REPORT | MARCH 2017

Agricultural Leasing Market Scoping Study for Sub-Saharan Africa

REDUCING POVERTY
THROUGH FINANCIAL SECTOR DEVELOPMENT

NATHAN ASSOCIATES

fsdafrica

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Front cover image credit: Charl de Klerk © 2014

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Abbreviations

3S	Supply functions (sales, service and spare parts)
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EU	European Union
FCAS	Fragile and conflict-affected states
FSD Africa	Financial Sector Deepening Africa
FSP	Financial service provider
GDP	Gross domestic product
GPS	Global positioning system
Ha	Hectare
ICT	Information and communication technology
IFC	International Finance Corporation
MAP	Making Access Possible
MIS	Management information systems
MNO	Mobile network operator
POS	Point of sale
PV	Present value
SHF	Small holder farmer
SME	Small and medium enterprise
SSA	Sub-Saharan Africa
TA	Technical assistance
VAT	Value added tax
USD	United States dollar

About Nathan Associates

Nathan Associates is a leading provider of economic and management consultancy services worldwide. In the past 12 years, we have implemented more than 120 projects in over 50 countries leveraging our global presence in Washington DC, London, Delhi and Chennai. We apply our technical expertise across a diverse range of economic sectors, including agriculture, finance, transportation, energy and telecommunications.

Nathan solves problems and delivers results: our economists have conducted monitoring and evaluation and impact analysis using a range of techniques including modelling, survey design, cost-benefit analysis and randomised control trials. We are also committed to equitable, responsible and sustainable growth, promoting economic inclusion for women, youth and vulnerable groups and advocating for green, climate-smart policies and practices. Our services include Economic Policy and Governance, Private Sector Development, Trade and Logistics, Infrastructure Planning and Finance, and Financial Sector Development.

The views expressed in this report are those of the author, Nathan Associates and in no way entirely reflect those of FSD Africa.

About FSD Africa

FSD Africa is a non-profit company funded by the UK Government which aims to increase prosperity, create jobs and reduce poverty by bringing about a transformation in financial markets in SSA and in the economies they serve. It provides know-how and capital to champions of change whose ideas, influence and actions will make finance more useful to African businesses and households.

Through access to finance initiatives, it seeks to build financial inclusion. Through capital market development, it looks to promote economic growth and increase investment. As a regional programme, it seeks to encourage collaboration, knowledge transfer and market-building activities – especially in fragile states.

Where there are opportunities to drive financial market transformation more quickly and intensively through capital investment, FSD Africa will deploy equity, loans or guarantees as the situation requires.

Foreword

Credit is an important tool for any business that wants to grow and this is certainly true for many farmers across sub-Saharan Africa who are trying to feed their families and build sustainable and prosperous farming businesses. However, credit remains a challenge for African farmers and limits the opportunities they have to grow their businesses, further restricting their potential and creating an ongoing cycle of poverty and food insecurity on the continent.

FSD Africa commissioned Nathan Associates to undertake this market scoping study to showcase a form of finance that is very relevant for agriculture but has yet to take off: leasing. Lease financing exists in many African countries, but is rarely available to the agricultural sector. Yet, in countries with well-developed agricultural and financial sectors, it is often the preferred form of finance among agricultural sector market players. This study aims to better understand why agricultural leasing is such a nascent sector in sub-Saharan Africa, asking the question, "What can be done to help the sector grow?"

Nathan Associates argues that a weak agricultural leasing sector is due to a combination of market failures that vary across the countries under review: Ethiopia, Ghana, Kenya, Mozambique, Nigeria, Tanzania, Uganda and Zambia. Like many other financial sector challenges, there is no "one size fits all" solution to building a functioning agricultural leasing sector that is appropriate for and accessible to market players across the continent. However, through a market systems lens, the research helps to identify constraints within the core market (supply and demand), the market functions that support the sector and the policy and regulatory systems that govern the sector. Using this approach, the report maps the countries of scope and starts to pinpoint recommendations for developing the sector.

The hope is that this market scoping can act as a starting block for development partners that may be interested in promoting growth within the agricultural leasing sector. The report provides useful country overviews and a summary as to how the countries of scope were chosen, in an effort to identify the right geographical focus for any development partner. The overarching recommendations can be used to best determine one's entry point or focus, based on specific interests.

Ashley Olson Onyango
Agricultural Finance Programme Manager
FSD Africa

Image:
Aquila © 2008

Executive summary

This scoping study applies a market systems approach to agricultural equipment leasing in sub-Saharan Africa in order to capture a holistic view of how the leasing market currently works. The study has analysed core market functions (supply and demand), as well as supporting market functions and the policy environment. The analysis has included both primary and secondary research, notably literature reviews and targeted interviews with key informants. A country selection framework has examined the breadth of the financial sector, relative importance of agriculture in the overall economy, total employment provided by the agriculture sector, presence of major agricultural equipment suppliers and the presence of leasing companies. It has led to a closer analysis of the following countries: Ethiopia, Ghana, Kenya, Mozambique, Nigeria, Tanzania, Uganda and Zambia. Additional references have been made to South Sudan and Liberia, offering general insights on agricultural leasing in a selection of fragile and conflict-affected states (FCAS), as well as to Rwanda.

Key findings

The analysis shows that leasing sectors exist and are active in a number of the study countries, but outside of a few niche players they do not offer leasing products to farmers or small and medium enterprises (SMEs) in agriculture. This is notable since agricultural equipment leasing tends to be a favoured form of asset financing in countries where agricultural and financial sectors are well developed. The comparatively slow development of leasing in sub-Saharan Africa, especially for agriculture, is most likely driven by market failures and constraints occurring at different levels of the market system. These failures are present across all of the study countries, albeit to different degrees. Addressing these constraints will be key to achieving greater penetration of leasing in the agricultural sector going forward.

On the supply side, key constraints holding back activity in agricultural leasing include informational asymmetries which reduce incentives for financial service providers to lend to farmers. A lack of visibility and understanding of customer needs and behaviour is a common challenge within agricultural finance, but with leasing there is an additional concern around adequate maintenance of equipment, which constitutes the underlying security for a lease contract. The lack of a developed secondary market for used agricultural

“The slow development of leasing in sub-Saharan Africa, especially for agriculture, is most likely driven by market failures and constraints occurring at different levels of the market system.”

equipment in most of the study countries is also a particular constraint, making the re-sale of equipment in cases of default very challenging. Overall, financial service providers perceive agriculture to be high-risk, and most lack the skills and internal systems required to accurately assess and price the risks involved when lending in this space. The issue is compounded by the fact that most farmers are seen as too small-scale to be profitable customers, and that financial service providers have historically been able to generate sufficient profits in other business lines. The types of assets that are needed by most farmers are also not always the ones that are easiest to finance. Despite these many challenges, the analysis shows that there is increasing interest among financial service providers to expand into agriculture, under the right conditions.

On the demand side the study shows that although the agricultural sector forms a large part of the economy in all the countries reviewed, effective demand for leasing is comparatively low. In most countries the sector is dominated by smallholder farmers, many of whom are subsistence farmers depending on their land for food, rather than commercial farmers. The small plot sizes that most of these farmers own are too small to justify significant investments in mechanisation, and realistically only a fraction of the overall sector is capable of absorbing lease finance to a significant degree. Other key constraints to demand are that most farmers are unfamiliar with leasing and lack the skills, resources or motivation to adequately maintain equipment. Across most of the study countries the financial capabilities of rural populations, including farmers, are very limited.

In addition, although taking on a lease contract instead of a loan allows farmers to avoid putting up collateral (which many of them lack), a down payment is still required. Across the countries reviewed this down payment could range from 20-40% of the value of the underlying asset.[1] Most farmers lack the ability to pay such an amount upfront, creating another major barrier to access.

The support functions that have been considered within this study include equipment suppliers, their distribution networks, product marketing and – to a lesser extent – technology. The analysis shows that while basic support functions are in place across most countries (indeed this was a key selection criterion for the study countries), a common challenge for suppliers is how to improve their footprint and sales in rural areas where population density is often low and the costs associated with maintenance provision are very high. A related constraint is the lack of sufficient financing options available to farmers and SMEs, which in turn holds back equipment sales and possibilities for expansion. In many countries, partnerships with financial service providers are viewed as challenging due to slow decision times and a reluctance to serve any but the best customers, but greater collaboration is also recognised as a key opportunity. Finally, although technology has the potential to become an enabler for leasing growth, mainly by increasing operational efficiency and reducing informational asymmetries, current initiatives do not seem to address a number of structural constraints faced by the sector.

The study's analysis of rules and regulations for leasing has been very general, recognising that leasing is both country-specific and highly complex. There is no single template for supporting leasing through policy, and globally, countries have taken different paths to developing healthy leasing sectors. Often, the policy environment for leasing in a given country consists of financial sector regulations, a leasing law (if one exists), laws of contract, sale of goods acts, fiscal laws and value added tax (VAT). More important than the laws and regulations themselves, however, is a country's ability to support and credibly enforce these, both through legal recourse from the existing court system or commercial dispute resolution mechanisms. The policy environments across the eight study countries vary significantly but no immediate "red flags" emerged as part of this analysis, meaning none of the countries had a policy environment in place that would definitively prevent the development of a leasing sector.

"Most farmers are unaware of how leasing works and what its potential benefits are compared to traditional bank loans."

Conclusions

Constraints throughout the market system for leasing currently create an environment where effective demand to lease equipment is limited and the incentives for financial service providers to offer agricultural leasing products are low. Most farmers are unaware of how leasing works and what its potential benefits are compared to traditional bank loans, and financial service providers do not see sufficient market opportunity to justify investing in the skills and capacity required to effectively offer leasing to the agricultural sector. At the same time, there are significant benefits attached to supporting leasing in sub-Saharan Africa. The availability of financial leasing for agricultural equipment can greatly increase mechanisation, especially for smallholder farmers, and therefore has potential to drive meaningful development impact.

Although significant barriers to leasing growth exist in all of the study countries, there are variations between countries in terms of their immediate potential to develop agricultural leasing sectors. Ghana, Kenya and Zambia especially offer high potential for different interventions, particularly at the level of the core market, i.e. facilitating greater demand and supply through targeted technical assistance or direct investment. Ethiopia, despite a much more challenging operating environment, also offers interesting opportunities due to the recent introduction of policies favourable to leasing and the fact that the sector is set to benefit from significant investment over the next few years.

Addressing the many constraints currently present in the market system will require a suite of mutually reinforcing interventions, as activities aimed at only one level of the market system are likely to have limited impact. Stakeholders aiming to support agricultural equipment leasing should also consider what types of interventions they are in the best position to support. In general, there is a trade-off between supporting niche players who are rolling out new business models or innovations that push the frontier of financial access, and more multi-faceted interventions facilitating longer term, systemic changes across multiple levels of the leasing market system. As there are many stakeholders (both public and private) working within leasing already, coordination is key and in many countries there are interesting opportunities for cross-sectoral partnerships to support sector growth. Specific interventions could include:

- Technical assistance to banks and other interested financial institutions, to improve their knowledge of leasing as well as their procedures for lending to the agricultural sector (developing new products and credit assessment skills)
- Demand-side interventions supporting awareness and understanding of financial leasing among farmers
- Support for technologies which make leasing operations and risk management more efficient
- Creation of financing facilities to either support general sector growth or help farmers overcome their inability to raise sufficient funds to satisfy the down payment requirements of most leasing products.

Finally, there are many areas related to agricultural equipment leasing that require further research. There is very little recent information available on leasing in the study countries, especially with respect to the core market i.e. supply and demand. The scope of this study has been limited, and expanding the body of evidence with more in-depth research on the potential market for leasing in individual countries, as well as the impacts of existing initiatives, could fill a significant market gap and provide helpful insights for stakeholders working in the sector.

The report is structured as follows: Section 1 sets the stage for the report, explaining its key objectives, methodology and why agricultural leasing can support improved agricultural productivity and income across the continent. Section 2 details key findings across the four market lenses set out in Figure 4 (supply, demand, supporting functions, and rules). Section 3 presents overall conclusions from the market scoping, and introduces a set of recommendations for how agricultural leasing could be effectively supported going forward. Annex 1 presents a summary of key data for each of the eight countries in the study, while Annex 2 shows the country selection framework that was applied at the beginning of the research.

1. Based on interviews with financial service providers in study countries and reviews of public data on financial product features.

Section 1

Setting the stage

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1.1 Why is agricultural equipment leasing relevant?

Agriculture remains a crucial sector in sub-Saharan Africa, contributing to a large proportion of gross domestic product (GDP) and employing a majority of the population. However, most farmers remain smallholder or subsistence farmers, highly dependent on their land for food and income. Agriculture is fundamental to poverty reduction; it plays a crucial role in driving economic transformation and ensuring growth is inclusive of the poor. The pathways that exist out of poverty – whether through farming, employment, non-farm processing and trading or migration – are all heavily reliant on agriculture. Increasing the returns that these farmers are able to generate from agriculture and related livelihood activities can be a key driver for reducing poverty in sub-Saharan Africa.

For agriculture to work better and improve the livelihoods of the rural poor, financial services need to work better for agriculture. However, financing agriculture is complex – all of the challenges that hinder financial outreach in regular markets are larger in a rural and agricultural context. Farmers often cite access to finance as a major barrier for increasing investment in quality inputs and agricultural technologies that could improve their yields. At the same time, financial service providers lack an understanding of the key characteristics and risks related to agriculture, and generally limit their exposure to the sector. Improving how financial and agricultural markets intersect in sub-Saharan Africa will be a significant factor in strengthening agricultural productivity, potentially ushering in a long awaited 'green revolution' for the region.

The penetration of any form of agricultural finance in sub-Saharan Africa has so far been limited: most financial service providers, governments and donors do not have a good understanding of the financial behaviour, usage and needs of rural populations. This restricts the effectiveness of rural outreach. In general, the financial sector has not been well positioned to address the many challenges related to agricultural lending (low economies of scale, insufficient infrastructure, unsophisticated agricultural technologies, unclear customary land tenure systems and low market access, among others) or to assess and price the inherent risks, such as crop failure. Moreover, small average plot sizes in most countries are an obstacle to optimising the benefits of financial inputs to the agricultural sector. As explained in the case study on Moldova below, consolidation can support increased efficiency and productivity in the agricultural sector as a whole.

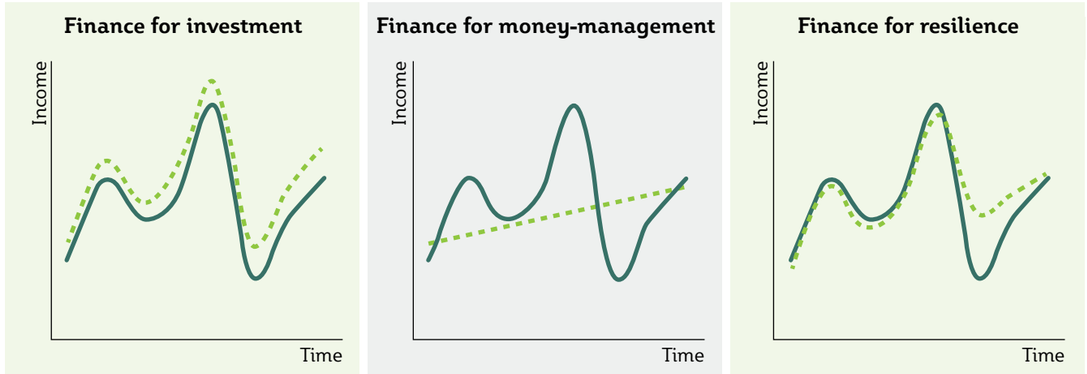
Case Study: The agriculture co-operative system in Moldova

Following the break-up of the Soviet Union in the late 1980s, the farmland that had been operating under the kolkhoz (co-operative) system was given to the people that lived on the farm and had earned a living from it. This resulted in individuals owning around one hectare of land and also having a share in the farm buildings and farm equipment. Many farms were effectively torn apart by the new landowners taking "their" door or window, but some survived and prospered by adopting a simple but effective method of farming whereby one individual (in many cases this was the kolkhoz farm manager) agreed to pay the new landowners an annual rent (usually under a ten-year contract) of produce (such as wheat, sunflower seeds or maize) in return for being allowed to farm the land. The new farmers were now able to benefit from economies of scale and from mechanisation, while the new landowners received an annual rent and still continued to live in their homes on the farm. Most of these new landowners also enjoyed an income from employment elsewhere. Although not universally representative, the model illustrates some of the potential benefits from sector consolidations in agriculture.

