



**Business
Innovation
Facility**

DECEMBER 2013

Inclusive business in practice – Case studies from the Business Innovation Facility portfolio

Collaborating for smallholder finance: How is Stanbic closing the loop?

This report is one of a series of 'deep dive' case studies that seeks to understand inclusive business in practice. The series explores contrasting inclusive businesses, all of which have been supported by the Business Innovation Facility.

Foreword: An introduction from the authors

Everyone in the room roared with laughter when the farmer dived to the floor, then sprang up again, all the time talking animatedly. Jerry Gushop, the head of Agricultural Banking at Stanbic IBTC Bank was engaged in a lively Q&A with a group of farmers from around Jos in Plateau State, Northern Nigeria. They were the representatives of cooperatives that are part of a World Bank funded project, some of whom are taking part in a pilot of an innovative smallholder finance scheme. The farmers who were not part of the scheme were questioning Jerry closely, while farmers whose cooperatives were already receiving credit from Stanbic were responding to questions from a team from the Business Innovation Facility (BIF). We were there to get a better understanding of the scheme in order to prepare this report.

We managed to ask Jerry why the farmer had dived to the ground. Jerry, who is from Jos himself, explained that the man had been talking about the benefits of the scheme in the local language. He had been telling the group that, before the scheme, he had to go to the local market with his crop. When, money in hand, he made his way home, he was at risk of being held up by local bandits. He had mimed taking cover as the thieves brandished their weapons and forced him to hand over the cash. Being part of the Stanbic smallholder scheme would mean that this couldn't happen. In the scheme, he already knows where he will sell the crop, as there is a guaranteed buyer who has already agreed to a minimum price. A local service company will come with a combine harvester and harvest the maize mechanically. The bank will then arrange payment to the cooperative's bank account, after deducting the capital and interest payments. The farmer never has to make the dangerous trip to town and face an uncertain market for his crop – let alone make his way home as a target for thieves.

We were impressed by the model that Stanbic is piloting in Jos. In our portfolio of over 100 projects it is the only example of an agricultural inclusive business model being led by a bank. Far more often the credit component is the missing piece in a production-oriented project. Part of the reason why this model has evolved as it has may be that Jerry and his team are agriculturalists as much as they are bankers.

While the pilot of the scheme in Jos is not yet complete, at the time of writing (September 2013), the farmers that the BIF team met were excited to be part of it, confident that they will not only make a profit this year, but also be enabled to increase their yields and expand their land under cultivation in the future as a result of the scheme. They were happy when Jerry told them that 'we want to grow our small scale farmers until you become commercial farmers...and buy your own tractors.' As one women farmer put it: 'with Stanbic by our side we are going to be giants!'

Acknowledgements

We would like to thank the following people who were consulted for the development of this report: Jerry Gushop (Stanbic IBTC Bank), Kefas Samuila Tungkir (Stanbic IBTC Bank), Maximus Ogoegbunam (Stanbic IBTC Bank), Oyinye Agubuokwu (Stanbic IBTC Bank), Oren Shaked (ASTC), Susan Nancin (ASTC), Timothy G. Makeri (Grand Cereals), Yakubu J. Amasa (Grand Cereals), Gideon Gordam Dandam (Third National FADAMA Development Project Plateau state FADAMA Coordination Office).

The case study would not have been possible without Nneka Enwonwu of the BIF Nigeria team, who worked with the team throughout the fieldwork and made invaluable contributions to the findings.

Authors:

Jack McMahon is an Associate Management Consultant at PwC. He has spent the past year as part of the core management team for the Business Innovation Facility in the UK. He previously worked with the monitoring and evaluation team for the Climate Development Knowledge Network (CDKN). Before PwC Jack spent two years as a participant on the Teach First graduate programme seeking to address educational disadvantage in the UK.

Jack.r.mcmahon@uk.pwc.com

Tom Harrison is a member of the international team delivering the Business Innovation Facility. Tom has had an operational role for the duration of pilot, with particular responsibility for supporting the development and delivery of projects in Bangladesh and Nigeria.

tomharrison@partnerfordevelopment.eu

Contributor:

Nneka Enwonwu
Business Innovation Facility, Nigeria:
nneka.enwonwu@cbnigeria.com

Editors:

Carolin Schramm, Business Innovation Facility,
Caroline Ashley, Business Innovation Facility,
John Paul, Inclusive Business Consultant

Contents

Executive summary	4
1. The inclusive business in brief	6
1.1 What is the inclusive business?	6
1.2 How is the business commercial, inclusive and innovative?	6
2. The story behind the smallholder farmer finance scheme	8
2.1 Commercial drivers	8
2.2 Timeline	8
2.3 Market context	9
2.4 Other country specific factors	10
3. How does the inclusive business model work?	11
3.1 Overview of the value chain and business model	11
3.2 'Closing the loops'	13
3.3 Margins and pricing	14
3.4 Evolution of the model	14
3.5 Future plans	16
4. Commercial results	17
5. Development impacts	19
5.1 Direct impacts at the base of the pyramid	19
5.2 Potential for systemic impacts	22
6. Future outlook and lessons learned	23
6.1 Future outlook and potential for scale	23
6.2 Additionality of BIF support	24
6.3 Lessons learned	24
Annex 1: Case study methodology	25
Partner profiles	26
About this series of case studies	27

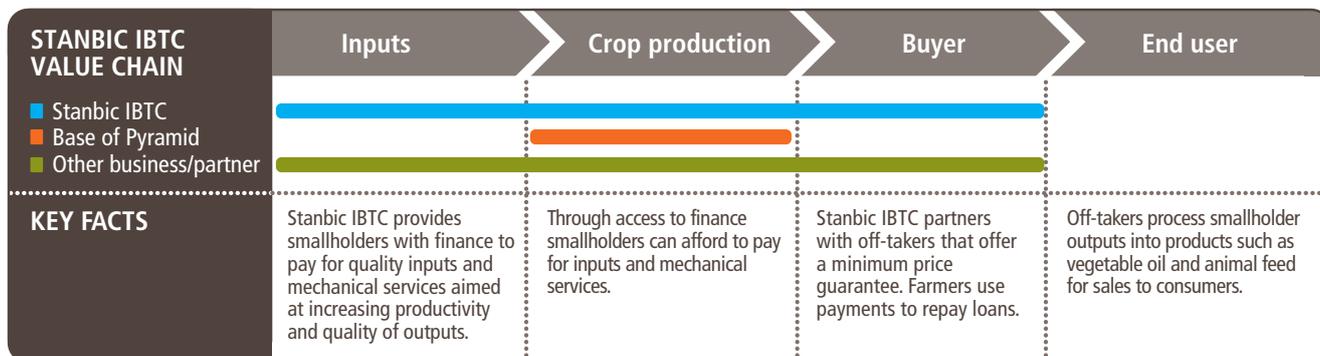
Table of Acronyms

ACE	Abuja Commodity Exchange
ASTC	Agric Services, Training Centre and Marketing Ltd.
BIF	Business Innovation Facility
BoP	Base of Pyramid
CEO	Chief Executive Officer
GCL	Grand Cereals Limited
MIX	Microfinance Information Exchange
MOU	Memorandum of Understanding
NIRSAL	The Nigerian Incentive-based risk sharing system for agricultural lending
WRS	Warehouse Receipt System

Executive summary

Nigeria's rural farmers are likely to be poor, uneducated and lack the access to financial services and resources that could transform them from subsistence to commercial farmers. Through its 'smallholder farmer financing scheme', the Agricultural Banking division of Stanbic IBTC is attempting to unlock this potential. The bank is intervening in the agricultural value chain to boost productivity and returns, and in the process, is catalysing a new approach to smallholder farming and banking.

Figure 1: Stanbic IBTC value chain



Stanbic is not just making a one-off loan to farmers but has built relationships all along the agricultural value chain. The bank provides smallholder farmers with seasonal finance (credit), a guaranteed market for what the farmers produce and modern farming methods to give the farmers the best chance of realising significant increases in yield and incomes. Mechanised farming and credit from the bank enable farmers to also make profitable use of additional land which they might already have, or can access through cooperatives which partner with Stanbic.

The model is highly ambitious. The bank is not supporting just one part of the agri chain, but making them all work together. In doing so, it is developing its own customer base while simultaneously providing the agricultural system with access to the finance and value chain relationships that are needed for significantly increased productivity. The potential is nothing short of a step change in the way that farming is undertaken, from farming as a way of life to farming as a business.

But while risks seem high due to the level of ambition, a number of strategies are in place to minimise and mitigate risk at every turn. The inclusive business model places a lot of emphasis on 'closing the loop' and tackling the weakness in smallholder models. It reduces the risks of failure by financing high quality inputs, technical assistance and crop insurance, and by guaranteeing a market to farmers for their increase in produce. Its end-to-end assistance to farmers reduces the risk of side selling and develops the trusted relationships needed for long-term sustainability and growth. Support from the Business Innovation Facility included a review of the business model in order to make it more robust and assistance in applying for donor funding for the scheme.

Although the model is strongly influenced by the Nigerian context – including weak value chains, government ambitions for agricultural exports and insecurity and low investment in the north – it also has implications throughout Africa. The larger success of this project could catalyse significant change in the market for smallholder finance and interrelated agribusiness markets throughout the continent.

On its journey developing the inclusive business model, Stanbic is learning lessons on how to make agricultural value chains work effectively for all stakeholders. The 'engines' of smallholder finance are the significant yield increases that can be achieved by small farmers with the right support. Working with a range of partners in a highly coordinated way appears to be a promising way forward; without the range of partners, the gains in productivity would not be possible. And although risks in agriculture cannot be avoided, through thorough understanding of farming systems, a number of detailed design issues can combine an ambitious intervention with risk mitigation.

At the time of writing this report the pilot scheme was coming close to the end of its first season, so the full benefits of the scheme, both for the bank and smallholders involved, have not yet been realised. However, there was a high degree of optimism and enough data to conclude that the scheme shows strong potential for success.

Figure 2: Summary of smallholder farmer finance scheme impacts

Stanbic smallholder farmer finance scheme

Country: Nigeria

Product: Banking and financial services

BoP: Smallholder farmers and cooperative groups



Inclusive business model:
 Making finance accessible to smallholders to improve productivity and commercialise farming activities. BIF support provided to review the business model and support applications for donor funding for the scheme.

