



## Financing Agricultural Value Chains in Africa

A Synthesis of Four Country Case Studies

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## Preface

The agricultural sector is essential for job creation, food production and overall economic growth in many developing countries. Africa's agricultural potential is largely untapped, however, with value chains often unproductive and uncompetitive. This is due to a number of environmental, economic, and social factors. One of the key challenges is lack of finance to fund the growth of African agriculture.

It is against this backdrop that African governments, commercial financial institutions and the international community have reinforced their efforts to close this gap, also spurred on by the recent global food and financial crisis. Initiated by German development cooperation as one of the members of the »Making Finance Work for Africa« (MFW4A) Partnership, an Africa-wide Task Force on Agricultural Finance has now been established. Its primary task is to develop specific recommendations for policy makers in Africa who may wish to use these to create standards on policy and regulatory frameworks, and thus to improve access to finance and facilitate investments in the agricultural sector.

The substantial effort that is being made within the Africa-wide Task Force on Agricultural Finance has the

power to reach out beyond the African context. The policy recommendations will represent the African voice in the international community as a primary input for the international G20 policy paper on agricultural finance. In order to ensure this programme is realised in time for the G20 summit in Cannes in November 2011, African representatives, G20 members and development partners are stepping up their collaborative effort in order to reach consensus on the best policy recommendations in agricultural finance, both in Africa and internationally.

The report at hand serves as a building block in this process. It represents the synthesis of a series of studies into agricultural finance in Africa sponsored by German development cooperation. The aim was to examine access to finance for agriculture in Africa, with a view to identifying strategies and tactics which would improve such access for commercially oriented agricultural value chains. These recommendations will be used as input for the pan-African and G20 task forces and to inform policy development by government and development agencies, both at country level and for the continent as a whole.



**Andreas Proksch**

GIZ

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Eschborn, April 2011



## Introduction

Africa has a large and growing population, and an increasingly industrialised and urbanised economy. All people need access to reliable, cost-effective and diversified sources of high-quality food, and the best source of this food is from the region itself. There is also the vast export potential to be considered, especially in Middle Eastern and Asian markets, where food consumption is rising rapidly. However, African agriculture continues to be relatively uncompetitive, especially in relation to developing counterparts in Asia and Latin America. The continent's over reliance on food imports creates unnecessary trade imbalances, fosters anxiety over food security, and is also a missed opportunity for promoting prosperity.

There is a serious danger that, through its inability to structurally reform agriculture, Africa is forced to make ever greater concessions to powerful foreign interests to guarantee food security. Whilst foreign investment should be encouraged, it should not be negotiated in desperation but from a position of confidence. Some of the large scale land sales and ceding of other natural resources has begun to smack of this.

A healthier development would be the orderly financing of a competitive domestic agricultural sector underpinned by a robust local financial sector; and there are reasons for optimism. In general, Africa's financial sector is deepening and improving rapidly. Currently, however, agriculture is not broadly an attractive market for commercial financial institutions.

Development agencies should build on the momentum in the financial sector however, to work more closely with financiers to facilitate access to finance for agriculture. This paper represents the synthesis of a series of studies of agricultural finance in Africa, sponsored by GIZ and executed Maxwell Stamp PLC, a consulting firm based in London.

The aim was to examine access to finance for agriculture in Africa, with a view to identifying strategies and tactics which would improve that access for commercially-

oriented agricultural value chains. We hope that these recommendations can be used to help inform policy development by government and development agencies, both at country level but also for the continent overall.

The countries studied included Kenya, Ghana, Burkina Faso, and Ethiopia. In each country, the studies analysed a small number of agricultural sub-sectors. The sub-sectors studied included: Kenya: dairy and mangos; Burkina Faso: manioc and cotton; Ethiopia: coffee and sesame; and Ghana: pineapple, cashews, and cocoa. By referencing the analysis against specific value chains, we hope that we can illustrate to readers how different agricultural markets work, and to highlight the features which make them more or less attractive to financiers. In each country the consultants met with a wide range of stakeholders from development agencies, the public sector, the private sector (including producers, processors, exporters, input suppliers etc), and the financial sector.

The report is structured as follows:

- **Section 2: Executive Summary**
- **Section 3: Assumptions and Principles:** Highlights some of the key assumptions and principles which underpinned the assignment, as well as some which were discovered along the way.
- **Section 4: Value Chain Finance:** Describes what we feel are some of the key common challenges specifically related to the financing of a specific agricultural value chain or its participants, and goes on to propose a series of potential interventions which could be considered to help address these challenges.
- **Section 5: Enabling Environment:** Examines some of the most important characteristics of the overall economic, policy, and business environment which impact on access to finance for agricultural value chains. Again it proposes a suite of remedial measures which may be instigated to address these deficiencies.

• **Section 6: Summary and Outlook:** Highlights several practical initiatives or areas of focus which we believe offer the most potential for policy-makers and development professionals seeking to improve access to finance

## Executive Summary

The relative under-performance of African agricultural value chains inhibits improvements in the quality of life for both small producers and domestic consumers. The lower levels of productivity mean that many African countries are overly dependent on imports from outside the continent. This is not ideal from a food security standpoint but also means that economies are suffering from unnecessary trade deficits and the loss of potentially valuable sources of export income from tapping new markets.

African agriculture badly needs finance for growth but, in parallel, it must be prepared to restructure in order to improve profitability. One of the major issues affecting production continues to be land reform. Many promising small farmers are dissuaded from making major investments in farm improvement or find it difficult to expand their farms due to the customary systems of land tenure, which can tend to prevent the holding of absolute title over their land. Land reform is essential to encourage the development of a larger class of »professional« farmers willing to invest heavily in farm improvement and expansion with a view to improving profitability and economies of scale over the longer-term. Aside from land reform, the legal environment still needs much improvement to support the more robust contractual arrangements which are required to support commercial relationships between value chain participants and also their financiers.

On a positive note, it is clear that increased liberalisation and regional integration is endowing African economic sectors with increased economies of scale, deeper markets, and increased competition. This applies to both the agricultural and financial sectors. From a policy perspective, there must be no return to the regressive

for agriculture, and also some recommendations as to further steps or areas of study which would move the process forward.

state intervention in financial markets such as interest rate caps, directed lending or debt forgiveness under the umbrella of pro-poor policy. That said, there seems to be some role for public sector engagement in partnership with the private sector to establish institutions which can add much needed »structure« to some of the more chaotic agricultural value chains, such as national commodity marketing bodies or exchanges.

Clearly it is vital that these offer additional value and must be carefully designed to avoid squeezing out nascent private sector enterprise. The growth of mid-size private sector players (e.g. suppliers, producers, transport and logistics etc) in African agriculture should be fully supported.

Even under ideal circumstances however, financing agriculture is a difficult business. Agriculture can be a risky sector for financiers, and exposed to extreme catastrophic and highly correlated risk events (e.g. flood, drought, disease etc). Also Africa lacks the fiscal support for catastrophic risks offered by many leading agricultural producers in Europe, the USA, and leading markets in Asia and Latin America. Even in these more developed countries, agriculture often has difficulty attracting the desired level of finance.

However, Africa is starting from a pretty low base level of lending and investment to agriculture. The domestic banking and capital markets system in many countries is growing rapidly, and even relatively modest increases in the share of finance from the big commercial banks or investors can potentially make a critical difference. What is required is to concentrate policy development and interventions by development agencies on the areas of highest impact.

In our view, this means engaging the big balance sheets of the commercial banking sector in support of agribusiness, particularly those SMEs with realistic prospects of growing into significantly large agro-enterprises in the medium-term. It is likely that credit will need to be supplemented by equity investment to maintain appropriate gearing ratios.

We are also strong advocates of the role that rural credit unions and banks play in providing outreach to producers. They are increasingly vital in underpinning the rural economy, and can play a valuable complementary role with commercial banks to provide a more integrated service to agricultural value chains. Both commercial banks and rural financial institutions however, do require additional expertise and investment to effectively implement strategies to better serve agriculture in a profitable way.

We appreciate that agricultural value chains are keen to access long-term investment capital but, without robust profitability and solid capitalisation, this will continue to be difficult to access over the short-medium term. More traction is likely with approaches to release working capital which can indirectly achieve these aims. The use of financing products which build on existing good relationships between value chain participants (e.g. supplier and buyer finance) are particularly encouraged. There are also a range of promising initiatives in relation to asset finance and insurance which should be encouraged on a tactical basis where the legal and business environment is supportive.

# 1 Assumptions and Principles

Finance for agriculture is a subject on which almost everyone holds strong opinions which initially seem difficult to reconcile. On closer analysis, however, much of this divergence depended on the personal perspective of the subject, and their relative interest in poverty alleviation measures versus economic growth indicators. This study is principally focused on measures to mobilise the supply of private sector finance with a view to increasing the quantity, quality, and economic value of African agricultural output. This is not incompatible with parallel measures to address livelihoods issues, but the two should not be too confused. This series of assumptions and principles in relation to financing for agricultural value chains, strives provide readers with a common frame of reference in which to assimilate the findings and recommendations.

Part of this divergence is related to the relative success of some sectors in African economies, including the financial sector, and the apparent lack of benefit to the poorest in society, and particularly in this case, small agricultural producers. This sometime encourages policy makers or development professionals concerned with the interests of these communities, and perhaps unfamiliar with pro-growth economic policies, to advocate regressive measures such as interest rate caps, directed lending or debt forgiveness for example. We cannot stress how damaging a return, or even the potential of a return, to this type of policy would be to the nascent African financial sector and the economy as a whole, including the agricultural sector. At the same time, the financial sector should be positive in its approach to working with development agencies, NGOs, and the public sector, in developing tactical initiatives and innovations which will help include poorer populations in economic develop to mitigate against this possibility.

## State Support for Mitigation of Catastrophic Risk

Of course it is impossible to generalise, and factors will vary from farmer to farmer, region to region, and sub-sector to sub-sector, but it is a general principle that agriculture is quite risky. Even in large, diversified and highly developed markets (e.g. US, Canada, Europe, and leading countries in Latin America and Asia) there is almost always a explicit or implied subsidy for agriculture which helps smooth risks. This will occasionally take the shape of a market protection measure, but much more often will be an explicit insurance subsidy which is protected under WTO agreements. Very few countries with the fiscal means (with the possible exception of Australia and New Zealand) expect the private sector to shoulder the entire burden of the catastrophic risks associated with agriculture. Most operate a variety of different Public-Private Partnership (PPP) schemes in order to share risk.

It is probably unrealistic, therefore, to expect the African private sector to achieve similar results without the backing of government or some other source of funds. There are a variety of models but many typically lead to the creation of a state-backed reinsurance market which can cover catastrophic risks. Developed countries make the fiscal argument that intervention of this type is a more cost-effective use of funds than the costs of disaster recovery which would be required. As far as we are aware, there does not seem to be a comparable framework in Africa, which is a major drawback that policy-makers and development professionals may need to address before finance will be released in a truly transformative way. Those who point to the agricultural revolution which has occurred in some parts of South and East Asia in recent decades should note that the explicit state funding of catastrophic losses in agriculture has been a key tenet of policy-making.

## Liberalisation of Domestic and Regional Markets

Firstly, there can be little argument about the benefits which have been achieved through the systematic liberalisation of the financial sector in many countries. An end to directed lending, interest rate caps, and politically-directed interference in financial markets through state-owned banks, and openness to the entry of foreign-owned banks has resulted in much deeper and more competitive financial markets. Those countries which continue to resist such policy measures are clearly disadvantaged. Particularly striking was the influence that regional trade agreements are having in encouraging the flow of capital within that region, and also the expansion in the scope and size of agrifood markets. It is our contention that these agreements underpin the development of true comparative advantage in agriculture (as well as other industries) in Africa, contributing to a much more competitive and prosperous economy. Unfortunately, there are domestic value chains which are uncompetitive in comparison to regional peers, which will suffer as a result. Clearly mitigation strategies need to be considered but the interests of producers cannot be put before the overall economic advantages conveyed by the strategic expansion of free trade (and other political and economic co-operation) in African markets.

## Issue of Land Tenure

It is not for us to presume to speak for Africans as they go about the process of deciding what sort of society they wish to create, however we believe that the link between private land ownership and the capitalisation of agriculture is clear. The private ownership of agricultural land (including the freedom to buy, sell, transfer, pledge, and develop this land within the reasonable conventions of prevailing business ethics and laws) is not prevalent in Africa, where systems of customary communal ownership (based around village or tribal systems) or even state-owned land are more common.

This creates two specific problems in relation to agricultural finance. Firstly, producers are less willing to invest long-term in the improvement of their land, as

they do not have security of tenure. Secondly, producers are usually unable to pledge their land as collateral for lending. It is worth bearing in mind that the heavy investment in the capitalisation of agriculture in developed markets over the last few centuries has been underpinned by security that lenders can obtain in establishing a charge over agricultural land. To expect Africa to achieve similar results in the absence of major reforms to land tenure are probably unrealistic.

## Influence of Commercial Banks

Whilst the development agenda has paid some attention to the promotion of MFIs and other specialised players in the financial sector, much less attention is paid to the large commercial banks. In all the markets studied (with the anomaly of Ethiopia's large state-sponsored MFIs – really analogous to large state-owned savings banks reminiscent of centrally planned economies), the commercial banking sector absolutely dwarfs the MFI and rural banking sectors. Whilst MFIs and rural banks grow robustly, the commercial banking sector in most of Africa is growing at least as rapidly on the back of retail franchises underpinned by growing wealth in urban centres, and also corporate banking (in all sectors).

Commercial banks, in general, do not currently have much appetite for lending directly to small producers (though they are very interested in large commercial farming) and micro-/small-enterprise (though large agribusiness is of interest). However, if agriculture is to approach the level of finance required to reach its potential, then commercial banks will have to be the principal bankers to the sector.

### Outreach of Rural Banks and Co-operative Financial Institutions

It is our contention that rural banks and co-operative financial institutions are key players in the market for agricultural finance. Currently, many of these institutions, despite being situated in rural areas, are oriented towards retail and small business customers in regional centres, rather than producers. There are examples of rural banks and co-operative financial institutions which are really getting to grips with agricultural lending from their own devices. However, generally they find it much easier to lend to the increasing population of salaried workers, professionals, and small merchant segments. These customers are usually account holders, make regular use of the bank's transaction services, tend to be within easy reach of or commonly visit the branch, are often known personally to staff, and form a pool of reliable borrowers. Lending is generally short-term, for household, consumer or working capital purposes.

It is this steady, conservative approach which is their major strength. In due course, and with proper support, it is likely we will see these institutions embed themselves very firmly in the fabric of the rural society, in much the same way as similar institutions in developed markets. It is likely that the future will see increased strategic partnerships between institutions (perhaps in the form of consolidation or marketing networks), and also

a deepening of relationships with the large commercial banks.

They are very interested in agricultural finance, but are inherently wary of the risks. They do not have the balance sheet or liquidity support to manage systemic default events, and are very conscious of their relative weakness. There is a danger in trying to force these institutions to be something they are not, and we see this currently with International Financial Institutions encouraging the uptake of long-term credit lines for on-lending.

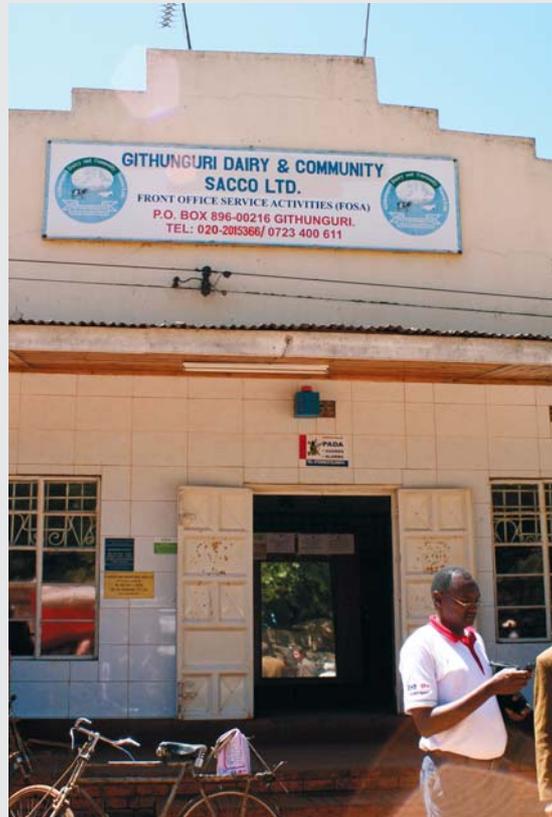
Quite rightly, they are worried about this. They do not want to feel forced into taking on risks they are uncomfortable with, especially on the back of a donor-financed credit line which is neither sustainable nor well aligned to their business strategy.

The key to engaging these institutions is to play to their strengths. They are the best positioned distribution channel, have the best understanding of the local economy, and often direct knowledge of potential borrowers at producer level. They are very keen to co-operate in the sharing of risk, particularly with commercial banks and agribusiness (whom they see having a much greater investment in success than IFIs and development agencies). Institutionally, however, individual institutions tend to be very weak, with inexperienced management and staff, and low levels of capitalisation and investment.

### Githunguri Dairy and Community SACCO

This SACCO was launched seven years ago, sponsored by the parallel dairy co-operative. It now has capital of Ksh 100m, 6 500 members and 8 000 customers. Since inception, membership has sprawled away from the dairy sector to encompass a wide range of other rural and town dwellers including coffee and tea growers, as well as a plethora of local retail, trading and support enterprises.

Like many SACCOs, management and governance are essentially provided by part-time volunteers with community standing. They are conscious of their limitations and run a very conservative balance sheet. In many senses they are very well adapted to meet the growing needs of the diverse population or regional centres, but find financing small-scale farming a challenge.



The SACCO provides basic savings, credit, transactional and cash management services. Short-term loans, repayable monthly, are offered on the basis of a compulsory savings programme, and are generally a multiple of two to three times the accumulated savings.

**Figure 1.1: Case Study of SACCO in Kenya**

### Nwabiagwa Rural Bank



Nwabiagwa Rural Bank is one of the largest rural banks in the country with six branches, a separate head office, and 131 staff. They have about 50 000 customers of which approximately 10% are farmers, 25% are traders/processors, and 65% are salaried workers. Salaried workers get the best loan deals with interest rates around 25%. Farmers are priced at more like 30% plus because of their higher risks (some years they claim to have had a 100% default rate from farmers). They are, however, much more comfortable with cocoa, which they see as a stable industry. Farmers are expected to save for at least three months or retain at least one third of the earnings from last year's crop. The term is around eight months with a full and final bullet payment encompassing both principal and interest at the end. They prefer to finance customers with good relationship with Licensed Buying Companies or »LBCs« (private traders authorised by the state cocoa marketing monopoly), and depositing a cheque for the proceeds of a cocoa sale to an LBC is seen as a very positive step towards getting a loan. The loan is to support production inputs and is not suitable for plantation rehabilitation. The bank finances Farmer-Based Organisations (»FBOs«) as well as individual farmers.

**Figure 1.2: Case Study of Rural Bank in Ghana**

## Role of MFIs

It is important that we say something about the role of MicroFinance Institutions (MFIs) and their role in the agricultural development agenda, particularly given the prominence that they have taken in the international development framework over the last 25 years or so.

Globally, it is impossible to stereotype MFIs which range from small NGOs with charitable goals up to industrial-scale commercial institutions driven by shareholder value and, to some extent, also incorporates the consumer and small business lending operations of many developed market financial institutions.

In Africa, however, most MFIs are currently of the smaller NGO type focused on specific target groups, though some commercial MFIs and MicroFinance Banks are springing up. The MFI model of high-volume, small loan-size is most easily exploited with an easily accessible and homogenous market (e.g. a poor salaried workers in an urban area). Often small farmers do not easily fit this profile and most MFIs are not gearing up to address them. True, in some regions (e.g. Latin America) MFIs are playing a much greater role in agriculture, and some institutions (e.g. Opportunity International) are also developing strategies for African agriculture, but this is the exception rather than the rule.

Our point is that MFIs are a very worthwhile component of a diversified financial sector, but are only part of the answer in relation to agricultural finance.

## Importance of Agricultural Insurance

The risks attached to agriculture generally are a large factor in the low mobilisation of finance for the sector. We alluded to the role of the state in the minimisation of catastrophic risks above, which seems to us to be the underlying issue. True, there are other type of niche, indemnity products which probably could be developed independently by the private sector – e.g. indemnity insurance related to specific weather events or property losses, some types of livestock insurance,

or perhaps index-based products. There are also possibilities for hedging instruments or futures contracts (not strictly insurance but potentially useful risk management tools), for providing predictability around input costs or market prices. In our view, they are not, of themselves, sufficient or capable of alleviating risk surrounding catastrophic events such as drought, flood, or disease.

Insurance is going to be a huge market in Africa, and the life and non-life markets for both retail and business customers in some countries are booming. Insurance companies are busy developing innovative products tailored to local markets, yet insurance for agriculture is lagging. Part of this is a lack of demand from producers, who don't seem to appreciate the value of insurance cover. Perhaps this is related to the inability of insurers to provide deep catastrophic risk cover like Multi-Peril Crop Insurance. We also heard on a number of occasions in different markets the tale of groups of producers approaching their insurer for a refund of their premium on the basis that they hadn't needed to make a claim during the covered period. This is possibly apocryphal, but more probably illustrative of a deep lack of financial literacy.