A simple understanding of agricultural finance assumes that credit is the most important financial product for encouraging productive investment, but the reality is more complex. By studying the livelihood strategies and complexities of life in rural areas, one can get a better, more user-centred perspective of financial transactions. Figure 1 presents a general typology of financial usage, grouping the financial needs of rural and agricultural populations into three overarching categories: investment, money-management and resilience. The solid line indicates income without the use of financial products, while the dashed line indicates projected income with the use of different types of financial products. The figure illustrates some of the trade-offs between allocating capital for investment and, for example, money-management, which may smooth but not necessarily increase income. If the financial sector is to develop products that work for agriculture, these need to be based on an understanding of why they are needed and how they will be used.

Figure 1: Agricultural financial usage typology[2]

Investment	Money-management	Resilience
– Investment in on-farm productivity (e.g. farm inputs, labour) across the agricultural cycle – Investment in off-farm productivity (e.g. processing) – Household investments (e.g. education, housing)	– Payments within value chain (buyers, suppliers) – Transfer within social and other networks to manage liquidity – Cover temporary income shortfalls	– Retain harvest and other income against downside risks – Manage and reduce exposure to risk (e.g. weather, disease) – Diversify income sources



Source: The World Bank's New Microfinance Handbook, 2013

Service providers aiming to finance productive agricultural investment also need to consider the competing priorities that farmers face in allocating their income. Traditional credit products such as loans are often diverted to support other – equally urgent – objectives, such as money-management during the dry season or resilience during a shock resulting from crop failure. In this context, alternative products may be more effective for boosting productive investment. One such product, able to support SMEs in particular, is leasing, especially leasing for agriculture equipment.

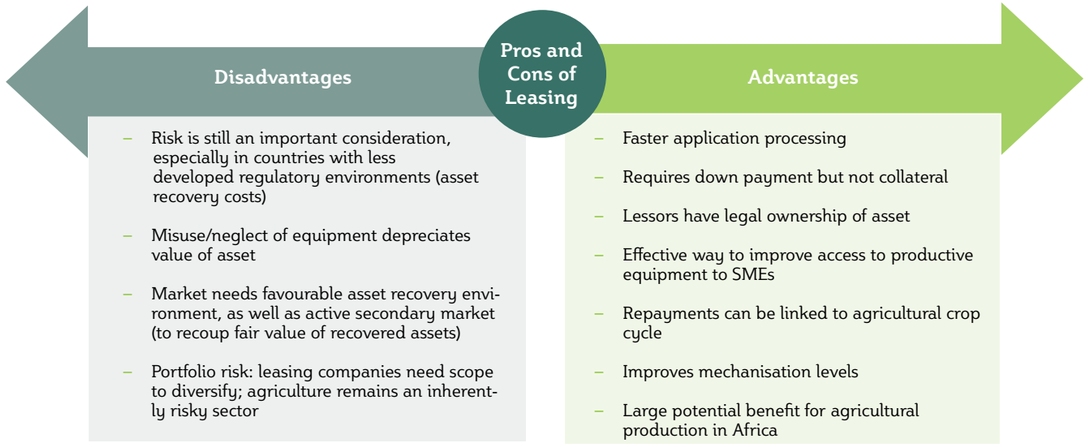
"Leasing can be a valuable tool for farmers who would otherwise struggle to access productive equipment that can improve their yields."

1.2 Agricultural equipment leasing

The advantages and disadvantages of agricultural leasing are presented in Figure 2. The advantages illustrate why leasing can be a valuable tool for farmers who would otherwise struggle to access productive equipment that can improve their yields. Leasing does not require collateral, for example, which is a key advantage within agriculture, especially in sub-Saharan Africa where most farmers and agricultural businesses do not own sufficient assets to use for loans. At the same time lessors retain legal ownership of assets throughout the term of a lease, which reduces the immediate credit risk faced by financial service providers (FSPs). However, as the disadvantages in Figure 2 show, financial service providers still face a number of risks in offering leasing products, for example being able to effectively recover and re-sell assets in case of a default. Leasing also does not address many of the general risks associated with providing finance for agriculture (such as crop failure, price fluctuations and drought).

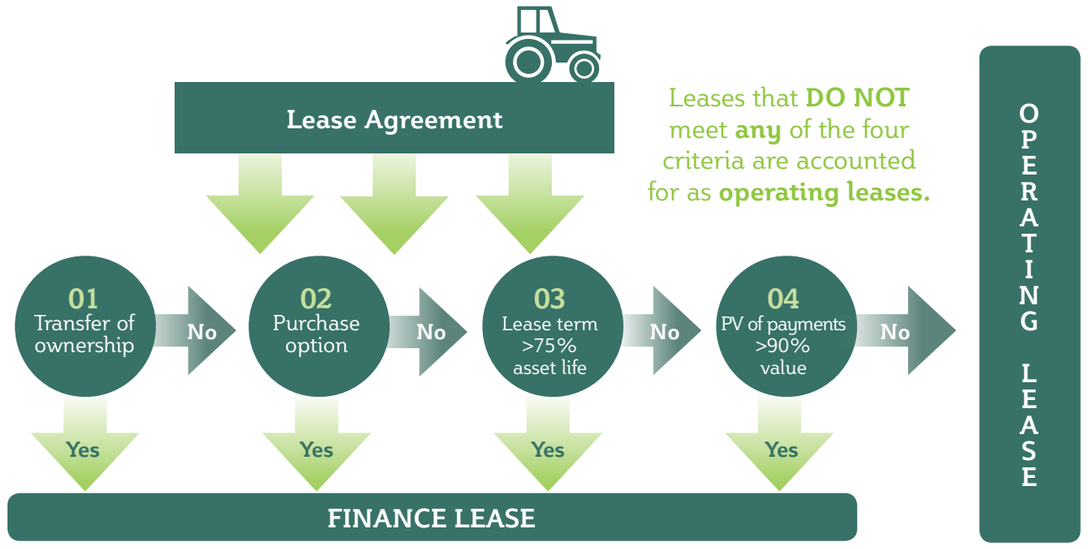
2. This typology is not specific to sub-Saharan Africa, but its principles generally apply in the region.

Figure 2: Advantages and disadvantages of agricultural equipment leasing



Agricultural equipment leasing includes two distinct sub-categories: financial and operational leasing. According to International Accounting Standards, "financial leasing transfers substantially all the risks and rewards associated with ownership [to the lessee]". It is typical to make a full transfer of ownership to the lessee (usually for a nominal fee) at the end of the lease term. All other leases are classified as operating leases, demonstrated in the diagram below. The classification of the lease is determined at the lease's inception, and is defined by the substance of the transaction over the form.[3] Although both forms of leasing exist within the countries included in this study, the majority of agricultural leasing products being offered are financial, and this is therefore the main focus of the study.

Figure 3: Classification of a lease



3. International Accounting Standards 17.4.

1.3 Objective and purpose of this market scoping

Financial Sector Deepening (FSD) Africa, as part of its wider work as a facilitator of financial sector development across sub-Saharan Africa, engages with and promotes agricultural finance. FSD Africa commissioned this cross-country scoping study on the agricultural leasing sector in sub-Saharan Africa, to inform market-building activities within its programme scope.

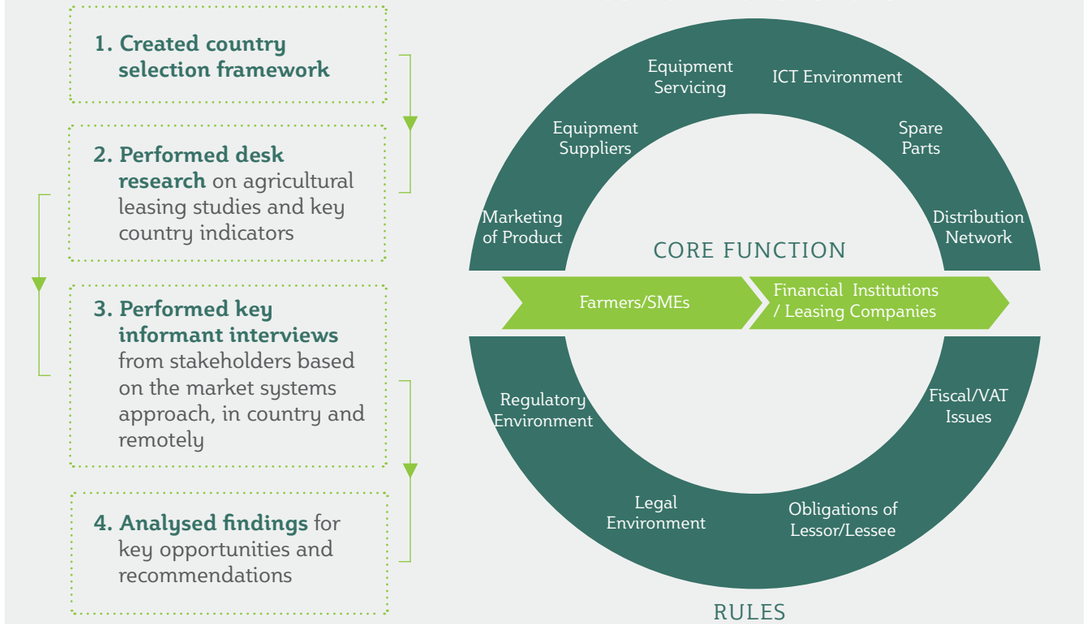
The aim of this study is two-fold: i) to act as a reference for stakeholders working within agricultural finance and leasing (donors, governments and private sector actors), supporting the development of well-informed interventions and strategies for agricultural leasing and ii) to inform FSD Africa's own market building interventions and activities.

1.4 Methodology

In order to capture a holistic view of how leasing in sub-Saharan Africa currently works, including its main constraints and opportunities for growth, this market scoping study follows a market systems approach. This approach is categorised by four main lenses of analysis: the core market functions, including supply and demand; the supporting market functions; and finally the policy environment. Information gathering, both primary and secondary, has followed these main categories, as has the analysis and the presentation of key findings.

The study covers the following countries: Ethiopia, Ghana, Kenya, Mozambique, Nigeria, Tanzania, Uganda and Zambia. While not part of the country scope, this study also includes learning and case studies from fragile and conflict-affected states such as South Sudan and Liberia, as well as from countries neighbouring fragile states such as Rwanda.[4] This reflects FSD Africa's growing interest to support these countries.

Figure 4: Market scoping methodology



In order to select study countries, the team created a country selection framework of sub-Saharan African countries, considering FSD and non-FSD countries, a broad geographical scope and both FCAS and non-FCAS countries. The framework considered key country characteristics and indicators, such as the breadth of the financial sector, the relative importance of agriculture in the overall economy, the total employment provided by the agriculture sector, the presence of major agricultural equipment suppliers (using companies such as John Deere, Massey Ferguson and Claas as proxies) and the presence of leasing companies. Also considered in the framework, but not itemised in the Annex, was the policy and regulatory environment.

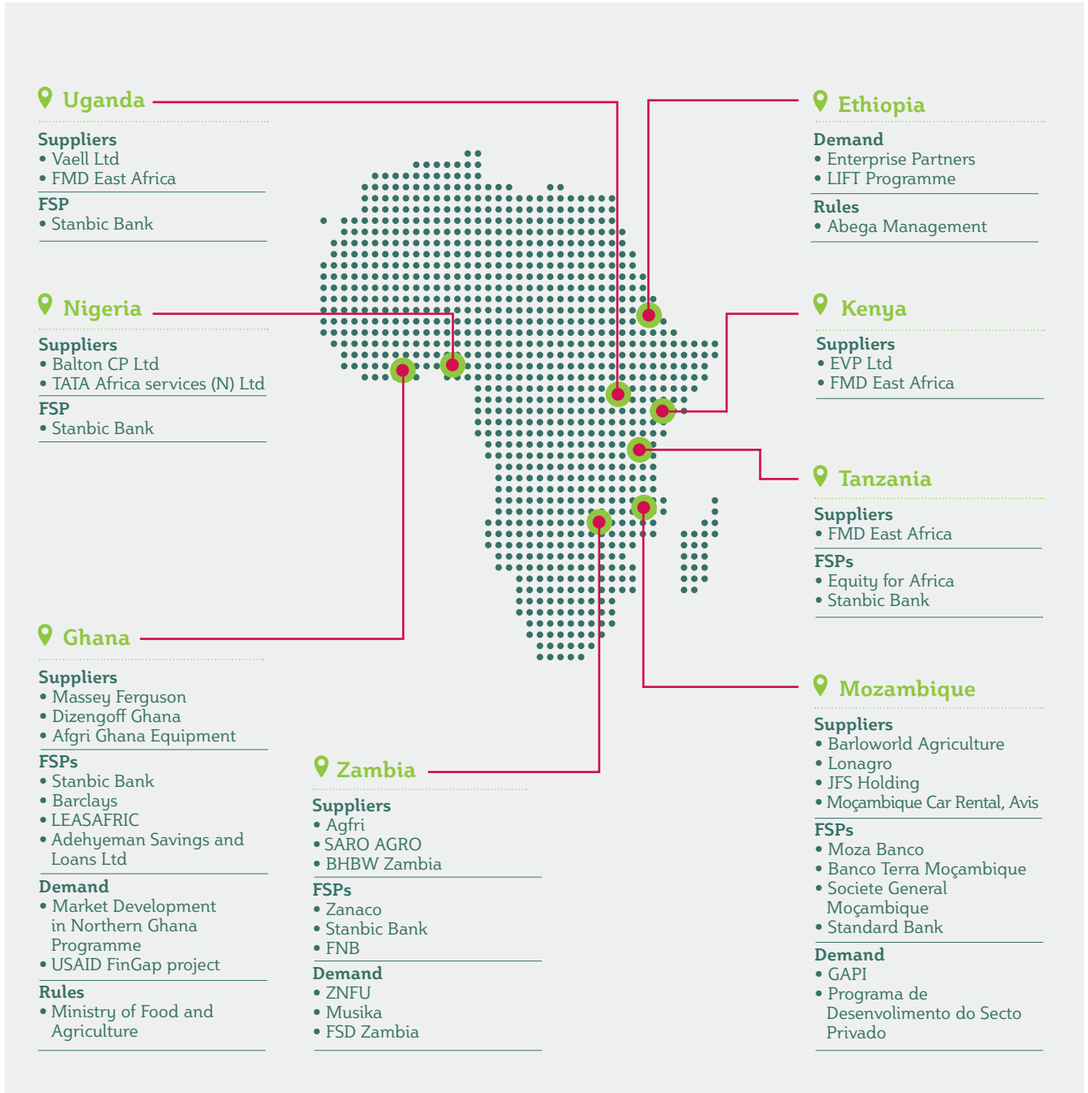
The policy and regulatory environment in this case was considered on a "red flag" basis, as policy environments are highly complex and generally non-linear. For example, a country with an explicit leasing law or regulatory body does not necessarily have a better regulatory environment than a country without those things, as the law may be very badly worded or the capacity to implement the law very low. No obvious "red flags" emerged during the analysis, implying that there are no immediate and binding constraints to leasing in the study countries. Many challenges remain with respect to creating enabling environments however, and a few of these are discussed in this report in subsequent sections.

The methodology for this scoping study included gathering secondary and primary data, using mainly desk research and key informant interviews. Desk research included reviewing key country indicators for financial sector and agriculture and policy environments, as well as a literature review of previous studies and academic papers on agriculture leasing and finance. Key informant interviews provided the main body of evidence, however, given the paucity of existing research on the subject matter in the selected countries. Field visits and deep dives of interviews were undertaken in Ghana, Mozambique and Zambia. Figure 5 below presents a map of interviewed stakeholders. While these interviews formed the basis of the analysis it should be noted that this was a general market scoping study, rather than a detailed market assessment for each country, which would require greater analysis of data (both primary and secondary) as well as engaging with a wider spectrum of stakeholders. The findings presented in Section 2 are by no means exhaustive, and the conclusions section therefore includes areas that would benefit from further research and analysis.