Market opportunity:

- Over 75% of adult rural population are 'unbanked'
- Opportunities to increase customer base at smallholder level as well as companies connected with the agricultural sector

Commercial results:

- Expected turnover of +/- \$130,000 by the end of 2013
- +/- \$762,000 investment to date

Development impacts:

- 1,860 smallholder farmers reached to date (including previous pilot)
- Access to finance, agricultural inputs, extension services and market linkages

Future plans:

- To reach a turnover of \$425,000 by the end of 2016
- To reach five million customers in the future

Website: www.stanbicibtcbank.com/standing/Nigeria/newSite/HTML/homePage.html

Note on figures used:

Currency: Financial figures that were provided in Nigerian Naira are expressed in USD, based on an exchange rate of 1USD = 163 NGN.

Base of Pyramid: Numbers of people reached at the base of the pyramid represent those directly engaged as suppliers, entrepreneurs or consumers, and are not multiplied by household size to represent 'lives touched'.

1. The inclusive business in brief

- > Stanbic IBTC is developing a smallholder farmer finance scheme that partners with buyers, input providers and cooperatives to help farmers improve the quantity and quality of their produce.
- > The pilot scheme currently underway is expected to generate profits after the first harvest.

1.1 What is the inclusive business?

Stanbic Bank's Agricultural Banking division is developing a business model for providing seasonal finance to smallholder farmers. The bank is calling this the 'smallholder farmer finance scheme.' The scheme is currently being piloted in a number of locations in Nigeria with a variety of different crops and farming systems. One of the most advanced pilots is taking place in and around the town of Jos in Plateau State, providing credit to small farmers growing maize and soya. This report looks in depth at the pilot in Jos, but many of the features described will also apply to the other schemes across Nigeria.

Under the scheme, the bank offers finance to smallholders to access good quality inputs and mechanised services. This will enable farmers to benefit from significantly higher yields, as well as increase the area that they cultivate. The quality of the produce may also increase. Once smallholders have sold their crops they are required to pay back what they have borrowed, with interest. The bank generates revenue from the interest it receives on its loans to the farmers. To be successful, the farmers need to generate enough additional income from the increased sales value of their crops to cover the interest payments and to provide income for their families.

In addition to providing credit, the bank partners with other organisations in order to boost productivity and profitability in the value chain. This increases the likelihood of the farmers making a profit from the model and the bank getting its capital and interest payments covered. In the pilot in Jos, the partner organisations include Grand Cereals (a major produce buyer), ASTC (an agricultural input and mechanical services provider), and the Fadama III project (a World Bank initiative that organises farmers into cooperatives).

Table 1: Smallholder farmer finance scheme key facts

Smallholder farmer finance scheme key facts	
Name	Smallholder farmer finance scheme
Sector	Financial Sector/Agricultural Banking
Country	Nigeria
Product/Service	The smallholder farmer finance scheme gives smallholder producers access to finance that can be used to improve the volume and quality of their production. The scheme involves partnerships with produce buyers, input providers and smallholder cooperatives
Relationship with lead company	The inclusive business is part of core business in the Agricultural Banking division of Stanbic IBTC Holdings PLC (a member of Standard Bank Group)

1.2 How is the business commercial, inclusive and innovative?

The potential of the scheme to significantly increase the amount that a farmer can produce is the main factor that shapes both the commercial and inclusive potential of the business. Evidence has shown that a combination of technical assistance, good quality inputs and mechanised services can increase yields two or three fold, but this often requires suitable credit being available. The smallholder farmer finance scheme can therefore unlock significant production benefits for farmers. The fact that smallholder finance is so rarely available, despite this potential, reflects the inherent risks of loans to smallholders, and it is these risks that have driven the innovative elements.

How is the business commercial?

The bank generates revenue by providing finance to smallholders with interest rates of 18 per cent attached. The pilot scheme currently underway is expected to generate profits after the first harvest, albeit small compared to other areas of the bank's business. It is also expected that the bank will expand its client market in the long term.

The bank is confident of the future commercial success of the scheme. In part this stems from the positive results of other schemes by the bank's parent company, Standard Bank, in other African countries.

¹ This data comes from a baseline study carried out by the Fadama programme in August 2009 on data and household surveys from smallholders that participated in the previous Fadama programmes (Fadama I and Fadama II). Source: Report of Fadama III baseline survey, Plateau State, Hon. S. L. Wazhi, State Consultant.

How is the business inclusive?

The scheme is available to smallholders in rural areas that have relatively low incomes. The average per capita income of a smallholder taking part in the scheme stands at \$323 per year¹. The scheme presents smallholders with an opportunity to move away from subsistence levels of farming, try new farming methods, and plan for the future. It is hoped this approach will lead many more smallholders to view their activities in a different way, as the head of the Agricultural Banking division at Stanbic, Jerry Gushop, stated "Farming should no longer be seen as a way of life but as a business".

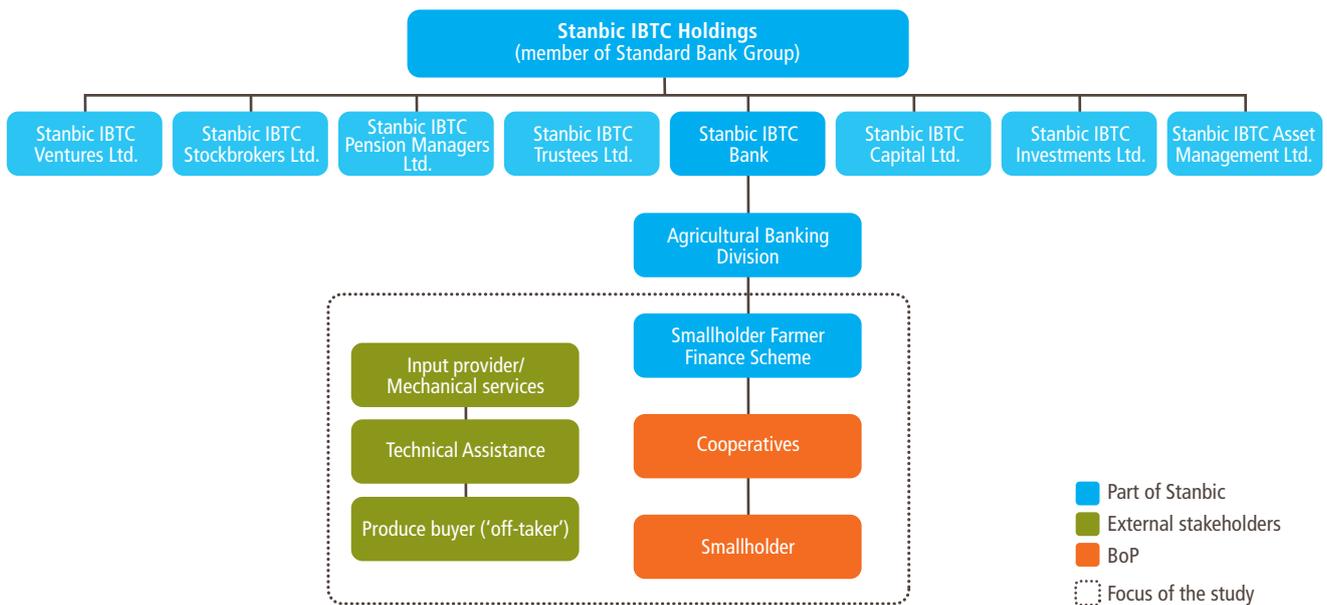
How is the business innovative?

Stanbic has developed a financial product specifically targeted at low-income smallholders. There are few examples of other banks implementing successful smallholder finance schemes in Nigeria. Smallholders are often excluded from accessing finance for many reasons including unaffordable interest repayments and other bank's refusing to lend due to the high risks involved.

The bank has had to take an innovative approach in identifying key stakeholders and brokering agreements to ensure the model functions effectively at every level. These agreements have resulted in a guaranteed minimum price for smallholder outputs and access to quality agricultural input service providers. Stanbic's role in developing these partnerships has gone far beyond what most other banks have either been willing, or able, to play.

Many of the innovations in the model arise from the need to take an active approach to managing the risks associated with smallholder lending. For other banks, the risk/reward ratio appears financially unattractive compared to other ways their capital could be used in Nigeria. Stanbic has developed its model to mitigate some of the major risks. These include lending to cooperatives rather than individual farmers and paying agricultural suppliers directly for their services rather than providing cash loans.

Figure 3: Focus of this report: Stanbic IBTC's smallholder farmer financing scheme



2. The story behind the smallholder farmer finance scheme

- > The agricultural sector in Nigeria is currently underdeveloped, and the majority of Nigerians still lack access to formal financial service providers.
- > Supported by favourable government policy and increasing market demand, the scheme is part of a wider strategy by Stanbic to develop inclusive financial services in Africa.

2.1 Commercial drivers

Stanbic IBTC Bank is a member of the Standard Bank Group, a South African owned bank with revenue of \$6.9 billion (FY 2012). In 2007, the Standard Bank Group merged its Nigerian operations, Stanbic Bank Nigeria, with that of IBTC Chartered Bank PLC to create Stanbic IBTC Bank PLC.

The Standard Bank Group has a long track record of offering inclusive financial services in other African countries and this inclusive business approach forms part of the bank's business strategy. The banking group has already implemented similar inclusive schemes in other African countries including Ghana, Mozambique, Tanzania and Uganda.

The long-term strategy for the bank in Nigeria is to take the model to scale. The bank's aim is to reach five million customers at the smallholder level and offer a range of inclusive financial services. The smallholder farmer finance scheme forms a large part of this strategy.

2.2 Timeline

The Standard Bank Group initially developed the smallholder farmer finance scheme in 2009. The fund initially launched in Ghana, Mozambique, Tanzania and Uganda where \$100 million in agricultural loans was made available for smallholder farmers over three years.

