

Spotlight
African Farmland

Land is Africa's greatest asset, and the farmland market has developed to the point where significant investment opportunities exist

There has and continues to be commentary almost daily about the supposed 'grabbing' of African agricultural land by foreign investors, government vehicles and transnational corporations (TNCs).

Indeed, since 2001 over 200 million hectares is believed to be leased to overseas investors according to GRAIN. This may be the case but out of this total area only a small proportion will have been properly titled and an even smaller proportion developed into a viable farmland asset.

It is perfectly true there has been much interest in this frontier land market, however, the situation on the ground is somewhat different from the picture created by some media, non-governmental organisations (NGOs) and investment companies.

Savills has been monitoring the market in Sub-Saharan Africa (SSA), see Map 1 on page 4, and it featured in our International Farmland Focus 2012 as a region to watch. The market has now developed to the point where there are real investment opportunities. Through a practical case study and first-hand experience from our team operating on the ground, we aim to provide clear, robust and transparent information about SSA to explain why it has become an area, which should be given serious consideration by investors. We are concentrating on SSA rather than South Africa (SA). In SA land title risk is higher and land is expensive.

There are many challenges and obstacles to overcome to unlock the 'land capital' in Africa but with the right knowledge, contacts and strategy; business can be done on a palatable basis and significant agricultural land assets developed.

Why Africa?

Africa continues to grow in economic significance (see Graph 1). It is becoming widely recognised as playing an increasingly important role in the global economy. Agriculture and, more specifically, land are Africa's greatest assets, offering significant capital growth potential. It now provides alternatives to the mature markets of the western world.

Graph 1 shows that, in some of the key countries of SSA, output relative to the UK and the USA over the past five years has been significant (annualised 10 to 15%) and similar →

SUMMARY

■ Africa continues to grow in economic significance and is widely recognised as playing an increasingly important role in the global economy. Agriculture and, more specifically, land are Africa's greatest assets.

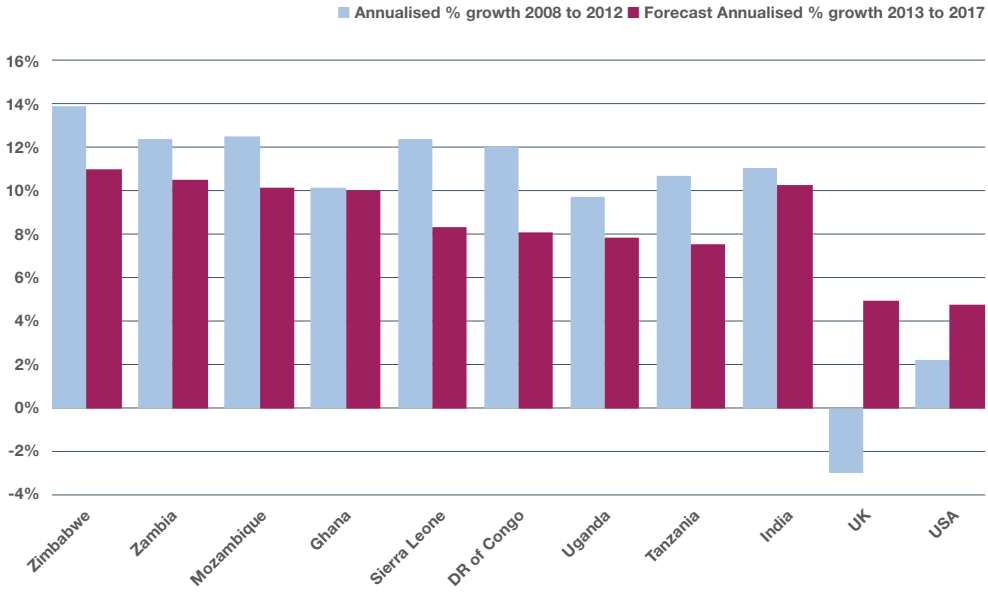
■ Africa is often seen as a homogenous region. However, there are significant 'growth corridors' developing in southern and eastern Africa that not only unlock the potential for export for investors but also significantly strengthen local and regional markets.