Image: Kristina Just © 2014

4. Rwanda does not strictly fall within the FCAS classification, but features on DFID's broader Fragile States list as a country "neighbouring high fragility states".

Figure 5: Stakeholder mapping



To allow a general comparison between the countries included in the study, a classification framework summarising country analysis and depicting the level of development of different components of the leasing sector (supply, demand and supporting functions) has been designed. The classification framework underpinning this analysis is presented in Figure 6 below. The cross-country analysis, presented in Figure 7, does not include policy environments, as these are highly country specific and generally very complex, making country comparisons difficult. Gaining a thorough understanding of leasing policy requires in-depth analysis from a technical, legislative and political economy perspective, something which fell outside the scope of this analysis. However, a general review of policy environments was undertaken in order to identify major challenges or barriers that would need to be taken into account as part of market facilitation activities, or in the design of leasing interventions. This review also allows for a general comparison of different country contexts, which can be found in Section 2.4 and in the conclusions of the report.

Figure 6: Country analysis classifications

				
Support Functions	Limited support from the suppliers, servicing and spare parts in the country	All three, suppliers, servicing and spare parts, are present in the country, but with limited distribution/service networks in agricultural regions	Suppliers, servicing and spare parts are present in the country, and also have a significant outreach and presence in agricultural regions	Suppliers, servicing and spare parts are present in the country, including in agricultural regions, and innovation is used in operations: product development, risk management and/or marketing, for example
Supply Side	Little interest from FSPs in leasing (or ag-leasing); low skill financial sector	Interest in expanding rural finance but lack of knowledge and skills (among FSPs)	Interest and some skills in working in rural finance, but high barriers to access (deposits, etc.)	Significant activity in rural finance and ag-leasing with potential to scale further
Demand Side	Low effective demand from SHFs; low levels of aggregation; low capacity of farmers to understand the product and to service the equipment	Some emerging aggregators/SMEs exist to increase demand; capacity constraints to understand the product and to service the equipment still exist	There is a significant presence of aggregators/SMEs exist to increase demand; capacity constraints to understand the product and to service the equipment still exist	There is a significant presence of aggregators/SMEs exist to increase demand; capacity of these actors to understand the product and to service the equipment is enhanced through ICT

Image:
Kristina Just © 2014

Section 2

Key findings

Agricultural finance in general and leasing in particular are highly context specific, making country comparisons difficult. Despite this, the analysis has yielded a number of common characteristics and challenges, which are presented in this section. Figure 7 presents a summary snapshot of the state of agricultural leasing in each of the eight study countries, following the classifications introduced above.

The summary country analysis shows there are significant variations between study countries in terms of their immediate potential for developing agricultural leasing sectors. Ghana, Kenya and Zambia in particular offer high potential for targeted interventions to support agricultural leasing, especially at the level of the core market, i.e. facilitating demand and supply.

Ghana has strong supporting functions in place and a number of leasing companies are already active, although less so in agriculture. The policy environment is also broadly supportive of leasing. Low financial literacy and high down payment requirements remain significant barriers however, meaning that interventions raising awareness about leasing or diluting (sharing) the credit risk of financial service providers could support expansion into agricultural leasing by both existing and new actors.

Kenya similarly has a strong framework of supporting functions for agricultural leasing as well as a rapidly developing core market in terms of supply and demand. Many banks are already active in the agricultural sector, although asset finance is currently more common than leasing. The sector's existing momentum means it could be difficult for some interventions to demonstrate additionality, although capacity building around leasing could still benefit the sector by increasing demand.

Zambia offers high potential for agricultural leasing due to a number of factors. Like Ghana and Kenya it has a strong presence of supporting functions (such as equipment dealers and post-sale services) but there are also a number of organisations and donor funded initiatives active in the country that can facilitate greater awareness of leasing to support demand and serve as partners for investments aiming to strengthen supply. Interventions that boost the capabilities and systems of financial service providers wanting to expand into agriculture, or that offset some of their credit risk in regard to agricultural leasing, could have a significant impact on the level of supply over time.

Ethiopia and Mozambique, despite much more challenging operating environments, also offer interesting opportunities – although for different reasons.

"Ghana, Kenya and Zambia in particular offer high potential for targeted interventions to support agricultural leasing."

The agricultural sector in Ethiopia is comparatively underdeveloped, with a large predominance of smallholder and subsistence farms and a heavily regulated financial sector. However, recent momentum at the level of policy and government commitment to leasing, as well as a significant inflow of capital to develop the sector, mean that it could evolve quickly in the next few years.[5] Similarly, Mozambique's agricultural sector is heavily dominated by subsistence farming and the penetration of financial services is very low, but financial service providers are interested in better understanding the sector, provided they can get appropriate support.

Overall, Uganda also offers good potential, but is currently being held back – mainly by the policy environment. Despite a relatively strong leasing sector and a growing agriculture sector, the IFC-supported Financial and Operating Leasing Bill has not yet been signed and there is limited indication that the government is going to sign it soon. Although the leasing sector appears to be growing despite this delay, it highlights potential future uncertainties. Likewise Nigeria offers a strong leasing sector (it is one of the 50 strongest leasing sectors globally), but there is limited evidence that the agriculture sector will gain significant market share with leasing companies, despite some development partners' activities in the agricultural and agricultural finance space.[6] The political economy and federal political system in Nigeria also make the implementation of any interventions very challenging. Finally, in the short to medium term, Tanzania does not offer as strong a market given the complexity of the political and policy environment. However, the environment may continue to improve, offering more fruitful opportunities in the future.

5. The government of Ethiopia, together with the World Bank and other development partners, has recently announced a USD 200 million credit facility to support SME finance in the country. The facility has a particular focus on expanding leasing activities, including in agriculture.
6. 2015 White Clark Group Global Leasing Report.

Figure 7: Summary country analysis

	Ethiopia	Ghana	Kenya	Mozambique	Nigeria	Tanzania	Uganda	Zambia
Demand Side								
Supply Side								
Support Functions								
Policy Environment								
Country Category	High potential	High potential	High potential	Low potential	Low potential	Low potential	Proceed with caution	High potential

The summary analysis presented in Figure 7 is by no means an exhaustive indication of how the agricultural leasing sector is evolving in each of the study countries. Rather it is an overview to allow comparisons between countries and to offer guidance to multi-country stakeholders for where interventions may have the greatest impact in the short to medium term. The categories noted in the analysis (high potential, low potential etc.) are therefore not an overarching judgement on agricultural leasing in each country, but a point of comparison indicating where interventions may be easiest to pursue.

Subsequent sections present key findings of the study, broken down by market lens. Each section provides an overview of the general characteristics of the leasing sector which are applicable across the different study countries, and summarises the main constraints to greater leasing growth.

2.1 Core market: supply

As indicated in Figure 4, the supply side is one of two components of the core market for leasing. It is made up mainly by financial service providers, including different types of leasing companies. It does not include equipment dealers, which are considered under the supporting functions lens. Although some financially robust equipment suppliers could potentially provide short-term financing for their customers, generally they do not as it is a significant shift in business model and can generate unwanted exposure to risk (of non-repayment) and potential doubt over ownership, and can also create cash-flow burdens. In general, equipment suppliers are also not best placed to make credit decisions.[7]

Therefore, the main supply-side stakeholders interviewed have included large international banks, national banks, specialised and independent leasing companies and leasing subsidiaries of international banks. Where possible, attention has focused on supply-side actors that are already active in the agricultural sector. Figure 8 summarises each country's potential for the provision of financing for agricultural equipment leasing, based on this analysis. Classifications are explained in detail in Figure 6 above.

7. These challenges are discussed also in Section 2.3.1.

Figure 8: Supply side analysis recap

	Ethiopia	Ghana	Kenya	Mozambique	Nigeria	Tanzania	Uganda	Zambia
Supply Side								

2.1.1 Key findings

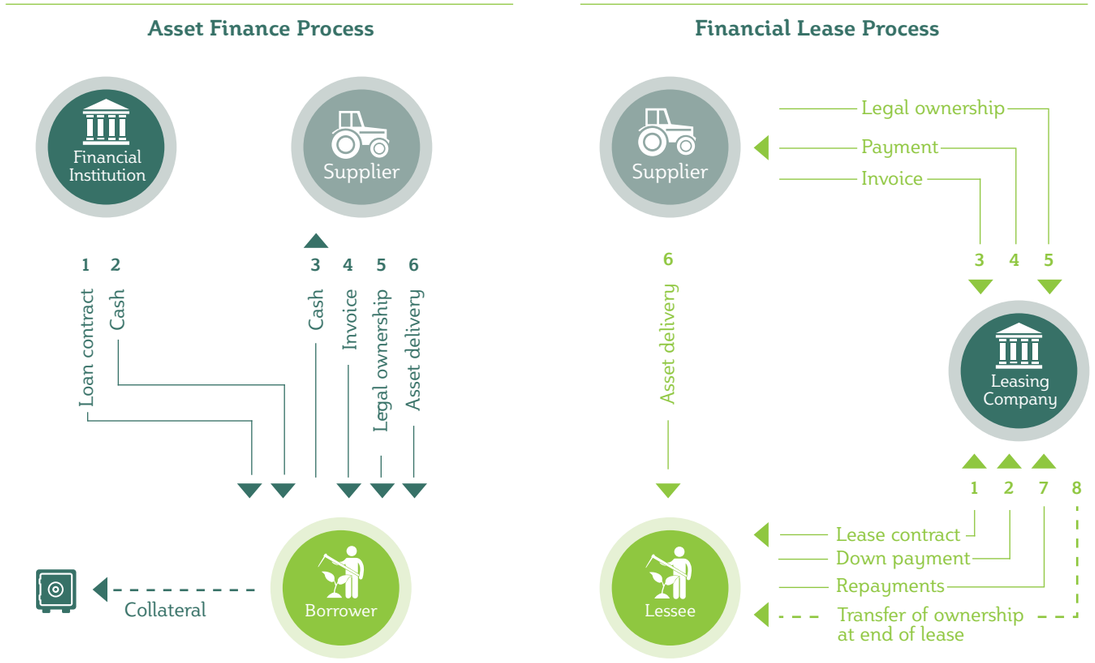
Leasing and asset finance are not the same, but are sometimes used interchangeably

In many contexts the term "leasing" has been used generically, and incorrectly, to describe "asset financing". The critical difference between these two recognised and popular methods of financing is the matter of collateral, in as much as asset financing most often (but not always, especially in developed financial sectors) requires the borrower to pledge some form of collateral. Conversely, a financial lease is normally secured by the lessor having clean title (ownership) of the asset and having received a down payment from the customer (lessee). The differences in processes are demonstrated in Figure 9 below.

For the purposes of this study both options have been considered, as a strict interpretation of financial leasing would yield very few results in the countries examined. In Kenya, for example, most financial institutions like Equity Bank, Cooperative Bank of Kenya and Kenya Commercial Bank only have an Asset Financing Product, offered at prevailing interest rates (ranging between 18-25%).

It is worth noting, however, that many potential benefits relevant to the agricultural sector are generated through the specific ownership structure allowed by leasing products. Specifically, this structure reduces some of the leasing company's risk while negating the requirement of collateral (even the moveable collateral often used in asset finance) that can be a significant barrier to access for most farmers.

Figure 9: Asset financing compared to financial leasing



An example of a leasing product can be found at Centenary Bank in Uganda, which specialises in rural financial services. It offers a short to medium-term leasing product (CenteLease) aimed at farmers (and businesses) engaged in agricultural production, processing and manufacturing. The finance lease product can generally be used to finance assets with a value ranging from UShs 100,000-1 billion VAT inclusive (equivalent to USD 30-300,000). For Centenary Bank, the finance leasing market is growing strongly: according to annual reports published on their website, in 2013 the value of its leasing portfolio was UShs 17.7 million (USD 5.27 million), and in 2014 this grew to UShs 21.6 million (USD 6.4 million). The average interest rate on these facilities in 2014 was 26.1% for UShs and 10% for USD facilities.

Not all equipment is suitable for leasing, especially in nascent markets

In many markets included in this study, there is a difference between the equipment types most demanded by lessees and what lessors are prepared to finance. This evidence was particularly strong in Ethiopia and Tanzania.

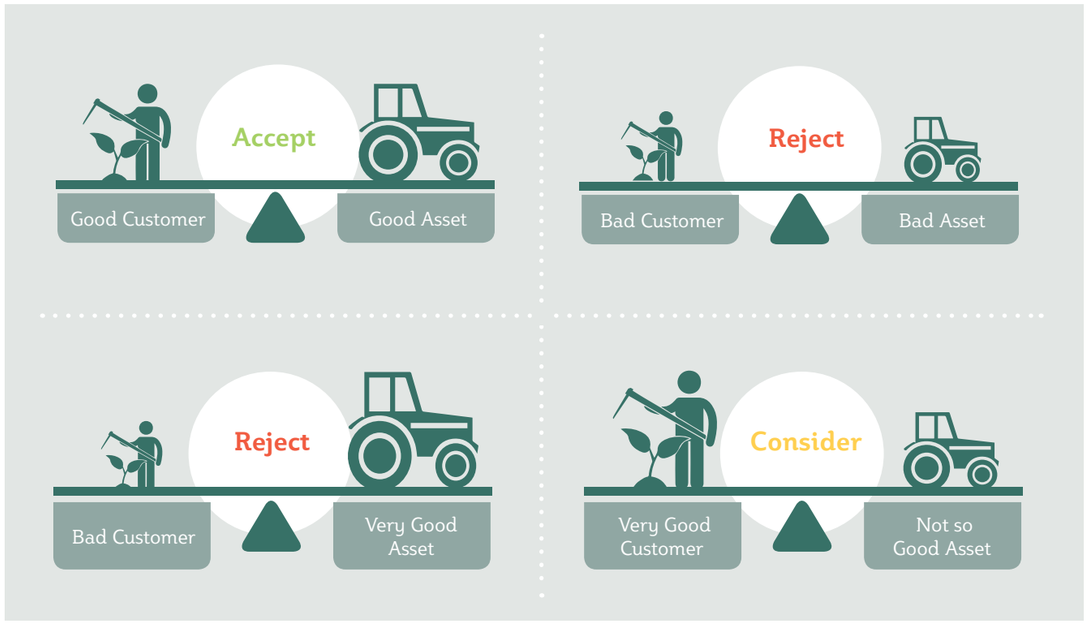
As a lessor's only security in a lease transaction is the legal ownership of the leased asset, the lessor must consider not only the credit risk presented by a potential lessee, but also the risks associated with the asset to be leased. A lessor will always assess the projected future value of any asset that will become part of the leasing company's portfolio. This future value will be determined by many factors, but the critical one is the potential resale value in the event of repossession.

Most leasing companies commence their activities by only offering their product for the acquisition of new equipment (and vehicles). But if an asset is repossessed because it is obviously no longer "new", then there must be a secondary market for that asset in order to make leasing worthwhile. The availability of a secondary market and the appetite of this market to pay fair prices for used equipment will determine the lessor's assessment of the future value of equipment and vehicles.

Sub-Saharan Africa does not have a developed secondary market for used agricultural equipment, including for high-value items like tractors. This adversely affects the future values of assets and makes the leasing of agricultural equipment (such as cultivation equipment, sprayers and seed drills) more risky.

Lessors will always balance the risk of a potential lessee with the risk of leasing a particular piece of equipment. In the early stages of developing a market a leasing sector will especially tend to focus on good customers wishing to lease "good" equipment (from "good" suppliers), as the simple decision continuum below demonstrates.

Figure 10: Decision continuum for lessors



In this context, micro-irrigation equipment is an example of a "bad asset" from the perspective of the financial service provider, although there are clear benefits to being able to irrigate crops (especially for small and medium-sized farmers) in terms of risk mitigation against drought, low unit costs and additional growing cycles for crops. It is difficult for a leasing company to finance these investments given the high costs of recovery in case of a default. Irrigation pipes buried underground are difficult to find, retrieve and re-sell to recover the outstanding capital owed by a lessee. This challenge was highlighted in several contexts, including through interviews in Ethiopia.