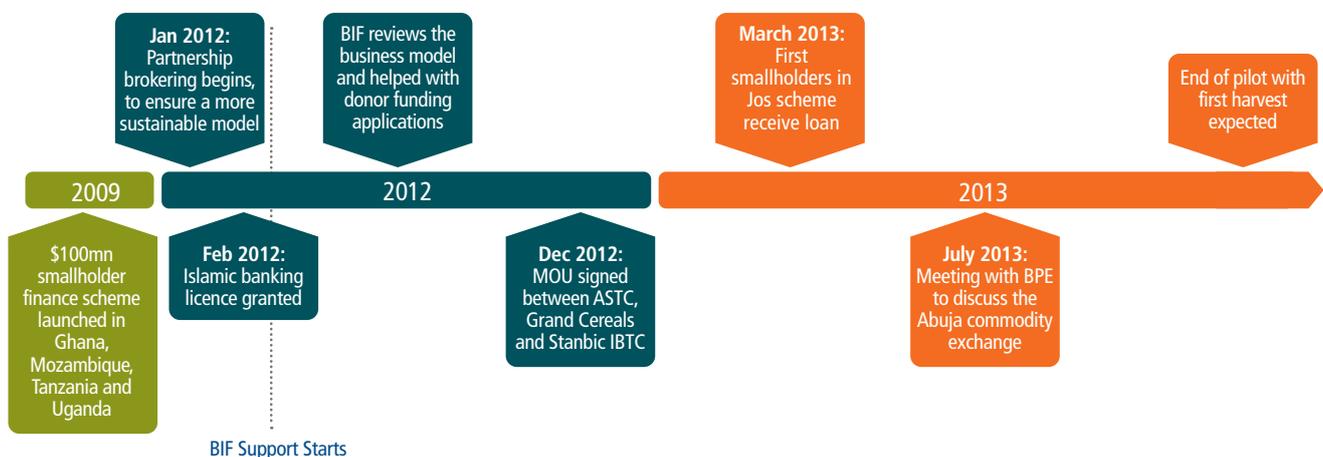


A local outlet for smallholders to trade agricultural outputs for money

“Finding ways to include the millions of economically active people in Africa who fall outside the mainstream financial sector is essential to Standard Bank Group’s (SBG) sustained profitability in emerging markets, and contributes to the broader socioeconomic development potential of the countries in which we operate.”

Source: 'Inclusive financial services', Standard Bank, 2013.
<http://sustainability.standardbank.com/socioeconomic-development-overview/inclusive-financial-services/>

Figure 4: Timeline of smallholder farmer finance scheme development



In 2011, Stanbic IBTC began to develop a strategy for adopting the scheme in Nigeria.

Building on experience from the Banking Group in different countries, they began searching for partners and brokering agreements with stakeholders to take part in the business. The initial partnerships consisted of a programme coordinator, organisations that could provide technical assistance and training for farmers, a source of mechanical services, and input providers. However, initial efforts to implement the project were unsuccessful as the bank was unable to find a suitable produce buyer. The decision was made to postpone the pilot phase to 2013 with new partners involved.

The model for the scheme has been adapted along the way to ensure the right partners are involved. These partnerships are secured through MOUs which increase certainty and reduce the risks involved for the bank.

The pilot in Jos was shaped in late 2012, with some revision of the initial model and brokering of new partnerships. In December 2012, a memorandum of understanding was signed outlining the roles and responsibilities of the stakeholders within the model. Grand Cereals agreed to become the produce buyer, ASTC agreed to provide inputs and mechanical services and Stanbic agreed to make available the finance for the scheme.

In May 2013, the first smallholders in the Jos pilot were given access to finance. Stanbic made \$20 million available for the scheme and to date \$762,404 has been lent to farmers. The results from the Jos pilot are expected to be announced in November 2013. Other pilots are in the pipeline for 2014 with the intention to diversify into new regions and markets. Part of the bank's strategy for the future is to reach scale by developing the financial infrastructure for agricultural credit more widely.

2.3 Market context

Market demand

The agricultural sector in Nigeria is currently underdeveloped but the potential to improve this is significant. The country has underutilised fertile land, low productivity, a large internal market and access to export markets. Stanbic IBTC Bank recognises that investment in agriculture should result in a very significant increase in agricultural production.

Competition

In 2004, the Nigerian government completed a consolidation process of the banking system to reduce the number of banks operating in the country from 89 (2004) to 22 (2013). Since consolidation, the retail banking industry saw an increase in the number of branches and cash centres from 3,200 to 4,579 by the end of 2007. Despite these increases the banking sector is still heavily focussed towards lending to a narrow target group including the government (over 15 per cent of total assets), followed by inter-bank lending, then corporate lending (including oil and gas, and telecommunications)².

The majority of Nigerians still lack access to formal financial service providers. According to a report by the MasterCard Foundation and MIX (Microfinance Information Exchange), Nigeria has one of the largest gaps between populations living in poverty and those with access to financial services³. There are a number of institutions working in the space of inclusive finance but these have historically been small NGOs, community banks, cooperatives and non-bank financial institutions. In many cases these organisations are often constrained by lack of coordination, inability to reach scale, and challenges to becoming profitable.

Financial access in Nigeria

- 64.1% of adults (56.3 million) have never been banked
- Only 32.5% of adults (28.6 million) currently have and/or use a bank account
- 76.8% of salaried workers vs. 14.9% of farm employees are banked
- 76.2% of adult rural population is unbanked

Source: EFINA Access to Financial Services in Nigeria 2012 survey – Key findings (pdf)

Box 1

² CBN Banking Supervision Annual Report 2007 and Goldman Sachs "New Markets Analyst," October 2008, 'Access to Finance in Nigeria: Microfinance, Branchless Banking, and SME Finance', CGAP, January 2009 .

³ 'Microfinance in Africa', *MIX Market*, September 2013. <http://maps.mixmarket.org/africa/>

2.4 Other country specific factors

Policy context

The smallholder farmer finance scheme fits well with the government's agenda for agricultural development in Nigeria. Under the leadership of Dr. Akinwumi Adesina the Ministry of Agriculture has embarked on a programme to actively seek participation from the private sector in order to professionalise the sector.

“Agriculture is not a development programme; agriculture is a business and we have to make that fundamental shift in Nigeria. I don't see how agriculture is going to recover until we treat it as a business. As a business, if it is well structured, you will attract significantly more private sector investment to unlock the potential of agriculture, and that's what we have done in Nigeria.”

Dr Akinwumi Adesina, June 2013

Source: 'Nigeria – The agriculture minister speaks', *New African*, 13 June 2013. <http://www.newafricanmagazine.com/features/environment/the-agriculture-minister-speaks>

One of the main drivers for the government's policies to improve agricultural productivity is import substitution. Before the discovery of oil in the 1950s, Nigeria was a major agricultural exporter. In 2012, \$4 billion worth of wheat, \$2 billion of rice, \$1.4 billion of sugar, and \$1 billion of fish was imported into Nigeria. The government is seeking to adopt policies that will reverse this situation to become net exporters of agricultural outputs in the future. These export ambitions are also evident at the state level as the Permanent Secretary for Agriculture, Plateau State, commented during a meeting with the BIF team, “We want to see ‘Made in Nigeria, Plateau State’ on the shelves of every supermarket in the UK.”

The Ministry of Agriculture has adopted a number of initiatives to improve growth within the agricultural sector. For example, the Nigerian Incentive-Based Risk-Sharing System for Agricultural Lending (NIRSAL) is a mechanism targeted at reducing the risk of agricultural lending and lowering the cost of lending for banks. \$500 million has been made available with the majority of this (\$300 million) allocated for a risk sharing facility. In the smallholder farmer finance scheme, Stanbic supports smallholders to access the NIRSAL scheme. This effectively reduces the amount of interest paid on the loans they receive, making the scheme more profitable for smallholders.

Domestic security

The current insecurity across much of Northern Nigeria, associated with the Boko Haram insurgency, creates barriers to the development of agriculture and the further fracturing of value chains that were in any case suffering from weak linkages. Reluctance among companies to invest in the North has contributed to economic decline and increased levels of poverty, particularly in rural areas. However the grain belt lies in central and Northern Nigeria, and is an important source of supply for major industries. While the smallholder finance scheme would bring significant development benefits and also help to increase the supply of commodities to these industries, the insecure environment must be taken into consideration when investing in the region.

Table 2: Summary of influencing factors

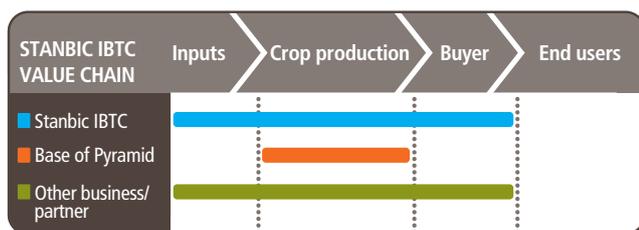
Internal factors	
Company strategy	The scheme is part of a wider strategy to develop inclusive financial services in Africa.
Company leadership	The scheme requires strong relationships amongst all stakeholders involved. The individuals involved need to be credible and build trust amongst large companies as well as individual farmers. Having come from agricultural backgrounds, Jerry Gushop, Head of the Agricultural Banking division at Stanbic and Kefus Tungkir, Regional Manager, Agric. Central region have built strong relationships and worked tirelessly to maintain these.
External factors	
Macro-economic conditions	The Northern region is underdeveloped which provides an opportunity to improve agricultural productivity. However, the security situation must be considered when evaluating potential opportunities to pursue.
Policy context	Favourable policy focused on improving agricultural development supports the scheme, including subsidies that reduce the effective interest rate for farmers. Further development of the ecosystem for agricultural credit depends on new legislation and a favourable regulatory environment.
Partnerships	The scheme has been driven mainly by Stanbic who has reached out to other partners to take part in the scheme. Other partners are important for the model to function rather than developing the concept.

3 How does the inclusive business model work?

- > Stanbic partners with input providers and buyers who provide farmer cooperatives with access to modern farming techniques and a guaranteed market for their produce.
- > The bank continues to iterate the model to overcome challenges, mitigate risk and take advantage of new market opportunities.