One problem is the difficulty African insurers sometimes face in diversifying risk through trading risk portfolios through the reinsurance market. There is a lack of depth in the reinsurance market in Africa in particular, though one assumes that this will deepen over time. It will be unlikely to see reinsurers jump into African agricultural risk and, even in developed markets, it has proved difficult to encourage reinsurers into catastrophic risk insurance for agriculture. Where this has occurred, it has generally been in partnership with the state who, through one means or another, will limit the losses faced by reinsurers.

### Limits of Micro-Enterprise

We recognise that a flourishing micro-enterprise sector is an important component of economic development, particularly in enhancing and smoothing household income, as well as providing a source of contentment and satisfaction for many. However, it is beginning to become clear that the idealised model of micro-entrepreneurs evolving inexorably towards becoming small businesses, then medium-sized businesses and so forth was largely theoretical. Understandably, it was accepted that it was always going to be a small minority of businesses which would graduate to the next level. However, rather than being an unusual event, it has proved to be exceptional. By and large, micro-enterprises stay micro-enterprises.

If we look at developed markets, we should hardly be surprised. New successful small-medium-large sized businesses are generally formed by successful serial entrepreneurs, working with significant amounts of private investor capital. Medium-large businesses generate competitive advantages and economic opportunities that cannot be replicated by micro-enterprise. Africa needs these businesses now, and cannot afford to wait for evolution. If we look to the agricultural revolutions in Asia, it is clear how development has been catalysed by large businesses, sometimes with the open support of the state.

### Blue Skies



Blue Skies is a major processor and exporter of fresh cut fruit which it exports by air to Europe. It was started in 1998 by Anthony Pile (see right) and now has operations in four different countries and 3000 employees. Blue Skies operates directly with individual farmers, helping prefinance production and providing technical assistance. The company stresses it is not an outgrower scheme though, and does not have formal arrangements with suppliers.



Farmers generally bring their food to the factory gate where it is graded and a potential deal struck. Payment is made in 14 days. Blue Skies has not benefitted from any government or development support, partly because the owner isn't Ghanaian. It is keen to continue to expand its operations and would appreciate to continue to expand its prefinancing operations. A supplier credit guarantee scheme would be a useful tool.



**Figure 1.3: Case Study of a Large Agriprocessor in Ghana**

### Rural Finance versus Agricultural Finance

It appears to us that there is sometimes confusion between »rural« finance and »agricultural« finance in the minds of policy-makers and development agencies. There have been quite a number of initiatives to expand access to finance to rural and provincial areas in many developing countries in recent years, to address the gaps between these populations and those living in very large metropolitan areas.

Whilst expanding access to rural finance seems to have an indirect benefit for primary producers, the direct benefit is often minimal. Financial institutions are concentrating their efforts on developing franchises from the salaried and merchant classes of provincial centres, which they see as a more attractive market than poorer farmers. As we say, there may well be very positive indirect benefits to farmers by expanding the economic activity of regional towns and cities, but direct access to financial services (and particularly credit) is still very low.

We see agricultural finance as much more oriented around the competitiveness and profitability of the agricultural sector (and particularly individual sub-sectors) than it is about demographic development. Synergies between the two approaches should be exploited but there are discrete approaches which »agricultural« finance brings that are not directly related to »rural« finance in isolation.

### Taking a Value Chain Approach

Agricultural development is best approached by breaking the agricultural sector into specific sub-sector »value chains«. These are essentially models of the market participants in an agricultural subsector and the interactions between them. Market participants include agricultural producers of course, but also input supplier, traders, processors, exporters, and retailers. They also include suppliers of ancillary services like transport, storage, extension services, and certification and inspection.

From the standpoint of agricultural finance, we are particularly interested in the financial interactions between these players (including financial institutions), their competitiveness, and the value they add along the way. Ultimately, financiers need to see good levels profitability embedded in the value chain at some stage in the process, to find the sub-sector an attractive proposition.

The value chain approach resonates with financiers. As a rule, they tend to be wary of »agriculture« per se, but may have specific interests in different sub-sectors (e.g. dairy, or livestock, or horticulture for example), or even sub-segments (e.g. input suppliers, processors, retailers, logistics, packagers etc). It aligns with an approach to market segmentation which can be more easily integrated with the marketing and risk management strategy of a financial institution than »agriculture« as a whole. High-level value chain mapping was undertaken for each of the sub-sectors under study with an example in figure 1.4 below. The complete set of maps is available in Annex 4.

Whilst a value chain approach is particularly applicable to the »upper reaches« of a value chain (e.g. at trading, processing, exporting and retail levels), we found that it was not so easy to apply at the level of the small farm. Many small farms in Africa are diversified businesses, perhaps engaged in a number of different agricultural sub-sectors and also off-farm activities.

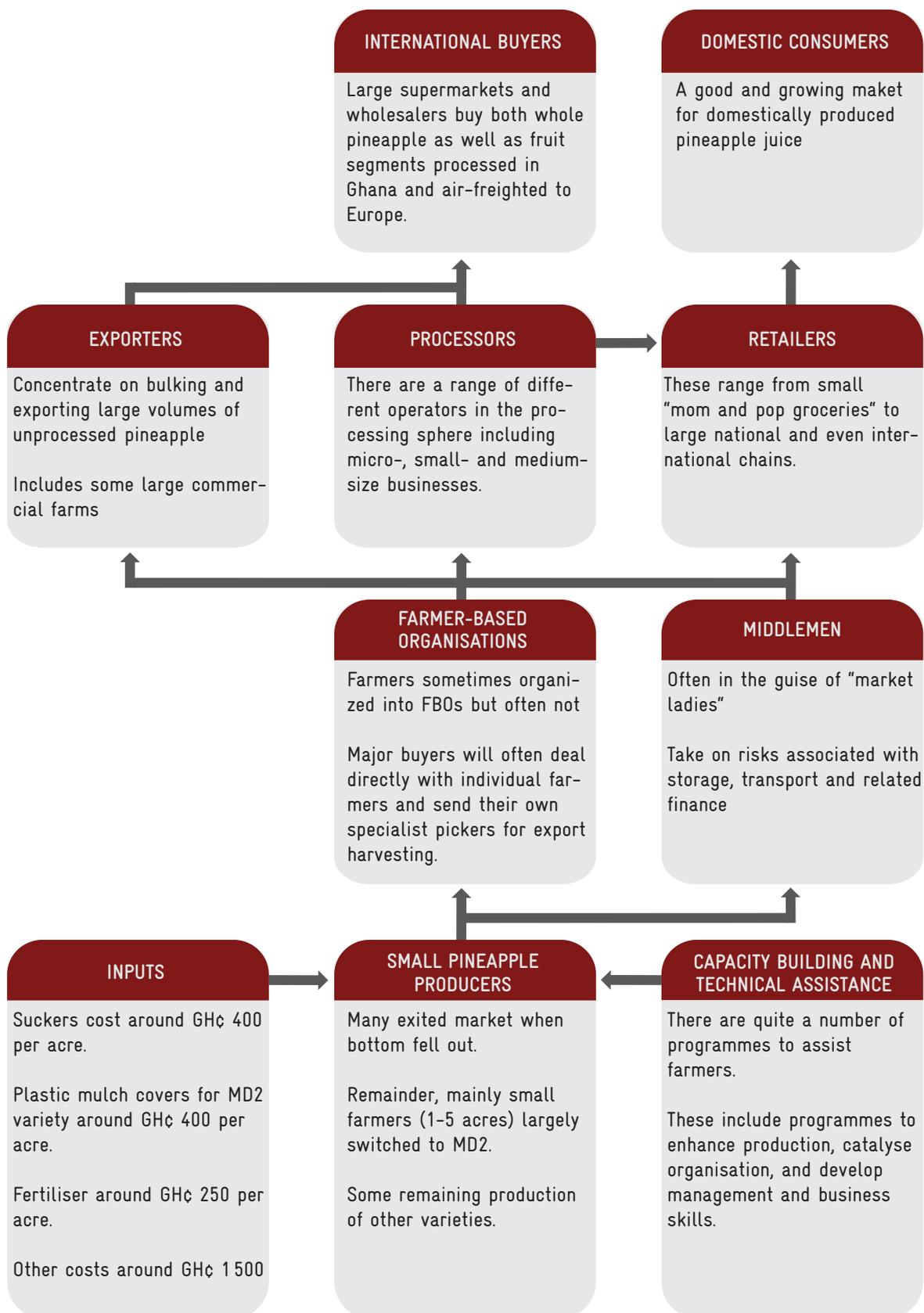


Figure 1.4: Example Value Chain Map of Pineapple in Ghana

In this case, the economic imperatives and rationale for a small farmer to be engaged in agricultural production in a particular sub-sector may not be adequately captured by a simple financial cost-benefit analysis. For example, some crops might be grown in rotation with others, for ancillary value addition or even soil restoration purposes. Some production may be largely for household subsistence purposes, with only the excess used to generate cash. Animals may be kept for similar reasons, or for farm work or even cultural reasons.

It is therefore very difficult to analyse the pros and cons of economic activity in a particular sub-sector at the level of the small farm, particularly where the farmers often are not easily able to attribute cash flows and labour to specific activities in what often constitutes a reasonably complex system.

Therefore the value chain approach to agricultural finance needs to be supplemented with a view of »farm as enterprise«. To enable access to finance at the level of individual producers then we need to understand much better the finances at farm level. This has typically proved very difficult and time consuming.

### Producer Viability and Farm Size

Ultimately, in order to access agricultural finance, a farm would need to be a viable commercial enterprise. This requires some tangible components such as:

- The farm needs to generate at least some retained cash which can be used to repay loans and/ or reinvest in growth and improvements;
- In order to achieve this, the farm needs to be of sufficient size and/ or scale;
- It also needs access to a market which will off-take this production; and
- The farm needs access to a minimum level of inputs and infrastructure required to enable production.

There are many whose livelihoods, whilst it is wholly or partially dependent on the land, do not meet this definition. This does not necessarily mean that they are excluded from access to finance, but rather that specific agricultural finance solutions are not appropriate. These include circumstances where:

- Small-scale production is used to supplement the diet and/ or income of a household where the primary source of income was from another source (i.e. another job);
- Subsistence agriculture, where the majority of production is used for household consumption rather than cash generation;
- Absentee »farmers«, for example those who have moved to cities from rural areas whose land holdings are not really actively managed, tend to be harvested by others in line with established custom, and the resultant cash payment generally considered a supplement to other income streams; and
- Those rural poor who have a small patch of land, used for very small scale subsistence, to the extent that the landholding is so small that it cannot even be improved on a full-time basis.

Clearly it is vital that credit extended to producers is repaid. One of the major determinants of producer viability is the size of the land-holding. Clearly this varies enormously depending on the type of farming and natural qualities of the land itself however, in general, the larger the plot the better. Many small farmers in Africa are working very small plots of land which means their economic opportunities are quite limited.

Most counterparts in the field of private sector development, agribusiness, and the financial sector were also keen to stress the intangible factors which make for a successful farmer, and therefore »bankable« proposition. These include:

- Farmers must be full-time entrepreneurs in pursuit of generating surplus cash from the farm »enterprise« (this includes off-farm income);

- They must be experienced and have an enthusiasm for developing their expertise;
- They need to be capable of thinking long-term about their business, and open to receiving advice and adopting new ideas; and
- Capable of working well with others where there is demonstrable mutual benefit, and of understanding

their rights and responsibilities in a group structure, and to external stakeholders.

These criteria further restrict the scope of agricultural finance and, whilst the extent to which ingrained values and behaviours can be changed, it is certain that a significant group of farmers would not be able to adapt to these requirements.

### Biogas: The Farm as Diversified Enterprise

This farming family is underpinned by its dairy farm which has 10 cows. By local standards this makes it a reasonably substantial enterprise and this farmer is considered a successful man.



The family has also ventured into a piggery, which generates additional income from the sale of meat. Combined with the dairy cows, the combined animals generated quite a lot of manure.

The farmer decided to invest in a biogas unit, which converts the manure into flammable gas. The residue or »slurry« is used to fertilise the family garden and reduce costs.



The farm uses the gas to run a small bakery, with the production sold in the local market to generate additional cash.

Figure 1.5: Case Study of Diversified Farm in Kenya

### Improving Customer and Product Data Management

Much is made in the development sector about the potential for rapidly expanding high-volume, small lending (for example to producers) in developing markets through credit scoring, a feature of similar lending in most developed markets. We believe that this is a very worthwhile ambition, but that some fundamental misunderstandings about credit scoring and its applicability need to be corrected. For the purist, credit scoring is the almost complete automation of a credit decision based on external (e.g. credit reference) and internal (e.g. account behaviours) information, generating an accept, decline or refer (where there is some limited human involvement) decision.

This system is underpinned in developed markets by a highly developed credit reference system and excellent customer and account data management by financial institutions. In most circumstances, it is used by banks for personal loans to established customers, where there is an excellent repository of customer and account behavioural information. Critically, credit scoring model developers will have a big pool of »black« data from which the factors which indicate probability of default can be derived (ideally captured over the full course of the business cycle or around seven years). This allows credit risk analysts to make reasonably sound forecasts as to the likely default levels of a pool of credit scored customers, to adjust the assessment criteria to an acceptable level, and to price the loans correctly.

Though credit scoring approaches can also be used with »new« customers (i.e. without a credit history known to the lender) this was largely the province of specialist lenders or lending divisions focused on high risk borrowers. The high cost of obtaining retail credit or store cards is a typical indicator.

In relation to businesses, it is rarely applicable, except for small working capital loans to very simple businesses (e.g. sole traders), and only to well established customers. However, for more complex business and larger loan sizes we can use a mix of automated and human analysis better known as a »credit decisioning or rating

system«. The idea is to radically improve the speed and consistency of decision-making through a much more structured, objective and automated approach. It still requires excellent credit skills from bankers (both front and back office), but helps to dramatically lower lending costs associated with smaller, less profitable customers.

If financial institutions in developing markets wish to reach smaller business customers (e.g. farmers and small agribusinesses) in a sustainable and profitable way, then they will need to adopt similar models. Not only do we need to drop the operational costs of banking these customers, but also the costs of marketing and customer service.

This requires a revolution in the management of customer and account data by financial institutions both large and small. First we must presume that financial activity by this segment is increasingly formalised, and that financial institutions are capturing meaningful transaction data on customers.

Second, financial institutions will need the technology and skills to integrate this data into a consolidated data warehouse, from which they can get a meaningful understanding of profitability down to a single customer and product view.

Finally, they will likely need assistance in the development of an active approach to portfolio planning and management, underpinned by more advanced modelling and forecasting.

## 2 Value Chain Finance

When assessing specific value chains, the diversity of geographic, environmental, agronomic, business, and cultural factors between value chains of different sub-sectors and the same sub-sector, made it impossible to adopt an entirely consistent approach. Rather, we have identified a set of flexible subjective criteria by which a reasonable judgement about the relative challenges and risks presented by a specific proposition for

finance could be assessed. Some criteria are illustrated in figure 2.1 below, but these are not exhaustive or exclusive. The value chains concerned were tested against these criteria, and generalisations drawn in order to highlight to value chain practitioners how these factors can affect access to finance. It is important to note that testing against these criteria does not substitute for an in-depth financial analysis of the value chains.

Criteria	Response		Comments
Is there significant domestic consumer demand in the sub-sector?	✓	✗	Clearly, robust local demand is very positive factor. Try to verify with numbers.
Is the country a leading participant in export markets in relation to the sub-sector?	✓	✗	If no domestic demand, the value chain should be internationally competitive. Again, verify with numbers.
Is the sub-sector regularly exposed to major environmental (e.g. climate, disease etc) risks?	✓	✗	Make sure that risks and mitigation strategies are clearly identified.
Is the sub-sector regularly exposed to unpredictable fluctuations in either domestic or international prices (of either outputs or inputs)?	✓	✗	What might the impact be? Conduct scenario analysis.
Is the sub-sector one in which there are significant opportunities for value addition through processing?	✓	✗	A positive factor. Look at how producers and processors might be linked more effectively, and the potential for supplier finance.
Is the sub-sector specifically identified by the national agricultural strategy as a strategic priority?	✓	✗	If not, why not? If necessary, lobby MoA to develop specific initiatives for the value chain.
Does the national agricultural strategy go on to identify objectives and targets specifically related to the sub-sector?	✓	✗	Elaborate how these targets relate to the finance strategy.
Is there objective, reliable and timely market and production data available on the sub-sector?	✓	✗	Difficult to develop and monitor finance strategy without this.
Is there some useful financial data and analysis which can be used to build up a »picture« of the typical financial structure of value chain participants and the flow of cash between them?	✓	✗	This needs to be undertaken, and headline results captured.

Criteria	Response		Comments
Is there a significant cluster of producers with farm sizes of sufficient size to be not only viable, but potentially quite profitable? It is important for financial institutions to be able to identify a market segment of suitable size before entering.	✓	✗	Look for geographical clusters of larger farm size if this data exists.
Is there a significant agriprocessing sector engaged in the value chain, with at least some medium-large enterprises (even if state-owned) involved?	✓	✗	Vital for off-take. Ideally if situated near a suitable cluster of producers.
Is there a well-structured network of producer organisations spearheaded by a professional management and technical team?	✓	✗	Vital in providing industry insight and promotion.
At grass-roots level, are there clusters of strong (i.e. independent, homogenous, sustainable) producer groups which might support group lending?	✓	✗	Lending to small producers is usually more successful through group lending schemes.
Are there examples of large commercial farming operations?	✓	✗	Can be suitable customers, intermediaries for supplier finance and important for structuring the value chain.
Does the value chain currently support formalised relationships such as contract farming or out-grower schemes?	✓	✗	This is an indicator that the value chain is fundamentally profitable, and outgrower/contract farming schemes are good targets for finance.
Is there a strong extension service available for producers?	✓	✗	Financiers like to feel producers are »supervised« to a certain extent and receiving good advice.
Do agriprocessors have access to high-quality Business Development Services?	✓	✗	Support to the business and management skills of agribusiness is important to financiers.
Is there potential for significant improvements in financial performance of specific market participants (e.g. producers or agriprocessors) through the adoption of new technologies or approaches?	✓	✗	If there is potential for significant productivity improvements given relatively minor investments then this is a positive factor.

**Figure 2.1: Sample Criteria for Assessing Viability of Finance for Value Chains**

What became very apparent during our study was that there seemed to be a distinct lack of well-executed financial analysis of value chains. Many value chain experts felt they had an »intuitive« feeling about the relative profitability of a value chain, often underpinned by anecdotal evidence, but there was relatively little committed to paper in terms of how the finances of a value chain operate in practice. Naturally, this was a major impediment to the study, and presumably to efforts to attract finance to value chains.

During the study the consultants directly engaged with nine separate value chains in four different countries. This diversity clearly underlined the importance of a

strong »structure« in a value chain as a key factor in improving its bankability. When examining a proposition, some of the key concepts of value chain analysis come easily to financiers, who are accustomed to looking at the strength and stability of a customer's supply chain, as well as their customer base. Businesses that involved in unpredictable and chaotic environments are not likely to be viewed favourably. In this section we will look at some of the key factors which contribute to a robust value chain, specifically in relation to facilitating access to finance. Figure 2.2 shows a table derived from the studies illustrating just a few of the high-level factors. A complete summary of all the value chains studied is shown in Annex 3.