More standard leasing packages preferred by FSPs typically focus on financing tractors or other moveable assets, as these are easier to track, repossess and dispose of in the case of default. However, in Tanzania one dedicated leasing company also indicated a portfolio limit on the number of tractors financed, mostly due to the targeted client base of smallholder farmers, but also due to constraints in regard to plot size and covariant risk (of default).

Information asymmetries are compounded in the agricultural leasing sector

Financial service providers often cite their lack of information on potential customers and the sector as a major barrier to developing leasing activities, especially in the agricultural space. Most FSPs interviewed for this study (in Ghana, Zambia, Tanzania, Mozambique, Ethiopia and Uganda) also underlined their own lack of knowledge of the agricultural sector, and admitted that this is a major reason for not attempting to develop products in this space. Lack of information on potential clients is also an issue however, especially in regard to working with smallholders who are less likely to have formal financial records, land registry or personal identification documents. A number of interviewed financial institutions noted that they would consider setting up leasing departments or subsidiaries, but have not yet done so as the level of investment required is substantial. Leasing activities require dedicated procedures and monitoring systems, as well as specialist knowledge among bank staff. This is especially the case for agricultural leasing, which is seen as an inherently risky sector. Institutions generally have a preference of lending to large, established commercial farmers in order to avoid these knowledge gaps and minimise their risk exposure.

Despite this, most FSPs recognised the potential in agriculture and clearly stated that if they understood the sector in greater detail, they would seek to increase their activities in this area. Many institutions also saw the advantages of being a first mover in agricultural leasing, recognising the potential to build a new and profitable business line (as explained in the case study on Poland below). For most FSPs, their lack of knowledge related to, inter alia: understanding the timing of the planting and growing cycle of different crops grown in their country; knowing where and how to market products; and effectively structuring repayments to conform to a customer's cash-flow. Other institutions required capacity-building on starting up leasing activities and integrating them with existing operations, including applying the appropriate procedures, risk management and portfolio diversification required.

Case Study: First mover's advantage in Poland

In 1997 there were around 500 leasing companies active in the financial sector in Poland, most of which were privately owned. None of them offered leasing to the agricultural sector as they all considered it to be too high risk. Around 60% of the agricultural sector was comprised of plot sizes of less than five hectares, though there were many farms that were originally sovhoz (state-owned farms) and which had productive land of more than 1,000 ha. Financially robust equipment suppliers like Korbanek were offering short-term "loans" to more credit-worthy customers using their own capital, or by taking loans from banks (and thereby assuming total risk of customer default). When De Lage Landen Leasing Polska (DLLLP) entered the leasing sector in the second quarter of 1997, financial leasing became available to Polish farmers for the first time. The new president of DLLLP brought 15 years of agricultural equipment leasing experience to Poland, including strong knowledge of credit risk assessment. DLLLP enjoyed a monopoly in agricultural equipment leasing for several years until other companies such as BNP Leasing entered the market having witnessed the profitability of the sector. Other actors then crowded in, leading to market consolidation from increased competition. Today there are fewer than 50 active leasing companies operating in Poland, all of which are subsidiaries of national and international banks and nearly all of whom are highly focused on offering leasing services to the agricultural sector.

Without this knowledge FSPs find it difficult to develop well-designed, profitable products that can accommodate the agricultural system and target new client segments. In Ghana and Zambia, for example, several stakeholders in the financial sector confirmed that they are very interested in receiving technical assistance in order to be able to reduce the perceived risk of agriculture and better expand into the sector. In Ethiopia, there are five dedicated leasing companies (all of which are part owned by local government) currently active in the market, implying there is an interest in expanding leasing activities generally. Although none of these currently engages in agricultural leasing, one or two have expressed an interest in expanding into the sector if they are provided with the right assistance. The recent announcement by the government of Ethiopia (together with the World Bank and the European Investment Bank) of a USD 200 million finance facility dedicated mainly to leasing illustrates the sector's growing momentum.

While asymmetric information can be cited as a general barrier to growth for agricultural finance, there is an additional consideration that is critical to agricultural equipment leasing. This is that FSPs must be able to understand and assess the capability and willingness of farmers to maintain their equipment, in order to minimise depreciation and retain the asset's value. Having this understanding can help FSPs to better assess the risk of potential lessees, in order to support the equipment's value on a secondary market.

Accurately quantifying risk remains a key concern for financial service providers

Although leasing products have significant benefits, FSPs and leasing companies face significant risks, which need to be mitigated for them to offer leasing profitably. Risks faced by FSPs in this regard include policy and default risks, which can be difficult to accurately assess and price. From the policy side, there may be weak regulations or processes in place to repossess equipment in the case of default. In other instances, where regulation and clear processes do exist, there may be limited capacity in the legal system to actually support repossession; for example, it may take months or years to go through a municipal court to obtain a single piece of equipment. The political economy can further aggravate this process. Corruption or a general lack of accountability can increase the risk of wilful default, and further complicate the legal process of recovering assets. Default risk can also be influenced by a number of factors, including a lack of understanding of customer incentives and financial behaviour, or a lack of awareness about a lessee's responsibilities under a lease contract.

These risks are compounded when offering leasing to the agricultural sector, where significant additional (and often covariant) risks such as extreme weather, commodity price fluctuations and market access can affect repayment rates. These risks may not be unique to leasing, but they significantly impact leasing activities. Finally, as described above, risks concerning the ability of the farmer or SME to not only service the leasing agreement, but also maintain the equipment to render it attractive on the secondary market, are also significant.

As a result of these risks, supply-side actors in the study countries that offer leasing generally require large down payments in order to mitigate their financial exposure – usually around 20-40% of the asset value. This creates a significant barrier for most farmers in terms of being able to access leasing products. Many FSPs, notably in Ghana and Zambia, recognise this barrier and would be interested in increasing their exposure to the agricultural sector and downscaling to smaller lessees (including reducing their down payment requirements), if their initial risk can be effectively shared or reduced, for example at a proportion of 40-60%.

Figure 11: Key constraints to supply

Key constraints: Supply side

- Equipment needed by most SHFs is not the best suited for new leasing markets
- Lessors' skills of client risk assessment are insufficient
- Lessors lack visibility on lessee's ability and willingness to maintain equipment
- Enabling environment compounds risks (lack of leasing oversight, barrier to repossession, unclear legal processes etc.)

2.2 Core market: demand

A second key component of the core market for leasing is effective demand, i.e. the extent to which borrowers (farmers and SMEs working in agriculture) understand and are interested in accessing leasing products. Here the analysis shows that there are a number of market failures which hold back demand for leasing across most countries in the scoping study.

In general, farmers need to be farming a minimum plot size in order to justify mechanisation and larger investments in equipment and inputs. In some countries there is scope to reach smaller farmers through aggregation, i.e. through cooperatives, input dealers or different types of brokers, but in most countries the sector remains dominated by smallholder farmers with a high proportion of output consumed by households themselves. This in turn reduces effective demand for leasing as many households are unable to mobilise sufficient resources to invest in agricultural equipment, or generate adequate returns from investments. Similarly, in many contexts there is a lack of understanding of leasing products, and most farmers lack the skills and know-how required to adequately maintain and service leased equipment. Figure 12 provides a snapshot of the level of demand across the countries included in the study, based on the classifications described in Figure 6. A more detailed discussion of demand is presented in the sub-sections below.

Figure 12: Demand side analysis recap

	Ethiopia	Ghana	Kenya	Mozambique	Nigeria	Tanzania	Uganda	Zambia
Demand Side								

2.2.1 Key findings

Effective demand in study countries is comparatively low

Although all the countries in the study have large agricultural sectors in terms of employment – and in most cases GDP – this does not necessarily equate to a strong demand for agricultural equipment or leasing services. Effective demand is driven more by farm size, degree of market access, crop types, levels of mechanisation and farmers' appetite and ability to invest in their land.

The individual risk profile of potential lessees is also a strong determinant of effective demand. If a farmer depends on rainfed agriculture, for example, then better inputs or greater mechanisation will not address the significant external risks that the farmer faces such as fluctuating weather patterns, price volatility and dysfunctional output markets. These factors often reduce the incentives of farmers to invest in their land, regardless of the potential benefits.

Detailed estimates of demand for financing (and especially for leasing) among farmers and agricultural SMEs are generally not available. As a result, this analysis has had to rely on available data, as well as information shared through key informant interviews.

Across all the study countries the vast majority of farmers are smallholder and subsistence farmers with limited incentives and resources to invest in increasing the productivity of their land. Table 1 below uses a cross section of data on agriculture to illustrate that in most countries, the sector is sizeable but fragmented and generally underfinanced, absorbing only a minimal proportion of total private sector credit. While exact levels of mechanisation are difficult to measure, using tractor sales as a proxy shows that mechanisation, though low in all countries, is especially limited in Mozambique, Uganda and Zambia.

Key informant interviews confirmed this, with farmers' unions in Zambia citing low mechanisation among smallholder farmers as a key barrier to increased productivity.

Table 1: Size of agricultural sector in study countries

	Ethiopia	Ghana	Kenya	Mozambique	Nigeria	Tanzania	Uganda	Zambia
% Employment in Agriculture	73%	45%	59%	76%	40%	67%	72%	71%
Agriculture % GDP	42%	22%	30%	29%	20%	27%	27%	9%
Average Size of Landholding (ha)	1.37	2.27	0.5	1.1	1	1.5	1.1	2.1
Agriculture as % of Total Private Sector Credit	25.3%	3.2%	4.3%	5.0%	4.7%	5.8%	7.3%	19.7%

Source: World Bank Indicators. Where World Bank data was unavailable, data has been sourced from a combination of household surveys and agricultural market reports.

In Mozambique, agricultural equipment suppliers estimated that up to 95% of farmers were subsistence farmers with limited ability to absorb commercial financing. Similar figures are echoed in recent research on access to financial services and agriculture in the country. The Making Access Possible (MAP) Mozambique report estimates that nearly 99% of farmers in the country are smallholders, with only just over 26,000 medium and large-scale farms in the country. Mechanisation is also very low and most farmers rely on traditional farming methods (around 4% use animal traction and even fewer use mechanised items).[8] Effective demand for leasing services, especially for high-value agricultural equipment (tractors, harvesters etc.) therefore appears low at first glance, with most farmers struggling to generate sufficient returns from such sizeable investments. A general assessment of demand can hide differences within countries however, as illustrated in the case study below on Ethiopia.

There are also significant variations between countries. Some countries, notably Zambia, are experiencing sustained growth in commercial farming while others, like Ethiopia, have strong cooperative networks implying significant opportunities from aggregation. In some contexts aggregation (via cooperatives, inputs dealers or other types of brokers) can help address constraints around effective demand, with farmers being offered training and support via cooperatives, for example, and these same institutions mobilising funds on behalf of larger groups of farmers. Many challenges remain however, as farmers often need certain types of equipment at the same time. Capacity can also be a significant barrier, with cooperatives and dealers lacking the skills to adequately support farmers with financing solutions (which they themselves may not fully understand). Workable solutions for leveraging aggregators to expand access to finance can also be difficult to replicate and scale.

A recent study on leasing in Ethiopia showed that up to 70% of sampled farmers were interested in leasing agricultural equipment, and able to pay for it (via cooperatives).[9] Similarly, micro-leasing initiatives in countries such as Tanzania show a significant demand from farmers for smaller-scale equipment, though most of these initiatives are small and the full extent of demand is therefore difficult to quantify. The ability of niche leasing companies to scale, thereby supporting systemic change in the overall sector, remains unclear.

Many farmers are unfamiliar with leasing and lack the skills, resources or motivation to adequately maintain equipment

Although leasing has many advantages over traditional loans, it is almost completely unknown to most smallholder farmers. Across the study countries the financial capabilities of rural populations, including farmers, are also limited; farmers often have little exposure to formal financial institutions and tend to use cash or in-kind transactions to meet their household needs. Interventions aimed at increasing the supply of agricultural leasing products are therefore more likely to be effective if they're coupled with demand-side initiatives such as financial awareness campaigns or targeted training sessions that explain the concept of leasing and clearly articulate the advantages and disadvantages of these types of products. Raising awareness and understanding can also, to some extent, address the concerns of financial institutions around finding "good customers" and in time support a better understanding of this customer segment among service providers.

As noted in the key findings around supply (Section 2.1), successful leasing solutions rely on adequate maintenance of assets to minimise depreciation. In financial leasing, the responsibility for maintaining assets rests with the lessee, though ownership of the asset remains with the lessor throughout the lease term.

Uneven demand: The case of Ethiopia

The majority of farmers in Ethiopia are smallholders or subsistence farmers with very limited access to finance. Recent research on leasing commissioned by Nathan Associates shows that although there is strong demand for leasing services in some regions, in others farmers are almost unfamiliar with the concept. Farmers in the Oromia region, where there are some private hire services available, showed a strong demand for leasing tractors, combine harvesters and water pumps. In neighbouring Amhara, awareness of leasing products was so low that demand levels could not be assessed. Leasing interventions should take these variations into account, in the sense that though aggregate demand levels may be low, there may still be pockets of strong demand (from individuals, SMEs or both) worth servicing.

8. Cenfri, Making Access Possible (MAP): Mozambique Financial Inclusion Country Report, 2014.
9. Feasibility Study on Agricultural Leasing, Ethiopia LIFT, 2016.

Maintaining high-value equipment requires certain skills however, which many smallholder farmers lack. Equipment suppliers include a generic explanation of the responsibilities and advantages of regular maintenance of leased assets as part of the sales process, but generally do not provide detailed training or capacity-building for lessees. Past efforts to promote mechanisation in Ethiopia, for example, have encountered these challenges, in that beneficiaries were either unwilling or unable to properly maintain equipment. A number of factors contributed to this, including a lack of due diligence of beneficiaries, a low sense of ownership among farmers, and insufficient maintenance and service infrastructure.

For most farmers, down payments remain a critical barrier to accessing leasing solutions

Access to finance is frequently cited as a key barrier to increased investment and productivity for smallholder farmers. Farmers struggle to mobilise the resources required to effectively invest in their land by themselves, but at the same time lack adequate collateral to access credit from financial institutions.

In this context a key advantage of leasing is that it does not require collateral, since the lessor retains ownership of the asset for the duration of the lease contract. However, lessors still need to mitigate their risk by taking an initial down payment from lessees. In agricultural leasing, concerns around willingness to pay, crop failure and asset depreciation all drive up the size of the initial payment required by financial institutions.

In the eight countries reviewed as part of this study, down payments generally range between 20-40% of the value of the asset, a threshold that is above what most farmers are able to pay.[10] This creates a significant barrier to accessing leasing products and holds back demand. As noted in Section 2.1, financial institutions active in the leasing sector generally voiced concerns about finding "good quality customers", i.e. farmers who are able and willing to pay lease instalments on time, and who maintain assets to minimise depreciation. This challenge emerged across the study countries, but especially in Ghana and Zambia. There are a number of ways to mitigate this barrier however, and many financial institutions were open to solutions and partnerships that could limit their exposure without transferring unreasonable risk to farmers.

Figure 13: Key constraints to demand

Key constraints: Demand side

- The number of farmers able to generate worthwhile returns on equipment that lessors can profitably lease is low, dampening effective demand
- Many farmers are unfamiliar with leasing and lack the financial capability to fully understand the product's obligations and requirements
- Although leasing requires no additional collateral, down payments are often too high for most farmers to meet
- Non-financial constraints and exogenous risks faced by farmers reduce incentives to invest in mechanisation and better input

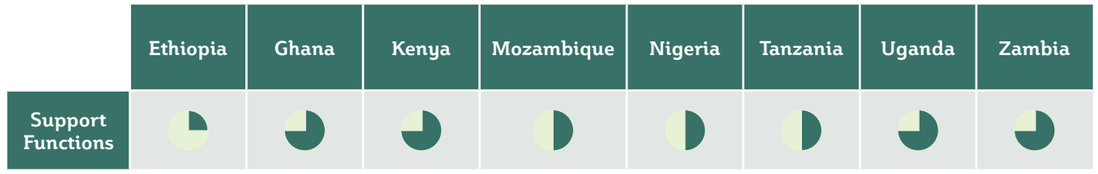
2.3 Support functions

As highlighted in Figure 4, the core market (supply/demand) is surrounded by supporting functions that should facilitate transactions between actors in the core market. In the leasing sector this includes equipment suppliers, distribution networks, product marketing and – to a lesser extent – technology.