■ The land tenure system and regulations vary for each country, but it is generally based on a long leasehold interest of between 50 and 99 years, often with a renewable clause written in to allow effective ownership in perpetuity.

■ Africa offers a significant agricultural investment market but is not for the faint hearted. As ever, it is vital to be focused and 'know your market'. The risks can be substantial but for the well informed there is an opportunity to acquire large productive farms that are likely to significantly increase in capital value over time.

GRAPH 1

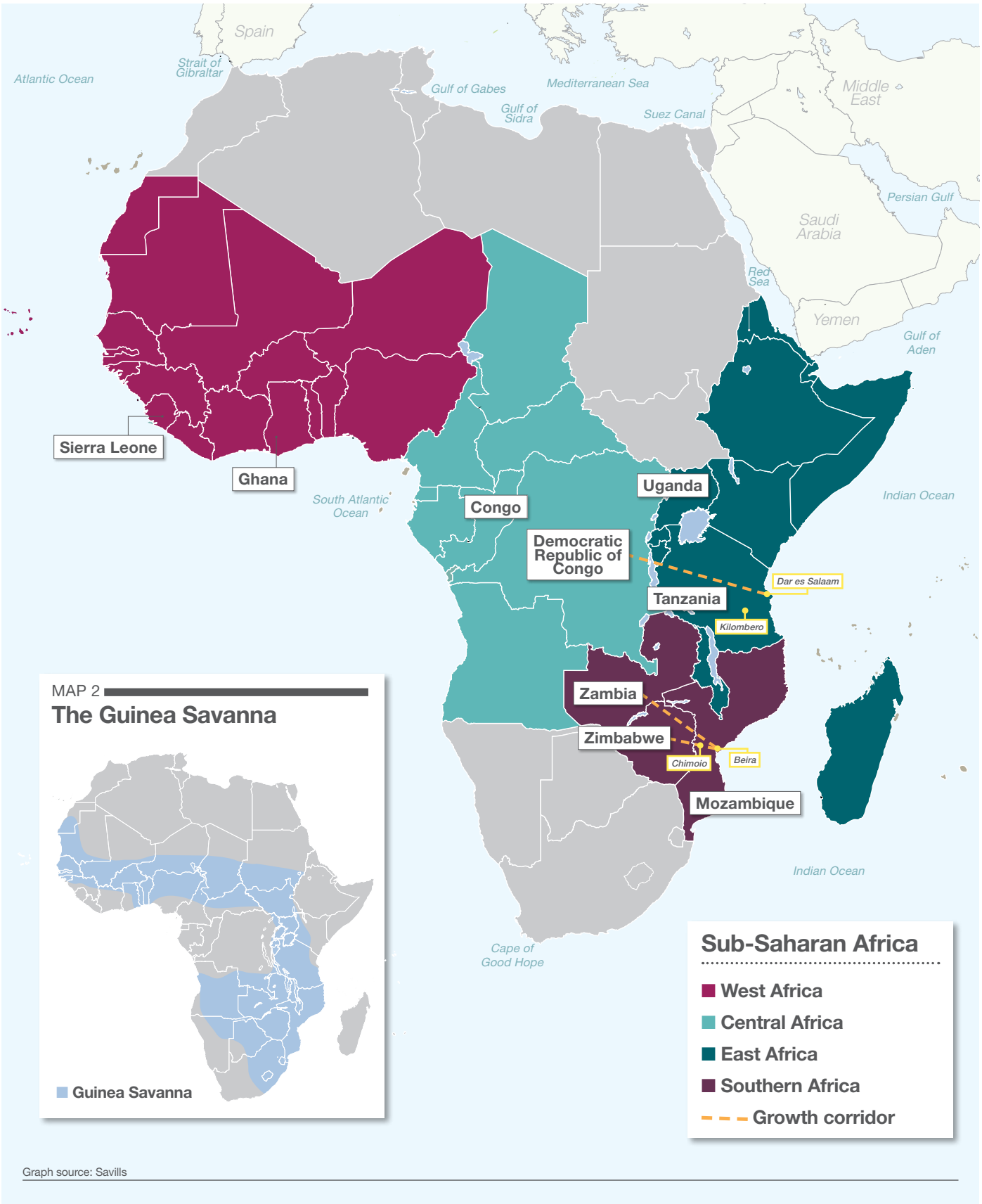
GDP growth at current prices USD



Graph source: IMF analysed by Savills Research

MAP 1

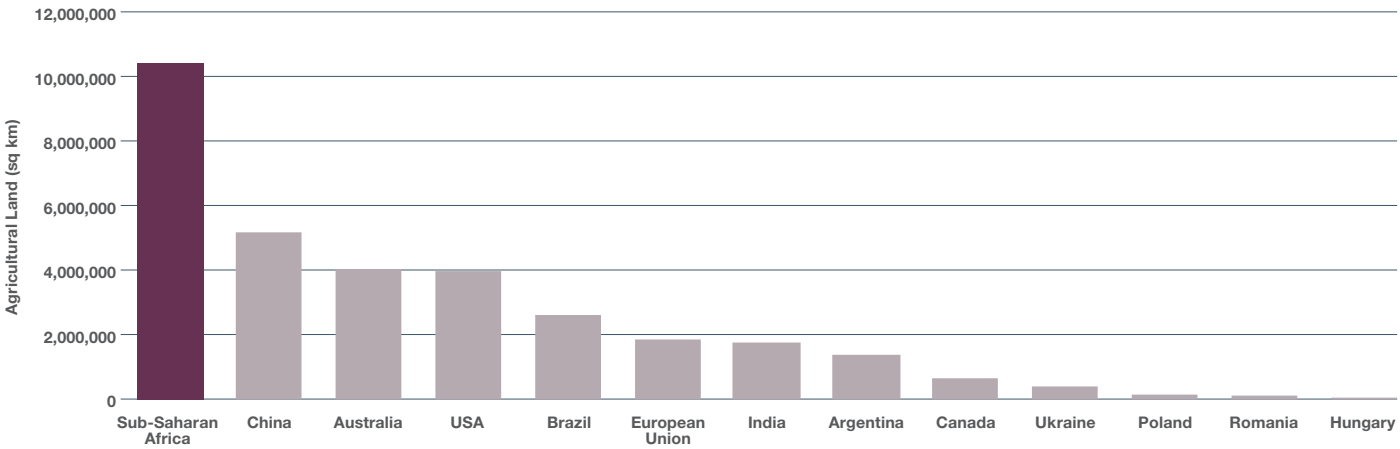
Sub-Saharan Africa



Graph source: Savills

GRAPH 2

Agricultural land area (sq km)



Graph source: World Bank

to India. Although the International Monetary Fund's annualised growth forecasts over the next five years are more muted they still outstrip the UK and the USA. Graph 2 illustrates how large Africa is. It is generally recognised there are substantial areas of under-utilised fertile land with significant potential to increase production.

The African Guinea Savanna is one of the world's largest underused agricultural land reserves, covering approximately 600 million hectares, of which about 400 million hectares can be used for cropping, but only 40 million hectares are currently farmed (source FAO).

Table 1, which shows the current yield relative to the estimated potential yield, clearly illustrates the significant yield potential of SSA compared with Asia and South America.

The World Bank report 'Growing Africa: Unlocking the Potential of Agribusiness' published in January 2013 reports;

■ Africa has more than half of the world's fertile yet unused land.

■ Africa uses only 2% of its renewable water resources compared with the global average of 5%.

■ Poor storage and other farm infrastructure leads to average post-harvest losses of 15% to 20% for cereals and higher for perishable goods.

■ Fertiliser use lags significantly behind Latin America and Asian countries and has remained relatively static since the mid 1970s.

■ In addition the climatic characteristics of the SSA zone are a warm tropical climate with typically between 800-1200mm rainfall per year and;

■ Soils are typically low activity clays and high base loams, of good quality and nutrient retentive.