3.1 Overview of the value chain and business model

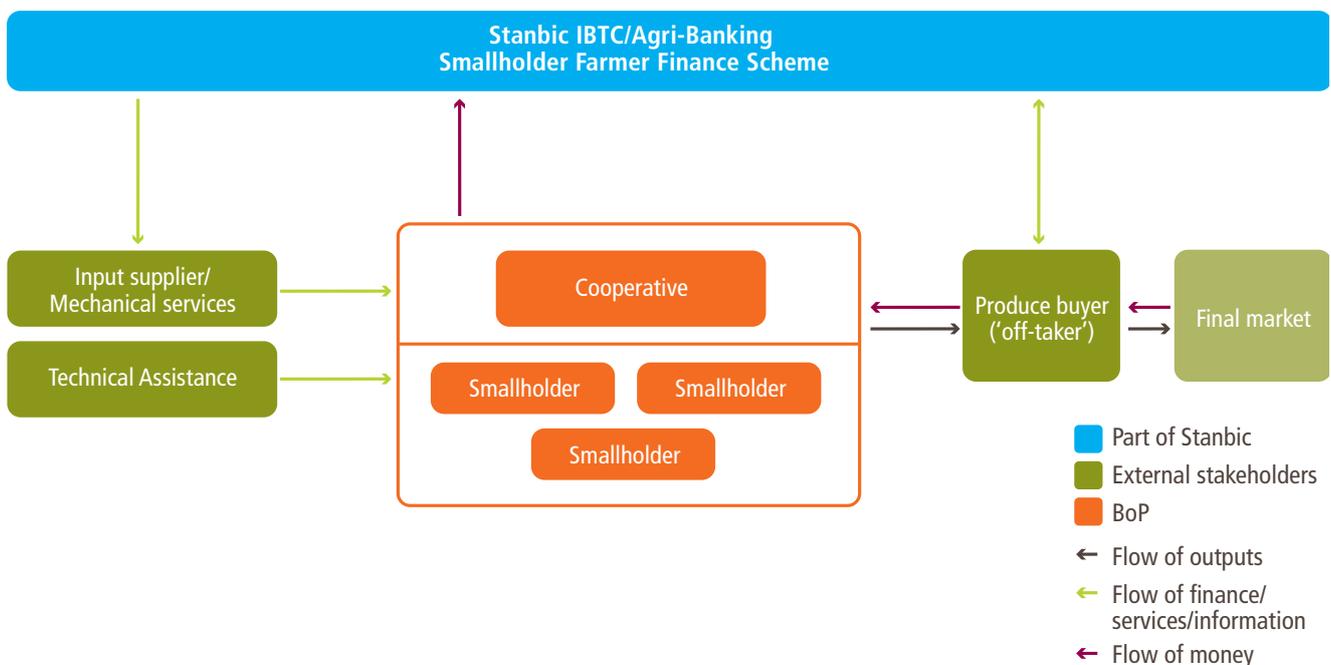
Figure 5: Stanbic IBTC value chain



Stanbic Bank is the driver of the business model for the smallholder farmer finance scheme. The bank provides smallholders that are organised into cooperatives with access to finance on the basis that the loans will be used to pay for quality inputs and

mechanical services from an approved supplier and that the bank pays for this directly. Cooperatives are given additional support through some technical assistance provided by the input supplier. It is expected that through quality inputs and mechanical services smallholders are able to improve the quality and increase the quantity of their outputs. The bank has negotiated with a major produce buyer to provide a guaranteed market for smallholder outputs and offer a guaranteed minimum price. The major produce buyer is also a customer of the bank, which means they also have access to finance if needed to purchase the outputs produced by smallholders within the scheme. On delivery of outputs to the produce buyer a payment is made into an account held with Stanbic Bank. The bank is then able to deduct the initial loan amount plus an interest of 18 per cent. It is then up to the cooperative to distribute the profits to individual smallholders.

Figure 6: The Agri-Banking business model – ‘As is’



Stanbic has entered into a tripartite agreement in the form of a Memorandum of Understanding (MoU) with two other organisations – the input supplier/mechanical service provider and one buyer. The MoU sets out the roles and responsibilities of each organisation and is designed to ensure the model functions effectively. In the MoU, Stanbic agrees to provide the seasonal finance (credit), Agric Services, Training Centre and Marketing Ltd (ASTC) provides smallholders with access to modern farming methods

and Grand Cereals Limited (GCL) provide a guaranteed market for smallholder produce. In addition to the tripartite agreement mentioned, the bank also creates agreements with cooperative groups rather than with individual farmers. For the Jos pilot, the bank has developed a partnership with the Fadama III project that has a network of smallholders grouped in this way. The organisations involved in the scheme are described in Figure 7.

Figure 7: The organisations involved in the scheme

Agric Services, Training Centre and Marketing Ltd. (ASTC) is a public-private partnership (80% government and 20% private shareholding). They provide technical assistance, mechanical services and access to quality inputs. ASTC “strives to encourage market – driven agricultural production”.

Grand Cereals Limited (GCL) is an integrated foods company with leading brands in the cereals, vegetable oil and animal feed categories. They have a major processing plant in Jos, Northern Nigeria.

National Fadama development project (Fadama-III) is funded through the World Bank. The project is a five-year action program developed to raise productivity and incomes of smallholders. The approach is centred on a community-driven model where smallholders are encouraged to work together in cooperative groups. The project aims to cover an estimated 7,400 Fadama Community Associations in 37 participating states.



There are three essential components to the model: seasonal finance (credit), modern farming methods to give the farmers the best chance of realising significant increases in yield and a guaranteed market for what the farmers produce.

Seasonal finance (credit)

Stanbic’s role within the tripartite agreement is to provide finance to smallholders within the scheme. In collaboration with other partners within the scheme, the bank has reached a conclusion as to the amount of loan needed to pay for the necessary inputs per crop and per hectare and per season. For maize production the bank lends \$858 per hectare, and for soya bean production the loan is set at \$1,041 per hectare. The bank does not pay this money directly to smallholders or cooperatives. Instead, the bank makes a loan available to the input/technical assistance (TA) provider to pay for agricultural inputs and mechanical services (modern farming methods) which will be paid directly to the supplier. The bank receives repayment for the loan with interest of 18 per cent once the smallholders have sold their outputs to an approved produce buyer.

Modern farming methods

In the tripartite agreement ASTC agree to provide discounted agricultural services to smallholders. They provide high quality agricultural inputs such as fertilisers and seeds as well as mechanical services which are important to the success of the scheme (Box 3).

ASTC are paid directly by the bank for their services. The bank transfers funds to ASTC once one of their extension officers has made a visit to the smallholder, measured the land with a GPS and made an assessment of the suitability of the land. As a result of this visit, ASTC are able to ascertain the necessary input services or mechanical services required. This is recorded using an inspection form (Box 2) which is shared with the bank. ASTC then requests the release of funds from the bank.

ASTC are also involved in the harvesting, packaging and transportation of outputs, ensuring that outputs are delivered to the produce buyer. The involvement of ASTC within the model increases the likelihood of outputs reaching the level of quality demanded by GCL and in the quantities needed to increase profitability for smallholders.

ASTC Field Inspection/ Assessment Form

ASTC AGRICULTURAL SERVICES AND TRAINING CENTRE
FIELD INSPECTION/ASSESSMENT FORM

Date: Farmer's Name: No: **12900**
 Phone No. Location: L.G.A.
 Date of Last Serviced & Type: Crop Cultivated:
 Crop Planned:
 Coordinates: E N Inspectors Approval: Name Sign Date / /

CURRENT OPERATION REQUIRED

FOR FIELD USE			FOR OFFICE USE			
S/NO	OPERATION	PLOT MEASUREMENT	AREA (Ha)	RATE/HA (N)	TOTAL AMOUNT DUE (N)	DATE OF OPERATION
1	SUBSOILER					
2	PLOUGH					
3	HARROW					
4	RIDGER					
5	PLOUGH, HARROW, RIDGER					
6	FERTILIZER SPREADER					
7	ROLLER					
8	PLANTER					
9	BOOM SPRAYER					
10	CULTIVATOR					
11	MADE SHELLER					
12	COMBINE HARVESTER					
13	MADE MOWER					
14	OTHERS					
TOTAL						

FERTILIZER ALLOCATION					Field Officer:	
DATE	QTY	ALLOCATION (N)	SIGN	REC. NO	Signature/Date	

COMMENTS:

NB:

Box 2

The model does not require that all of the farming is done mechanically. In the Jos pilot, farmers were able to choose from a list of mechanised services and take a loan that may have been bigger or smaller accordingly. However, it appears that some mechanised land preparation, use of improved seeds and mechanised harvesting are the minimum requirements for the model to have the best chance of working.

Currently, ASTC is providing the TA element to the model but has limited resources. A lack of funding means that ASTC is unable to provide end-to-end extension services and TA to farmers and is often limited to providing assistance connected with the delivery of their paid for services.

Guaranteed market

GCL offers a secure route to market for smallholders by performing the function of 'produce buyer' within the model. GCL have agreed to offer smallholders a minimum price for their outputs before the start of the season. For the harvest of 2013 the minimum price was set at \$295 per ton of maize and \$430 per ton of soya. This minimum price is reviewed at the end of the season to take into consideration changes in the market. If prices have increased since the minimum price was set GCL will offer a higher price to take these changes into consideration.

3.2 'Closing the loops'

In addition to the three essential components discussed above there is a cross-cutting feature of the model that involves 'closing the loops' and reducing the risks involved for the bank. Mitigating risk is a key component of the model as the bank is lending against future cash flow only, and has no security through conventional asset-based collateral. There are a number of elements to mitigate risk to the bank and to the farmers. Some mitigation strategies are part of the structure of the model, including:

- **Avoiding side selling:** The modern farming methods provided by ASTC also extend to mechanical harvesting by a trusted intermediary (i.e. not the farmers themselves) in order to avoid the farmer 'side-selling' their harvest to different buyers and avoid meeting their contractual responsibilities to GCL.
- **Ensuring selection of trusted smallholders:** The bank provides loans and has agreements with cooperative groups rather than with individual smallholders. The bank has developed a partnership with the Fadama III project that has a network of smallholders grouped in this way. Each cooperative must register with ASTC and GCL in order to participate in the scheme. Preference is given to farmers with a track record of farming with ASTC. In addition, the cooperative must sign-up to the bank's terms with agreement from every member. This makes them collectively responsible for repayment of the finance provided by Stanbic.