A starting point for this analysis was the fact that, without a reliable supply of quality agricultural equipment or basic after-sales services, there is little opportunity to sustainably grow a leasing sector in most contexts. The existence of basic "3S" supply functions (sales, service and spare parts) was therefore a key criterion in the selection of countries to include in the study. The major global manufacturers of agricultural equipment (John Deere, AGCO, Claas and CNH) have appointed distributors of their equipment in all of the countries that were analysed for this report. Figure 14 provides a snapshot of the level of supporting functions that are present across the study countries. These are explained in more detail on the next page.

10. There are exceptions (EFTA in Tanzania charges 10% for a standard lease, for example).

Figure 14: Supporting functions analysis recap



2.3.1 Key findings

Basic support functions are in place across the study countries

The countries within the study were selected in part because of a basic presence of reputable agricultural equipment suppliers and services. Major international suppliers are therefore active across all eight countries included in the study. A common challenge for suppliers, however, is how to improve their presence (and sales), especially in rural areas where population density is generally low and the costs associated with maintenance provision are very high.

Similarly, each of the countries has a basic infrastructure for the 3S supply functions, allowing for after-sales support of agricultural equipment. In most countries, equipment suppliers work through distributors or franchisees who sell their equipment in local markets. These distributors also ensure after-sales services, including basic maintenance and the provision of spare parts. Like equipment suppliers, a key constraint for distributors is their level of presence in rural areas. Most are only present in capitals and other large cities and hubs, which limits the level of support they can offer to farmers in more remote areas.

In light of this, most local distributors stated openly that it is difficult and expensive for them to offer service facilities to farmers in more remote areas. Many also stated that smaller scale farmers generally do not understand the need for daily maintenance and often do not perform this task, thus increasing wear and tear and lowering the value of the equipment. The fact that secondary markets for agricultural equipment remain thin across the study countries makes it difficult for either farmers or leasing companies to realise a residual value from equipment once leases have ended, which further reduces the incentive to perform regular maintenance.

Innovations and Information and Communication Technology (ICT) solutions so far do not address a number of core constraints in the leasing sector

In financial inclusion generally, innovation and ICT have been proven market disruptors. Mobile network operators (MNOs) and mobile money operators can often leapfrog over traditional banking systems, as evidenced in Papua New Guinea (MiCash, BSP Mobile banking), Kenya (M-Pesa, M-Shwari) and Cambodia (Wing Money), for example. ICT's strengths, however, have tended to be in building alternative, low-cost delivery channels for financial services, and to a lesser extent collating and sharing reliable customer information (using mobile phone transactions to create payment and credit histories). Given that some of the main risks in agricultural equipment leasing are the feasibility and cost of asset recovery, and the risk of asset depreciation through misuse, the role of ICT/innovation is less clear. Equipment may be Global Positioning System (GPS) enabled to assist in recovery or to better enable equipment servicing, but there is no significant evidence as yet that this can improve the leasing market overall. The following case study on the evolving activities of Hello Tractor illustrates some of the benefits and limitations of ICT solutions in agriculture.

Case study: Hello Tractor

This start-up, based in Nigeria, has gained significant attention over the past two years for its innovative 'smart tractor', which has GPS-integrated machinery and is offered at a lower price point (USD 4,000) than comparable models. The GPS antenna alerts the owner when regular maintenance is needed, based on tractor usage data. The company also offers additional features such as an SMS service to their Abuja headquarters to order replacement parts and a coordination app that allows owners to turn the productive use of the tractor into a service (much like the Uber app). Using US-based dispatch offices the tractor's owner can, for a set fee (USD 75), provide services to nearby farms as a way of generating additional income.

continued on the next page...

Case study: Hello Tractor (continued)

The company has to date raised USD 3 million from USAID and other donors and sources, selling approximately 1,000 tractors as of May 2016. Desk research shows the company is primarily an equipment supplier, and does not currently offer finance solutions. At the same time, the tractors sold to date appear to be highly subsidised by public funding. The Central Reserve Bank of Nigeria guaranteed 75% of the smart tractor loans to farmers in the country and IFAD has provided funding through the government of Niger to finance 70% of loans used to buy these tractors.

While the business model shows promise in downscaling equipment to reach more farmers in Nigeria and West Africa, several questions remain unanswered:

- How can innovative solutions be taken to scale?
- Can SMS replacement parts services improve the expertise required for servicing in remote areas?
- Is there a feasible market for "rental" services of such equipment, given the existing information asymmetries in the market and the highly synchronised needs of farmers working in the same communities?
- Is the model commercially viable and possible to take to scale? Will others be able to replicate and deepen the market or will this evolve to be a monopoly provider?

At the same time, however, technology still plays an important role in supporting agricultural equipment leasing. A key challenge for many FSPs expanding into leasing is the lack of effective and easy-to-use IT solutions for portfolio and risk management. Many firms rely on general back-office systems and try to adapt them for their leasing activities, but different cash flows, payment systems and accounting treatment can make this difficult. Others, often smaller niche companies, have few resources and only limited digital back-office operations. Although there are ready-built software packages available for leasing, not all of these work well for agriculture and many can be complex and difficult for branch staff to use. The introduction of a tailored, digitised management information system (MIS) in a leasing company's back-office functions can therefore have a marked impact on its efficiency and effectiveness in both client risk assessment and portfolio management. With these functions working well, companies would have greater opportunity to achieve growth and scale.

Equipment suppliers can facilitate leasing, but are not well placed to offer finance directly

A major market constraint highlighted by interviewed suppliers was the lack of sufficient financing options available to farmers, which in turn held back equipment sales. Equipment suppliers in Zambia and Mozambique highlighted the challenge of engaging with financial institutions, which many saw as risk averse and slow with respect to credit risk decision making. The general view was that most large banks are either uninterested in financing agriculture, or lack the technical skills and knowledge to fund agriculture profitably.

The fact that distributors have a greater understanding of agriculture than most banks, as well as a better presence in rural areas, raises the question of whether distributors themselves could offer financing solutions for farmers since they are closer to the end customer and the provision of finance could support sales growth. Although distributors sometimes offer payment by instalments, their business models are generally not conducive to the provision of finance. Most lack the appropriate risk management systems to be able to adequately calculate fees, oversee repayments, and anticipate and manage non-performance within a credit or lease portfolio. In Zambia, Afgri – a John Deere distributor – confirmed that they had tried to offer "supplier credit" as part of an offtake contract for maize, but this had not been successful due to a combination of defaults and problems with the maize harvest. The initiative has now been discontinued. Conversely in Kenya, Chase Bank struggled after trying to gain a competitive edge offering products with interest rates that were subsidised by both manufacturers and dealers.[11] Suppliers also lack the opportunities for portfolio diversification that are generally available to banks. Even smaller leasing companies engage in significant portfolio diversification to pro-actively manage their risk exposure within agriculture.

In some cases distributors may partner with FSPs to include financing as part of their general offer, but the products themselves are generally managed by the FSP. Partnerships between distributors and financial institutions exist in a number of the study countries, including, for example, in Zambia. According to equipment suppliers they involve multiple challenges, including slow decision times by FSPs and a tendency to work only with the very top customers.

11. Chase Bank has since gone into receivership following financial difficulties unrelated to leasing.

Case Study: Dealer credit versus leasing or hire purchase

Dealer credit is when the dealer begins to fulfil both the function of equipment provider and of finance provider. "Easy terms", "extended credit", "instalment plan" and "buy now, pay later" tend to be terms used by dealers to entice customers to buy vehicles or equipment that they cannot afford to pay for upfront. The dealer creates a "loan" agreement and the customer signs the agreement as a party along with the supplier. The legality and enforceability of these agreements can be questionable at times, especially in situations where the financial sector is not well regulated. The overarching problem with this type of credit facility, however, is that vehicle and equipment suppliers are generally salesmen, and not always in the best position to make sound credit risk decisions. The conflict between wanting to make a sale and gauging whether a potential customer is a "good" finance customer is difficult to overcome.

An additional challenge relates to cash flow and funding for suppliers themselves. Manufacturers will sometimes provide delayed payment terms to the supplier, e.g. 60 days or 90 days (this means the supplier must pay the manufacturer 60 days after the vehicle or equipment is shipped). Although this lag should be sufficient in the normal course of business for a supplier with a high level of sales (turnover), it is generally not enough time if the supplier is offering "terms". The supplier therefore ends up paying 100% of the goods to the manufacturer while having only received a proportion, 35% for example, from the customer who has signed an agreement for "delayed payment". Only very strong suppliers can sustain this type of drain on their cash flow without requiring external financing to cover the receivables on their own loan agreements.

The introduction of finance/leasing companies to a market usually brings real point-of-sale (POS) finance to a vehicle or equipment dealer through leasing or hire purchase. Finance companies normally start by co-operating with car dealers, then expand to haulage equipment, construction equipment and sometimes (but not always) to agricultural equipment dealers. The sales team of the finance/leasing company then trains the sales people working for the dealer on the features and benefits of leasing, and how to use it to close a sale. Dealer salespeople can then sell leasing products "on behalf" of the leasing company. When this works well it allows leasing companies to make decisions quickly, as they already know the supplier and the asset, so only have to verify the credit-worthiness of the new customer. Many large manufacturers have understood not only the need for POS finance, but also the profit opportunity, so have established their own finance/leasing companies or even banks. Examples are John Deere, GE and Ford, though these are not active in all markets.

However, suppliers also admit that the pool of potential customers tends to be quite small, and as these partnerships facilitate additional sales they are viewed as positive overall. The above case study on dealer credit highlights some of the common challenges that emerge when equipment suppliers try to include financing in their service offering.

Although equipment suppliers are not well positioned to offer financing directly, they can still play a significant role in facilitating leasing and supporting the activities of leasing companies and banks. Given their expertise and understanding of agriculture at the local level, suppliers can accurately assess the equipment needs of farmers and help them to access the best equipment to address these needs, supporting productive investment and better repayments. Suppliers can similarly support FSPs in marketing their products, and also build the capacity of end customers by sharing key information with them around maintaining assets. Given the limited awareness around leasing that exists in several countries in the study, equipment suppliers could also complement tailored awareness-raising campaigns with targeted training sessions around the advantages of mechanisation and possibilities for financing.

Figure 15: Key constraints for support functions

Key constraints: Support functions

- Financing options for larger scale agricultural equipment are limited, holding back sales
- Equipment suppliers are based mainly in or near the capital city and their reach in rural areas is limited
- Limited skills among farmers increase risk and concerns around adequate and timely maintenance of equipment

2.4 Rules and regulations

Rules and regulations for leasing can be influenced by financial sector regulations, a leasing law (if one exists), laws of contract, sale of goods acts, fiscal laws and VAT, among other things. Moreover, the policy environment is affected not only by the passing of laws or regulations, but also the relevant capacity and appetite to enforce these laws or regulations.

As mentioned in Section 1.5, this study has considered rules and regulations from a "red flag" perspective, as the additional input required to perform a full policy review and analysis is significant. The section below highlights broad key findings around policy environments, punctuated with key informant information where appropriate. The section has been approached with a view to illustrate what an ideal rules and regulation environment should be, considered from the broad categories of: a financial leasing law; leasing regulation, supervision and licensing; fiscal issues; and VAT issues.

Key findings

A leasing law is not a necessary or sufficient condition for a supportive leasing sector

Many countries that have a vibrant leasing sector do not have a leasing law; the UK, for example, is a country where other supportive regulations and laws of contract and sale of goods acts provide a clear enabling structure. The lack of a leasing law should not be a deterrent to the financial sector to develop leasing as a product, as long as fiscal treatment is clarified before any leasing operations commence. The Rwandan leasing sector, for example, is currently completely closed due to a lack of agreement between lessors and the fiscal authorities. The International Finance Corporation (IFC) is working with stakeholders in Rwanda to achieve an agreement and to support the development of the leasing sector generally, as illustrated in the case study below.

Some countries included in this study, such as Uganda and Tanzania, have draft leasing bills or laws, but these have limits which curtail their ability to encourage leasing growth in their respective countries.

Case Study: Rwandan leasing sector

The National Bank of Rwanda (NBR) is currently working with the IFC to assess the state of financial leasing in Rwanda. Many banks began offering leasing products to their customers in 2007/8 as they recognised the benefits for broader asset finance. Due to a number of reasons, including a lack of clarity around the fiscal implications of the product, the banks stopped offering leasing and today there is no financial leasing activity in the country. The NBR and Ministry of Finance wish to restart financial leasing activities however, and are focused on improving the associated legislation as well as general understanding of the relevant fiscal issues. Both organisations view financial leasing as something that can improve access to finance for the SME sector, and indirectly support a strong economy.

Tanzania has basic regulations in place to govern leasing, although gaps remain in several key areas, with hurdles for contract enforcement and repossession in particular. Uganda is another example of how complex the policy environment can be: the IFC has been working with the Ugandan government to develop a leasing law for the past two years. The Ugandan Law Reform Commission has prepared a study report on the Financial Leasing Bill, and consultations are underway to review the bill from the perspective of the public and private stakeholders. The bill will be submitted to the Minister of Finance, Planning and Economic Development once consultations are completed.[12] It will define the obligations of the lessor, lessee, supplier, repossession, insurance and third party claims. To date the draft bill is still not passed, and there is no indication this may happen soon.

Learning from international best practice, leasing laws should be relatively simple documents to mirror the fact that leasing is a comparatively simple product. Key components of these laws include:

- Definition of financial leasing
- Requirements of a bilateral contract between the lessor and lessee
- Rights and duties of a lessor
- Rights and duties of a lessee
- Duties of the supplier of the asset to be leased
- Right and procedure of repossession in the event of default by the lessee.

The terms and conditions of a leasing contract should comply with all relevant laws. If there is no leasing law then the contract must still comply with laws on contract, sale of goods, fiscal issues and the civil code or basic common laws.

12. http://www.ulrc.go.ug/content/development-law-financial-leasing.

Language matters in leasing laws

Lessors should also be wary of any references in the civil code or common law to words such as "hire" or "rental". Some civil codes have references to property or apartment rental and usually seek to protect innocent tenants. As there tends to be a significant lack of knowledge of financial leasing (for vehicles and equipment) within the court system, the judiciary can often default to common law and equate a lessee with a tenant to the detriment of lessors.

In addition, despite the fact that leasing laws and fiscal laws are intimately entwined, leasing laws should ideally not include direct references to fiscal laws or issues, as if any of these (related to leasing) are subsequently amended it can make the leasing law invalid or unenforceable.

It is as yet unclear who is best placed to regulate the leasing sector, especially in Africa

In the same way that some countries have a leasing sector but no law, some countries have a leasing sector but no regulator. Banks must be regulated (usually by the central bank) for many reasons, not least the fact that they are deposit takers. Leasing companies, although they are financial institutions, do not take deposits from individuals and are generally funded by larger financial institutions (often a parent bank). An argument is sometimes made that leasing companies can therefore be self-regulating and that their funders (lenders) should have sufficient credit risk assessment skills to make prudent lending decisions. However, in most developing countries it is better to have some form of regulation and supervision, as this makes external funders such as development capital providers or international financial institutions more comfortable with lending to leasing companies.

Another big issue relates to which institution should supervise leasing companies. There is no obvious answer to this as often even senior central bank officials know little about leasing. Where leasing companies are mostly subsidiaries of banks, it can be argued that the fact that banks themselves are regulated and supervised by the central bank is sufficient. This is the case, for example, in Uganda, where independent leasing companies are not regulated while those operating under commercial banks are regulated by the central bank. In Kenya and Zambia, banks and leasing companies alike are regulated by the central bank. In Ethiopia, operating and finance leases are regulated by different entities (the Ministry of Trade and National Bank of Ethiopia respectively).

In the short term it is probably prudent that the central bank regulates leasing companies and activities. However it is imperative that central banks address any gaps in their knowledge of leasing by engaging with specialists who can provide guidelines and support drafting of policies and procedures. The Rwandan Central Bank, for example, recognising there was insufficient knowledge within the institution to create strong regulations enabling the regrowth of the country's leasing sector, requested the IFC to redraft its proposals for regulating the sector.