These headlines look very attractive and have inspired many investors to take a look at the market and in some cases acquire some land. However, it is often understated that to transform this land into a commercially productive asset requires a large amount of readily available capital, good external infrastructure, technical expertise, especially at farm level and time. As with all investments with potentially high returns, investing in SSA is not without risk.

Without the suitable resources and knowledge to overcome the natural constraints of investing in African farmland investors are unlikely to be successful. Whilst there are large areas not formerly under any title, most areas of productive land have some subsistence farming in place.

Thus, in addition to the requirements noted above, there are social, environmental and political factors that need to be included into any project to ensure success. It should never be underestimated how emotive the subject of land can be and being aware of these issues is fundamental to success.

TABLE 1

Current yield relative to estimated potential yield (%)

Country/ Region	Maize	Oil Palm	Soybean	Sugarcane
Sub-Saharan Africa	20	32	32	54
Asia	62	74	47	68
South America	65	87	67	93

Table source: World Bank

Where in Africa?

Africa is often seen as a homogenous region, which is written off as dangerous and risky. While there are political and business issues to contend with in most African countries the situation varies significantly for each country and region. It is important for any investor to take a specific and focused look at the market when deciding where to invest. Map 1 illustrates the key regions in SSA.

There are significant 'growth corridors' developing in southern and eastern Africa that not only unlock the potential for export for investors but also significantly strengthen local and regional markets. These

TABLE 2

Main agricultural outputs by country

Region	Country	Main Outputs
West Africa	Ghana	Rice/Sugarcane
	Sierra Leone	Cocoa/Palm Oil
East Africa	Tanzania	Rice/Grains/Oil Crops
	Uganda	Grains/Horticulture
Central Africa	Congo	Biofuels/Palm Oil
Southern Africa	Mozambique	Beef/Grains/Cotton/Oil Crops/Sugarcane
	Zambia	Beef/Grains/Cotton/Oil Crops/Sugarcane

Table source: Savills Research

include the growth corridors from Beira in Mozambique to Zambia and Zimbabwe and the southern agriculture corridor from Dar es Salaam flowing from Tanzania to the Congo.

Table 2 provides a snapshot of the key outputs (crops) grown in the regions and countries that are attracting particular interest for commercial agriculture.

Tenure

Land tenure is the backbone upon which all land and property markets are built. The World Bank estimates only between 2-10% of land in Africa is held under formal tenure and most of this is in urban areas or areas of historical farm investment such as the southern highlands in Tanzania. African agriculture is dominated by smallholder farming for subsistence and local markets.

The average holding is in the region of half a hectare. Most of the land is either state owned in one form or another; or held by tribal or other local communities. This weak tenure system can be both an advantage and a disadvantage for the overseas investor.

"As this report illustrates, the farmland market in Africa is very limited despite the large geographic size and market hype" Ian Bailey, Savills Research

On the one hand, weak tenure allows easy access to vast areas of land, which are not governed under a formal tenure system and can then be bought under one concession.

On the other hand, this activity has been heavily criticised by international organisations, such as GRAIN, the World Bank, Oxfam, and the Oakland Institute.

The land tenure system and regulations vary for each country, but are generally based on a long leasehold interest of between 50 and 99 years, often with a renewable clause written in to allow effective ownership in perpetuity. Zambia and Tanzania are generally considered to have more simple structures due to common law.

Other countries, such as Mozambique, have a sensible DUAT system that offers title after an investor proves commitment under an initial two year permit and then allows investors to secure infrastructure through freehold, thereby registering security and value in perpetuity.

A focused on the ground approach is vitally important at this stage of the emerging SSA market. It is anticipated that the market will become more transparent and structured/regulated as it develops and therefore common terms and transactional evidence are likely to emerge. The current lack of 'normal' market characteristics requires a different strategy to ensure success. This includes the need to overcome obvious and unseen pitfalls.

The strategy needs to be sensitive to the market challenges and local issues and a direct, holistic and mutual involvement approach is advised. Each agreement will vary slightly depending on the country law and local tribal landowner situation but will be based on these sound principles.