Modern farming methods explained

Modern farming methods encouraged within the scheme include:

- Mechanised land preparation where possible to prepare the ideal seed bed.
- Use of high yielding seeds, planted by a machine so that they are evenly spaced and with the right number of seeds to provide the optimum number of plants per unit area, with the right amount of fertiliser to ensure a good yield (but not more than enough).
- The right care of the growing crop to minimise competition from weeds or the spread of harmful pests and diseases. Even application of the necessary chemicals can also be done by machine to ensure that it is applied evenly and at the optimum concentration.

Box 3

- **Avoiding diversion of money:** The produce buyer, GCL, makes a transfer payment to the bank account of the cooperative for the outputs they collectively produce. As it is a requirement of the cooperative to hold an account with Stanbic, the bank is able to automatically deduct the loan amount with interest as soon the payment from GCL is received. This money is then divided amongst the individual smallholders based on the type of crop and amount sold.

Other mitigation strategies are specified in the operating guidelines that sit alongside the tripartite agreement (Table 3).

Table 3: Mitigation strategies

Event	Mitigation strategy	Impact of mitigation if the event occurs
Crop grows well but a small number of farmers are unable to, or chose not to, pay back bank	Guarantees required at cooperative and individual level	Bank: no impact Farmers: some farmers may have reduced income
Crops suffer from insurable event (assumed to be extreme weather events, unpreventable insect damage, disease) such that they cannot cover costs	Cooperatives are required to hold insurance	Bank: no impact Farmers: all farmers likely to have reduced income, but loss is mitigated by insurance
Crops do not grow well in some cooperatives for reasons that cannot be insured, such that they cannot cover costs	Cooperatives required to have 20% equity in the bank	Bank: will have a reduced profit and may incur losses if the overall default rate is greater than 3% Farmers: farmers in those cooperatives will lose their equity and may go into long term debt

It is not possible to eradicate risk completely from any business activity. The Stanbic agricultural team are confident that they have minimised risk for both the farmers and the bank, but by the very nature of contract farming there are still a number of issues that will continue to need attention, such as:

- **Insurance limitations:** While compulsory crop insurance covers the cooperatives from natural disasters it does not cover every eventuality. Depending on the profit smallholders receive (which remains to be seen) there may be little margin for error in order for them to make a decent profit.
- **Partner capacity limits:** ASTC does not always have the capacity, particularly at harvest time, to meet the demand of farmers. This increases the risk of side selling.
- **Farmer debt:** In the event that farmers go into long-term debt then the bank is also very likely to lose money as some of this will become bad debt.

3.3 Margins and pricing

The bank makes money by charging 18 per cent interest on all loans provided. This level of interest is already low in the current market but is reduced further to 10.8 per cent after the NIRSAL rebate of 40 per cent of interest paid. There are no other banks known to be currently operating this model in this way. Stanbic does not expect to see any default on repayments but should this occur would be a maximum of one per cent of the total amount loaned.

The commercial viability of the project is discussed in detail in Section 4 "Commercial results".

3.4 Evolution of the model

Since the beginning of 2011 when the implementation of the smallholder finance scheme was being considered in Nigeria, there have been a number of revisions to the model in response to some of the key challenges.

Table 4: Key changes – solutions to challenges

Issue	Challenge	How Stanbic is addressing the challenge
Solvency of buyers	In a previous pilot in Nigeria the buyer was unable to pay for the smallholder outputs which meant that the bank had to find an alternative produce buyer.	The bank now partners with off-takers that are customers of the bank so they can ensure solvency and provide access to finance if necessary.
Lending to individuals	While the strategy of the bank is to increase the number of individuals holding accounts the risk of lending to individuals was too high.	The bank's solution was to use cooperatives to create a cross guarantee and mutual accountability system. The bank started to use the cooperatives in association with the Fadama III project to receive loans during the pilot phase.
Natural disasters/ crop failure	Crop production can be adversely affected by unforeseen and unpredictable circumstances or events.	The bank requires that all cooperatives take out insurance to protect against natural disaster or crop failure.
Interest rates	In order to make the scheme financially viable for smallholders the bank needed to ensure that interest rates were as low as possible. The banks interest rate of 18% should leave farmers with a positive, but not that large, margin from their harvest.	The bank applies on behalf of all smallholders participating in the scheme to the Nigerian Incentive Risk-based Sharing System for Agricultural Lending (NIRSAL). The scheme offers a 40% rebate on the interest rate paid on the loan received from Stanbic. This effectively reduces the rate of interest to 10.8% which improves the margin for smallholders.
Extension workers/ Technical Assistance	There is a shortage of agricultural extension workers that provide technical assistance and capacity building to smallholders in Nigeria. ASTC are able to provide some services but are limited by government funding which has not always materialised.	The bank recognised the need for donor funding in order to be able to provide end-to-end extension services to smallholders and is actively exploring opportunities. Exploration of potential donor funding sources was also one of the key areas of technical assistance provided by BIF (Box 4). The search for donor funding is on-going.

BIF support in brief

BIF's initial support to Stanbic provided in June 2012 included assistance in brokering agreements with buyers and other stakeholders, conducting a review of the business model to ensure its sustainability, and identifying potential sources of grant funding to pay for elements in the supporting ecosystem that will enable the scheme to scale. These could include enhanced agricultural extension services and farmer training.

Support was also provided to help with the development of a model for an effective private sector led forum in the Nigerian agricultural sector. It is intended that this forum will extend the bank's network within the agricultural industry and be an enabler for the scheme's ability to scale-up based on various partnerships across sectors.

Box 4

3.5 Future plans

Stanbic recognises that – while they have come a long way in developing the inclusive business model – there is still work to be done. The bank is ambitious in its plans to develop the current model, scale up and increase the benefits both for themselves and smallholder farmers. Future plans include:

1. CEO Forum

Stanbic is currently developing a model for a CEO forum for agricultural development. The bank sees this as an important opportunity to build a network of major produce buyers that can commit to the model and help it to scale up.

2. The Warehouse Receipt System (WRS) and Abuja Commodity Exchange (ACE)

Incorporating the ACE and a WRS into the model is currently being negotiated through a policy to privatise the national warehouse system. The bank sees this as the next logical step in the evolution of the model, as Jerry Gushop, head of the agricultural division at Stanbic states "The WRS is very important to us and we are very passionate about developing it further in the future."

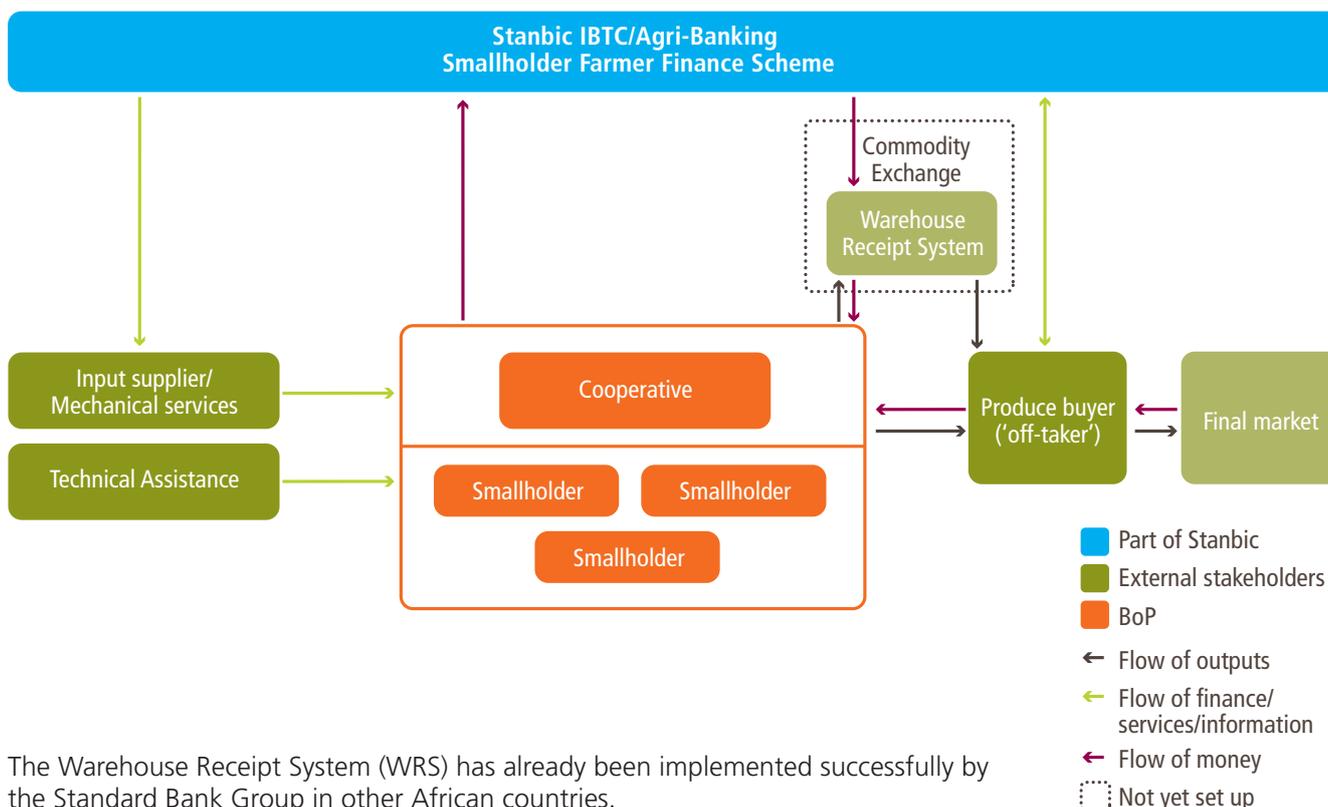
There are a number of benefits of incorporating the ACE and a WRS into the model. Smallholders will benefit from the widening of the market through the ACE and see an increase in return through selling later in the year by using a WRS. The bank would benefit through commodity trading and the potential of reaching scale with this model.

Stanbic envisage that the model being piloted in Jos will continue alongside the WRS/ACE addition. The bank has already begun to get the necessary elements in place to make this a reality. In 2012, for example, the bank was granted an Islamic banking license that allows them to expand into the Northern States where Sharia Law places some constraints on how banks can operate.