The regulatory environment must also consider fiscal laws or other fiscal issues

The key fiscal issues associated with a financial leasing law are the treatment of fiscal depreciation and also lease rentals (repayments). International accounting standards recommend that fiscal depreciation be taken by the lessee although the lessor is the legal owner (the premise being that the lessee has the rights of use and possession), and that the interest element within a lease rental should be a deductible expense (against taxable profits/income) for the lessee and taxable income for the lessor. These key issues place financial leasing on a level playing field with bank loans.

VAT treatment is more important than VAT levels

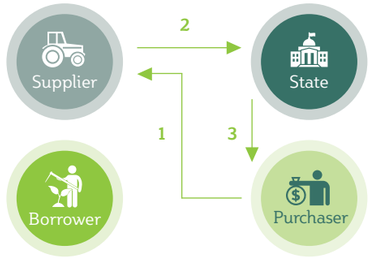
Under international accounting (and fiscal) principles, both types of leasing (financial and operating) attract VAT, as leasing is considered a financial service. By contrast, bank loans do not attract VAT on repayments, either on principal or on interest. In many developing financial sectors leasing is a product that is offered primarily by banks. Banks tend to overcome the VAT "issue" in ways that do not adhere to the international accounting standards. Some banks will state they offer leasing but in fact offer asset-backed loans, as banks are VAT exempt globally (though in some countries banks may be granted partial exemptions by the fiscal authorities). Some countries offer VAT exemption or zero rates on agricultural machinery if the government considers this to be a key sector. In Ghana, for example, the fiscal environment allows machinery, apparatus, appliances and parts intended for agriculture, veterinary practice, fishing and horticulture to be exempt from VAT and National Health Insurance Levies. Similarly, the supply of machinery, tools and implements suitable for use only in agriculture are zero-rated in Uganda. Kenya formerly used a zero-rated VAT measure on imported agricultural machinery, but this was lifted in 2013.

Although VAT is an additional tax on the leasing product, in some cases potential lessees are registered for VAT. The effect of this is that although a lessee must pay VAT on lease repayments, she or he may also recover or offset the VAT against VAT receipts.

This makes the product more favourable to VAT-registered SMEs over individuals, as demonstrated in Figure 16 below. However, given the level of informality in the agricultural sector in nearly all of the study countries, most farmers and small businesses are likely to struggle to recover VAT. This may increase the overall cost of leasing products, though other factors can still make the structure attractive.

Figure 16: Standard VAT practices

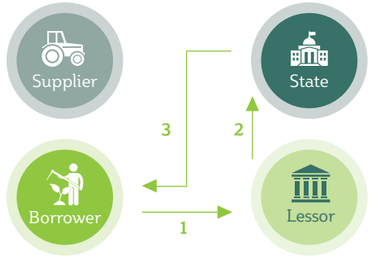
VAT flows: Asset Purchase



1. The Purchaser pays the invoice value to the Supplier plus VAT
2. The Supplier retains the value of the asset paid by the Purchaser and transfers VAT to the state
3. The Purchaser recovers the VAT s/he paid to the Supplier from the state

Situation at the end of the process – **neutral**

VAT flows: Financial Lease Contract



1. The Lessee pays the lease rental (repayment) to the Lessor plus VAT
2. The Lessor retains the value of the rental paid by the Lessee and transfers VAT to the state
3. The Lessee recovers the VAT s/he paid to the Lessor from the state

Situation at the end of the process – **neutral**

If the purchaser is not VAT registered stage 3 will not occur

Individuals are not necessarily worse off for paying unrecoverable VAT on the leasing product. If the lessee is not VAT registered then she or he will be unable to recover VAT payable on lease repayments, but she or he will also be unable to recover VAT payable on equipment financed by a bank loan. The relative benefits between the two products would then depend on the difference in interest rates. As noted above, leasing products may still offer more favourable terms for tenor, collateral requirements and interest rates, making them an attractive product notwithstanding VAT. VAT is therefore not always a deterrent for leasing demand. As highlighted in one stakeholder interview, the inability to claim back VAT does not appear to be a significant deterrent even at the micro-leasing level, where the majority of businesses are informal. Those able to afford the additional cost often opt for leasing regardless, especially in situations where other forms of finance might be unavailable or impractical. Although it is not possible to directly quantify the impact of VAT on effective demand, it does not seem to be a binding constraint to leasing growth.

Figure 17: Key constraints to rules and regulations

Key constraints: Rules and regulations

- Leasing policy is disjointed between multiple laws or policies
- Obligations and remedies for lessor, lessee and supplier not always clearly defined

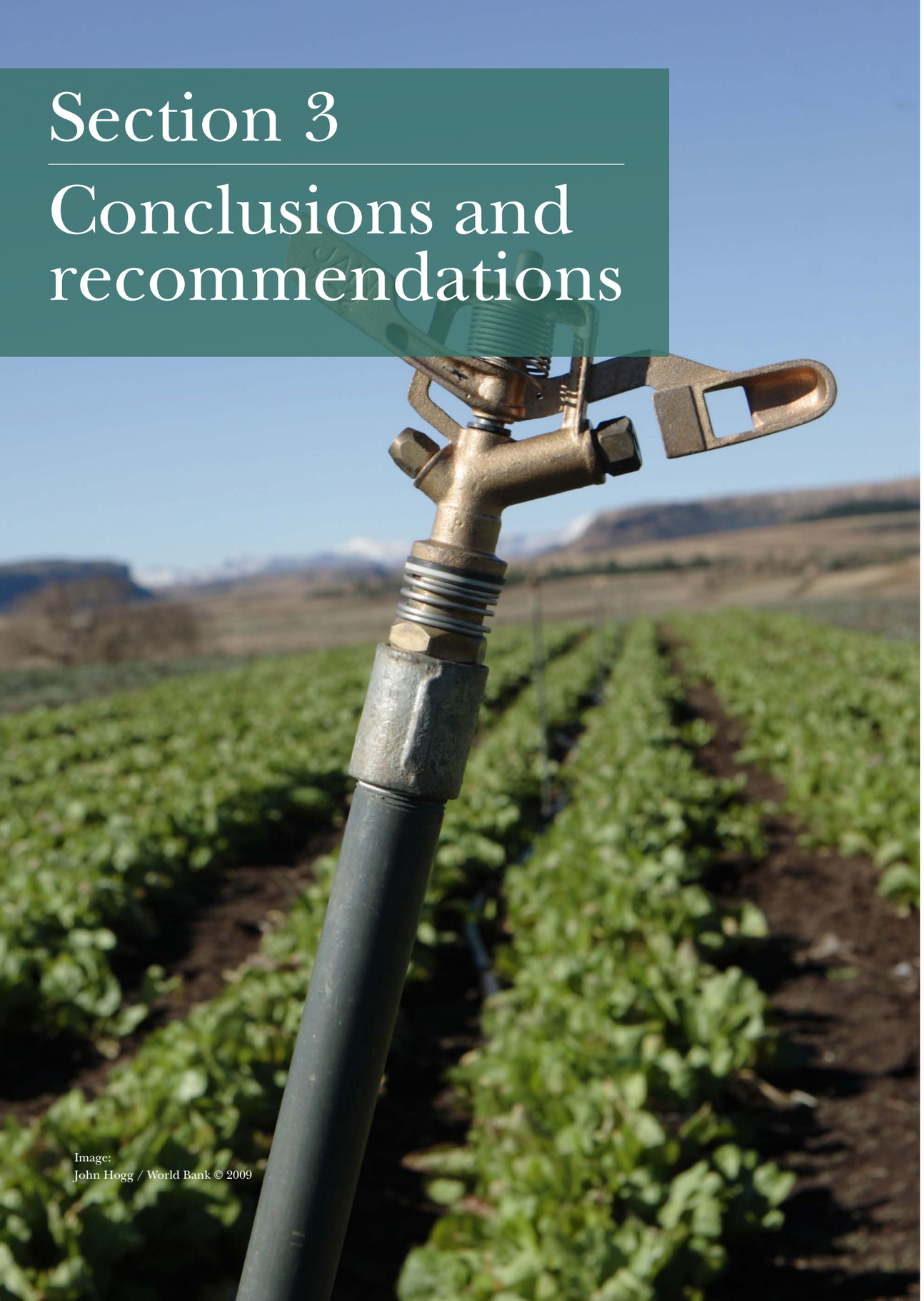


Image:
John Hogg / World Bank © 2009

Section 3

Conclusions and recommendations

The analysis shows that across the eight countries reviewed for this study, access to finance – including leasing – remains a major challenge for the agricultural sector, with most farmers (except the large commercial farmers that exist to varying degrees in different countries) unable to develop their land into more productive units. Availability of finance for small-scale commercial farmers and smallholders will likely only develop slowly when, as was demonstrated in the Polish example in Section 2.2, a first mover financial institution makes the decision to accrue sufficient knowledge about agriculture to enable it to operate safely and profitably in the sector. Agricultural equipment leasing tends to be the favoured form of asset financing in countries where both the agricultural and financial sectors are well developed, with financial sectors historically developing first. In the countries reviewed for this study, agricultural leasing remains very limited overall, which to some extent illustrates the comparatively low level of development of both sectors in these countries as compared to many other developing countries.

A number of specific constraints are to different degrees holding back leasing growth in the study countries, and these are summarised in Figure 18 below.

Figure 18: Summary of key constraints to agricultural leasing

Constraints to agricultural equipment leasing

Key constraints: Supply side

- Equipment needed by most SHFs is not the best suited for new leasing markets
- Lessors' skills of client risk assessment are insufficient
- Lessors lack visibility on lessee's ability and willingness to maintain equipment
- Enabling environment compounds risks (lack of leasing oversight, barrier to repossession, unclear legal processes etc.)

Key constraints: Support functions

- Financing options for larger scale agricultural equipment are limited, holding back sales
- Equipment suppliers are based mainly in or near the capital city, and their reach in rural areas is limited
- Limited skills among farmers increase risk and concerns around adequate and timely maintenance of equipment

Key constraints: Rules and regulations

- Leasing policy is disjointed between multiple laws or policies
- Obligations and remedies for lessor, lessee and supplier not always clearly defined

Key constraints: Demand side

- The number of farmers able to generate worthwhile returns on equipment that lessors can profitably lease is low, dampening effective demand
- Many farmers are unfamiliar with leasing and lack the financial capability to fully understand the product's obligations and requirements
- Although leasing requires no additional collateral, down payments are often too high for most farmers to meet
- Non-financial constraints and exogenous risks faced by farmers reduce incentives to invest in mechanisation and better input

3.1 Conclusions

Although each country faces its own particular constraints and challenges, many of which are presented in the country notes contained in Annex 1, five overarching conclusions emerge from the overall analysis.

The availability of financial leasing for agricultural equipment greatly increases mechanisation, especially for smallholder farmers

As Section 1.1 explains, smallholder farmers often use financial products for multiple purposes within their business or household, e.g. a loan could be used to finance a productive investment, a hospital bill, or equally consumption smoothing for cash-flow purposes. Financial leasing can only ever be used as a means of asset financing however, and as it does not require the pledging of collateral (since the leasing company is the legal owner of the asset) it has become a popular product for individuals, SMEs and commercial farmers in many developing countries. Although leasing activities in the countries included in this analysis are currently limited, the sector is growing in a number of countries, including Kenya and Uganda. These countries and others, such as Tanzania, are also seeing some growth in related financial products such as asset financing.

As Figure 10 demonstrates, an FSP will initially only lease "good" equipment to "good" borrowers. However, as the FSP's business grows and it gains a better understanding of the market in which it operates, it will improve its client risk management and be better placed to make leases to "good" borrowers for "not so good" equipment, such as irrigation reels, milking parlours and storage equipment. The momentum currently seen in a number of study countries may therefore in time increase access to finance for farmers and agricultural businesses currently operating at very limited scale.

Offering leasing products to the agricultural sector has traditionally been viewed by lessors as problematic, as it is easier and more secure to build a portfolio leasing vehicles, for example, and most lessors know little about farming. However, as the need and appetite of a leasing sector to expand grows, most lessors ultimately discover that the agricultural sector can be a great source of new business, provided some basic knowledge has been gleaned and that quality equipment (supplied by the distributors and dealers of global manufacturers) is available.

As lessors become more comfortable with the sector and with its erratic cash flows, they require lower down payments on standard equipment such as tractors, and their appetite to lease non-standard equipment increases. Although mechanisation is only one element required to improve agricultural productivity (other elements include quality seeds, fertilisers and herbicides, and general improvements in husbandry) it is a very important element even for relatively small-scale farmers.

Increased access to finance, and a resulting increase in mechanisation, can significantly improve the productivity of agriculture but it will not address a number of the structural challenges faced by the sector in sub-Saharan Africa. Most subsistence farmers will never be able to afford a lease, and many have limited need for equipment given their small plot sizes and minimal commercial activities. If smaller plots were to be consolidated and farmed as larger plots (as described in the Moldovan case study in Section 1), then the farmer, the lessor, the owners of the plot, the equipment supplier and the country's economy are all likely to benefit in the long run.

A suite of mutually reinforcing interventions is required for systemic change

As Figure 18 shows, constraints from throughout the market system create an environment where effective demand to lease equipment is limited and the incentives for financial service providers to offer agricultural leasing products are low. Most farmers are unaware of how leasing works and what its potential benefits are compared to traditional bank loans, and financial service providers do not see sufficient market opportunity to justify investing in the skills and systems required to offer quality leasing products to the agricultural sector. Similarly, although major equipment suppliers are represented in all eight countries generally by third-party distributors, the current low sales volumes result in these distributors having only a limited footprint in rural areas, thus reducing their ability to effectively provide after-sales services.

Addressing these constraints will require a range of interventions at different levels of the market system. Within the core market, the awareness and knowledge of both farmers and financial service providers need to be strengthened, providing each with a better understanding of how leasing products work and what their benefits are.

Although constraints can be mitigated with well formulated interventions and initiatives, if activities are aimed at only one level of the market system their impact is likely to be limited. To facilitate lasting systemic change, stakeholders working in agricultural finance should aim to address barriers using coordinated interventions at multiple levels of the market system, as illustrated in the case study below on FCAS countries. While there are differences between FCAS and the countries of this study, they share a common trait of thin markets.

Case study: Working in fragile and conflict-affected states (FCAS)

The IFC is working on leasing in a number of FCAS countries, including South Sudan and Liberia, which can provide some lessons for other stakeholders. While the countries of this study share a common characteristic of thin markets, FCAS countries additionally suffer from risks and uncertainties linked to security and political unrest.

In South Sudan, the IFC is currently finalising the drafting of a Financial Leasing Law, which will be followed up with an awareness campaign of the product in the SME sector as well as provision of technical assistance to the banking sector. Several workshops have already been conducted by the IFC to promote leasing to both the banking and SME sectors in the country. However, due to the unstable environment that still exists in South Sudan, the IFC's work has to date focused only on the capital city of Juba.

The IFC has also joined forces with the National Investment Commission (NIC) to introduce financial leasing to Liberia. There is one non-bank leasing company in the country, M&E Leasing Limited, created with an initial capital investment of USD 500,000. The company was inaugurated in 2014 and is projecting that the leasing sector has a potential new business volume of at least USD 30 million per annum. The IFC and NIC will jointly promote awareness of the leasing product to both the financial and SME sectors.

Although drafting leasing laws and regulations and providing technical assistance are important in FCAS countries such as South Sudan and Liberia, they are only tactics to help achieve an overall strategy of developing the leasing sector in these countries. A holistic approach can better crowd-in private sector actors in these thin and fragile economies. For example, it is critical that IFIs and other development partners help nascent leasing sectors by taking equity positions in existing institutions, as well as helping to start new financial services institutions, for example by providing local currency loans. Another important tactic that should be put in place is the awareness campaign: making not only the financial sector aware of new leasing products, but also equipment and vehicle suppliers, as well as the SME sector itself.