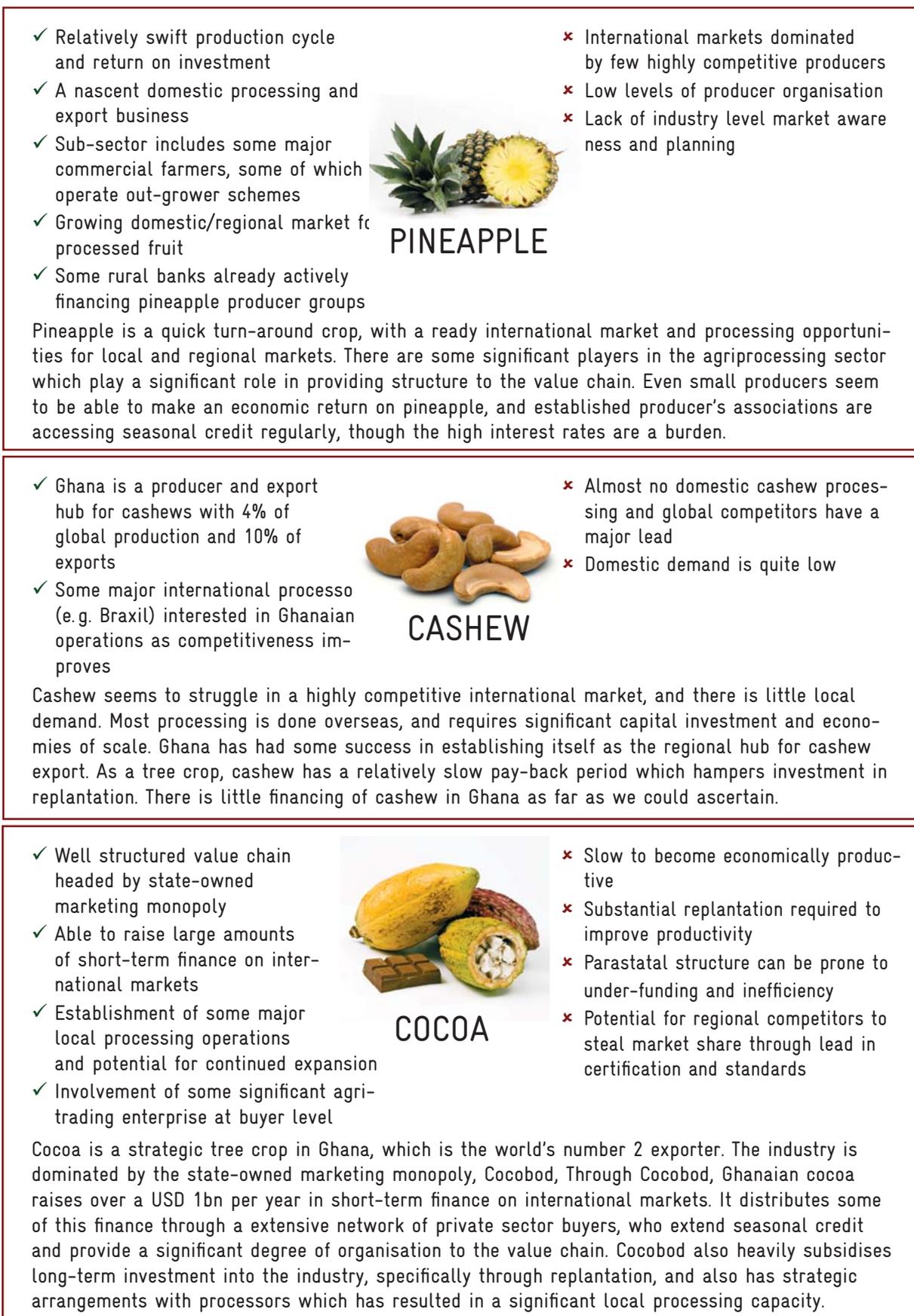


Figure 2.2: Illustration of High-Level Value Chain Assessment in Ghana

## Challenges and Opportunities

### High Catastrophic Risks

As described earlier, agriculture is uniquely exposed (more than any other sector) to catastrophic events such as weather and disease. Financiers are equipped to handle risks and estimate default events in the general course of things, but are usually unable (even in developed markets) to handle the unpredictable and devastating. This is even more the case in developing markets, where the government often lacks the fiscal resources to redress the situation. At least in Australia where there might be a severe drought, or the US where a hurricane may strike, financial institutions can reasonably hope that their core constituency of agricultural borrowers can receive significant budgetary support to maintain viability until the situation normalises. This is not an expectation which African financial institutions can assume. More likely would be a government decree to write-off agricultural loans meaning they would bear an unreasonable burden.

### Missing Agricultural Insurance Market

A closely related and inter-dependent issue is the lack of agricultural insurance to address the more »business as usual« risks to agriculture (and particularly producers) which bother financiers. We contend that the rapidly developing insurance market in Africa is capable of developing innovative and robust products, but are not experiencing significant levels of demand. It was a common complaint amongst some of the observers we met, that small producers do not really understand or value insurance. A typical story related to producers who approached insurers after their premium had expired, demanding a refund as they hadn't felt the need to make a claim during the period.

It is also true to say, however, that it is a difficult process to find a product which really meets their needs. Perhaps there really would be a market for a truly reassuring product, like Multi-Peril Crop Insurance or comprehensive herd insurance (which would provide cover to farmers for almost any eventuality), but local insurers find it

difficult to take these policies onto their books. Consider, the recent example of Pakistan, where the financial impact of the devastation would presumably have wiped out an insurance market offering these products. Where these products exist in more developed markets, they are usually diversified onto the reinsurance market and usually with government support. Niche indemnity products (like hail insurance in Europe for example) are bought tactically by farmers, to limit losses on a specific claim. For example, a typical product might cover growers during a certain growing period against a hailstorm or fire. The risks would usually be well understood with many decades of excellent data to back up the insurer's assumptions. They are usually attached to a large deductible (i.e. excess) which prevents spurious claims and require a relatively sophisticated loss-adjustment process (by which the insurer will often inspect and assess the damage in person) which would be very difficult to replicate with small, emerging market farmers.

Certainly index-linked products may offer a solution to some specific problems, but it is likely that growth of these products will be organic, as they require quite significant set-up costs in environments where the data environment is usually poor.

### Poor or Missing Infrastructure

African agriculture generally suffers from major competitiveness constraints due to poor or missing infrastructure. This includes road and rail transport, storage facilities, irrigation schemes, and access to power and telecommunications. It is not just producers which are affected of course, but also agribusiness. The extra cost, waste and delay incurred by constant power interruptions and transport delays fundamentally diminish domestic competitiveness. Clearly an agricultural strategy should identify these gaps, but public finances are often stretched to make the required investments. In addition, the public sector sometimes lacks the technical and project management skills required to effectively deliver projects. In this case, governments should be looking at approaches to the mobilisation of private sector finance (and expertise) for infrastructure development, particularly through a PPP approach. This is as true for

agriculture as it is for any other sector. It is notable, as has been mentioned earlier, that the transformation in agriculture in markets in East Asia (particularly China) has been led by an emphasis on public spending in rural areas.

### Limited Working Capital for Producers

For a number of reasons small producers find it difficult to access even small amounts of short-term credit from financial institutions. To be frank, small producers in Africa have a poor record for repaying loans. Sometimes this is a result of catastrophic environmental or economic conditions which have reduced capacity to repay, but there are often other factors at play as outlined below.

The prominent role of state-directed credit is often cited as a negative factor. Under previous economic models, populist governments often forced state-owned and even private sector banks to lend to farmers, particularly in countries where farmers en masse play a huge role in shaping political opinion. Governments were then often lobbied to cancel or write-off these loans under political pressure, passing the losses onto the financial institutions. Financial institutions are therefore very wary of becoming embroiled in this type of situation again.

A secondary effect of this has been a weakening of the sense of responsibility from farmers, some of whom take a careless attitude towards their debts to financial institutions. This is particularly the case in countries where it is difficult or expensive for financial institutions to sanction poor behaviour or to take and enforce collateral.

Finally, farmers can tend to be a difficult market to approach from a marketing standpoint. They are not well understood by financial institutions, and more expensive and time-consuming to address than other markets. Realistically, it is likely to be a long time before large commercial financial institutions and small farmers are able to interact directly, so other models are required.

### Under-Capitalised Agribusiness Sector

Most agricultural produce in Africa is not destined for processing in local factories. Rather it is processed at household level for domestic consumption or exported in raw form for processing overseas. Meanwhile imports of processed foods are rocketing to serve the needs of a booming, increasingly urbanised, and increasingly diversified economy. The pattern of consumer buying behaviour (particularly amongst the higher income urban customers) is rapidly moving from local markets and kiosks to modern groceries and supermarkets.

It is no exaggeration to say that the groceries and supermarkets in Africa are dominated by imported produce. The situation is exemplified by examples such as the import of processed tomato products (e.g. paste and sauces) into Ghana, a country with a thriving horticulture sub-sector producing fresh tomatoes for export. Another is the import of fruit juice concentrate into Kenya, a country with a large surplus of wasted tree fruit.

Whilst the relative fairness and equity of international trade and competition is argued vociferously in the international agenda, there is also little doubt that the scale and competitiveness of African agribusiness is pretty woeful. A robust local agribusiness sector is vital for:

- Creating markets for domestic produce, resulting in improvements in the price and stability of demand;
- Supplying vital agricultural inputs such as fertiliser, pesticides, herbicides, and machinery;
- Improving employment options in both rural and urban areas;
- Diversifying and expanding the tax base to support public finances; and
- Improving the balance of trade and reserves of hard currency.

Agribusiness in Africa must be transformed if it is to not only meet domestic needs, but also the needs of regional and international markets. Whilst there are some

notable examples of the state attempting to substitute for private agribusiness (e.g. input supply in Ethiopia or the state-owned cocoa monopoly in Ghana), these are not the best long-term options and private sector engagement must be increased.

## Importance of Outgrower Schemes and Contract Farming

Whilst traditional buyer-supplier relationships between agriprocessors and producers can play an important role, even more formalised relationships are often preferable to both parties. Contract farming is where a major agriprocessor cultivates a portfolio of preferred suppliers, cementing the relationship with a formal contract to buy production under mutually agreed terms and conditions (contract farming). Large commercial farms can form alliances with small local producers whereby they can provide practical support in the production cycle and consolidate produce to take advantage of the larger farm's competitive advantage in marketing and logistics (outgrower scheme).

Both these approaches mean that the producer has access to a guaranteed market and, on the demand-side, a predictable and stable source of supply is established. It may mean that one or the other may be marginally disadvantaged from one year to the next (if market prices move against them), but the stability of the relationship over the years tends to provide much greater rewards than relying on the vagaries of the markets.

Certainly, financiers view these relationships very favourably, as they allow much more transparent future cash flows. However, as iterated previously, they rely on an environment where both parties honour the spirit and the letter of the agreement, rather than abandoning the contract in favour of some perceived short-term gain.

## Role of State in Value Chain Structure

One of the key criteria financiers adopt when looking at the bankability of a value chain is a solid and predic-

table structure. Uncertainty and chaos are an anathema when assessing credit risk. Structure is radically improved by the involvement of a major agribusiness(es) player in the market, either as processors or exporters, or even financial markets. This includes monopolies and state-owned enterprises as well as, in Ethiopia for example, the commodities market.

As consultants with expertise in private sector development, we are generally wary of the anti-competitive issues attached to such structures. However it was striking (as was the case with cocoa in Ghana and cotton in Burkina Faso) how much finance could be raised on local and domestic markets through such counterparties.

The fact remains that bankers prefer parastatal counterparties where they feel the risk is predictable and acceptable to a weak and unstructured private sector, no matter if it contrasts with their political and economic leanings. In an ideal world we would like to see increased private sector participation in these institutions however, for the time being, they are much better than the alternative. It is notable that economies in Asia which have transformed their agricultural sectors show no such scruples about the overlap between public and private sector interests. The standard of public governance in most of these countries however, is comparably higher than that in many countries in Africa.

## Lack of Integration in Wholesale Credit Markets

We contend that a diversified and healthy financial sector is one in which both high-quality universal and niche financial institutions can flourish by getting access to reasonably priced funding, and also the risk management approaches they need to manage their balance sheet. The situation varies widely, for example, Kenya has quite a well-developed inter-bank market between the commercial banks, whilst financial relationships between Ethiopian commercial banks is virtually absent. Regardless, access to the market for successful rural and small co-operative banks is limited. We believe that developing financial relationships

between large commercial banks and smaller institutions in rural areas is the logical first step to deepening long-term relationships and strategic partnerships.

### Lack of Producer Level Financial Data

As described earlier in the report, there is little objective financial data on the small farm enterprise. This target market is too fragmented, diverse and nebulous to effectively apply traditional financial analysis techniques. In the long run, however, financial institutions will need much more concrete data with which to segment the market, develop products, and make lending decisions.

Currently, many farmers only deal with a financial institution with a view to obtaining credit. The financial institution, therefore, only has one set of data on which to make decision. Farmers rarely open savings accounts voluntarily, and tend to operate their business on a cash basis. This also denies the financial institution the opportunity to cross-sell other products to improve the overall profitability of the customer.

Exacerbating the situation, is that many financial institutions – particularly those smaller ones in rural areas – do not have the IT systems or analytical capacity to really extract the full value from customer transaction behaviour.

## Interventions

### Development of PPP Catastrophic Risk Reinsurance Pool

The feasibility remains to be tested, yet it is our view that agricultural finance would benefit greatly from a reinsurance pool through which insurers or bank-assurers could diversify and limit losses on insurance products covering catastrophic risks. There are many different models operating around the world, but all effectively have the same end in mind. They leverage the private sector's skills to develop products and accept some risk, whilst relying on state funds to cover truly exceptional circumstances.

### Technical Assistance in the Development of Innovative Insurance Products

Insurance markets in several of the countries were developing rapidly, with substantial growth in the scope of products available for both retail and business customers. It is anticipated that, where the environment is conducive, the opportunities in the insurance industry in many parts of Africa will continue to grow and markets deepen.

In relation to agricultural insurance, however, underwriting appetite is not so strong. Agriculture is exposed to highly correlated risks which are currently difficult to diversify, and catastrophic events which are difficult to predict and quantify. The situation is not helped by the often poor data environment in relation to agricultural performance and environmental factors.

Those looking for a »magic bullet« in relation to agricultural insurance are likely to be disappointed. Niche indemnity products are difficult to develop and distribute for small producers, and the latent demand still seems to be low. There are very intriguing experiments underway in some emerging markets in the use of index-based insurance (e.g. rainfall indicators) for crops, livestock mortality statistics, and even the potential use of satellite imagery to determine the levels of dryness of the land. These should be explored and the potenti-

al for cross-fertilisation into other markets examined. However, much more so than credit or equity markets, agricultural insurance is the product of intense customisation to local circumstances and demand. Demand could be stimulated compulsorily, through the mandatory »bundling« of loan insurance along with the loan, however it still requires that the product is well tailored and priced. Significantly more work in this area is required.

## Technical PPP Advice for the Development of Infrastructure

The competitiveness of African agriculture is badly hampered by the lack of decent public infrastructure (and sometimes also services). This includes:

- Road and rail transport;
- Air- and seaports;
- Warehousing and cool storage;
- Irrigation and commercial water supply;
- Power and energy;
- Telecommunications;
- Services such inspection and certification, genetic propagation and distribution, ploughing and clearing, and extension services.

Of course financing and managing the development and delivery of major projects is very stretching. The use of Private-Public Partnerships (PPP) is a way of mobilising private sector finance and expertise for the delivery of public sector targets and objectives.

We are slightly worried that the term is becoming slightly »stretched« to encompass any private-public sector engagement whatsoever, which begins to render it slightly meaningless. In banking and finance, a PPP is a quite particular type of deal structure. It does not extend in our view, to straightforward procurement or outsourcing activities.

PPP can be complex and risky, but executed well can radically increase public sector capacity. Generally it will need significant legal changes to allow governments (both national, regional, and local) to take on the kind of long-term warranties and guarantees, and to issue the type of concessions which are required to fully exploit the PPP model.

Specialist advice could be provided to the public sector wishing to explore PPP arrangements, in terms of identifying opportunities, soliciting interest and proposals, and developing a solid deal structure. It may that legal reform is also required in order to facilitate these arrangements.

## Supplier/Buyer Finance for Expansion of Working Capital to Producers

Producers lack two kinds of finance, long-term capital required for investment in capital items and infrastructure required to maintain and improve long-term competitiveness, and short-term finance called working capital for day-to-day operating expenses such as input supply.

By their very nature, financial institutions are more reluctant to lend long-term compared to short-term. Long-term lending means exposure to risks in the future which are less well understood than those in the short term. In addition, financial institutions have their own regular cash or liquidity commitments to meet (e.g. depositors withdrawing cash or regulators requiring cash deposits for regulatory reasons), so they prefer a pool of small, short-term loans that get repaid on a regular basis, rather than larger, long-term commitments which mean cash is tied up.

Given the negative reputation of agriculture in the minds of financiers already, the idea of mobilising major amounts of long-term finance for producers is probably too much of a challenge at this stage. More attractive would be the idea of expanding access to working capital. In this case, financiers prefer supplier or buyer finance, because they have a larger intermediary standing between them and the customer providing them

with both comfort and lower credit distribution costs. From a comfort point of view, input suppliers guarantee that the loan is being used for the right purposes (i.e. the purchase of their inputs) and buyers are providing a more certain off-take market. Indeed, to incentivise the input suppliers and buyers further, they should be expected to shoulder some of the default risk.

Perhaps development agencies can facilitate the uptake of such arrangements, either through the provision of technical assistance, or the contribution to a buyer/supplier finance guarantee fund to share some of the credit risks. Similar approaches could be adopted for out-grower schemes and contract farming arrangements.

### Equity Investment for Development of Agribusiness

To some extent, we feel that perhaps the most direct route to strengthening the agribusiness sector (including both input suppliers as well as produce buyers) is through direct equity investment rather than credit, particularly in relation to SMEs. Bankers are concerned about the relatively low levels of investor risk capital in the sector generally, and the lack of professional management and technical skills. Working on the assump-

tion that high-potential opportunities can be found, and current ownership can be induced to accept the necessary concessions in return for additional capital, this can simultaneously reduce the financial risk profile of the business whilst also introducing improved governance and better management.

International Financial Institutions and private investors could combine to create an agricultural VC fund, especially focused on value addition agriprocessing in attractive value chains. The aim of the fund would be to make a return for investors through the assumption of equity risk and the adoption of an active management approach. This indirectly addresses access to credit by strengthening balance sheets and enhancing growth prospects.

### Athena Foods

Athena Foods is a locally-owned juicer of both citrus and pineapple, for the domestic market (where it is building its brand) and the international market where the juice is exported in bulk and unbranded. After a series of inter-related management and financial problems, the owner finally invited a private equity firm to make a major investment and help restructure the business. A new professional management team is being appointed in anticipation of the deal, and the strategy reviewed. The company is looking to grow the business and is seeking opportunities for further finance. It would very much welcome access to the ability to leverage a supplier finance guarantee, to help cement relationships with producers.



Athena sources its produce from about 50 different farmers, which results in exports of about four containers a month. Farmers are basically paid cash on delivery and Athena assumes that they use their own resources and rural banks to finance production. Athena would like to work with key suppliers in helping them boost their production in line with Athena's planned expansion.



**Figure 2.3: Case Study of Equity Investment in Agribusiness**

### Finance for other Agricultural Value Chain Enablers

In almost all cases, the value chain competitiveness was affected by what we might call »enablers« – e.g. the ancillary goods and services that support the timely and cost-effective movement of produce through the value chain from producer to consumer. Clearly we can think of some obvious ones which are usually identified in a typical value chain map – for example, hauliers who provide transport services, or warehouse operators who provide storage services. Yet, despite their importance to the value chain, they rarely seem to get much attention from development agencies. Another common complaint we heard was the difficulty of obtaining and cost of packaging materials – most of which appear to be imported from Asia. It is likely that investors and lenders would find customers in these sectors more attractive than those who are completely exposed to specific agricultural value chains. The dilemma for development agencies, of course, is that it is significantly more difficult to control the direction of investment or credit in relation to agricultural development, and to monitor the subsequent impact.

### Deepen Credit Markets and Developing Financial Sector Relationships

Ultimately, we believe that successfully addressing the demand for agricultural finance will require a mix of institutions, and that diversity in the financial sector is a strength. Rather than competition between financial institutions to address agriculture, we are more likely to see co-operation. Commercial banks have the strong balance sheet and liquidity required for mobilising significant volumes of finance, whilst co-operative and rural banks have a more appropriate distribution network.

Fostering relationships between commercial banks and co-operative institutions is hardly revolutionary; it is a fundamental of the co-operative banking system. The co-operative banking apex structure is not the only way to achieve the same result, however. A liquid wholesale credit market for domestic financial institutions can work in a number of ways.

Commercial banks may need technical assistance on developing a local financial institutions (FI) portfolio, and perhaps some credit enhancements might also be effective in catalysing this market. Development agencies may give some thought to the establishment of rural FI partial guarantee scheme to this end. Through this they would agree to guarantee to refund some of the losses on lending portfolios to eligible rural banks or co-operatives. In the longer term, it is hoped that relationships might deepen beyond purely credit, to strategic and marketing partnerships of many different kinds. Again, financial sector participants may need strategic advice and assistance in developing and implementing these models in the future.

### Support Formalisation of Financial Activity

Efforts to improve the formalisation of financial activity are vital in the long-term goal to open access to credit for small producers. During this study, we have talked relentlessly about access to finance, and little about the need for savings and transaction products. This is a limit on the scope of the assignment, not to under-estimate the importance of these initiatives.

Quite apart from the more obvious benefits of encouraging savings (e.g. household economic security), savings provide liquidity for the local banking system, and also an opportunity to generate additional revenue. Also, a customer with a strong record for saving is much more viable credit proposition than one who is only approaching the bank for credit services.

Furthermore, formalisation of cash flow through use of current accounts and transaction services (perhaps mobile banking or ATM/POS systems) is another revenue stream for the banks, as well as valuable pool of information on which to make lending decisions. Behavioural account analysis is an established way to monitor the cash flows of a customer, estimate the earning capacity, and to credit score loan applications. Initiatives to support this formalisation are linked to financial literacy, but also marketing and product development for financial institutions, and also the implementation of the IT systems and analytical capacity to make use of the data.