Figure 8: The Warehouse Receipt System

Currently, lack of access to storage facilities and to buyers not only forces farmers to sell their produce at time of harvest but also means that they only receive a small fraction of the actual market price (an average of 48%) due to various middlemen involved. The WRS is based on a network of physical grain silos which will allow farmers to store their produce. This service enables farmers to sell their produce at potentially higher prices later in the year, and also provides them with the opportunity to access cash from Stanbic – backed up by their commodities stored in the warehouse – before the actual produce is sold.

The Agri-Banking business model – including the WRS/ACE



The Warehouse Receipt System (WRS) has already been implemented successfully by the Standard Bank Group in other African countries.

4 Commercial results

> The pilot is expected to make an operating profit of \$38,883 by the end of 2013.

> As the inclusive business scales, Stanbic expects an increase in profits from the scheme, as well as from increased demand for its existing products and new market opportunities.

Current results

The current model is not yet considered to be commercially successful by the bank. Though currently operating at a profit, the scheme is only operating on a small scale and with relatively low margins compared to the bank's other activities. The actual figures for costs, turnover and profit will be determined after the loans have been repaid by the cooperatives once the harvest has been completed and GCL has paid them for their outputs, expected by November 2013.

Stanbic loaned \$762,404 in total to those cooperatives taking part in the Jos scheme in 2013. It is expected that turnover for the bank by the end of 2013 will reach \$129,608. Turnover for the bank is the interest rate of 18 per cent (minus one per cent in direct transaction costs) attached to all loans provided by the bank. The total costs for the project in 2013 are estimated to be \$90,725 which includes staffing, administration and the processing of loans necessary to run the scheme.

Profit for the bank is calculated by taking the turnover minus the costs. The bank calculates that profit stands at 30 per cent of turnover received. Assuming that the scheme will continue to have this margin, the bank is expected to make a profit of \$38,883 at the end of 2013.



Stanbic Bank, Lagos

Future targets at scale

For the bank, their interest lies in the potential of the scheme to reach scale and the commercial benefits it could have in the future. The scheme is already being replicated in Kaduna state and the bank intends to reach other states where there are the right partners to participate in the scheme. The scale-up of the scheme in other areas of Nigeria has a number of potential commercial benefits for the bank, including:

- **Increased profits:** An increase in the number of smallholders accessing the scheme will see a steady yearly increase in profits for the bank. The bank has a conservative strategy to increase the number of smallholders accessing the scheme from 540 to 3,500 per year by the end of 2016. It is estimated that this would result in a profit of \$127,500. While this is still a relatively low profit margin for the bank, this will support the bank in its long-term strategy to improve market position, increase customer base and provide new products.
- **Increased demand for services:** It is hoped that the smallholders accessing the scheme will become more profitable for the bank in the future as their incomes begin to increase. The bank will then be able to offer a range of services including personal loans, mortgages and savings accounts. It is also envisaged that the bank will increase the number of partnerships with major produce buyers and input providers. This will increase the number of private sector customers accessing the bank's services.
- **Expanded market opportunities:** The bank's strategy to link the scheme with a Warehouse Receipt System and the Abuja Commodity Exchange will provide opportunities to become involved in commodity trading and any associated financial services.

Table 5: Overview of commercial results

Commercial returns	Financial ⁴	Strategic
Company objective	<ul style="list-style-type: none"> To generate turnover and profit through the provision of loans to smallholder farmers 	<ul style="list-style-type: none"> To generate a new customer base and increase market share To develop further partnerships with major produce buyers and agricultural input providers To incorporate the Warehouse Receipt System into the model and connect this with the Abuja Commodity Exchange
Progress to date	<ul style="list-style-type: none"> \$762,404 total loans to cooperatives in the Jos scheme in 2013 Expected turnover of \$129,608 by the end of 2013 	<ul style="list-style-type: none"> Stanbic is at the pilot stage and on track to grow the numbers of smallholders taking part in the scheme from 540 currently to 3,500 in 2016
Trajectory going forward	<ul style="list-style-type: none"> Reach a turnover of \$425,000 by the end of 2016 	<ul style="list-style-type: none"> Develop the scheme outside of Jos where the pilot is taking place
Key challenges	<ul style="list-style-type: none"> Keeping the cost of sales low Continuation of the NIRSAL Scheme – government subsidy is key Increasing the number of farmers 	<ul style="list-style-type: none"> Building further partnerships with major produce buyers and input providers Government policy and obtaining approval of the scheme, particularly regarding the Warehouse Receipt System and Abuja Commodity Exchange

⁴ Turnover here refers to the amount of money Stanbic IBTC receives back in interest repayments minus direct transaction costs. It does not include the actual loan amount.

5 Development impacts

- > The current pilot benefits 540 rural farmers in Northern Nigeria with average annual income of \$272 and 1-1.5 hectares of land. Stanbic aims to have reached a total of 3,500 farmers in total by 2016.
- > Farmers benefit from increased access to finance, agricultural inputs, extension services and market linkages.
- > Stanbic's activities, if successful, will likely be replicated and adapted by other market players, potentially creating a step change in the system for smallholder finance.

5.1 Direct impacts at the base of the pyramid

Who is benefitting?

The inclusive business model benefits smallholder farmers at the base of the pyramid (Box 5). The bank provides finance to cooperatives rather than to individual smallholders, which supports the organisation of smallholders in this way. Cooperatives are often made up of people with disparate amounts of land ownership and income levels. The idea behind the cooperative is to support other members through sharing knowledge, physical help or emergency financial support. This means that if the cooperatives are successful then this will result in wider benefits for smallholders within the group.

It is important to note that the scheme is aimed primarily at farmers and cooperatives with land additional to that which they are already using. It is expected that the scheme will provide an additional revenue stream for these farmers which could be used to invest in future activities and scale up their current farming operations.

As part of the pilot in Jos, 36 cooperatives have received loans from the bank averaging \$21,177 each. In each cooperative there are approximately 15 smallholder farmers. On this basis the number of individual smallholders taking part in the scheme is estimated to be 540. This number only includes the actual farmers, themselves, and does not include their families or other people who could potentially benefit from the scheme.

How do people benefit?

The scheme increases the farming income of smallholders by increasing their access to finance, agricultural inputs, extension services and market linkages. As farming is often the sole source of income for the smallholders and their families, any increases in income will benefit others within the household. The additional income they can earn from improved farming methods has already enabled some farmers in the region to support their children through higher education and to invest in better quality housing.

Defining the BoP

The average per capita income of a smallholder within the pool of cooperatives supported by the Fadama II project is \$323 per year which equates to \$0.88 per day. This falls below the World Bank's international poverty line of \$1.25 and significantly below Nigeria's own national monthly minimum wage of \$115 (equivalent of approximately \$3.8 per day).

The average smallholder farmer with this level of income has approximately 1-1.5 hectares of land. Smallholders currently produce a variety of crops, including maize, soya, sorghum, and Irish potatoes to name a few. The scheme is currently only focusing on maize and soya production.

Smallholders within this income group and land size can be characterised in other ways as well. In terms of housing they typically would have a single dwelling, per household, and be built using traditional techniques of clay bricks and a low-cost metal or thatched roof. They are likely to be uneducated themselves and also be unable to afford to pay for the education of their children. They struggle to access basic levels of primary healthcare and would be unable to pay for any long-term medical treatment needed. Financially the smallholders accessing the scheme were typically the 'unbanked'. There is little knowledge of the services the bank can offer including an understanding of how finance works.

Box 5

Table 6: How do BoP farmers gain?

Dimension of Significance	Relevance	How it applies
Access	√√	The scheme is targeted specifically at smallholders and those that are currently 'unbanked'. It gives the BoP access to finance and creates market linkages.
Quality	√√	Farmers are able to benefit from a 'service package' that includes mechanised services and a guaranteed market as well as credit at a reasonable price. This constitutes an excellent quality service compared to the rest of the market, which is reluctant to offer even simple credit.
Affordability	√√	<p>The scheme is designed to ensure that smallholders are able to pay back the bank loans and still make a decent profit.</p> <ul style="list-style-type: none"> • The bank supports smallholders in applying for rebates on the loan interest. • GCL agreed to a guaranteed minimum price for outputs and will increase this to match market prices. • The pilot benefits from an interest rate rebate which reduces the effective interest rate to farmers. Until the scheme is fully operational it is not possible to assess whether it is fully sustainable without this subsidy.



Daniel Arandong, Chairman of his local farming cooperative shows us the land being used as a cooperative

A visit to one of the areas where the scheme is being piloted near Jos indicated how the scheme can directly impact the farming system. Much of the maize in the area, which was about half grown, was yellow in colour and the height and appearance of the maize was inconsistent. This suggested that maize was being grown from seeds from the last harvest and had not been adequately fertilised. Maize growing out of the scheme is typically planted with a low plant density on hand-prepared land, and weeds are allowed to grow between the widely spaced rows. The difference between this and the plot next door was easy to see.

The maize grown in a field which is part of the scheme is larger, darker in colour and more consistent in appearance, suggesting that high yielding improved seeds have been used. There are also fewer weeds among the more densely planted fields. This field was prepared by hand, as ASTC could not provide a tractor at the right time. Other fields in the scheme nearby showed signs of mechanised land preparation.

During the Jos field visit, the BIF team met the farmer (left, centre) with some of his colleagues from a cooperative that is taking part in the scheme. He is standing next to his field of soya, which had been prepared by ASTC. This farmer had already benefited from help under the World Bank finance Fadama scheme. He has prospered, and has been able to build five houses which he rents out, and also has a vehicle (he is holding the keys). He has supported his children through further education.

This man represents Stanbic's vision of the 'farmer as business man' who can quickly emerge when given the right support. He is excited by the scheme and thinks his income will increase significantly from it. He has fallow land that he wants to plant. When asked what constrains him from increasing his income under the scheme, he replied 'give me the money!'.



Hosea Mamwan, treasurer of his local farming cooperative explains what he expects from the scheme



The BIF team on a site visit with local farmers in Bokkos, Jos on 24th October, 2013. The field on the left is part of the Stanbic smallholder finance scheme. The field on the right is not part of the scheme

They were all in agreement that, should any farmer not contribute fully or pay back his or her share of the loan, the group could take land in as compensation. They also agreed that the first use of profits from the land would go towards families in the group that were experiencing real hardship.