Often there is a trade-off between supporting innovation and facilitating systemic change

Although there are a number of niche companies providing leasing services to SMEs, including to smallholder farmers, few (if any) of these are currently working at scale. A key part of the business model for many of these companies is to be well established in local communities and conduct detailed, tailored assessments of potential customers. While this may support good portfolio growth and performance, it also requires significant investments that are difficult to replicate or rationalise. Back-office resources can also be a challenge, as MIS systems have often grown organically and may not be fit for higher transaction volumes, reducing operational efficiency. Thus many companies are piloting and applying business models that allow them to effectively reach underbanked populations, but their current impact on the wider financial sector is limited. Most leasing companies, especially those focusing on micro-leasing, also struggle to access funds themselves. Many rely on banks for commercial funding, and need to incorporate the cost of funds in their product pricing. Funds (i.e. loans) also need to be repaid, limiting opportunities for portfolio growth. As a result, niche leasing companies aiming to reach small-scale farmers and businesses generally depend on concessionary funding to support their growth.

Facilitating systemic change can often involve engaging with more traditional approaches and market actors (international banks, established equipment suppliers etc.) but their resources and outreach are much broader and changes to their behaviour can have a significant impact on the approach of the sector as a whole. While there may be opportunities to support niche players to access additional financing or to broaden their outreach via digital platforms, this is unlikely to facilitate systemic change unless it is complemented by additional interventions supporting effective demand or strengthening enabling environments.

Many areas related to agricultural equipment leasing require further analysis

As is highlighted in Section 1.5, there is little to no secondary market information available in the countries of this study and data is therefore primarily drawn from interviews with key stakeholders. While this is a direct source of new information, especially with key contacts in the industry, it does create a risk of biased information entering the study especially in regard to indications of market failures that could be addressed by stakeholders working in agricultural finance. Implementing and adding further qualitative and quantitative studies to the body of evidence would help to triangulate and strengthen findings.

In particular the sector would greatly benefit from further analysis regarding effective demand for finance (especially leasing and asset finance) as well as in-depth analysis on rules and regulations. On the demand side, tailored customer or business surveys could strongly support the development of the sector, and assist FSPs to develop appropriate products for a specific client segment. Although there is a growing body of data available on financial access and behaviour for most of the study countries (through Finscope surveys and other initiatives), many gaps remain in terms of understanding demand and capacity among the small-scale farmers and businesses that are most likely to use and benefit from leasing products. Demand assessments could also assist equipment suppliers or distributors to reach a greater number of potential clients or locate new service locations through which to increase their sales base.

On the rules and regulation side, policy environments for leasing are highly complex and require in-depth analysis in order to determine whether or not they are supportive for the development of the leasing sector. Some interviewed stakeholders listed policy reform as a priority for future market growth, notably in Tanzania and Uganda, but it is difficult to offer concrete recommendations in this space as there is little recent analysis available on enabling environments for leasing in the study countries. Not only is the potential legislation taken from a variety of overlapping laws, policies and regulations, it is also highly influenced by political economy and the government's capacity to enforce laws, as demonstrated in different ways in Ethiopia and Uganda. VAT treatment and its different impacts is a particular area that could be better understood and potentially addressed by policy, but it is also likely to be a contentious issue for host governments and may be difficult to influence.

Well-designed interventions that maximise impact will require communication and coordination between different donors and stakeholders

As highlighted above, significant opportunities exist for mitigating the many market failures that currently hold back agricultural leasing. However, a number of development organisations (as well as other stakeholders) are already active in leasing, and in some cases also in agricultural equipment leasing. For example, European Investment Bank and IFC/World Bank are active on the supply side of the core market in some countries, in terms of supplying technical assistance to FSPs and making capital investments. IFC/World Bank are also very active in the policy reform environments, in terms of drafting leasing laws and regulations, as well as advocating for tax reforms. However, they are less active in terms of market information and understanding demand-side constraints and dynamics. A number of development initiatives are also active in supporting and investing in micro-leasing across the continent.

Following on from the above conclusion that mutually reinforcing interventions should be taken across the market, the partnership potential in the leasing sector is high. Stakeholders should consider what types of interventions they are in the best position to support, i.e. small-scale innovations and business models pushing the frontier of financial access, or larger interventions facilitating longer term, systemic changes in behaviour at different levels of the financial and leasing markets. Under either scenario there is potential to collaborate with other stakeholders working within leasing, both in terms of sharing information and learning, and more proactively coordinating initiatives to address multiple market constraints.

3.2 Recommendations

Drawing on the conclusions set out in the preceding section, five main recommendations emerge for interventions that stakeholders interested in promoting agricultural leasing could pursue to support the sector in sub-Saharan Africa. These recommendations focus primarily on addressing market failures at the level of the core market (supply and demand) but also link to supporting functions, predominantly via partnerships with market actors present in these areas.

Recommendation 1: Interventions supporting farmer/SME awareness of leasing

One of the main constraints for agricultural leasing in the eight study countries is a lack of financial capability and awareness among farmers who could be potential users of leasing products. Financial education is generally low, with most farmers unclear about the difference between traditional credit and leasing products, and why leasing could be a more attractive option for them. At the same time financial service providers and leasing companies, to the extent that they are active in the agricultural sector, do not have the resources to implement awareness-raising campaigns targeting potential customers.

Co-funding or otherwise supporting small, targeted marketing campaigns about agricultural leasing could improve demand and support greater awareness of available financial products among rural populations. Detailed awareness-raising via established channels such as market days or community meetings also offers opportunities for repeat engagement with farmers. The use of radio programmes, interactive theatre, or videos can in these instances demonstrate how leasing works in practice, tangibly highlighting its advantages and disadvantages. More general awareness-raising initiatives should ideally be complemented with in-depth training sessions managed by equipment suppliers, who also have a stake in supporting demand for agricultural equipment. The European Bank for Reconstruction and Development (EBRD), for example, has successfully used video tutorials (shown by equipment suppliers to prospective customers) to demonstrate how financial leasing works. Targeted awareness-raising and capacity-building initiatives would be beneficial in all eight study countries, but especially in the countries that already show good potential for leasing growth (Ghana, Kenya, Zambia) or where there is increasing momentum for leasing solutions (i.e. Ethiopia).

Recommendation 2: Developing MIS solutions to facilitate provision of leasing services

When banks attempt to enter the leasing sector (either by offering leasing as a subset of existing products, or by creating a leasing subsidiary) they often find that their core banking system is not compatible with the different inputs and outputs of a lease receivables management system. Any bank considering creating a leasing subsidy will not be able to rely on its current MIS; one Rwandan bank stated that this issue was the main reason it left the leasing sector. Smaller or independent leasing companies also often lack sophisticated MIS solutions that can match their knowledge of the sector.

An effective IT platform for leasing must produce extensive reports on diverse subjects, such as new business performance (volume, tenor, margin) and financial statements (local and international and management accounts) among others. Leasing companies have two types of business partners; the lessees (customers) as well as the asset suppliers, with a need to manage multifaceted information on both types. Leasing is also a service that (normally) attracts VAT, whereas banking is generally exempt.

Although it is possible to purchase IT platforms for leasing "off the shelf", few have been developed by leasing specialists and many are not fit for purpose. These platforms often offer user-friendly front-office systems, but have poor back-office systems and are inadequate in terms of report generation.

There are two ways in particular through which stakeholders could support the development of an effective IT platform for leasing activities. One is via a traditional grant mechanism, offering funds to a partner with the capacity, skills and track record to develop and build this type of system. The other is through a more commercial development capital approach, potentially in the form of a returnable grant or an investment in a firm already developing this type of solution. The objective of this type of intervention would be to facilitate affordable access to an effective IT platform for start-up leasing companies, with the view to helping them manage costs and more rapidly scale activities. A longer term objective could be to make this platform the industry standard across Africa.

If this type of intervention were to be pursued via more commercial means then the investment required to produce the platform could be recouped by selling a user licence to multiple leasing companies. It could also become an opportunity for other donors to help finance the acquisition of the licence. Beneficiaries of the intervention would primarily be smaller companies engaged in micro-leasing, but it could also be interesting for larger FSPs looking to expand into leasing. The intervention could have a market throughout the region, but is likely to have most traction in countries such as Kenya, Tanzania and Zambia where there is an existing presence of smaller leasing companies.

Recommendation 3: Provision of technical assistance (TA) to financial service providers

A recurrent theme in interviews and discussions with FSPs (especially large banks) across the different study countries was an interest in better understanding both the general leasing sector and the agricultural sector. A wide cross section of stakeholders highlighted their interest in pursuing more leasing activities, including in the agricultural sector, provided they could receive technical assistance to improve their knowledge and skills in these areas. An effective expansion into leasing would require re-skilling of staff both at head office and at branch level, as well as an investment in internal systems, which could effectively track and monitor the performance of leasing contracts and products. Specific training sessions would include credit risk assessment techniques as well as general leasing knowledge in sales and marketing. The provision of TA for financial service providers interested in expanding into leasing could offset some of the initial costs involved and facilitate market entry by a number of established market actors able to scale operations quickly should they be successful.

Due to the fact that FSPs need to diversify risk by providing leasing across multiple sectors, stakeholders wishing to promote agricultural leasing may have to allow for the fact that TA would not necessarily focus on the agricultural sector in the first instance. However, entry into the agricultural sector by beneficiaries (i.e. banks or leasing companies) could be a pre-condition

of receiving a broader technical assistance package. As the below case study highlights, broader facilities that combine finance and technical assistance can provide an effective stimulus for lending, including for leasing. Similarly, as noted in Section 2, the Government of Ethiopia has announced a USD 200 million credit facility to support SME finance, the bulk of which will be allocated for leasing. The facility will combine wholesale finance for financial service providers with technical assistance to build the sector's capacity in leasing, among other areas. The provision of TA is likely to have most impact in countries where there is either an existing leasing sector (that is not active in agriculture), or in countries where there is already an interest from FSPs to expand into agriculture, such as Ghana or Zambia.

Case study: The EU/EBRD SME Finance Facility

In April 1999, the European Bank for Reconstruction and Development (EBRD) and the European Commission (EC) launched a SME Finance Facility for SMEs operating in EU Accession countries. The main objective of the facility was to develop the long-term capability of banks and leasing companies to provide finance to SMEs without external support, thus making it an integral and profitable part of their ongoing business activities.

The EBRD offered concessional funding to participating financial institutions, along with a targeted technical assistance programme. A strict, monitored requirement of the programme was that the funding received had to be used to offer finance to qualifying SMEs. Technical assistance meanwhile focused on developing financial institutions' knowledge of sales and credit risk assessment techniques in the SME sector.

The facility was made available to financial institutions operating in the EU accession countries of Central Europe, the Baltics and the Balkans and was considered to be a very successful initiative by the different stakeholders, as the participating FIs were able to develop a sustainable SME finance portfolio while credit worthy SMEs were better able to access additional sources of finance.

Recommendation 4: Create financing facilities to support leasing company growth

The basic business model for leasing companies is very capital intensive, as companies access financing at a certain cost and then allocate this funding to leasing contracts at a higher rate of interest in order to make a margin. Leasing companies are therefore always in need of more funds upon which to build their lease portfolios. Some stakeholders interviewed as part of this research, especially smaller leasing companies, highlighted access to (affordable) financing as one of their key constraints to growth. Bank loans, for example, need to be paid back and replaced with new funds, making it difficult for leasing companies to consistently grow their portfolios.

A revolving financing facility, aimed at supporting growth for leasing companies, could help to address this constraint and improve the supply and reach of leasing products. This type of facility has not been made available before to leasing companies, but would likely be in great demand. The lender can manage its risk by receiving regular structured reports to spotlight any impending problems or worrying trends within a leasing company or its portfolio, and also create covenants that would allow it to break a loan contract or take additional security in the event of default.

Recommendation 5: Establish a fund that increases the penetration levels of financial leasing by reducing the credit risk of leasing companies

One of the critical aspects of leasing being a suitable form of asset financing for both individuals and SMEs can also prove to be a barrier. As has been explained in earlier sections, financial leases do not require collateral but lessors mitigate their risk by requiring a down payment (in the study countries usually in the range of 20-40% of the total asset value). This places a burden on small businesses (including farmers), because while the additional output produced by leased equipment can generate enough income to cover lease payments and other ongoing costs, most do not have sufficient resources to cover the upfront payment. As a result a lease contract is not agreed, neither the lessor nor the small business manage to grow, and economic activity remains limited.

A solution to this problem, which is an issue in most developing economies, could be the creation of a fund that bridges the gap between what potential lessees are able to pay and what a lessor's risk policy deems an acceptable down payment.

Image: A'Melody Lee / World Bank © 2013

As a working example, a lessee may be able to afford 20% of the cost of an asset as a down payment. If the fund matched this amount then the lessor would have a 40% down payment which, with the obvious condition that the lessee has been assessed as credit worthy, would result in most lessors agreeing a lease contract. The lessee would then agree a contract that would require them to repay the full 80% (plus interest) of the value of the asset to the lessor over an agreed period of time. The 20% contribution made by the fund would be treated as a separate long-term loan between the fund and the lessor, with loan repayments synchronised to the dates of the SME's lease repayments. As the lessee makes lease repayments to the lessor, the lessor makes loan repayments to the fund (effectively transferring a percentage of the lease repayment).

In the event that a lessee does not make a lease repayment, the lessor would not make a loan repayment to the fund. The fund would therefore share credit risk with the lessor, and in the event of a default (and subsequent repossession) would suffer a loss pro rata with the lessor, should the asset be re-sold for less than the outstanding lease contract value.

If the fund charges interest on its loan then the interest income could be put towards mitigating any losses from repossessions, e.g. if the interest rate is 5% the fund could accept a 5% loss on the loan portfolio while still maintaining the core value of the fund. The overall fund could be used as a revolving facility, allowing continued support for new lease contracts as loan payments for the existing portfolio come in.

Alternatively the fund could provide a 25% (for example) guarantee for any loss incurred by lessors, but this does not have the advantage to the lessor of reducing their financial (funding) commitment for each lease contract. They would have to put up 80% of the funds for each asset (as opposed to 60% under their original scenario), limiting their ability to expand their portfolio.

Annex 1: Country infographics

Ethiopia

Demand side	Supply side	Support functions	Rules	Country category
				High potential

Ethiopia

Overview: Ethiopia offers high potential for agricultural leasing, despite the fact that the agricultural sector is currently less advanced than those in many other study countries. Although financial penetration and capability are low overall – holding back demand – large government-backed initiatives are generating positive momentum for the sector. Recent proclamations have clarified the draft legal framework around leasing and opened the sector to foreign participation. This is complemented by the introduction of a significant funding facility targeting a significant expansion of leasing activities in the country, including in agriculture. As a result there are good opportunities to support leasing growth and access to financial services for farmers via interventions in the core market (supply and demand).

Supply side

- Number of banks: 19
- Agriculture as % of total private sector credit: 25.3%
- Five licensed leasing companies, although none are active in agriculture
- Financial sector is heavily regulated and excludes foreign participation
- Overall penetration of financial services is low, with MFIs (group loans) the main source of credit for farmers

Demand side

- Proportion of employment in agriculture: 73%
- Proportion of GDP in agriculture: 42%
- Average size of land holding: 1.37 hectares
- Financial capability and skills among farmers are generally very low, though there is familiarity with leasing in some areas

Support functions

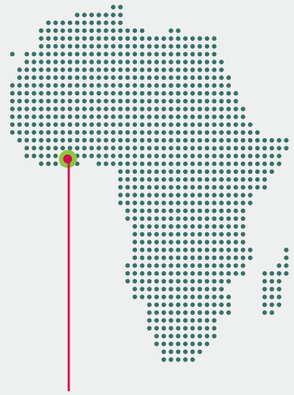
- Major equipment suppliers (covering sales, service and spare parts) include: John Deere, AgCo-MF, Claas and CNH
- Low population density and long distances limit reach however, making it challenging to service equipment in rural and agricultural areas

Rules

- Capital Goods Leasing Business Proclamation No. 103/98
- Capital Goods Leasing Business (amendment) Proclamation No. 807/2013
- Financial leasing regulated by Central Bank
- Operational leasing regulated by Ministry of Trade

Ghana

Demand side	Supply side	Support functions	Rules	Country category
				High potential



Ghana

Overview: Ghana offers high potential for agricultural leasing, despite key barriers to leasing solutions such as low financial literacy and high downpayment requirements. There is a small but present leasing sector, although it is not very active in agriculture. There is an indication of demand from a number of FSPs to build their knowledge and product portfolio for this sector. Basic infrastructure for supporting functions is in place and the regulatory environment is comparatively supportive. Machinery, apparatus, appliances and parts intended for agriculture, veterinary practice, fishing and horticulture are exempt from VAT and National Health Insurance levy rates. Key opportunities exist in both the core market, as well as support functions, in capacity building and information sharing.