## 3 Enabling Environment

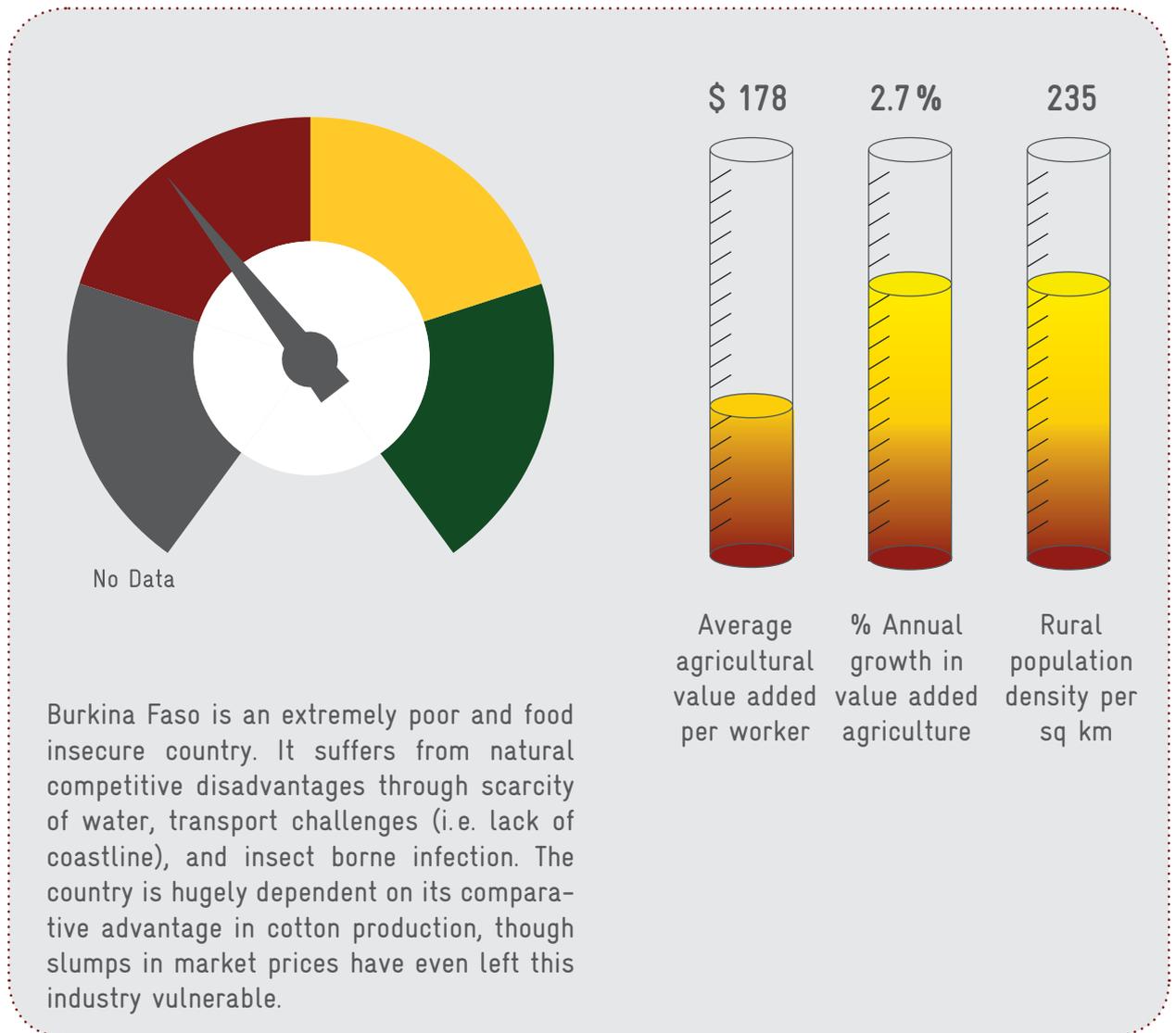
Clearly the agricultural and financial sectors do not exist in a vacuum, and there are many »external« factors which have a major impact on the sectors themselves and how they interact. When addressing the topic, it is very important to be conscious of these issues as they have a major impact on the potential success of initiatives to improve access to finance. Market participants will be very alive to these issues and, more than most regions, there are serious institutional and policy challenges in Africa which are preventing growth of agricultural finance.

At a sector-level, we even made an attempt to categorise these factors, and adopted a consistent framework across the country studies to aid comparability. This framework was exemplified in the set of »dashboards« we developed for each country, summarising the key factors which we grouped under the headings of Agricultural Sector, Financial Sector, and Business Environment (which incorporated some of the cross-cutting factors which do not fit easily into either the agricultural or financial sector perspectives). According to the GIZ approach, we have grouped these factors under Macro-, Meso-, and Micro-

Level sub-headings to provide structure, with the exception of Business Environment, which we felt would have been unnecessarily fussy. An example is shown in figure 3.1 with the full set of dashboards for the financial and agricultural sectors in Annexes 1 and 2.

There are obviously drawbacks to this approach as, at a country level, the reports are not precisely tailored to the specific circumstances of the subject, and may over- or under-emphasise particular factors which may not be necessarily warranted. However, the overall objective of the study was to develop a relatively common set of factors which policy-makers and development specialists could examine to help identify particular sector-wide challenges and opportunities.

A very brief summary of the high level review of the enabling environment for each country is provided in figure 3.2. It is clearly impossible to give justice to a quite complex set of inter-related factors in this summary report, so we refer you to the underlying studies for more detail on our findings and rationale.



**Figure 3.1: Sample Dashboard Design**

## Macro-Level



Burkina Faso's inability to reduce economic dependence on cotton is a major challenge. The country requires major investment to overcome some of the intrinsic challenges to competitiveness such as water scarcity and transport difficulties.

### Leadership



The MAHRH has set up policy co-ordination mechanisms but implementation of policy still seems to be poor.

### Strategy Development



There are plenty of strategies and policies in place, but little in the way of tangible implementation plans and performance measurement.

### Legislative and Policy Development



The state seems effective in formalising policy, but the process of implementation is weak and could be affected by the new decentralisation process.

### Budget Allocation



Burkina Faso has a high budget allocation to agriculture, much of which is provided by development partners, however.

## Meso-Level



Burkina Faso has a wide range of players in the agricultural sector, and has made significant progress in embedding a structure for producer organisations. Clearly capacity of some of this players is quite weak, however.

### Parastatal Organisations



There are a large number of parastatal and academic institutions but under-investment and lack of co-ordination have hampered effectiveness.

### Producer Organisations



A lot of progress has been made in establishing an effective structure for producer organisations, but may still lack financial sustainability.

### The Development Community



As an ultra-poor country, Burkina Faso receives a great deal of donor attention, some of which is not well co-ordinated, however.

### Agribusiness



Aside from cotton, and a number of other small exceptions, agriprocessing is basically absent. There are traders, of course, and some small input suppliers, too.

## Micro-Level



Agricultural production in Burkina Faso is basically at subsistence levels, and in dire need of drastic improvements in yields and the development of a culture of modern commercial farming. Most farmers do not even have access to animal traction, let alone more modern agronomic practices.

### Producer Viability



Farmers tend to have very small plots of land and are basically subsistence farmers. There is a small population of farmers with slightly larger landholdings, however.

### Access to Inputs



Aside from the cotton sub-sector, access to inputs for Burkina Faso farmers is very poor indeed.

### Water and Irrigation



Despite variability in rainfall, Burkina Faso has access to significant water resources. The potential for expanding of irrigation is a major priority.

### Agricultural Extension Services



Extension services exist but tend to have low levels of uptake in terms of new technology. The scope of extension services has reduced over time.

### Agricultural Standards, Pests and Disease



Poor performance, largely as a result and consequence of lack of integration into international markets, and poor value chain structure.

## Burkina Faso

Financial Sector: Red/Amber



Agricultural Sector: Red



Burkina Faso was one of the poorer countries under study. More than any other country under study we felt that it suffered from one of the greatest degrees of geographic and environmental obstacles. It is a dry country, land-locked, and with an endemic tse-tse fly problem. Burkina Faso faces very big intrinsic hurdles in relation to agricultural competitiveness. It is, however, Sub-Saharan Africa's largest cotton producer and the industry is a strategic one for the country. Unfortunately cotton prices have slumped somewhat in recent years, which has thrown the local industry into crisis.



The financial sector is currently very small, though openness to regional markets through its membership of UEMOA means that foreign banks are gradually expanding their presence. One of the local credit cooperative unions has a strong rural network, and provides some very limited short-term finance to producers.

The benefits of UEMOA membership also need to be considered in light of Burkina's low regional competitiveness. This means that local produce is often disadvantaged compared with regional imports. Indeed, Burkina's major export is people, and the value of remittances from Burkinabe's working in neighbouring countries is major contributor to GDP.

## Ghana

Financial Sector: Amber/Green



Agricultural Sector: Red/Amber



Ghana has a relatively modern commercial banking sector, and a growing network of rural banks. The commercial banks are, predictably, oriented towards retail and corporate banking (particularly in relation to Ghana's booming oil and gas, and mining industries, as well as growing manufacturing, retail, and services markets).

Producers are not typically well organised, though successful producer associations seem to be accessing decent amounts of working capital from rural banks. Agriprocessing is generally weak in Ghana, however, which weakens value chains overall. The exception is cocoa, in which Ghana is the world's number 2 exporter.



The policy environment is generally supportive of pro-growth initiatives in agriculture, though implementation seems to be a struggle. Again, land reform is a major issue in Ghana. One of the major hurdles Ghana faces is macro-economic imbalances leading to very high domestic interest rates.

## Kenya

Financial Sector: Amber/Green



Agricultural Sector: Red/Amber



Kenya was one of the more developmentally advanced countries under study. It has a relatively large and advanced financial sector. Never-the-less, financiers are still wary of the risks of the agricultural sector, and tend to focus on growing mass-market retail franchises, and large corporate enterprises in manufacturing, retail, trading, and services.

Kenya does have some striking examples, however, of some relatively competitive agricultural value chains such as coffee, tea, horticulture, and floriculture. These are usually underpinned by large commercial farms which have access to major export markets. Most of the large commercial banks have specialist units focused on banking these customers. Smaller producers, however, find it much more difficult to access finance. Rural areas, however, are served by a network of co-operative banks which can provide outreach, though are generally under-capitalised.

The policy and business environment is broadly supportive of agricultural finance, with the exception of land reform, which is an on-going political issue in Kenya, yet to be addressed comprehensively.



## Ethiopia

Financial Sector: Red/Amber



Agricultural Sector: Red/Amber



Ethiopia is still very much a centrally planned economy, with a state-dominated financial sector and strong direct and indirect affiliations between politics and business in almost all areas. Its highly regulated economy suffers from acute economic imbalances and, currently, credit growth is inhibited by caps put in place by the National Bank in order to control inflation. No foreign capital is permitted in the banking sector, and private banks are not permitted to access foreign currency credit lines. Overall, the financial sector is in a pretty poor state, though sponsorship of the Ethiopian Commodity Exchange seems to have added some structure to key commodity markets. Small producers can typically access small amounts of short-term credit from large state-owned MFIs.

Agriculture is generally dominated by small-holders, though there are a population of commercial farmers. The availability of arable land is something that government is keen to exploit through long-term leases to large commercial farming enterprises from overseas. This is usually contingent on the lease-holder investing in agricultural infrastructure for the common good. Typically, agricultural value chains are weak, with extremely limited agriprocessing for value addition. Producer organisation is also very poor.



Figure 3.2: Brief Summary of Country Study Findings

## Challenges and Opportunities

### Regional Integration

The increasing importance of creating regional free markets to encourage specialisation, competitive advantage, and trade in agriculture became clear during the study. The regional trade agreements of East (COMESA) and West (WAEMU) Africa also have a vital role in creating large, diverse, and increasingly well-off consumer market for regional produce.

Efforts to improve the free movement of capital also encourage intra-regional investment, especially in agribusiness. It is also clear that it may take some countries a significant amount of time to reduce net imports of food to a level which gives them a degree of security, largely due to large populations and low agricultural productivity. In this case, the free movement of labour can encourage migration within the region to areas of labour shortage, reducing economic burdens and increasing the value of remittances.

Along with regional integration comes the risk of increased competition from regional competitors. This is already becoming a feature of some of the markets studied, especially in areas close to national borders. However, the focus of this study is on policy options to improve access to finance with a view to developing the agricultural sector in Africa as a whole, not approaches to protection of uncompetitive production. Therefore, we must recognise the benefit of more open regional and continental markets, and support policy initiatives with this goal in mind.

Naturally it is also vital that the requisite infrastructure exists (e.g. road and rail networks, air- and seaports, warehouses and inspection services etc) to support cost-effective transport of produce. The role of supra-national policy makers is clearly very important in shaping a co-ordinated approach to infrastructure development to support agricultural trade.

### Financial Sector Liberalisation

The positive impact of financial sector liberalisation on credit expansion seemed very evident during the course of the study. Ghana and Kenya have been relatively liberalised for some years and are host to some of the continent's biggest and most sophisticated financial institutions. Burkina Faso has a very small financial sector base, though liberalisation accompanying its member of WAEMU has seen a rapid injection of new capital, the entry of new players, and the expansion of credit. Ethiopia is the exception, where the financial sector is predominantly state-owned, and is seeing real problems in its financial sector.

Political involvement in the pricing and/ or allocation of credit seems inevitably disastrous and should be avoided at all costs. This is not to say that a depoliticised, well-managed, state-owned development bank is not an asset. Unfortunately, successful examples were not in evidence in the markets studied. Political governance needs to be of a quite high standard to avoid the excessive politicisation and sometimes abuse of state-owned enterprises.

Three of the four countries under study had made substantial efforts over recent decades to liberalise and privatise their financial sectors. We believe that this has been a substantial catalyst for the growth of a significantly larger and more effective financial sector, particularly in Kenya and Ghana. Such policies include:

- The abandonment of policy instruments such as credit and interest rate caps, and directed lending;
- The reduction of the state as a competitive force in financial markets through exit of stakes in commercial financial institutions;
- The wind-up or reform of poorly managed or politically directed development banks; and
- Openness to entry of foreign financial institutions.

## Budget Allocation and Public Finance Management

One of the key indicators of successful agricultural development policy is the level of budget allocation. All sub-Saharan African countries have signed up to the Comprehensive African Agriculture Development Programme (CAADP) which targets an allocation of 10% of public expenditure to agriculture. This does not seem hugely ambitious considering the high level of economic contribution agriculture makes to many African countries, yet we are aware of only five countries which have achieved this so far. These include two of the countries under study, Ghana and Burkina Faso, though Ethiopia was expected to reach this target soon. It is, however, difficult to compare countries fairly given the lack of a very clear framework for effectively categorising public spending.

Our studies reveal two potential traps however. Firstly, in the case of Burkina Faso, the budget is largely supported through grants and loans from development agencies, making it ultimately unsustainable. Ghana was noted for the difficulty it faced in converting increased spending on agriculture into economic results. Perhaps the situation in Ethiopia is indicative, where there were significant deficiencies in the financial and economic analysis of spending options, and also financial governance (and monitoring and control frameworks), particularly in the regional and local governments.

## National Agricultural Strategy, Coordination and Implementation

In most countries we found that the coordination, development, and implementation of agricultural strategy is not optimised. In general, the published strategies were filled with sound reflections on past experience and pointed to very positive directions in the future, but detail, specifically in respect of tangible action plans and targets, was missing. Also, it was not clear in some countries, how the respective Ministry of Agriculture or equivalent intended to co-ordinate their approach with other public bodies. This is particularly vital in relation to agriculture where there is a great deal of

overlap between Ministries responsible for creating the enabling environment. This is important to financiers. If they have confidence about the direction and efficacy of public spending in relation to agriculture, it makes it much easier for them to plan their strategies and synergise with the public sector.

Ideally a country should have a challenging yet realistic agricultural development strategy. In many ways it makes sense to separate the rural livelihoods agenda from that of commercial agricultural development, though clearly the two approaches must be very well co-ordinated.

From the point of view of financiers, an agricultural development strategy should be underpinned by commercial realities and specifically identify the sub-sectors with high potential. High potential sub-sectors fall into two categories: exportable produce in which the country has a strategic competitive advantage either regionally or globally, or those in which there is currently or could be a major local market and/ or potential for import substitution.

The strategy should go on to detail the policy measures and investments the public sector will commit to in order to improve competitiveness in these sub-sectors. Naturally it is vital that readers from the financial sector should be able to place some faith in these promises. There also appear to be some serious skills deficiencies in project analysis and implementation in the public sector. This seriously affects implementation and fiscal accountability. The development of specific and tangible deadlines, targets, and measures of success may provide some greater level of confidence.

## Land Tenure

The issue of land tenure is one of great political and cultural sensitivity in many parts of Africa. In brief, in many circumstances in Africa, private ownership of agricultural land does not exist in the sense that we would understand it in developed countries. Use and title to land are often underpinned by customary systems at village level where land tends to be viewed as a more com-

munal asset, to be allocated at the discretion and favour of village leadership (e. g. chief, clan head, elders etc).

Some other countries have experienced Marxist revolutions and nationalised all private agricultural land, whilst others are attempting to reconcile current land ownership (often crystallised during colonisation) with competing claims from different stakeholders.

Basically, it is relatively rare for a small farmer to be able to claim absolute title to his land and to dispose of it freely. This has two knock-on effects. Firstly it tends to inhibit long-term investment in the improvement of land. If a farmer has little security that the land will remain his asset and the asset of his descendants in perpetuity, then there is little incentive to take the long view. Secondly, the land does not tend to make very good collateral. There is doubt about the title-holder's rights to pledge the land, and what rights and responsibilities would accrue to a charge-holder if security was enforced. Add this to a slow, unpredictable, expensive and often corrupt legal system and it is unsurprising that banks do not view charges on agricultural land as good security.

Often they will seek to take a charge anyway, with a view to at least holding some leverage with the borrower, but they rarely expect to be able to recover losses through the actual seizure and sale of property.

The agricultural system of much of the developed world is underpinned by the private ownership of land, the right to pledge this land, and the practical enforcement of this charge in the case of default. To imagine that a revolution in agricultural finance for small farmers can occur in the absence of land reform is naïve.

### Legal Rights and Responsibilities

Binding contracts can be used between value chain participants to build relationships, particularly between producers and buyers. Indeed, the presence of a valid off-take contract for a producer is a significant factor could ordinarily be considered as a significant plus when making a credit decision.

Whilst many development practitioners point to the availability of unsecured finance to farmers in developed countries as an example that can be replicated in developing countries, it must be understood that the business and legal culture and environment is very different in Africa. The observance and enforcement of contracts is generally much weaker, and there are much more limited incentives and sanctions geared towards engendering financially responsible behaviour, especially on the part of producers.

### Value of Extension Services

We believe that strong extension services play a vital role in improving the bankability of agricultural value chains. Indeed, commercial bankers themselves expressed to us directly and unprompted, that they see the supply of such services as a prerequisite to their interest in a particular sub-sector.

They were particularly interested where international NGOs and development agencies were focused on bringing transformative new technologies and agronomic approaches that had been thoroughly researched and tested. It was felt that the commitment of such agencies to effective implementation, and the high calibre of the personnel involved provided some comfort to the financiers.

Rightly or wrongly, the financial sector had low levels of confidence in either the technical or management abilities of most small-scale producers. They also felt that most lacked the entrepreneurial attitude required for long-term success, and that there were inherent differences of understanding around the respective rights and responsibilities of creditors and lenders.

Therefore the ideal extension programme (from an agricultural finance perspective) also tackles educational and cultural barriers to business (e.g. financial education, literacy, business ethics), as well as focuses resources on producers with the personal characteristics required for success. Financiers like an extension programme which filters producers so that they have access to a pool of significantly higher potential.

Merely having an extension programme is not enough of itself. It needs to be one which has a good record in successfully transforming the practices of its target group. Demand-led approaches seem to have a much higher uptake than others.

## Research and Development

Every country studied appeared to have a wide range of agricultural research and development institutions. It is beyond the competence of the consultants to assess the efficacy of these institutions, though anecdotal evidence and secondary research suggested that many suffered from chronic financing and human resources challenges. However, it did appear that many of these institutions were producing high-quality outputs, for example in the form of higher yielding and disease resistant genetic varieties, and improved agronomic practices. It was felt that even more benefit could be gained if stronger links were developed between African research institutes and leading international peers.

The real breakdown appeared to be the failure in the dissemination of these improved technologies, even when integrated with extension services. Adoption of new and improved varieties was generally poor. There seems to a real role for the private sector here, in a niche area of agribusiness, notably the propagation and distribution of improved genetic varieties of animals and plants.

## Weak Producer Organisations

It is difficult to under emphasise the importance of strong producer organisations in improving the »structure« of agricultural sub-sectors. The most common form is the agricultural co-operative. These organisations enable producers to collaborate in the marketing, and sometimes processing of produce, by leveraging synergies and economies of scale. They can also provide an effective conduit for cost-effective access to inputs, extension services, and even financial services.

Producer organisations need to be financially sustainable and controlled by members. They also usually need to be networked or linked in some sort of hierarchical structure, which allows the creation of a body of professional management and expert staff at some level. The culture of producers needs to emphasise the importance of collective behaviour and co-operation, and to be supported by the social and financial incentives and sanctions which supports this behaviour.

From a financial sector standpoint, reaching individual small-scale producers is difficult, and often a more appropriate counterparty is the producer organisation or co-operative. Agribusiness is also usually happy to deal with an intermediary institution, either in terms of input supply or the purchase of produce.

Building and professionalising these institutions is an important building block. It is very difficult to achieve proactively however. Interventions by development agencies and government to catalyse the creation of specific institutions have not met with great degrees of success. Often these have been incentivised by access to certain benefits or credits and, once these have been exploited, tend to disintegrate. The strongest institutions are those which have developed organically, on the initiative of members at a grass roots level, because they see and understand the long-term benefits of co-operating around a wide range of producer activities.