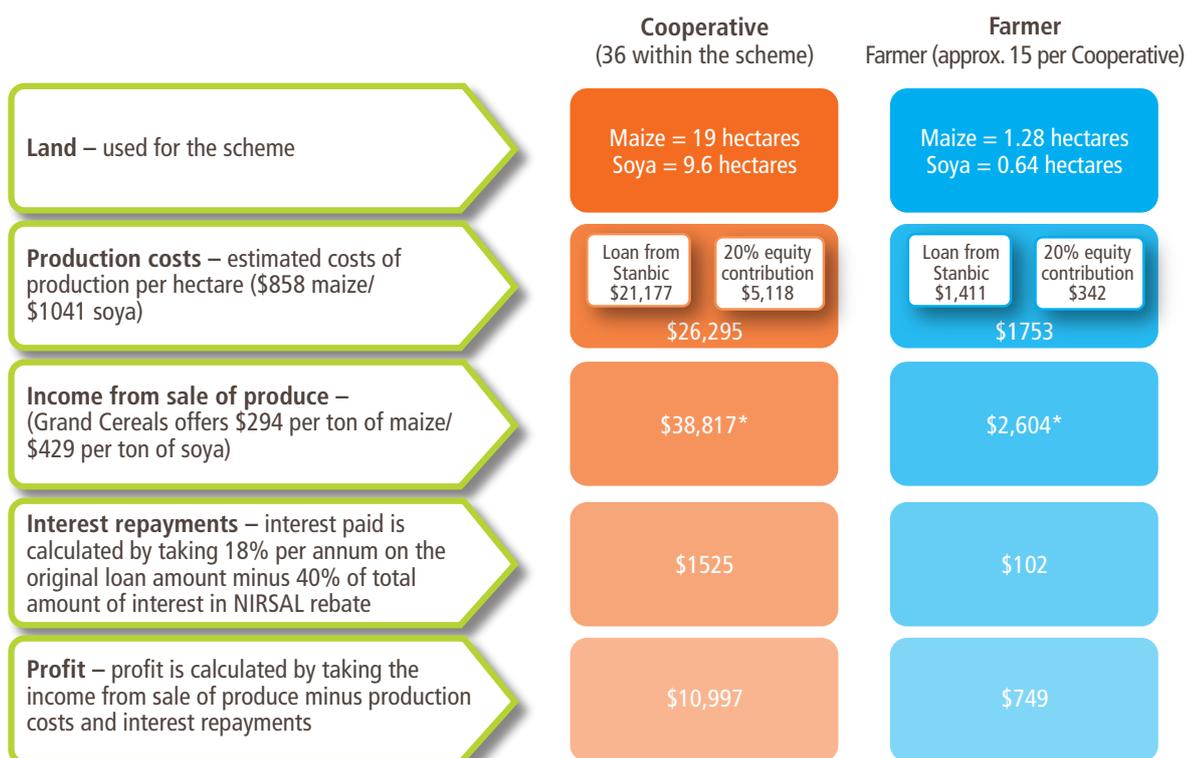
The development goal for the scheme is to provide smallholders with income that is greater than what would be possible without the scheme. This is possible as the mechanised farming and credit available enables smallholders to make profitable use of additional land that they may have already, or is possible to access through organising cooperatives. Figure 8 shows how this additional land results in profits for cooperatives and individual farmers.

Smallholders are loaned an amount based on what Stanbic believes to be the optimum investment/ input costs in order to reach preferable yields. This is estimated to be \$858 per hectare of maize and \$1,041 per hectare of soya. Each farmer/cooperative is required to contribute 20 per cent of these costs and

the remaining 80 per cent is provided by Stanbic as a loan. On average each cooperative borrows \$21,177 from the bank, provides \$5,118 in own contributions and spends \$26,295 total in input costs.

It is expected that investing this amount of money into crop production will result in yields increasing from approximately one ton of produce per hectare to four tons of produce per hectare. With this assumption and the agreement with GCL to provide a guaranteed minimum price for maize and soya (\$294 and \$429 per ton respectively) it is expected that income of each cooperative will be \$38,817 per year on average. After the loan is repaid with interest and smallholders have received a rebate of 40 per cent of interest paid through the NIRSAL scheme it is estimated that each cooperative will achieve a profit of \$10,997. This would equate to an average profit of \$749 per farmer per year. It can therefore be concluded that the estimated gross profit for cooperatives and farmers is 26 per cent and the return on original investment is 39 per cent.

Figure 9: How cooperatives and individual farmers make profits from the scheme



*Based on farmers producing 4 tons of produce per hectare of land

5.2 Potential for systemic impacts

There would appear to be significant opportunities for three types of systemic impact:

1. Potential for greater efficiency and productivity in the agricultural value chain

In order to make the margins work for farmers and bankers, the model has to improve productivity at key points in the value chain. Stanbic is establishing relationships between market players, and new skills and approaches among farmers. As this embeds, it has potential to influence the overall evolution of how smallholder farmers engage with value chains, with more direct engagement and higher productivity.

The model may have a positive impact on interrelated markets as well, such as those for the supply of agricultural inputs and mechanised services. As the scheme grows, there will be incentives for companies in these markets to extend their provision, or for new companies to enter these markets. Stanbic is already keen to take an active role in making other potential partners aware of the opportunity.

The commodity markets may also be impacted if the model reaches real scale, such that the major buyers of maize, soya and other products that may be included will be more likely to consider contract farming as a viable way of procuring products. This could create a virtuous circle which encourages yet more companies to increase their activities in the smallholder finance and agro input markets.

2. Potential for replication and adaption by other market players

If the scheme is successful then Stanbic will have shown that it is possible to profitably offer cash flow-based lending to small farmers. This will require the initial pilots to be sufficiently successful for the bank to scale this activity such that it becomes a core-business activity that can be systemised.

While the initial profitability may still not be attractive compared to other forms of lending (e.g. asset base finance), as these farmers become more business oriented and increase their productivity further then the commercial potential will be even stronger. There are also a lot of small farmers in Nigeria, and the national and regional market for agricultural produce

is very large. Therefore it would appear very likely that other banks will be attracted to either replicate the Stanbic model or adapt it to their own needs.

This wider uptake by banks would itself be a change in the market system for smallholder finance. Other changes in this market system might then follow, in order to promote faster or larger scale uptake of the model. The project is already attracting interest from the donor community, and as the government has made agriculture a high priority there could well be favourable changes in the policy environment. In this regard, it is interesting to observe that the Plateau State government is already highly interested in what the bank is doing.

3. Potential for a step change in the system for smallholder finance

The final significant potential for system change in the market for smallholder finance arises from Stanbic's ambitions to provide more options to smallholder farmers. As noted in this report, this is currently awaiting government clearance, which is part of a policy of introducing the legal and regulatory environment for a well-functioning commodities market in Nigeria.

When they are able, Stanbic intends to extend their smallholder finance into other types of finances, such as the Warehouse Receipts System. As a first mover in these activities, Stanbic is extremely well placed to provide further reassurance and technical knowhow to the wider market, such that the benefits of a commodity exchange and associated financial instruments can be achieved quickly and at scale.

6 Future outlook and lessons learned

6.1 Future outlook and potential for scale

Stanbic Bank IBTC's strategy is to increase the number of smallholders accessing the scheme from 540 currently to 3,500 per year by the end of 2016. By increasing the customer base, the bank aims to increase the range of commercial services and products it is able to offer. The bank has an ambitious long-term goal to reach five million customers through expanding the scheme in other states. In order to get there, the bank is currently pursuing four strategies:

1. CEO Forum

A CEO forum is currently in the planning stages and is being driven by the head of the Agricultural Banking division of the Stanbic Bank, Jerry Gushop. The bank wants to build up a strong network of people interested and excited about engagements at the smallholder level. It is envisaged that the forum would include CEOs from major produce buyers and companies that have an interest in the development of agriculture in Nigeria. The forum will be a platform for the bank to build further partnerships with companies that will become future 'buyers' within the scheme's model. This will be an important development for the scheme and is hoped will be a catalyst for future scale.

2. The Warehouse Receipt System (WRS) and Abuja Commodity Exchange (ACE)

Stanbic has also been in discussion over a number of years with the government about how they can contribute to the development of a fully functioning market for agricultural commodities. Most recently, bank representatives attended a meeting with the Bureau for Public Enterprise (BPE) in July 2013 to discuss whether Stanbic could operate a WRS linked to the ACE. These discussions are still underway but the outcome is anticipated to be a significant milestone for Stanbic, and other banks, to evolve financial services for smallholder farmers in the future.

3. Donor funding

Stanbic Bank is currently in search of donor funding to provide improved levels of technical assistance to smallholders. While the model is able to function with the limited amount of technical assistance ASTC is able to provide, it is important that smallholders receive the support needed to improve their skills for long-term success. Improved access to technical assistance will mean that more smallholders will be able to access the scheme and reach the necessary level of expertise needed to be successful farmers year after year.

4. Adapting the scheme

The current scheme concentrates on the production of maize and soya but Stanbic Bank is keen to see how the scheme can be adopted elsewhere. The bank has plans to implement the scheme in other areas including cassava, oil palm and poultry farming. If successful, this will be an important way forward in demonstrating the applicability of the model to other areas in the agricultural sector, which would greatly increase the scope of the scheme.



Maize growing as part of the scheme

6.2 Additionality of BIF support

BIF support coincided with unexpected staff changes at senior levels of the bank, which resulted in delays to regain momentum of the collaboration between BIF and Stanbic. BIF input came at a crucial time in development of the pilot. However, in practice, BIF input did not have a strong influence on the pilot design because of challenges that emerged. The member of Stanbic IBTC's staff who had requested, and then managed, the BIF input left without prior warning. Because the rest of his team were field based, it took time to regain momentum on the project. The new BIF contacts were not aware of the work that had already been done by BIF until sometime later. Once the relationship was established again, BIF started providing input more suitable for looking to scale the pilot.

Sourcing funding to help scale up the model has been part of this new work. It is also taking longer than expected. However, it does appear that BIF's engagement with Stanbic has meant that DFID Nigeria is well informed about the initiative and this may yet result in support to scaling the work more quickly than would otherwise be possible.