Supply side

- Number of banks: 29
- Agriculture as % of total private sector credit: 3.2%
- Three finance and leasing companies, none of which are specialised in agriculture
- Many FSPs currently lack the knowledge and infrastructure to effectively serve the agricultural sector, especially with leasing products

Demand side

- Proportion of employment in agriculture: 45%
- Proportion of GDP in agriculture: 22%
- Average size of land holding: 2.27 hectares – however, around 60% of the landholding households operate on less than the national mean

Support functions

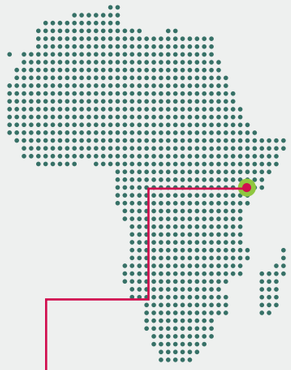
- Major equipment suppliers (covering sales, service and spare parts) include: John Deere, AgCo-MF, Claas and CNH
- Low population density and long distances limit reach however, making it challenging to service equipment in rural and agricultural areas

Rules

- 2004 Banking Act
- Non-Bank Financial Institution Act 2008
- Machinery, apparatus, appliances and parts intended for agriculture, veterinary practice, fishing and horticulture are exempt from VAT and National Health Insurance levy rates

Kenya

Demand side	Supply side	Support functions	Rules	Country category
				High potential



Kenya

Overview: The agricultural leasing sector in Kenya is promising; most banks are already active in the agricultural sector, though asset purchases are much more common than leasing products. Key barriers include farmers' education about the leasing product and their ability to maintain equipment. The removal of the zero-rate VAT on imported agricultural machinery in 2013 increased costs for lessees, but this has not been seen to dampen competition in the sector. At least two financial service providers operating in the agricultural space are reported to have financial difficulties, after offering subsidised interest rates to gain a competitive edge in the market. Despite the dynamic sector, concerns remain over any additionality of donors' interventions.

Supply side

- Number of banks: 42
- Agriculture as % of total private sector credit: 4.3%
- 40 registered members of the Leasing Association of Kenya
- Kenya has the most advanced financial sector of the eight countries, with competition growing in both finance and agricultural sectors

Demand side

- % employment in agriculture: 75%
- Agriculture in GDP: 30%
- Average size of land holding: 1.75 hectares

Support functions

- Major equipment suppliers (covering sales, service and spare parts) include: John Deere, AgCo-MF, Claas and CNH

Rules

- 2002 Income Tax Act (CAP470)
- VAT Act (CAP476)
- In 2013 the government removed a zero-rate VAT on imported agricultural machinery

Mozambique

Demand side	Supply side	Support functions	Rules	Country category
				Low potential

Mozambique

Overview: Mozambique offers low potential for supporting agricultural leasing growth, as it faces significant constraints with regards to both supply and demand. A very high proportion of farmers in the country are subsistence farmers, with little access to or understanding of formal financial services. Mechanisation is very low and most farmers would struggle to absorb commercial financing. Maintenance of equipment is also an issue. The financial sector is conservative and many larger banks are not interested in supporting smallholder farmers. A number of smaller, niche players are interested in better understanding leasing however with the view to offering products either directly, or via leasing subsidiaries.

Supply side

- Number of banks: 18
- Agriculture as % of total private sector credit: 5.0%
- There are no leasing companies
- Overall penetration of financial services is very low, especially in rural areas. Although the financial sector is fairly robust, its presence and understanding of the agricultural sector is very limited

Demand side

- % employment in agriculture: 76%
- Agriculture in GDP: 25%
- Average size of land holding: 2.27 hectares
- A significant proportion of farmers are subsistence farmers, many of whom have little to no exposure to financial services. Financial penetration in rural areas remains very low

Support functions

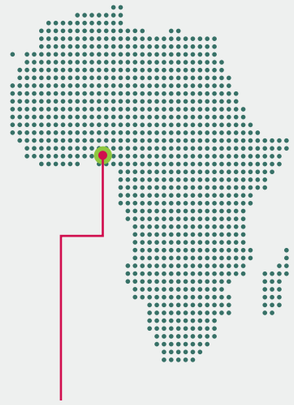
- Major equipment suppliers (covering sales, service and spare parts) include: John Deere, AgCo-MF, Claas and CNH
- Low population density and long distances limit reach however, making it challenging to service equipment in rural and agricultural areas

Rules

- Law is being drafted
- Banks were prohibited from entering the leasing sector until 2004

Nigeria

Demand side	Supply side	Support functions	Rules	Country category
				Low potential



Nigeria

Overview: Overall Nigeria has the most advanced leasing sector of the countries in this study, but offers low potential for agricultural leasing. In the 2015 White Clark Group Global Leasing Report, Nigeria was ranked 45th out of 50 countries for annual leasing volume as a percentage of GDP. However, very few of these companies provide agricultural equipment leasing services, and the importance of agriculture in the overall economy, both in terms of percentage of employment and contribution to GDP, is lower than in other countries. While Nigeria certainly has the potential to increase both its agricultural production, as well as its agricultural leasing, it is less clear that there is political will to support this development. The country's complex political economy and federal system makes this more difficult.

Supply side

- Number of banks: 22
- Agriculture as % of total private sector credit: 4.7%
- Equipment Leasing Association of Nigeria (ELAN): 98 corporate members, 18 associate members and 162 individual members
- Several public initiatives in agricultural lending (Bank of Agriculture, the Agricultural Credit Guarantee Scheme Fund (ACGSF) and Nigeria Incentive Based Risk Sharing for Agricultural Lending (NIRSAL)

Demand side

- % employment in agriculture: 40%
- Agriculture in GDP: 20%
- Average size of land holding: 1 hectare

Support functions

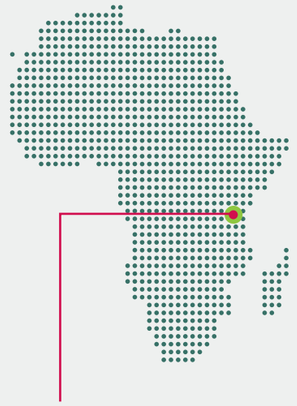
- Major equipment suppliers (covering sales, service and spare parts) include: John Deere, AgCo-MF, Claas and CNH

Rules

- Equipment Leasing Act 2015

Tanzania

Demand side	Supply side	Support functions	Rules	Country category
				Low potential



Tanzania

Overview: Tanzania offers low potential for agricultural leasing, as there are significant demand and policy hurdles. The agricultural sector consists primarily of smallholder farmers, although commercial farming and mechanisation is growing. This may be partly due to the Government of Tanzania's relationship with India, which can deliver agricultural equipment on 'soft terms.' There are basic regulations in place to govern leasing, although gaps remain in several key areas, namely hurdles for contract enforcement and repossession in particular. Leasing also involves VAT liabilities (whether engaging in operational or finance leasing). The policy sector has until recently crowded out the private sector in agricultural lending, therefore markets are still relatively thin.

Supply side

- Number of banks: 36
- Agriculture as % of total private sector credit: 5.8%
- There are three registered leasing companies in Tanzania, of which only one is active in agriculture
- Banks and non-bank financial institutions (NBFI) offer leasing services, though the NBFIs tend to be smaller scale, with limited resources and net worth

Demand side

- % employment in agriculture: 67%
- Agriculture in GDP: 27%
- Average size of landholding: 1.5 hectares
- Financial capability of farmers remains limited, and awareness around leasing is low

Support functions

- Major equipment suppliers (covering sales, service and spare parts) include: John Deere, AgCo-MF, Claas and CNH
- Low population density and long distances limit reach however, making it challenging to service equipment in rural and agricultural areas

Rules

- Financial Leasing Act 2008
- The Banking and Financial Institutions (Financial Leasing) Regulations 2011

Uganda

Demand side	Supply side	Support functions	Rules	Country category
				Proceed with caution

Uganda

Overview: At first glance, Uganda currently offers a promising base for increasing agricultural leasing, but it is recommended to proceed with caution. Despite average landholding sizes of 1.1 ha, agriculture is increasingly served by financial service providers – including by leasing companies, four of which are currently involved in the agricultural sector. However, the policy environment is a work in progress. Uganda received support from the IFC to revise its leasing policy environment, but despite the drafting of the Financial Leasing Bill and stakeholder consultations, it remains unsigned by the Minister of Finance, Planning and Economic Development. While the leasing sector appears to be growing despite this delay, it does highlight potential future uncertainties.

Supply side

- Number of banks: 25
- Agriculture as % of total private sector credit: 7.3%
- Number of leasing companies: 11. Of the 11 leasing companies, only three are independent; the remaining eight are ring-fenced divisions of banks. Four are currently involved in agricultural leasing.

Demand side

- % employment in agriculture: 82%
- Agriculture in GDP: 27%
- Average size of land holding: 1.1 hectares

Support functions

- Major equipment suppliers (covering sales, service and spare parts) include: John Deere, AgCo-MF, Claas and CNH

Rules

- Financial Leasing Bill (to be published)
- Sale of Goods Act (2015), Income Tax Act (1997)
- Value Added Tax Act (1996)
- Independent leasing companies are not regulated, while those under commercial banks are regulated by the Central Bank
- Machinery, tools and implements suitable for use only in agriculture are zero-rated in Uganda

Zambia

Demand side	Supply side	Support functions	Rules	Country category
				High potential

Zambia

Overview: Zambia shows high potential for expanding agricultural leasing activities due to a number of factors. There is a strong presence of supporting functions in terms of equipment dealers and “3S” services, but also organisations and donor funded initiatives that can facilitate greater understanding and investment in leasing within the core market. Although the bulk of the agricultural sector is made up of smallholders, there are opportunities to support greater mechanisation and to develop commercial farming in the country. FSPs remain very cautious about the agricultural sector, with slow decision times and cautious lending decisions. If solutions can be found to offset some of their perceived risk however, there is appetite to increase exposure to the sector in downscaling and leasing.

Supply side

- Number of banks: 19
- Agriculture as % of total private sector credit: 19.7%
- There are six registered leasing companies as of 2014
- Many financial institutions expressed concern over the difficulty of working in agricultural markets, preferring to work with the few, large commercial farms and agribusinesses that exist

Demand side

- % employment in agriculture: 71%
- Agriculture in GDP: 9%
- Average size of land holding: 2.1 hectares
- SHF make up much of Zambian agriculture, despite some notable exceptions in large-scale, commercial farms

Support functions

- Major equipment suppliers (covering sales, service and spare parts) include: John Deere, AgCo-MF, Claas and CNH
- Low population density and long distances limit reach however, making it challenging to service equipment in rural and agricultural areas

Rules

- Regulated by the Bank of Zambia
- Banking and Financial Services Act Chapter 387
- Certain agricultural supplies are zero-rated, including seeds, fertilisers or stock feeds, but machinery is not included in this category

Annex 2: Country selection framework

Country	Region of SSA	FCAS country	FSD country	No. of banks	Agriculture GDP %	Employment in ag. sector	Tractor sale	John Deere	AgCO-MF	Claas	CNH	Main crops
Burundi	East Africa	Yes	No	10	40%	94%	4	No	N/A	Yes	No	coffee, cotton, tea, corn, sorghum, sweet potatoes, bananas, cassava (manioc, tapioca), beef, milk, hides
Congo, DR	Central Africa	Yes	No	20	21%	N/A	485	Yes	N/A	Yes	No	coffee, sugar, palm oil, rubber, tea, cotton, cocoa, quinine, cassava (manioc, tapioca), bananas, plantains, peanuts, root crops, corn, fruits, wood products
Cote D'Ivoire	West Africa	Yes	No	25	18%	68%	131	Yes	N/A	Yes	No	coffee, cocoa beans, bananas, palm kernels, corn, rice, cassava (manioc, tapioca), sweet potatoes, sugar, cotton, rubber, timber
Ethiopia	East Africa	No	No	19	42%	85%	299	Yes	Yes	Yes	Yes	cereals, coffee, oilseed, cotton, sugarcane, vegetables, khat, cut flowers, hides, cattle, sheep, goats, fish
Ghana	West Africa	No	No	29	22%	45%	409	Yes	Yes	Yes	Yes	cocoa, rice, cassava (manioc, tapioca), peanuts, corn, shea nuts, bananas, timber
Kenya	East Africa	No	Yes	42	30%	75%	648	Yes	Yes	Yes	Yes	tea, coffee, corn, wheat, sugarcane, fruit, vegetables, dairy products, beef, fish, pork, poultry, eggs
Malawi	Southern Africa	No	No	12	33%	90%	81	Yes	No	Yes	No	tobacco, sugarcane, cotton, tea, corn, potatoes, cassava (manioc, tapioca), sorghum, pulses, groundnuts, macadamia nuts, cattle, goats
Mozambique	Southern Africa	No	Yes	18	29%	81%	270	Yes	Yes	Yes	Yes	cotton, cashew nuts, sugarcane, tea, cassava (manioc, tapioca), corn, coconuts, sisal, citrus and tropical fruits, potatoes, sunflowers, beef, poultry
Nigeria	West Africa	No	Yes	22	20%	70%	511	Yes	Yes	Yes	Yes	cocoa, peanuts, cotton, palm oil, corn, rice, sorghum, millet, cassava (manioc, tapioca), yams, rubber; cattle, sheep, goats, pigs, timber, fish

Annex 2: Country selection framework

Country	Region of SSA	FCAS country	FSD country	No. of banks	Agriculture GDP %	Employment in ag. sector	Tractor sale	John Deere	AgCO-MF	Claas	CNH	Main crops
Rwanda	East Africa	Yes	Yes	17	33%	90%	2	No	N/A	Yes	No	coffee, tea, pyrethrum (insecticide made from chrysanthemums), bananas, beans, sorghum, potatoes, livestock
Senegal	West Africa	No	No	23	17%	78%	39	Yes	Yes	Yes	No	peanuts, millet, corn, sorghum, rice, cotton, tomatoes, green vegetables, cattle, poultry, pigs, fish
Somalia	East Africa	Yes	No	6	60%	71%	39	No	No	Yes	No	bananas, sorghum, corn, coconuts, rice, sugarcane, mangoes, sesame seeds, beans, cattle, sheep, goats, fish
South Sudan	Central Africa	Yes	No	21	N/A	N/A	-	Yes	No	No	No	sorghum, maize, rice, millet, wheat, gum Arabic, sugarcane, mangoes, papayas, bananas, sweet potatoes, sunflower seeds, cotton, sesame seeds, cassava (manioc, tapioca), beans, peanuts, cattle, sheep
Tanzania	East Africa	No	Yes	36	27%	80%	352	Yes	Yes	Yes	Yes	coffee, sisal, tea, cotton, pyrethrum, (insecticide made from chrysanthemums), cashew nuts, tobacco, cloves, corn, wheat, cassava (manioc, tapioca), bananas, fruits, vegetables, cattle, sheep, goats
Uganda	East Africa	No	Yes	24	27%	82%	40	Yes	Yes	Yes	Yes	coffee, tea, cotton, tobacco, cassava (manioc, tapioca), potatoes, corn, millet, pulses, cut flowers, beef, goat meat, milk, poultry
Zambia	Southern Africa	No	Yes	19	9%	85%	252	Yes	Yes	Yes	Yes	corn, sorghum, rice, peanuts, sunflower seeds, vegetables, flowers, tobacco, cotton, sugarcane, cassava (manioc, tapioca), coffee, cattle, goats, pigs, poultry, milk, eggs, hides

About the FSD Network

The FSD Network is a group of nine financial sector development programmes or 'FSDs'. Located across sub-Saharan Africa, it includes seven national FSDs (Access to Finance Rwanda, Enhancing Financial Innovation & Access in Nigeria, FSD Kenya, FSD Moçambique, FSD Tanzania, FSD Uganda and FSD Zambia) and two regional FSDs (FinMark Trust in Southern Africa and FSD Africa).

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