This tends to manifest itself in homogeneity inside the small producer groups or co-operatives which make up the system. The strongest and most stable groups tend to be those where the members are engaged in the same production, have strong local familial and social ties, and are of very similar social and economic status. It is in these groups where the social pressure to conform to group norms is most acute. Groups which appear to have been »captured« by local political or social elites seem to have real problems with governance at all levels.

### Githunguri Dairy Farmer's Co-Operative Society

The co-operative movement in dairy farming is relatively strong. Farmers deliver their milk to collection centres, where it is cooled, bulked and transported for better prices.



They will often provide access to farm inputs for members, taking advantage of their bulk buying capacity. Sometimes these are provided on credit.



Some dairy co-operatives have moved into major value addition, with at least two establishing national brands.



They also provide extension services and/or work with partners to facilitate access to agroveter expertise (e.g. artificial insemination, zero-grazing units, biogas etc.).

Figure 3.3: Profile of Dairy Co-operative

## Limited Understanding/Appetite for Agriculture in Financial Institutions

Agricultural finance is a difficult business, and this situation is underpinned by a general lack of appetite from commercial financial institutions. This situation is reinforced by several factors:

- there is usually a distinct lack of reliable, regular and timely statistical information on the sector collected by both the public sector and value chain participants, presented in a readily accessible format; and
- there is a lack of high quality, micro-economic and sub-sector analysis of agricultural performance, market participants, and the outlook for the future

It might be argued that the banks should produce this themselves, but why should they when other sectors make a real effort to collect and analyse data on their behalf.

## Interventions

### Support to the Public Sector

Specifically advice pertaining to:

- Increasing regional integration and free movement of goods, capital, and labour
- Creating a positive investment climate for the attraction foreign capital for both agribusiness and financial sector expansion
- Increasing security of private land tenure and rights to develop, sell, transfer, or pledge property
- Financial sector liberalisation

Technical assistance in:

- Developing inter-ministerial co-ordination and planning
- Developing the ministerial budgeting and budget planning process
- Developing pro-growth agricultural strategies oriented towards commercialisation of agriculture
- Approaches to improving competitiveness of agricultural value chains
- PPP structures and working with the private sector
- Project financial and non-financial appraisal and analysis
- Project and change management skills and approaches
- Implement effective land and collateral registers
- Improving operation of commercial courts, and the cost-effective and timely enforcement of creditors rights
- Agricultural data collection and statistical analysis

### Case Study: Ethiopian Commodity Exchange

The Ethiopian Commodity Exchange (ECX) is an initiative sponsored by the Ethiopian government to better regulate and more efficiently trade major agricultural commodities. The exchange is currently trading a number of commodities (of which coffee is only the most important) and hopes to move into sesame in due course. The government has mandated that all trade in certain commodities must be directed through the exchange so it is effectively a monopoly. Buying and selling members buy a seat on the exchange, and the exchange also takes a margin on all trade, which underpins operating costs. The ECX has a network of warehouses throughout the country where produce can be stored securely, and correctly measured and graded. On the basis of a receipt from the issuing warehouse, a seller can then instruct his agent to make a deal in the open outcry market. The buyer can then collect the specific produce from the warehouse on production of the required paperwork. The ECX is one of the few functioning commodity markets in Africa.



Figure 3.4: Profile of Commodity Exchange

## Commodity Markets

There are very few functioning commodity markets in Africa, with one of the notable exceptions being Ethiopia, where a state-sponsored initiative mandates that the majority of trade in major commodities passes through the exchange. It is a good way for Ethiopia to regulate the trade in these commodities, but also provides significant structure to the market. On the back of this initiative the exchange has begun to offer warehouse receipts to help finance the trade flows in certain value chains. An ancillary benefit is the development of strong quality control and certification standards at ECX facilities. This is necessary to give traders the assurance that they are getting what they pay for. This has had the effect of immediately rewarding those traders with strong, high quality supply line. Previously, the value of Ethiopian produce had been spoiled by unethical practice amongst value chain participants, but now it is much more difficult to get away with.

It can be difficult to reconcile the government ownership of what would ordinarily be considered a private sector function. However, in an imperfect world, it certainly seems to have a lot of promise. The Ethiopian government has undertaken to transfer ownership to the private sector in due course. Development agencies would do very well to consider how other countries in Africa could benefit from national, or even regional, exchanges. A lot of papers have been published on the topic, but little actual progress has been made.

## Development of an Agric Investment Pipeline

There is a lot of investor interest in African business, from both domestic and international sources of capital. One of the challenges that equity investors face is scanning the market for investable opportunities. In developed markets, this function is filled by financial advisors, who link potential investors with opportunities and vice versa. This is not the case in most countries in Africa, but perhaps could be replicated by the development of a continental agriculture investment pipeline. Private capital (both local and international) could be

assisted to make their investment decisions in Africa through the establishment of a register of high-potential opportunities. These could be selected through criteria including quality of management, appetite for investment and openness to negotiation, business prospects, and alignment to the national agricultural strategy.

Successful applicants would have priority access to Business Development Services, and the administrators would undertake regular brief financial and management reviews of the business. These should be collated in a database which would allow potential investors to easily analyse and identify targets which meet their desired profile. This would also serve well for the development community in the identification of strong private sector counterparts with whom to co-ordinate initiatives of mutual benefit.

## Business Development Services for both Producers and Processors

It is fair to say that whilst Africa has a pool of entrepreneurial farmers and agribusinesses, there are major deficiencies in management and financial planning skills. Naturally this detracts significantly from their credit worthiness.

It does not appear that there is a major, well coordinated programme to deliver BDS to the agricultural market. In the case of producers, some limited BDS are occasionally incorporated as part of agricultural extension programmes, but these are usually very shallow and delivered by extension officers almost as an adjunct to their core interest in farming practice. Often many of these extension officers have not been farmers themselves, and their ability to transfer intangible expertise of this type will be limited.

Effective BDS require a sophisticated approach and intensive effort, and the involvement of highly intelligent and persuasive agents. They need to be concentrated on those with the potential and attitude to absorb the benefit, and to be customised to the local circumstances and environment.

In our experience, a market driven approach can work best, allowing the private sector to compete for the provision of BDS services. The pre-qualification of suitable service providers with a range of offers, and catalysing the market with the provision of vouchers to BDS candidates, to spend on their preferred option is often preferable to the direct provision of such services.

#### Capacity Building of Producer/Commodity Associations

As already detailed, producer associations are a vital component in many value chains, and many are quite weak. They can play a vital role in intermediating credit, as well as promoting, representing, and supporting their constituencies. Commodity associations and/ or other processing or exporting groups tend to play more of a lobbying and knowledge management role, however, they are also important. One of the key areas that we feel that agricultural associations of any type can play a greater role is in public relations.

In general, agriculture does a poor job of promoting its image in the financial sector. Credit is limited, and is allocated on the basis of credit strategies developed by financial institutions. These credit strategies articulate the institution's appetite for credit, usually by specifying portfolio limits for particular sectors and sub-sectors.

There are many competitors for finance from the booming minerals, oil and gas, construction, retail, tourism, and manufacturing industries, most of which have well-established lobby groups at both the corporate and industry level. These lobby groups are staffed with well-trained professionals who are adept at promoting their industry with financiers by collecting and sharing well-presented and compelling industry and project data and analysis.

There seems to be little parallel for the agricultural sector. Producer and processor groups, where they exist, are often under-funded and under-resourced. They do not make it easy for financiers to take a more positive view of agricultural sub-sectors and to develop plans to expand financial services.

### Farmer-based organisation

The Adonten Pineapple Growers and Marketing Society was established in 1993, and currently has 48 members, of which six are women. The members supply the Blue Skies company, which is a major exporter of fresh, cut fruit, and also the domestic market through local traders.



The farms have suffered badly in the switch-over to the new MD2 variety, with sales dropping from 900MT in 2000 to 30MT in 2009. Nevertheless, they are adamant that pineapples are by far their most profitable crop, though they do use inter-cropping for some food crops. One of the principal reasons for grouping together is to access finance. Members make a small initial capital contribution and payments either on a regular basis or when they sell fruit. These savings are used to mobilise funds at rates of around 30% over three years from rural banks to help prefinance the crop. The group used to be part-owners of Farmapine, a co-operative-owned processing plant set up by Technoserve with US\$ 1.4m from the World Bank. Farmapine has subsequently collapsed leaving debts of around GH¢ 8m to the local banking sector.

**Figure 3.5: Case Study of Farmer-Based Organisation**

## Financial Literacy

Embedding financial literacy within agricultural development programmes is vital. Firstly, we need to see an uptake in demand from producers for products other than credit. They need to understand that a relationship with a financial institution is more than just a source of funds. Specifically, savings mobilisation is critical, which is not only good sense for the farmer, but also deepens the local financial sector. They also need to see the benefit of increasing formalisation of their financial affairs (correspondingly, the bank will need to be capable of meeting this need and also of rewarding responsible behaviour). There is also a need to reinforce basic business skills and ethics, such as simple financial planning and the importance of repaying your loan.

## Assistance to Commercial Banks

Some banks will require technical assistance in order to develop a robust agricultural finance portfolio. Many financial sector players could afford this advice, but perhaps will look for some contribution from the development community where there is a coincidence of interest. Sometimes this support can effectively be a loss leader from the development sector in engaging the support of a financial institution in a particular subject. It is a matter of principle, however, that where an institution can afford to pay that they make some contribution to the costs of this technical assistance. Some of the areas of most value in our view are:

- credit strategy for agriculture: helping financial institutions to develop a portfolio for the agricultural sector aligned to their balance sheet strategy, to determine attractive sub-sectors and set suitable limits, to develop products fitting both the needs of customers and the balance sheet, and articulate a clear credit policy towards the sector;
- marketing strategy for agriculture; working with financial institutions to develop a cost-effective operating model and distribution strategy, to set appropriate sales targets and to train and incentivise sales staff;

- risk management approaches: including portfolio management strategies, development of risk rating models and credit scoring methodologies, and effective bad debt management and collection; and
- training: in all of the above making sure that the training is customised for the local environment, applies detailed local case studies and involves participants in intensive problem solving group work.

## Capacity Building of Rural/Co-operative Financial Institutions

Rural banks and co-operative financial institutions look set to become an integral feature of the rural landscape in the future. They are also a welcome feature of a diversified financial sector environment. Whilst balance sheets are still quite weak, and management and staff inexperienced, they are still the ones building the vital institutional knowledge of how to develop and deliver financial services in rural areas. They must be a critical component of any sustainable attempt to deliver agricultural finance to small producers.

That said, in general, these institutions need to lift their level of professionalism well beyond current levels. Governance and management is often provided by volunteers with little financial services experience. They often lack the necessary strategic and financial planning skills required to grow what is essentially a large savings and credit association into a proper community bank.

Problems are exacerbated by chronic human resources issues. It is very difficult for these small and isolated institutions to retain talented staff. Promotion prospects are low, pay is poor, and there is usually little training and development. For high-calibre personnel, it is usually seen as an entry route into commercial banking.

This tends to trap institutions in a cycle of low innovation, mediocre financial performance, and weak capitalisation.

A programme to deliver tailored technical assistance to promising rural banks and co-operative financial

institutions would therefore be welcome. This would need to be flexible to cover a wide range of technical areas, but would initially need to focus on working with management around strategy and the management of change.

## Embedding Financial Analysis in Value Chain Development

As we say, financiers are inclined to understand value chains. The basic principles of credit analysis require financiers to think strategically about the nature of the product, the strength of the supply chain underpinning it, and also the market and levels of demand at various levels. They are attempting to reach some conclusions about the relative rewards attached to a specific sub-sector and the risks which are attached.

In order to encourage access to finance, it needs to be demonstrated to financiers that, at least at some stage along the value chain, there are retained earnings of sufficient magnitude to justify the risks they would assume. In some cases, it seems to us that some agricultural

value chains are inherently uncompetitive. In this case, consideration of measures to improve access to finance from the private sector are doomed and should be abandoned in favour of initiatives to address to root causes of low profitability, or even to encourage participants to exit these value chains in favour of more profitable ones. The idea that private sector finance can be facilitated to catalyse an uncompetitive value chain is naïve and counter productive. Rather private sector finance can be used to much more rapidly expand and develop an already profitable value chain.

Too often we find that a lot of value chain analysis is missing important financial and risk information which is particularly relevant to finance. Value chain specialists have gone to a great deal of trouble in mapping the market participants and the interactions between them without getting into the numbers in sufficient detail. It may be useful to consider a programme to train agricultural value chain development professionals in basic financial analysis techniques, and perhaps to provide an introduction to the operation of the financial sector so they can get a better understanding of the perspective of financial institutions.

## 4 Summary and Outlook

The outlook for agricultural finance in Africa is neither certain, nor will it be even remotely consistent across markets. Some markets, notably Kenya and Ghana within the context of this study, have a well-established lead in economic development, the development and implementation of good policy, a nascent agriprocessing sector, and a robust financial sector compared with many other countries in Africa. This is not to mention the good fortune of abundant natural resources. It is not difficult to imagine that improved access to finance will occur organically in these countries, albeit perhaps not at the rate required to meet the ambitious growth targets for agriculture.

Unfortunately, for many reasons which we hope have been articulated in this report, agricultural finance is not a natural »self starter« compared to many other facets of a growing economy. There are a wide range of initiatives which would add value to the promotion of agricultural finance, and an even great variety of ways to structure them.

Insurance, commodity markets, mbanking, warehouse receipts, savings-led approaches, asset finance and leasing etc are all important, but for the purposes of this study we have gone »back to basics«, i.e. the simplest ways to mobilise investment and working capital for agricultural value chains. The suggested approaches are also relatively practical and achievable, perhaps compared to ambitious goals such as the creation of a continental state-backed agricultural risk reinsurance market for example. They are also relatively simple, without the need to involve complex interactions of stakeholders which would be required in the development of a functional PPP market for illustration. They include a mix of financing and technical assistance solutions which we believe are naturally harmonious and supportive. We have limited ourselves to six top recommendations for the purposes of promoting a focused discussion.

### Connecting Value Chain Development and Value Chain Finance

It is imperative that initiatives focused on access to finance are effectively dove-tailed with value chain development measures. Improving the competitiveness and underlying profitability of agricultural value chain participants is ultimately a key ingredient. Finance cannot and should not be directed towards proposal which will not generate the required cash flow to meet the needs of lenders and investors. Agricultural value chain development programme should continue apace, albeit with perhaps an even greater focus on identifying those measures which improve financial performance most effectively and rapidly.

### Enhancing Access to Working Capital for Small Producers through Support for Buyer/Supplier Finance

The reality is that providing long-term investment capital for small producers is not an attractive proposition for the commercial financial sector at this stage of development. However, banks are much more likely to be amenable to the prospect of providing working capital, particularly if they can understand the risks and keep the distribution costs down. The simplest way to achieve this is to provide short-term credit to the clients or suppliers of current agribusiness borrowers, to prefinance agricultural production.

In some markets, agribusiness is already prefinancing production in certain areas. Input suppliers are extending trade credit to buyers, and agriprocessors/ exporters to suppliers. This implies that they already have a very strong understanding of the credit characteristics of a particular customer set.

And in some markets, banks are already building on this knowledge by providing or looking to provide their larger agribusiness customers with buyer or supplier credit lines. This helps their agribusiness customers release

working capital whilst also widening the pool of funds available to prefinance production. It builds on the expert knowledge and insight of agribusiness, and balance sheet and financial management skills of financial institutions. Default risk could be shared to ensure that all parties have a vested interest in maintaining a high quality portfolio.

We propose that the development community can build on this momentum by providing technical assistance to banks looking to explore the product, and potentially to provide some partial portfolio guarantees to expand credit appetite.

## Facilitating Equity Investment in Medium-Large Agribusiness

Agribusiness is generally seen by commercial banks in Africa as under-capitalised with relatively weak management. It is not seen as a relatively attractive prospect for further increases in long-term investment lending. In every market, business owners are often prone to withdrawing too much capital from their business, especially when they have sole management control.

Banks really want to see an improvement in debt/ equity ratios, and an increase in the professionalism of management and financial control. The ideal solution, if it can be achieved, is to attract further equity investment with an active management approach.

Equity capital markets in Africa are still nascent but growing quickly, though rather more focused on sectors other than agriculture. Development agencies could support growth of agriculture through a variety of technical assistance measures to support development of capital markets, promote African agribusiness to local and international investors, to support African agribusiness with Business Development Services to prepare them for investment, or even take a direct equity stake themselves. Consideration of the development of a continental agribusiness equity investment fund should certainly be considered.

Equity is special as it often has a leveraging effect. By improving debt/ equity ratios, access to credit can be improved and, through an active management approach, the financial performance of the company can be improved.

## Commercial Bank Technical Assistance and Co-financed Agricultural Credit

Working with commercial banks to increase their exposure to agricultural finance should be considered. This could comprise of technical assistance and consulting services, perhaps in the context of a co-financed agricultural credit line. If a commercial bank and a development finance institution can agree on an appropriate credit marketing strategy towards a particular segment of the agricultural sector, then both parties could agree to jointly finance a credit line. It is imperative that banks, where possible, contribute at least partially to the costs of any assistance received. In the more developed markets this should rarely prove a problem if the bank indeed has any appetite for agricultural lending. If not, it is unlikely any such venture would succeed anyway.

Commercial banks are looking for partners in risk, not to avoid it entirely. A trusted partner with demonstrable expertise in realising profits from agricultural finance should prove enticing. In order to achieve this, development agencies should avoid »solutionising« and approaching banks with a standardised model or prejudiced set of assumptions about what is to be achieved and how. Any initiative must start with a bespoke strategy which works for both the bank and the development agency. For example, as illustrated above and below, it may be most appropriate for commercial banks to partner with agribusiness or rural financial institutions (or both) respectively to extend credit to small producers.

## Technical Assistance to Rural Financial Institutions

If the rest of the world is any guide, rural financial institutions (e.g. rural banks or credit unions) in Africa should become an increasingly key part of the fabric of rural life. They are intrinsically sustainable savings-led institutions which is their key strength. Development agencies should avoid pushing them down the wrong path by foisting upon them large, long-term directed credit lines which they cannot handle and which are likely to disappear as a result of a policy change thousands of miles away.

They are the coal face of financial services provision for rural communities and nobody understands the market better than them. They limit their agricultural lending (notably to producers) quite tightly for the time being, rightly assuming that they have neither the expertise, operating model, liquidity, nor balance sheet to assume major portfolio changes. This will change over time, however, and we can already see promising signs as they get to grips with this segment.

In the interim, they need huge support to improve their technical, management, and financial skills. The IT environment is also usually woeful. A technical assistance programme to develop rural financial institutions would be extremely well received, much more so than a credit line. This is a long-term play, however, and results will only be evident over the longer-term. The training and career development of staff is also key, so that high quality personnel are not consistently lost to commercial banking or other industries.

## Deepening Wholesale FI Credit Markets and Financial Integration

Finally, we believe that the best way to facilitate access to long-term credit for rural financial institutions (if they feel they need it), is through the local commercial banking sector. Development agencies can help commercial banks with technical assistance and perhaps some credit enhancement to help them develop port-

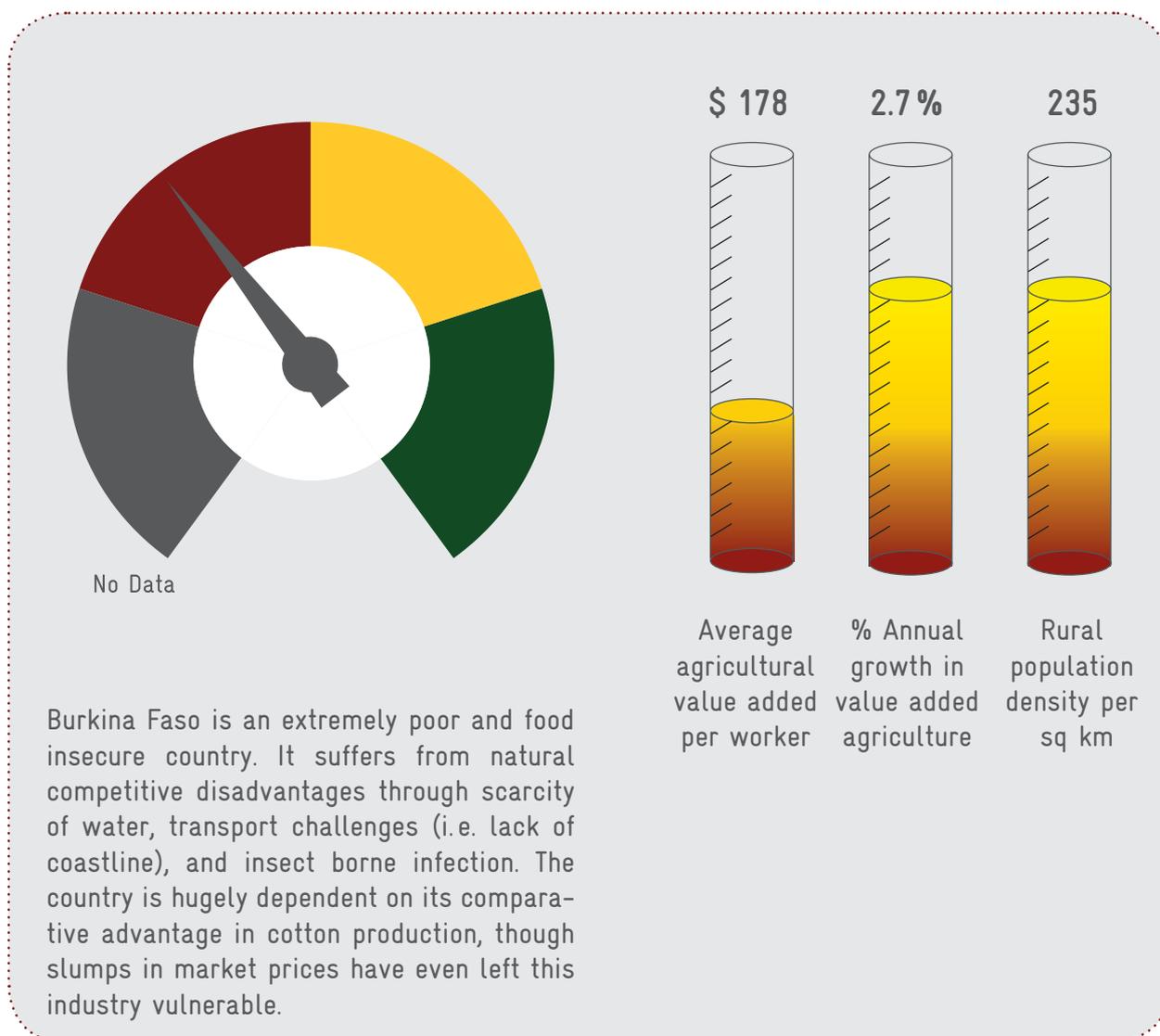
folios of rural financial institutions. Commercial banks have an interest in developing a sustainable portfolio and have the insight and expertise to better assess risks in this market.