Market and Values

As this report illustrates, the farmland market in Africa is very limited despite the large geographic size and market hype. There are fundamentally two options available to an investor wanting to access this market and in both cases secure land title is essential.

1. Invest in (early stage) projects and develop a greenfield asset (primary market).

2. Source and acquire one of the limited 'developed' farms (secondary market). Although the core market is still in its primary phase there is evidence that a secondary market is starting to develop.

The secondary market is a consequence of the original pioneers of commercial agriculture who invested four or five years ago and have successfully developed their farms from Greenfield to fully operational aggregated agri-businesses.

Many holdings are showing a profit and have significant capital value captured in the assets. An example of this can be seen in our case study on page 8.

In some cases these successful investors and pioneers are now looking for a full or partial exit to realise the true value of their asset. We anticipate that some of these developed commercial farms will come to the market in the next year or two offering significant opportunities to investors.

In addition there are smaller titled farms available for sale, which are often a result of post-independence family farm development. More evidence of asset values will emerge as the market develops and there is a transaction history for these more developed assets.

Recent comparable evidence in Zambia, where several farms came to the market in 2012, endorses the illustration shown in Graph 3. Due to the lack of comparable

evidence from the market, values are often assessed by a combination of comparable profits and residual based valuation methods, which look at the income potential and infrastructure development potential of the farm.

Graph 3 attempts to illustrate this process. This should be used as a guide only as many different factors are interlinked and can give significantly different results but the principle remains the same.

■ Base – early stage project presuming suitable soil type, climatic conditions, location, in an area of low population density and NOT situated in an area of environmental importance.

■ Improvements to soil fertility and/or livestock genetics leading to improved productivity.

■ Improved external infrastructure including utilities (especially power) and transport links enabling transport efficiencies and reduced costs.

■ Improved internal infrastructure including roads, buildings and fencing which increase management and labour efficiencies.

■ Investment in the latest technology and equipment to improve operation efficiency and timeliness to reduce costs and increase output (crop yield and quality).

■ Water management and irrigation to create dry season production certainty.

■ Up stream facilities, processing facilities and feed mills to add value to outputs and integrate supply chains.

■ Successful integration of sustainable (social and environmental) value chain projects.

Although broadbrush, Graph 3 illustrates the relative amounts of capital required against value uplift and is a key consideration for those making a Greenfield investment.

Investment case

Potential for significant crop yield increase

The farmland investment market is immature in SSA and hence it is very difficult to source reliable data on investment performance (income yields and capital appreciation). However, information derived from our experience shows that:

Typically, investment returns based on net cash flows for Internal Rates of Return (IRR) are between 8-25% over 5-10 years. These will depend on the enterprise and location, and the level of capital required to develop the farm to full operational capacity. External infrastructure and access to markets are key to maximise income return. Entry costs will be high if buying an existing operational asset but that will reflect on the level of return.