6.3 Lessons learned

The following lessons have been learned from this project:

- Smallholder finance in Nigeria requires a **patient and knowledgeable approach**. Risks in agriculture cannot be avoided, but through thorough understanding of farming systems, a number of detailed design issues can combine an ambitious intervention with risk mitigation.
- The 'engines' of smallholder finance are the **significant yield increases that can be achieved** by small farmers with the right support. If these yield increases materialise, and there is no reason at the time of writing to think that they will not, this can be a profitable business for the bank as well as for the farmers.
- **Working with a range of partners** in a highly coordinated way appears to be a promising way forward; without the range of partners, the gains in productivity would not be possible.
- A **step change in the way that farming is undertaken** is needed to achieve these benefits. This is often expressed by those working in the Stanbic scheme as a change from farming as a way of life, to farming as a business.
- The environment in which the initiative is being piloted is one where there is a gap between the government policy, which is very supportive of agriculture, and the banks, most of which do not yet see smallholders as a profitable class of customers. The larger success of this project could be to **catalyse significant change in the market for smallholder finance** and interrelated agribusiness markets.

Annex 1: Case study methodology

Overview

Research was conducted using both primary and secondary data.

Primary data was collected via discussion with stakeholders and beneficiaries during eight days of fieldwork conducted between 19th August and 26th August, 2013. Specifically a combination of focus groups, interviews and site visits were conducted. Conversations were had with a number of farmers, some of whom are featured in this case study, and interviews were held with the agricultural teams at Stanbic IBTC as well as the management team at GCL and ASTC.

Interviews were conducted with the following stakeholders:

Stanbic IBTC Bank	
Jerry Gushop	Head of Agric-banking, Nigeria
Kefas Samuila Tungkir	Regional Manager, Agric. Central region
Maximus Ogoegbunam	Agric Manager South
Oyinye Agubuokwu	Agric Manager, Lagos
ASTC	
Oren Shaked	ASTC Manager
Bentu Susan Nancin ESQ	Company Secretary/Legal Adviser
Grand Cereals	
Timothy G. Makeri	Procurement Manager
Yakubu J. Amasa	Supply Chain Manager
Cooperative farmers featured in the case study	
Hosea Mamwan	Treasurer of his local farming cooperative
Daniel Arandong	Chairman of his local farming cooperative
Isa Hamidu	Smallholder farmer receiving a Stanbic loan
Convention on Business Integrity	
Soji Apampa	Executive Director

Secondary data included BIF baseline reports, progress report, Convention for Business Integrity documents, and other external sources such as the World Bank, MasterCard Foundation and MIX (Microfinance Information Exchange), CBN Banking Supervision, Goldman Sachs, EFlA and the Nigerian Government, Ministry of Agriculture. This desk research was conducted before, during and after the field visit in August and September 2013.

Strengths of this case study

- Listening to stakeholders first hand and asking questions openly and freely
- Well facilitated and well planned field visit by the Convention on Business Integrity and the Stanbic IBTC teams
- Openness and willingness of Stanbic IBTC to discuss all aspects of the project and meet with key stakeholders in the scheme

Limitations of this case study

- The results of the pilot are yet to be determined so all conclusions are indicative based on what the expected outcomes are. While we have tried not to overestimate the results, there is a risk that the positive results mentioned in the case study may not be realised in the ways discussed
- The BIF team was not able to extend our research far away from Jos and only saw examples of where the scheme is operational around Jos and Bokokos
- The BIF team met with farmers in more formal settings and within wider groups with no one-on-one interviews taking place. This may have reduced the chances of receiving more candid or negative responses to the team's question
- The sample size of farmers we met (approximately 20-30) is relatively small and could have been extended with a longer field trip
- The meetings with stakeholders were arranged by Stanbic IBTC and the Fadama cooperative group to ensure that we met all of the important stakeholders. Due to time constraints we were unable to have individual follow-up meetings
- Due to the limited depths and scope of data collection undertaken for this report, the nature of BoP level data is indicative
- This case study is based on information and discussion as of mid 2013. Although discussion of specific details has continued with key stakeholders in the process of finalising this report for publication in December 2013, it should be seen as a snapshot as of mid 2013.

Partner profiles

Business Innovation Facility

The Business Innovation Facility supports companies as they develop and implement inclusive businesses. Inclusive business is profitable, core business activity that also expands opportunities for people at the base of the economic pyramid: either as producers, suppliers, employees, distributors, or as consumers of affordable goods and services.

The Business Innovation Facility is a pilot project funded by the UK Department for International Development (DFID). It is managed for DFID by PricewaterhouseCoopers LLP in alliance with the International Business Leaders Forum and Accenture Development Partnerships. It works in collaboration with Imani Development, Intellectap, Renaissance Consultants Ltd, The Convention on Business Integrity and Challenges Consulting.

For further information on BIF go to: www.bifprogramme.org

To join the discussion on inclusive business, go to: www.inclusivebusinesshub.org



Institute for Development Studies (IDS)

The Institute of Development Studies (IDS) is a leading global charity for research, teaching and information on international development. Our vision is a world in which poverty does not exist, social justice prevails and economic growth is focused on improving human wellbeing. We believe that research knowledge can drive the change that must happen in order for this vision to be realised. IDS hosts six dynamic research teams, several popular postgraduate courses, and a family of world-class knowledge services. These three spheres are integrated in a unique combination – as a development knowledge hub, IDS is connected into and is a convenor of networks throughout the world.

The Impact and Learning Team (ILT) conducts action research to generate new insights into the ways that evidence is used in decision making in policy and practice, including the generation of multiple types of evidence and knowledge (from evaluation, monitoring, and research), and the behaviours and capabilities of decision makers in using evidence to contribute to organisational, programme and policy changes. The ILT is situated under the Knowledge Services department of IDS, and works collaboratively with the six research teams in the institute as well as external partners.

For more information about the Impact and Learning Team, please visit:

<http://www.ids.ac.uk/team/impact-and-learning-team>

For information about IDS research on business and development, please visit:

<http://www.ids.ac.uk/idsresearch/business>



Oxford University, Saïd Business School

Saïd Business School is one of the world's leading and most entrepreneurial business schools. An integral part of the University of Oxford, the School embodies the academic rigour and forward thinking that has made Oxford a world leader in education. The School is dedicated to developing a new generation of business leaders and entrepreneurs and conducting research not only into the nature of business, but the connections between business and the wider world.

For further information please visit: <http://www.sbs.ox.ac.uk/>

Skoll Centre for Social Entrepreneurship

The Skoll Centre is a leading academic entity for the advancement of social entrepreneurship worldwide that is housed in Oxford University's Saïd Business School. The Centre fosters approaches to market-based social transformation through education, research, and collaboration among business, policy, academic and social leaders

For further information please visit: <http://www.sbs.ox.ac.uk/ideas-impact/skoll>



About this series of case studies

The definition of inclusive business is fairly well known by now – profitable, core business activity that also expands opportunities for people at the base of the economical pyramid (BoP). But what does it look like in practice? That is a harder question to answer. Experience is diverse, much of it early stage, and published reports often err on the side of ‘cuddly’, not forensic.

This report is one of a series of ‘deep dive’ case studies that seeks to understand inclusive business in practice. The series explores contrasting inclusive businesses, all of which have been supported by the Business Innovation Facility (BIF). Support from BIF is not cash, but technical input to help overcome challenges, seize momentum, and build a business model that will take the inclusive business to scale and sustainability. The partnership with BIF is, thus, very focused on the practicalities of business models and identifying key milestones in an inclusive business journey.

Over the past three and a half years, BIF has worked with almost 100 companies in five countries. BIF-supported businesses offer rich lessons about the evolution and impact of inclusive business, ranging from working with smallholder mango farmers in Malawi to rural energy solutions in India. Some of this is captured in the monitoring and evaluation (M&E) system. However, the system was designed to be applicable to all projects, not necessarily to capture the richness of the most interesting.

In order to add a deeper understanding of BIF supported inclusive business, BIF, in partnership with the Institute of Development Studies (IDS) of Sussex University and Saïd Business School (SBS) of Oxford University, has generated a set of case studies of inclusive business.

Following a joint framework developed by BIF and IDS, these reports explore what counts as success and what factors have created it. They assess the internal and external context of a company’s business model, the ‘nuts and bolts’ of how the model works, actual or likely commercial returns, emerging impacts on bottom of the pyramid beneficiaries, value added from BIF support, key success factors for scale and lessons relevant for other companies.

We hope that the reports will provide inclusive business practitioners with knowledge and insights on how companies are progressing on their inclusive business journeys – each one distinctive, yet each discovering challenges and solutions that resonate with others.

Caroline Ashley and Carolin Schramm, BIF, Elise Wach, IDS and Pamela Hartigan, SBS

The full series of case studies:

- > ACI Agribusiness: Designing and testing an integrated contract farming model in Bangladesh
- > Collaborating for smallholder finance: How is Stanbic closing the loop?
- > Commercialising cassava: New opportunities for Universal Industries and Malawian smallholders
- > Evolution of mKRISHI®: A technology platform for Indian farmers
- > iSchool: Transformative learning in the Zambian classroom
- > MEGA: A commercial approach to off-grid power in rural Malawi
- > The JITA sales network: An inclusive business on the rise



The series was coordinated by Carolin Schramm, and edited by Caroline Ashley. The methodology was developed and shared with authors in collaboration with Noshua Watson and Elise Wach of the Institute of Development Studies. Editing was done by members of the BIF team and by John Paul, independent inclusive business consultant. The series Production Manager was Clare Convey, and design was done by Caroline Holmqvist.

We are grateful to the authors, contributors and companies who have provided the images used within these case studies. Images cannot be reproduced without their permission.

→ To view all case studies, go to **The Practitioner Hub for Inclusive Business:**
www.inclusivebusinesshub.org/page/bif-case-studies



The Business Innovation Facility (BIF) pilot project was funded by the UK Department for International Development (DFID), managed for DFID by PricewaterhouseCoopers LLP in alliance with the International Business Leaders Forum and Accenture Development Partnerships, and in collaboration with Imani Development, Intellectap, Renaissance Consultants Ltd, The Convention on Business Integrity and Challenges Worldwide. The views presented in this publication are those of the author(s) and do not necessarily represent the views of BIF, its managers, funders or project partners and does not constitute professional advice. BIF pilot ran from 2010-2013. Information on the next phase of BIF, since 2014, can be found at www.bifprogramme.org

We welcome feedback on our publications – please contact us at enquiries@inclusivebusinesshub.org