The direction of excess commercial bank liquidity to rural financial institutions which have the ambition, expertise and franchise to expand will help accelerate the development and probable consolidation of the sector. Technical assistance could extend to working with both sides of the transaction to help them realise the benefits of even closer co-operation, perhaps through strategic marketing arrangements, or even equity investment or other long-term capital support. Financial institutions are not always in competition over every segment and sector, and more developed markets show features of quite intense collaboration.

We hope that the suggestions proposed show how a series of initiatives can support each other, and that the needs of a variety of stakeholders can be met in a coordinated approach. Clearly feedback is welcomed and we hope that the proposals can be discussed in more detail in the future. It remains only to thank the huge number of people, who cannot be mentioned for reasons of practicality, for their input to this study. Really, it is the distillation of their knowledge and understanding which has been the focus of this study. To some extent, the message we got was that, despite the complexity of the problem, sometimes the simplest approaches may yield the best results.



## Annex 1: Dashboards for Agricultural Sector



**Agricultural Sector Dashboard for Burkina Faso**

## Macro-Level



Burkina Faso's inability to reduce economic dependence on cotton is a major challenge. The country requires major investment to overcome some of the intrinsic challenges to competitiveness such as water scarcity and transport difficulties.

### Leadership



The MAHRH has set up policy co-ordination mechanisms but implementation of policy still seems to be poor.

### Strategy Development



There are plenty of strategies and policies in place, but little in the way of tangible implementation plans and performance measurement.

### Legislative and Policy Development



The state seems effective in formalising policy, but the process of implementation is weak and could be affected by the new decentralisation process.

### Budget Allocation



Burkina Faso has a high budget allocation to agriculture, much of which is provided by development partners, however.

## Meso-Level



Burkina Faso has a wide range of players in the agricultural sector, and has made significant progress in embedding a structure for producer organisations. Clearly capacity of some of this players is quite weak, however.

### Parastatal Organisations



There are a large number of parastatal and academic institutions but under-investment and lack of co-ordination have hampered effectiveness.

### Producer Organisations



A lot of progress has been made in establishing an effective structure for producer organisations, but may still lack financial sustainability.

### The Development Community



As an ultra-poor country, Burkina Faso receives a great deal of donor attention, some of which is not well co-ordinated, however.

### Agribusiness



Aside from cotton, and a number of other small exceptions, agriprocessing is basically absent. There are traders, of course, and some small input suppliers, too.

## Micro-Level



Agricultural production in Burkina Faso is basically at subsistence levels, and in dire need of drastic improvements in yields and the development of a culture of modern commercial farming. Most farmers do not even have access to animal traction, let alone more modern agronomic practices.

### Producer Viability



Farmers tend to have very small plots of land and are basically subsistence farmers. There is a small population of farmers with slightly larger landholdings, however.

### Access to Inputs



Aside from the cotton sub-sector, access to inputs for Burkina Faso farmers is very poor indeed.

### Water and Irrigation



Despite variability in rainfall, Burkina Faso has access to significant water resources. The potential for expanding of irrigation is a major priority.

### Agricultural Extension Services

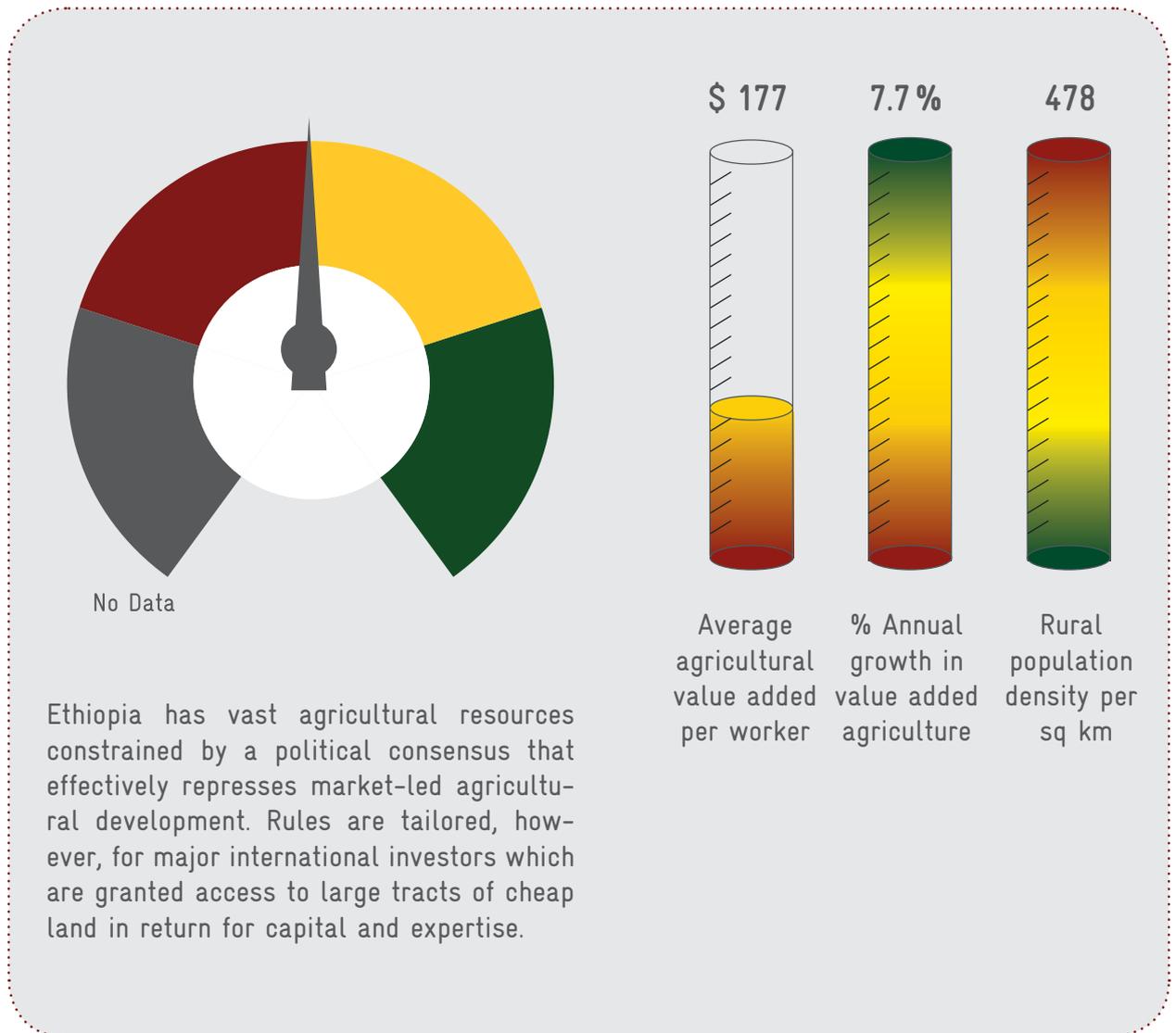


Extension services exist but tend to have low levels of uptake in terms of new technology. The scope of extension services has reduced over time.

### Agricultural Standards, Pests and Disease



Poor performance, largely as a result and consequence of lack of integration into international markets, and poor value chain structure.



**Agricultural Sector Dashboard for Ethiopia**

## Macro-Level



The government is certainly demonstrating its commitment to agricultural development through budget allocations, but effectiveness is undermined by poor implementation. Policy development, public sector co-ordination and fiscal responsibility all needed drastic improvement.

### Leadership



Ministries do not seem well co-ordinated in Ethiopia and there appear to be competing agendas and contradictory policies in relation to agriculture.

### Strategy Development



Ethiopia takes agriculture very seriously and has developed comprehensive policies to address the sector. The path for implementation is not so clearly mapped out.

### Legislative and Policy Development



The political environment is very poor, marked by considerable and violent divisions between factions. Policy development is put behind rivalry and power struggles.

### Budget Allocation



Ethiopia's decent budget allocation is let down by poor control of public finances, exacerbated by the country's federalised system.

## Meso-Level



Ethiopia is strikingly weak at the meso-level, and particular disappointing were the lack of producer organisation and the almost complete absence of agribusiness. This is a legacy and symptom of the state's inability to release responsibility to the private sector.

### Parastatal Organisations



The parastatal sector is undertaking major initiatives to improve, but is crowding out the private sector where it would be better placed to deliver in the long run.

### Producer Organisations



Farmer organisation is typically very weak, though the co-operative movement is experiencing something of a revival.

### The Development Community



There are a wide range of players but there could be more emphasis on market-led initiatives.

### Agribusiness



Agribusiness in Ethiopia is very weak and private sector development is constrained. The government is encouraging large-scale FDI in commercial farming.

## Micro-Level



The competitiveness of value chains vary from one sub-sector to another, though generally farmers in Ethiopia have relatively low productivity.

### Producer Viability



Most Ethiopian agricultural production is by small-scale producers, many of which lack economies of scales as well as the required technical and business skills.

### Access to Inputs



Producers use relatively low levels of inputs due to lack of finance, and the absence of a robust private sector to meet demand.

### Water and Irrigation



Ethiopia has recognised the vast potential of its water resources and is beginning to bring major programmes on line.

### Agricultural Extension Services

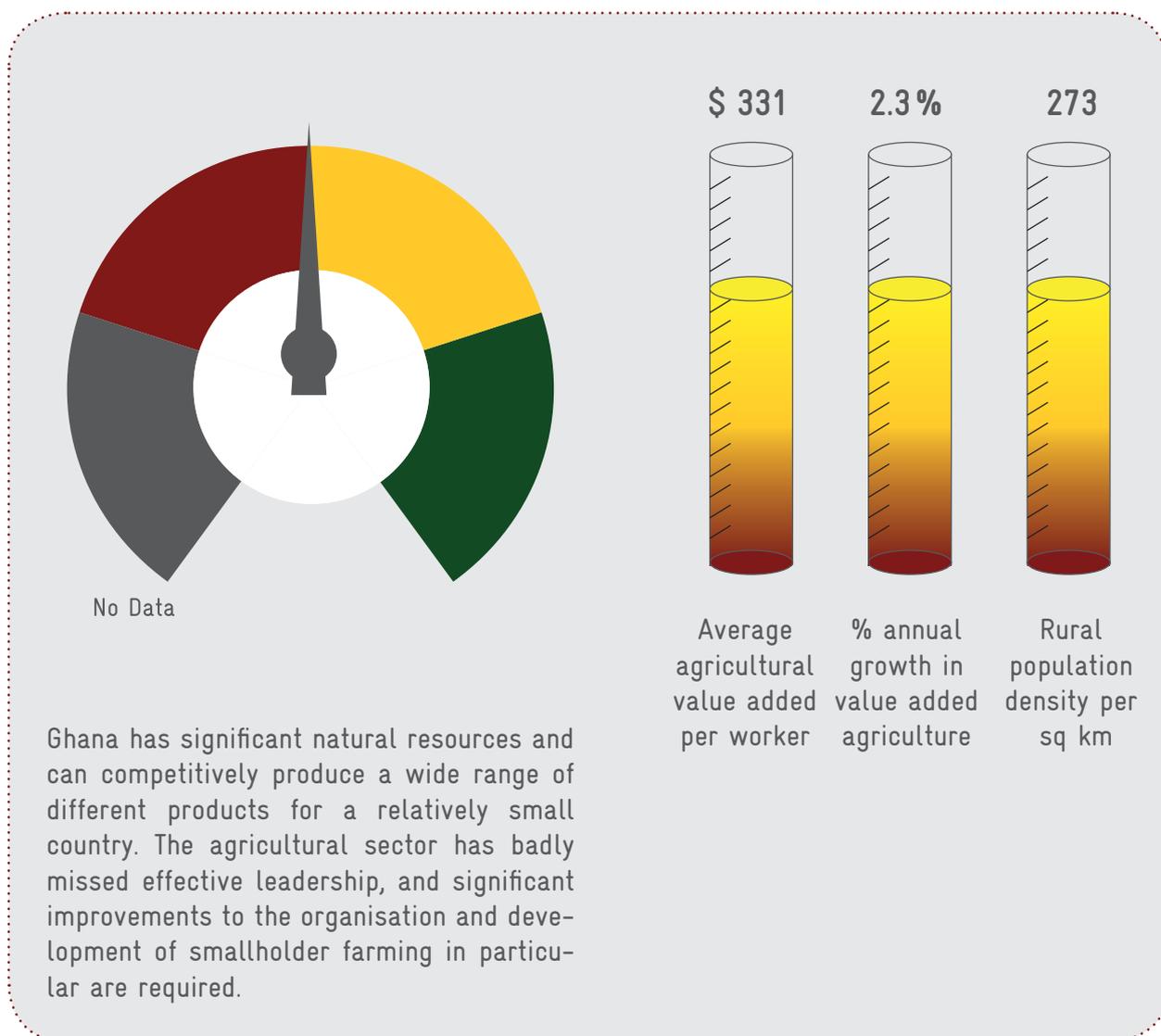


There has been a considerable improvement in extension services though uptake is relatively low.

### Agricultural Standards, Pests and Disease



Performance in this area seems to be weak, but the development of the Ethiopian Commodity Exchange could lead to improvements for some key value chains.



**Agricultural Sector Dashboard for Ghana**

## Macro-Level



The major concern is the lack of a clear inter-ministerial co-ordination structure, and a framework of public-private dialogue.

<b>Leadership</b>		The Ministry of Food and Agriculture is leading agricultural development but there is no clear framework for inter-ministerial co-operation and private sector engagement.
<b>Strategy Development</b>		The revised strategy (2007) makes little reference to the involvement of other government stakeholders and is missing a strong monitoring and control framework.
<b>Legislative and Policy Development</b>		A generally orderly political system let down by the delays in the passage of vital legislation.
<b>Budget Allocation</b>		Much improved budget allocation towards CAADP levels though expenditure appears to have been less effective than hoped for.

## Meso-Level



Ghana is weak at this level, with a particularly noticeable deficiency in farmer organisation in many subsectors (excluding cocoa).

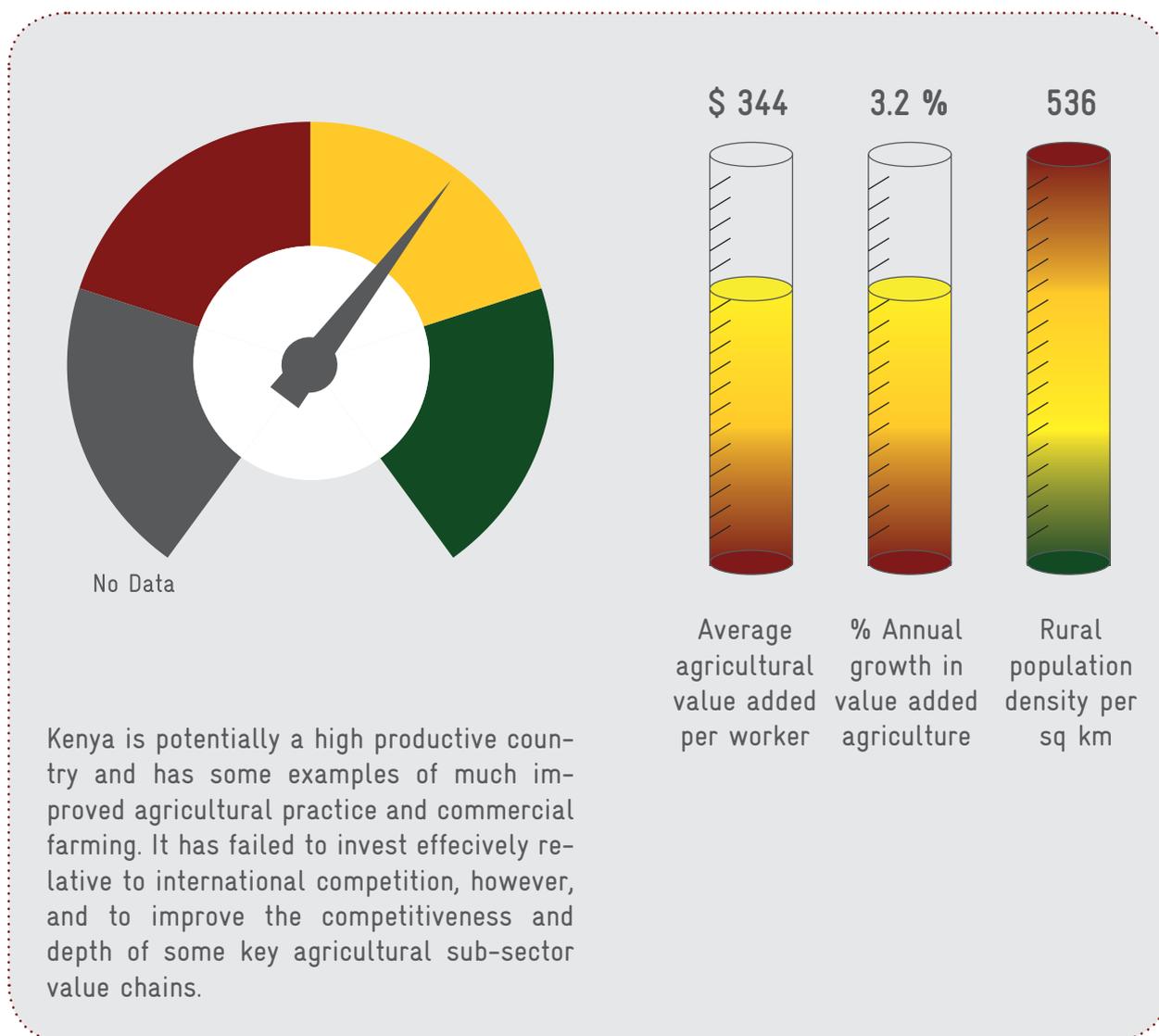
<b>Parastatal Organisations</b>		There are a large number of parastatal and academic institutions but underinvestment and lack of co-ordination has hampered effectiveness.
<b>Producer Organisations</b>		Farmer-based organisations are recovering after years of systemic abuse, but there is a distinct lack of national structures to support development.
<b>The Development Community</b>		Ghana is well served by the development community, however, there are improvements needed in co-ordination between each other and government.
<b>Agribusiness</b>		Agribusiness is generally weak, and characterised by low capitalisation and a lack of professional and technical management skills.

## Micro-Level



The competitiveness of value chains vary from one sub-sector to another, though generally farmers in Ghana have relatively low productivity.

<b>Producer Viability</b>		Most Ghanaian agricultural production is by small-scale producers, many of which lack economies of scale as well as the required technical and business skills.
<b>Access to Inputs</b>		Producers use relatively low levels of inputs due to lack of finance and expertise. The input supply industry lacks scale.
<b>Water and Irrigation</b>		There is very little irrigation in Ghana, despite the availability of large, secure water sources. Public management of irrigation has been poor.
<b>Agricultural Extension Services</b>		There is a comparatively wide range of extension services available for farmers but these are highly variable in terms of depth and scope.
<b>Agricultural Standards, Pests and Disease</b>		Better processes and infrastructure are required to make sure that Ghana remains competitive in this area.



**Agricultural Sector Dashboard for Kenya**

## Macro-Level



There appears to be concerted effort to establish more effective leadership, especially through development of the ASDS and related governance structures.

### Leadership



The Ministry of Agriculture establishing mechanism for cross-ministerial co-operation but this yet to be tested in implementation.

### Strategy Development



Development of the ASDS which lays out clear direction for pro-growth agricultural strategy but specifics of implementation yet to be realised.

### Legislative and Policy Development



Regular and consistent passage of legislative acts and amendments specific to agricultural development.

### Budget Allocation



Poor record for budget allocation to agriculture, both in terms of level and stability, and Kenya still has some way to go to meet its stated objectives.