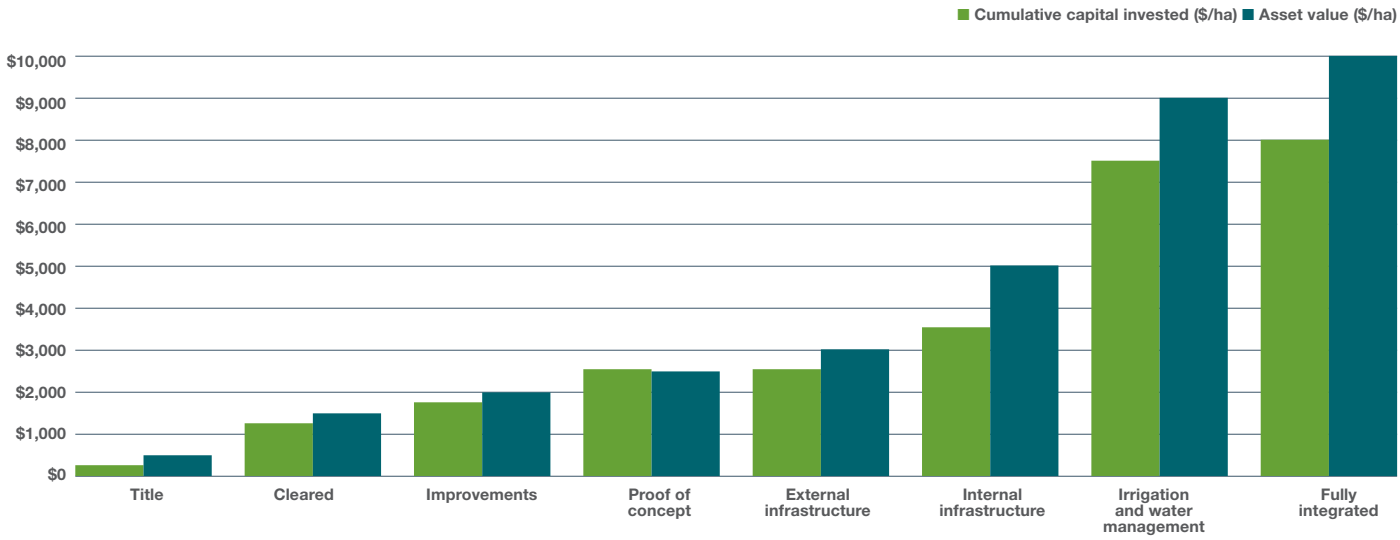
It is difficult to disseminate figures for capital appreciation as it is fundamentally related to infrastructure development. Our experience and evidence suggests that capital growth can range between 10% and 30% in the first five years but this is highly variable and growth is very specific to individual farms and markets.

Once up to full strength (in year five or six for a Greenfield asset or year one for a going concern) a commercial farm should be returning an annual net yield of 20-25% based on EBITDA against capital invested and or likely capital value. The first two to four years are likely to show an annual loss depending on how quickly the farm is scaled up.

The investment period should be over 10 years, with seven years the absolute minimum. The exception to this is a capital value play of acquiring an asset, improving it through capital development and then selling in a strong market for capital plus a premium. Returns here, as a developer would expect, are likely to be 10-20% per annum depending on strength of demand and quality of the improvements.

GRAPH 3

Estimated capital growth relative to investment in farm development



Graph source: Savills Research

Case study
MOZBIFE LIMITADA, MOZAMBIQUE

Mozbife Limitada is a vertically integrated cattle ranching and feedlot production business based in Chimoio, Central Mozambique approximately 150 kilometres west of the port of Beira.

The farming operation is well located being in the Beira 'corridor', which is a developing infrastructure corridor to serve agricultural and other investment operations from Beira in Mozambique through to Bulawayo in Zimbabwe and up to Lusaka in Zambia. The 'corridor' is a lifeline for enabling easy transport of inputs and outputs to farming operations of this type.

Mozbife is owned by Agriterra, a company focused on agricultural investment and sustainable development in Africa, providing high quality produce while simultaneously improving the livelihoods of smallholder farmers by improving access to markets.

Agriterra has four main divisions:

- Beef ranching;
- Maize processing and farming;
- Cocoa buying and trading; and
- Palm oil plantations.

Its strategy is to become one of the largest agri-operators and leading food providers in Africa. The company cites a wealth of experience and a good network of contacts as contributory factors to its success. Mozbife has four main operations:

- The 1,350 hectare Mavonde Stud Ranch is stocked with high quality Beefmaster cattle. These are bred for their high growth rates and high

"The objective is to build a total herd in excess of 10,000 cattle and, in order to add value and increase profitability, it is developing into a 'field to fork' producer taking cattle through its own feedlot and abbatoir" James Cairns, Savills

The 1,350 hectare Mavonde Stud Ranch – dam and irrigated pasture

quality of meat, in addition to their adaptability to hot climates.

■ The 15,000 hectare Dombe Ranch is rapidly expanding with investment currently focusing on infrastructure, particularly the construction of paddocks, roads and fencing in addition to water boreholes for irrigation during dry periods.

■ Mozbife has developed the Vanduzi Feedlot project in line with its strategy to become a vertically integrated beef producer.