## Meso-Level



Kenya has a wide range of players at the meso-level, though many have been under-invested in terms of both money and expertise, and are not working effectively.

### Parastatal Organisations



There are a large number of parastatal and academic institutions but under-investment and lack of co-ordination has hampered effectiveness.

### Producer Organisations



The co-operative movement is recovering from scandal and there are an increasing number of producer associations.

### The Development Community



Kenya is well served by the development community, however, improvements are needed in co-ordination between each other and government.

### Agribusiness



Agribusiness is generally weak, and characterised by low capitalisation and a lack of professional and technical management skills.

## Micro-Level



The competitiveness of value chains vary from one sub-sector to another, though generally farmers in Kenya have relatively low productivity.

### Producer Viability



Most Kenyan agricultural production is by small-scale producers, many of which lack economies of scale as well as the required technical and business skills.

### Access to Inputs



Producers use relatively low levels of inputs due to lack of finance and expertise. The input supply industry lacks competitiveness.

### Water and Irrigation



Many areas in Kenya are now becoming water scarce, though the country has the raw potential to be much better served given the right infrastructure.

### Agricultural Extension Services



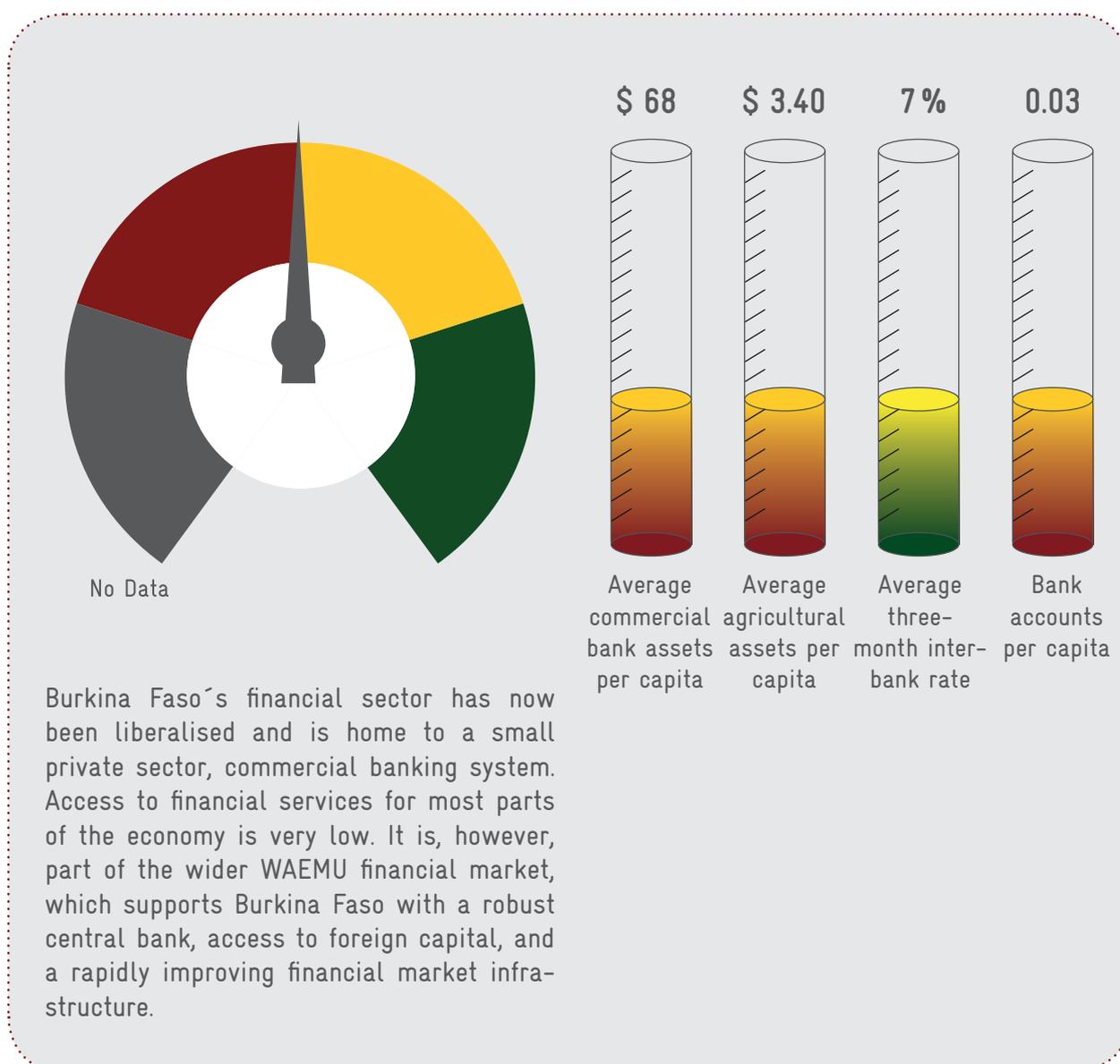
There is comparatively wide range of extension services available for farmers but these are highly variable in terms of depth and scope.

### Agricultural Standards, Pests and Disease



Better processes and infrastructure are required to make sure that Kenya remains competitive in this area.

## Annex 2: Dashboards for Financial Sector



**Financial Sector Dashboard for Burkina Faso**

## Macro-Level

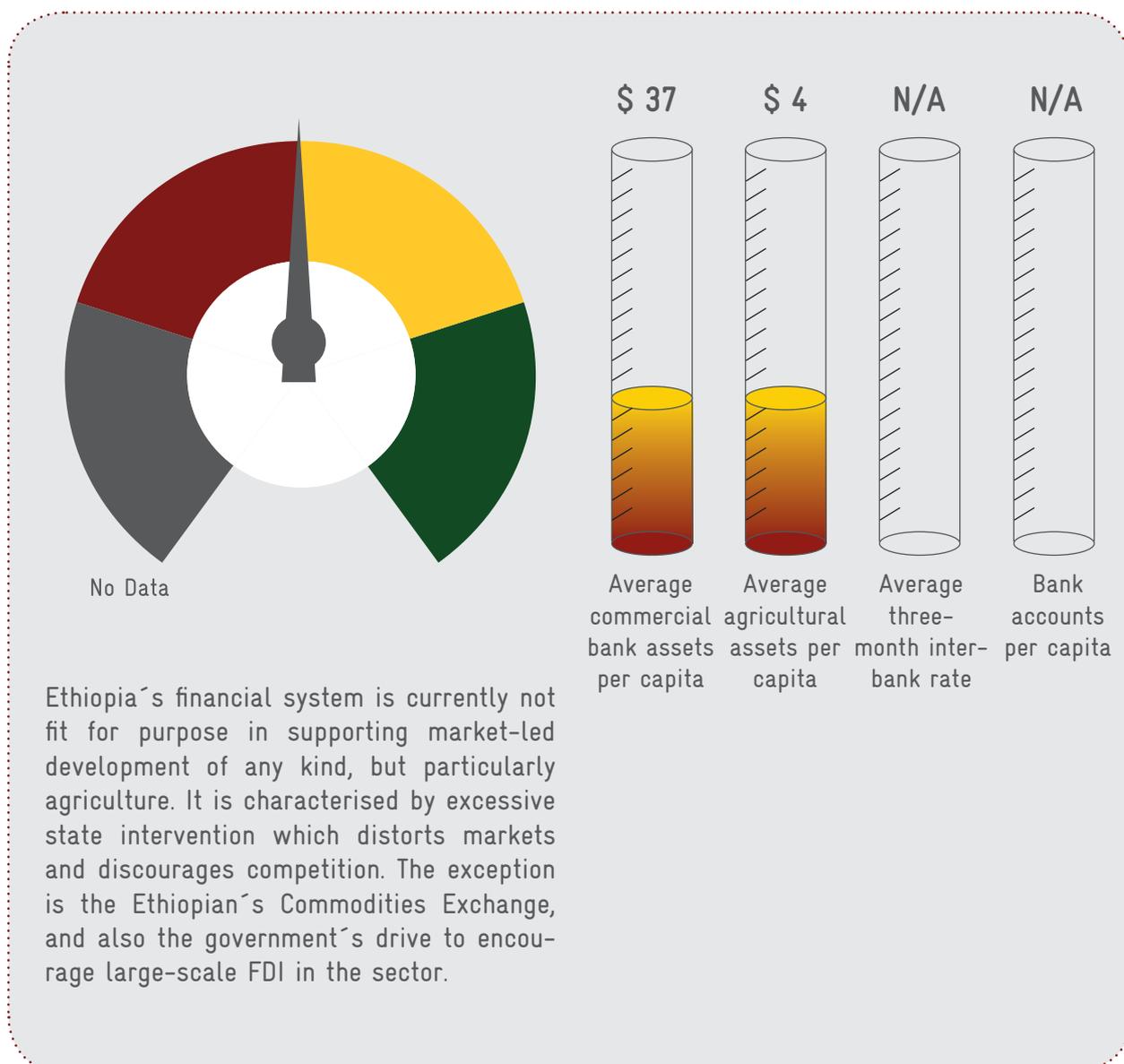
Market Liberalisation		The reforms of the mid-1990s and Burkina Faso's membership of WAEMU mean the market is now much more liberalised.
Regulation and Supervision		The BCEAO is well-respected with a forward-looking approach but is naturally worried about some of the rapid balance sheet expansion in the sector.

## Meso-Level

Financial Sector Infrastructure		Burkina Faso shares a reasonably sophisticated payments and settlements system, though the credit reference infrastructure does not function well.
Scope, Depth and Integration of Market		Regionally, there is much to be positive about, but economic development in Burkina Faso is so low as not to be a high priority for financial institutions.
Product and Market Development		There is very little engagement with agriculture by the financial sector, especially since the withdrawal from cotton lending following the crisis.
Interest Rates		Interest rates are generally high, a function of inflation, but exacerbated by VAT on interest charges on loans.
Financial Sector Expertise and Culture		Burkina Faso has access to a reasonably deep pool of regional talent, and also has a local financial sector training academy.
Financial Sector Operating Model		Lack of depth in commercial banking, and outreach by other financial institutions, means the key ingredients are missing.
Technology		The basic enablers are in place, and innovation will occur as market conditions and demand improve.

## Micro-Level

Commercial Banks		Commercial banking in Burkina Faso is very shallow, and penetration of financial services exceptionally low.
SACCOs		Have developed a reasonable network but are institutionally weak with very small balance sheets.
Development Finance		Extremely weak. No real sovereign development finance capacity at all since the insolvent national development bank was wound up.
MFI		Burkina Faso has a small MFI sector which seems to be operating more-or-less successfully, though with extremely limited exposure to agriculture.
Venture Capital and Private Equity		Virtually absent.
Insurance		Some development in the life and non-life sectors but no agricultural insurance currently.
Development Agencies		There are many active development players, but very little involvement with the financial sector and credit enhancement is extremely limited.



**Financial Sector Dashboard for Ethiopia**

## Macro-Level

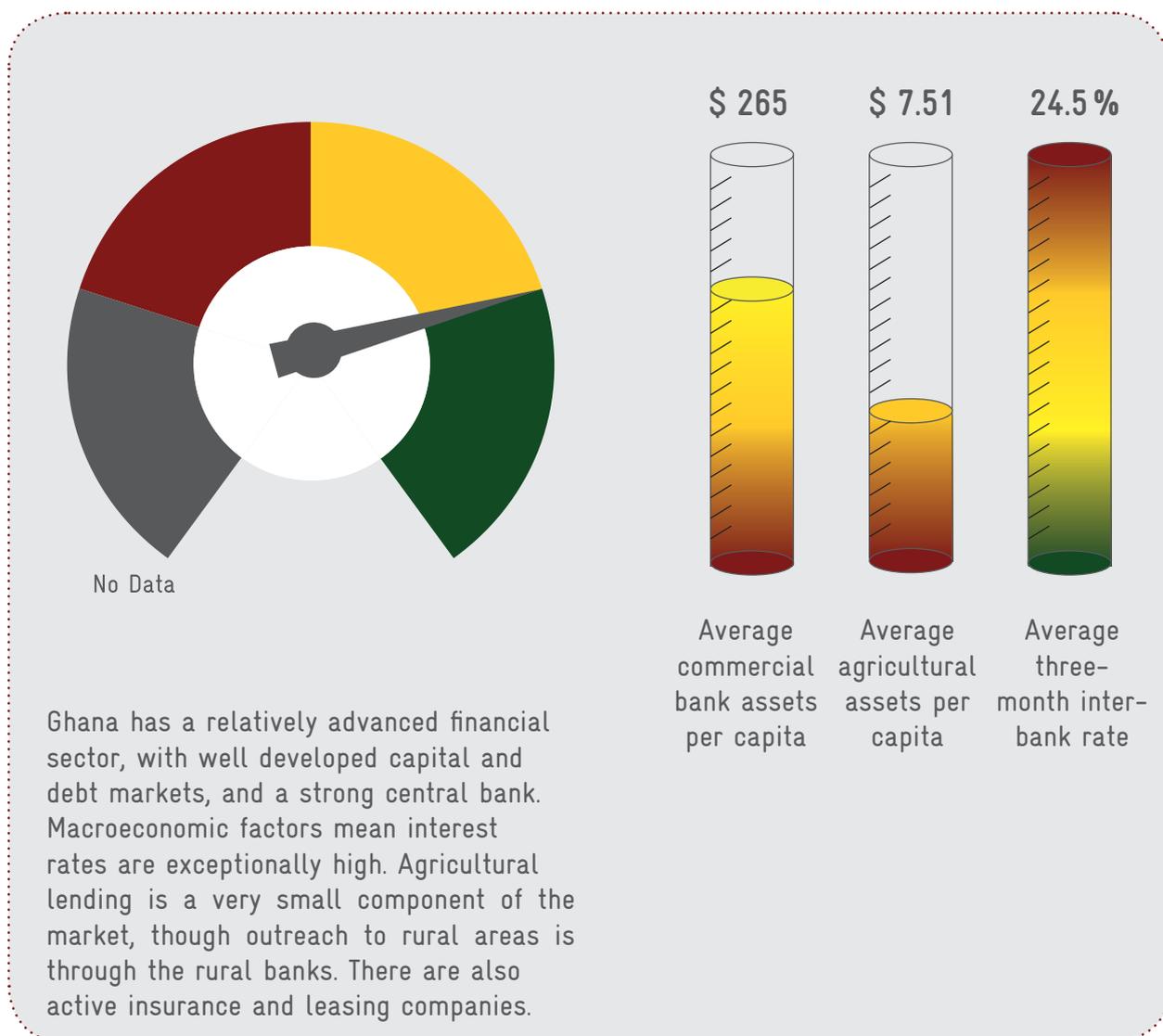
Market Liberalisation		Ethiopia is a closed market dominated by state-owned institutions and denied access to foreign capital or even credit lines.
Regulation and Supervision		NBE has significant deficiencies in its approach to financial sector policy, its human resources, and its organisational culture.

## Meso-Level

Financial Sector Infrastructure		Major market deficiencies, though NBE is trying to address these (e.g. introduction of modern payments and settlements system).
Scope, Depth and Integration of Market		No real interbank wholesale market and very low levels of integration between institutions.
Product and Market Development		Product development currently sleepy but the implementation of the Ethiopia Commodities Exchange is a real innovation.
Interest Rates		Rates are feasible for borrowers but negative real interest rates mean that savings are low.
Financial Sector Expertise and Culture		Little tradition of commercial banking means skills and experience are very low.
Financial Sector Operating Model		A lack of coverage by financial institutions combined with a lack of integration means the required fundamentals are missing.
Technology		Adoption of technology is currently low, though technology could prove to be the key factor in driving the sector forward.

## Micro-Level

Commercial Banks		The banking sector is dominated by state-owned institutions and current credit caps make the private sector uncompetitive.
SACCOs		The SACCO sector in Ethiopia is weak, with no real apex structure to promote development.
Development Bank of Ethiopia		A very weak institution characterised by poor performance.
MFI's		Ethiopia is home to some of the world's largest MFIs, however, these are largely state-owned institutions.
Venture Capital and Private Equity		In a very nascent state but the Ethiopian government is encouraging direct investment, especially in export-led agriculture.
Insurance		The insurance sector is in an embryonic state, though shows great potential for future development.
Development Agencies		Aside from a major World Bank programme, there is not too much financial sector activity, and NBE restrictions are in place.



**Financial Sector Dashboard for Ghana**

## Macro-Level

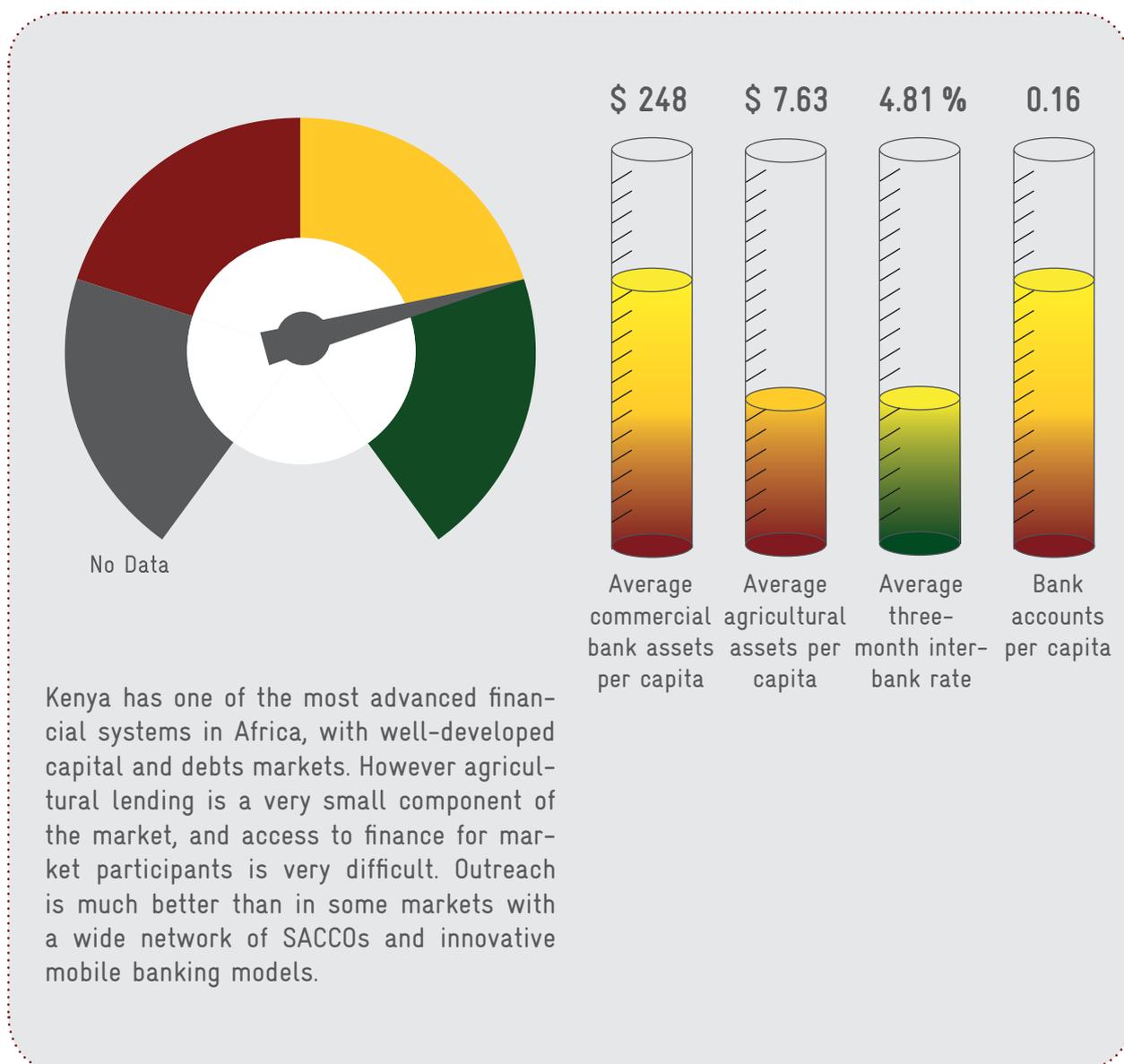
Market Liberalisation		Ghana is a highly liberalised market with market forces at work in the allocation and pricing of credit.
Regulation and Supervision		The Bank of Ghana is a well-respected institution with forward looking plans to develop the sector.

## Meso-Level

Financial Sector Infrastructure		There are some particular weaknesses, but these have been identified by the Bank of Ghana and plans are in progress to address these gaps.
Scope, Depth and Integration of Market		As a sector, the market is deep and liquid, however, this is concentrated in the hands of a relatively small number of major players.
Product and Market Development		In relation to agricultural finance, the sector is very wary of expansion, especially considering the competition for finance from other sectors.
Interest Rates		Ghana has very high interest rates, largely attributable to a high base rate and also relatively wide net interest margins.
Financial Sector Expertise and Culture		Generally well regarded, there are particular gaps in skills among Ghanaian financiers in relation to agriculture and SME banking in particular.
Financial Sector Operating Model		Much of the infrastructure required to reach the producer market in a cost-effective way is in place, but needs joining up in a concerted manner.
Technology		Enthusiastic adopters of new technology, Ghanaian bankers have ambitious plans to revolutionise their sector through the application of technology.