■ It operates an abattoir at Chimoio, to ensure the full value uplift of the butchered product is realised. This commenced operating in December 2012 and has a target throughput of 4,000 cattle per month, in addition to a goat processing line. Local animals are also processed to boost efficiency.

Mozbife was established to supply premium beef to both the domestic market in Mozambique as well as for export. Beef consumption in Mozambique has been steadily rising and is forecast to continue to grow as living standards across the country improve.

The objective is to build a herd of more than 10,000 cattle and in order to add value and increase profitability it is developing into a 'field to fork' producer taking cattle through its own feedlot and abattoir.

Properties are held under the Mozambique DUAT property register, which is in effect a long leasehold interest that offers title security in perpetuity and assignment. The DUAT system allows land and infrastructure developments to be registered thereby achieving value.

This process has been relatively simple for Agriterra as they engaged with the stakeholders, government and community early in the process and are delivering on promises of investment into and development of the land.

Considerable value has been achieved through significant investment in infrastructure for irrigation, dam, fencing, buildings and roads with the most significant uplifts in asset value followed the installation of the dam and irrigation equipment as well as the infrastructure, which allows them to operate as an integrated value chain.

The 1,350 hectare Mavonde Stud Ranch is stocked with high quality Beefmaster cattle

There are pitfalls and Agriterra's success has been achieved through:

■ Experienced management teams on the ground.

■ Investing promptly after the initial title permit received. If investment targets are not met then full lease title will not be granted.

■ Sufficient capital to develop and establish operations.

■ Structuring the company to utilise profits and investment funds effectively.

Mozbife is another example of an integrated beef business doing very well in Africa. Zambeef was the first to prove the model in Zambia and now has a market capitalisation of over $200 million and land values in the region of over $100 million. ■

Savills is extremely grateful to 'Agriterra' management for giving permission to produce this case study and for providing the information. James Cairns, through Savills, valued the assets of Mozbife in 2012.

Conclusion and outlook

The African model could follow a similar pattern to Brazil

Africa offers a significant agricultural investment market but is not for the faint hearted. As ever, it is vital to be focused and as with all investments 'know your market'. The risks can be substantial but for the well informed there is an opportunity to acquire large productive farms that are likely to significantly increase in capital value over time.

We believe the African model is likely to show a similar, although accelerated, pattern to agricultural investment opportunities in Brazil. 40 years ago Brazil had limited agriculture potential with poor infrastructure and a weak economy. Investment in infrastructure, the availability of credit facilities and policy reform to consolidate land has turned around Brazil into a global hub of commercial agriculture.

For example, the Cerrado region has shown remarkable growth where, soybean output increased from 250,000 tonnes in 1961 to 30 million tonnes in 2011. Farmland values increased around six times between 2000 and 2012.

The easiest way to access the SSA is through the developed markets of Zambia. However, an investor will pay the price for entering into a secondary market – the primary investors will require compensating for the time and capital invested into developing these assets.

The other option is to take advantage of the significant agricultural opportunities in Africa, which requires the investor to develop their own farm from an early or Greenfield stage.

In all cases it is ideal to invest in medium to large scale (being 1,000 – 5,000 hectares). As elsewhere the operations which will allow economies of scale and competitiveness in labour, logistics, mechanisation and sourcing inputs are likely to be most successful.

Investors looking at very large scale tracts of land, in excess of 5,000 hectares, may attract negative government and international publicity as part of an anti 'land grabbing campaign'.

We recognise this may not be the place for institutional investors who tend to have a 'low risk' profile to investments.

Although the market is currently limited, we believe there are opportunities at this early stage to acquire a significant asset for a value that is still currently less than its true net asset value. In these cases, investors can capitalise an asset that in three to five years' time will hold significant capital value and be showing a healthy income return. As in Zambia well developed commercial scale farms will attract a premium comparable to the best western market values.

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- **UK Agricultural Land Survey 2012**
- **International Farmland Focus 2012**
- **Market in Minutes | Q1 2013 Farmland Market**
- **Residential Property Focus Q1 2013**

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