## Micro-Level

Commercial Banks		The sector is recognised as one of the most advanced in Africa, though exposure to agriculture is very limited.
Rural Banks		Have a great outreach and are becoming a feature of the rural economy, but most lack balance sheet and management strength.
Agricultural Development Bank		A decent, state-owned commercial bank expressing a desire to strategically rebuild its agriculture portfolio after largely exiting the sector in past years.
MFIs		The MFI sector is generally booming but it is not anticipated that this will have a transformative impact on agriculture.
Venture Capital and Private Equity		In very nascent state but shows great potential for future development, assuming more stability in the exchange rate in particular.
Insurance		The insurance sector is well-established, professional and innovative. We are not aware of any specific initiatives to develop agricultural insurance.
Development Agencies		There are many active development players in the financial sector but some activities do not seem to be well-coordinated.



**Financial Sector Dashboard for Kenya**

## Macro-Level

Market Liberalisation		Kenya is a highly liberalised market with market forces at work in the allocation and pricing of credit.
Regulation and Supervision		The CBK is well-respected with a forward-looking approach but is naturally worried about some of the rapid balance sheet expansion in the sector.

## Meso-Level

Financial Sector Infrastructure		There are some particular weaknesses, but these have been identified by the CBK and plans are in progress to address these gaps.
Scope, Depth and Integration of Market		As a sector, the market is deep and liquid, however, this is concentrated in the hands of a relatively small number of major players.
Product and Market Development		In relation to agricultural finance, the sector is very wary of expansion, especially considering the competition for finance from other sectors.
Interest Rates		Interest rates for agricultural finance tend to be high, but the sector overall is relatively competitive and liquid.
Financial Sector Expertise and Culture		Generally well regarded, there are particular gaps in skills among Kenyan financiers in relation to agriculture and SME banking in particular.
Financial Sector Operating Model		Much of the infrastructure required to reach the producer market in a cost-effective way is in place, but needs joining up in a concerted manner.
Technology		Enthusiastic adopters of new technology, Kenyan bankers lead the way in some areas. It is not currently optimised for the needs of agriculture, however.

## Micro-Level

Commercial Banks		The sector is recognised as one of the most advanced in Africa, though exposure to agriculture is very limited.
SACCOs		Have a great outreach and are becoming a feature of the rural economy, but most lack balance sheet and management strength.
Agricultural Finance Corporation		Previously a state-owned financier of the sector which has been allowed to slip into a very poor state.
MFI		The MFI sector is generally booming but it is not anticipated that this will have a transformative impact on agriculture.
Venture Capital and Private Equity		In very nascent state but shows great potential for future development, assuming an increase in investable opportunities.
Insurance		The insurance sector is well-established, professional and innovative. Market and product development tend to be hampered by a lack of depth in reinsurance.
Development Agencies		There are many active development players in the financial sector but some activities do not seem to be well-coordinated.

## Annex 3: Value Chain Analysis of Agricultural Sub-sectors Studied

- ✓ Relatively easy to grow with quick turnaround
- ✓ Robust domestic demand



### MANIOC

Cassava is grown and processed locally by small groups for domestic consumption. The industry is effectively a cottage one, and there is little engagement with the financial sector. Producers and processors may be a target for specialist microfinance NGOs, however, oriented towards livelihood development.

- ✗ No real structure to the value chain
- ✗ Producers use poor agronomic practices
- ✗ Processors are generally small, informal operations
- ✗ Domestic production inferior to regional competition

- ✓ Burkina Faso sub-Saharan Africa's largest producer
- ✓ A major export commodity
- ✓ Established producer organisations
- ✓ Established agri-processing industry with three major cotton ginneries
- ✓ Industry able to raise large amounts of finance on international markets



### COTTON

The cotton industry is a major feature of the Burkinabe economic environment. It is dominated by a small number of processors granted a government monopoly on local cotton. Ordinarily, these ginneries were able to raise significant funds on both local and international markets for the pre-financing of cotton production, which could be distributed through a well-structured network of Cotton Producer Groups to underpin input supply purchases for members. Since the collapse in the cotton price, the ginneries and many of the CPGs have been thrown into financial crisis which has seized the flow of credit for the time being. An injection of development funds is hoped to ease this situation in due course.

- ✗ Poor rainfall a major risk
- ✗ Producer organisations and ginneries heavily indebted following cotton crisis
- ✗ Access to finance regulated by producers union
- ✗ Producer competitiveness still low due to poor agronomics and infrastructure

### Burkina Faso: Manioc and Cotton

- ✓ Ethiopian Arabic coffee renowned for quality and pedigree
- ✓ A major player in global export markets
- ✓ Traded on Ethiopian Commodity Exchange



- ✗ Potential for value addition is not huge

## COFFEE

Ethiopia is a major coffee exporter, and dominates the trade in the Arabic variety. The importance of the trade to the government as a generator of scarce foreign currency makes it a high priority in planning. It is also a major source of livelihood for very many Ethiopians. Most coffee producers are small-holders, but there are also some large plantations. Agribusiness generally consists of international trading enterprises, operating through the Ethiopian Commodity Exchange, which has had significant impact on improving the stability of prices and the consistency of product. There is some small local roasting, grinding and packaging capacity but this is very limited. The limited finance available is short-term credit for exporters.

- ✓ Ethiopia a major international producer and exporter
- ✓ Sesame has quick turn-around and relatively pest and disease resistant
- ✓ Large areas of vacant land suitable for sesame production
- ✓ Nascent processing industry



- ✗ Impurities (by poor handling and deception) a major destroyer of value
- ✗ Lower levels of value chain chaotic and disorganised
- ✗ Strong competition in processing industry and high capital costs

## SESAME

Sesame is an oilseed plant which can be harvested annually. It is well suited to large parts of Ethiopia and is relatively hardy. Ethiopia is now a major producer and exporter, but does very little processing which is dominated by overseas processors. The supply chain for sesame is poor, with contaminated and spoiled product destroying value. Movement of the trade to the ECX could improve this situation. Again, the limited finance available is concentrated on exporters. The trade is of significant importance to the Ethiopian government in its drive to raise foreign currency.

### Ethiopia: Sesame and Coffee

- ✓ Relatively swift production cycle and return on investment
- ✓ A nascent domestic processing and export business
- ✓ Sub-sector includes some major commercial farmers, some of which operate out-grower schemes
- ✓ Growing domestic/regional market for processed fruit
- ✓ Some rural banks already actively financing pineapple producer groups



## PINEAPPLE

- ✗ International markets dominated by few highly competitive producers
- ✗ Low levels of producer organisation
- ✗ Lack of industry level market awareness and planning

Pineapple is a quick turn-around crop, with a ready international market and processing opportunities for local and regional markets. There are some significant players in the agriprocessing sector which play a significant role in providing structure to the value chain. Even small producers seem to be able to make an economic return on pineapple, and established producer's associations are accessing seasonal credit regularly, though the high interest rates are a burden.

- ✓ Ghana is a producer and export hub for cashews with 4% of global production and 10% of exports
- ✓ Some major international processors (e.g. Brazil) interested in Ghanaian operations as competitiveness improves



## CASHEW

- ✗ Almost no domestic cashew processing and global competitors have a major lead
- ✗ Domestic demand is quite low

Cashew seems to struggle in a highly competitive international market, and there is little local demand. Most processing is done overseas, and requires significant capital investment and economies of scale. Ghana has had some success in establishing itself as the regional hub for cashew export. As a tree crop, cashew has a relatively slow pay-back period which hampers investment in replantation. There is little financing of cashew in Ghana as far as we could ascertain.

- ✓ Well structured value chain headed by state-owned marketing monopoly
- ✓ Able to raise large amounts of short-term finance on international markets
- ✓ Establishment of some major local processing operations and potential for continued expansion
- ✓ Involvement of some significant agri-trading enterprise at buyer level



## COCOA

- ✗ Slow to become economically productive
- ✗ Substantial replantation required to improve productivity
- ✗ Parastatal structure can be prone to under-funding and inefficiency
- ✗ Potential for regional competitors to steal market share through lead in certification and standards

Cocoa is a strategic tree crop in Ghana, which is the world's number 2 exporter. The industry is dominated by the state-owned marketing monopoly, Cocobod, Through Cocobod, Ghanaian cocoa raises over a USD 1bn per year in short-term finance on international markets. It distributes some of this finance through an extensive network of private sector buyers, who extend seasonal credit and provide a significant degree of organisation to the value chain. Cocobod also heavily subsidises long-term investment into the industry, specifically through replantation, and also has strategic arrangements with processors which has resulted in a significant local processing capacity.

### Ghana: Pineapple, Cashew, and Cocoa

- ✓ Strong domestic demand and potential for regional markets
- ✓ Well established producer organisations
- ✓ Well established private sector and co-operative processors
- ✓ Year round cash flow
- ✓ Significant improvements in producer competitiveness due to improved technology and herd quality



## DAIRY

- ✗ Relatively capital intensive
- ✗ Many producers quite small
- ✗ Correlated risks to herds through disease

The dairy sector is relatively well organised with a strong domestic processing presence, dominated by the cooperative sector. Competitive dairy requires significant capital investment, but allows producers to significantly leverage profitability of a relatively small plot of land. The processors tend to have quite good control over the supply chain, and a ready and stable off-take market in terms of local supermarkets and groceries. As a result, financiers are more interested in opportunities in the dairy sub-sector, to the extent of looking at potential products for producers.

- ✓ Strong domestic demand and potential for international markets



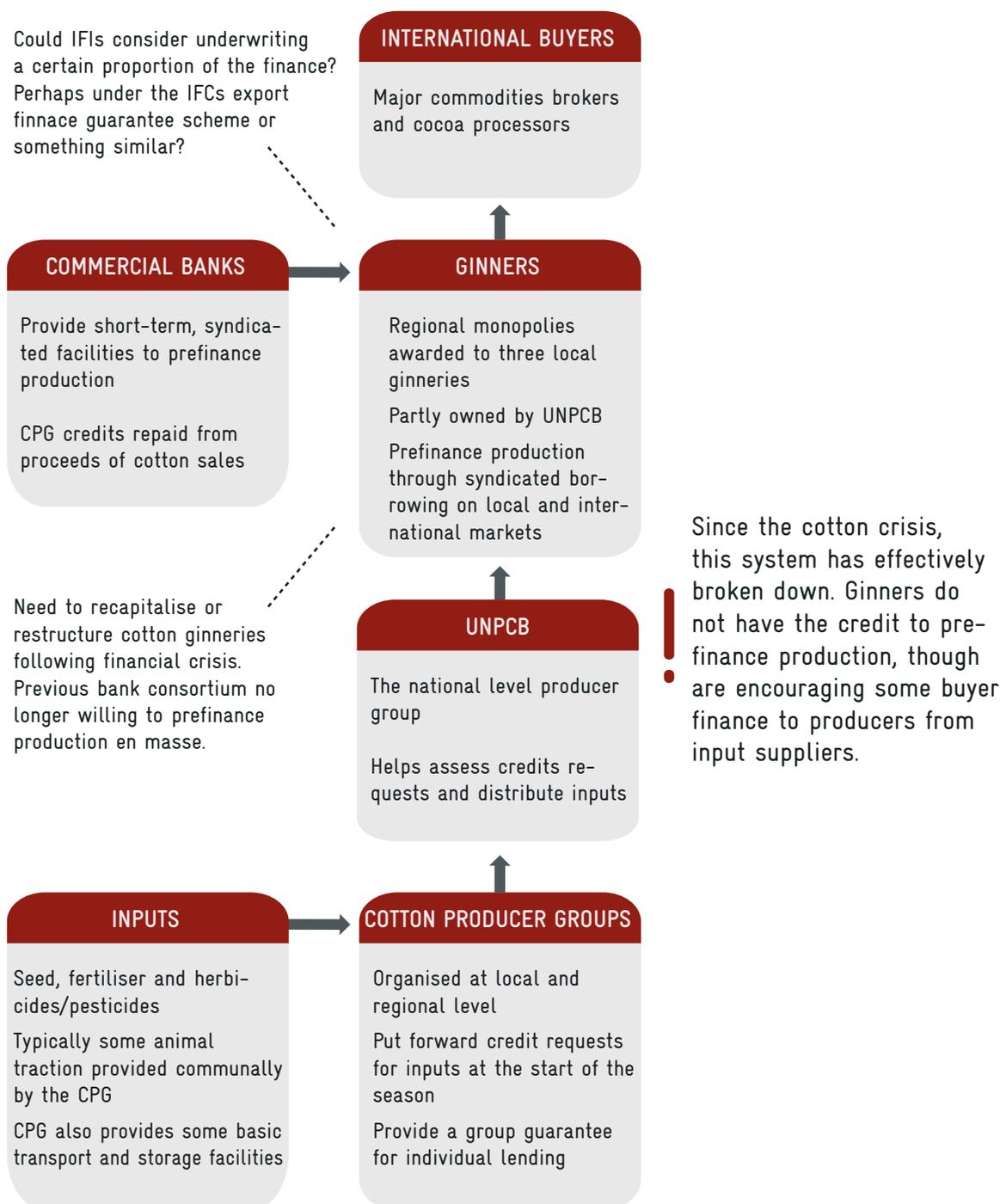
## MANGO

- ✗ Poor quality local production unsuitable for export or juicing
- ✗ Slow return on investment for replanting
- ✗ Agriprocessing relatively weak
- ✗ Exposed to strong international competition
- ✗ Poor logistics and post-harvest handling

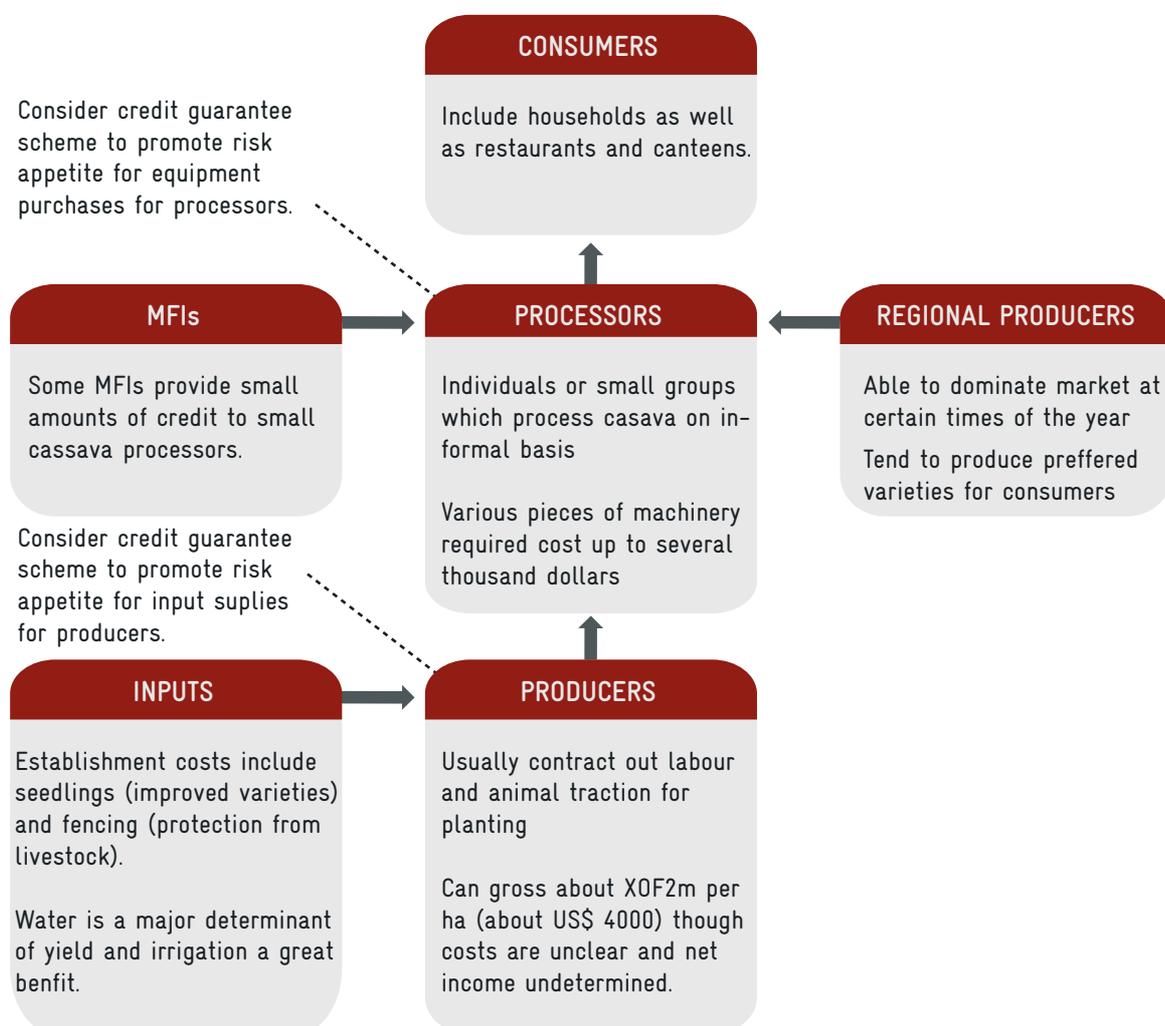
The mango sub-sector is characterised by a large number of small scale producers producing low-quality mangos for domestic consumption. There is limited processing, export, and value addition in the value chain. Indeed, waste in the mango value chain is relatively high with much of the crop spoiling before it reaches consumers. Another problem typical with tree fruit crops is the relatively long payback period required before an economic crop is produced. There was little finance oriented towards the mango sub-sector.

### Kenya: Dairy and Mango

## Annex 4: Value Chain Maps for Sub-sectors Studied



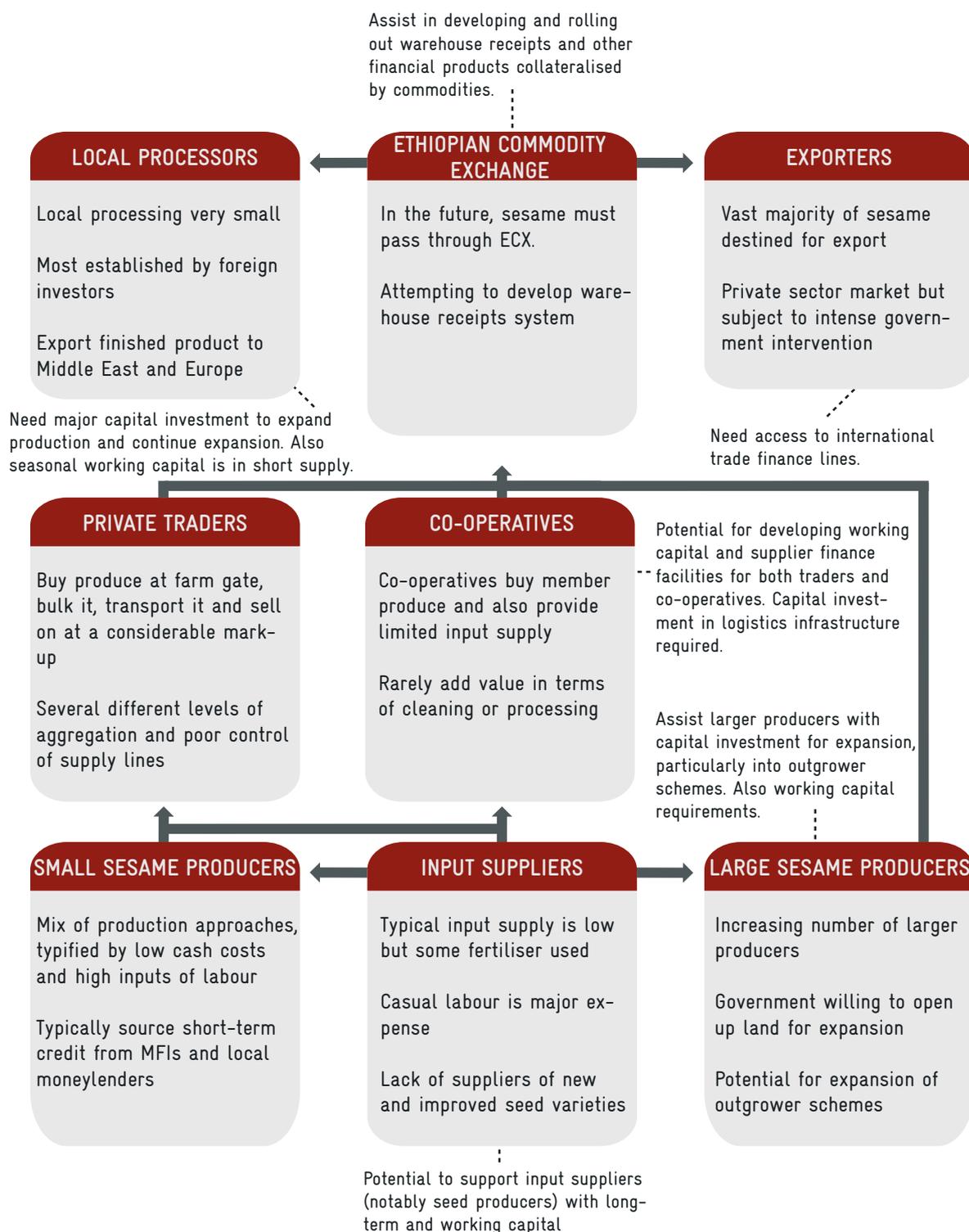
**Cotton in Burkina Faso**



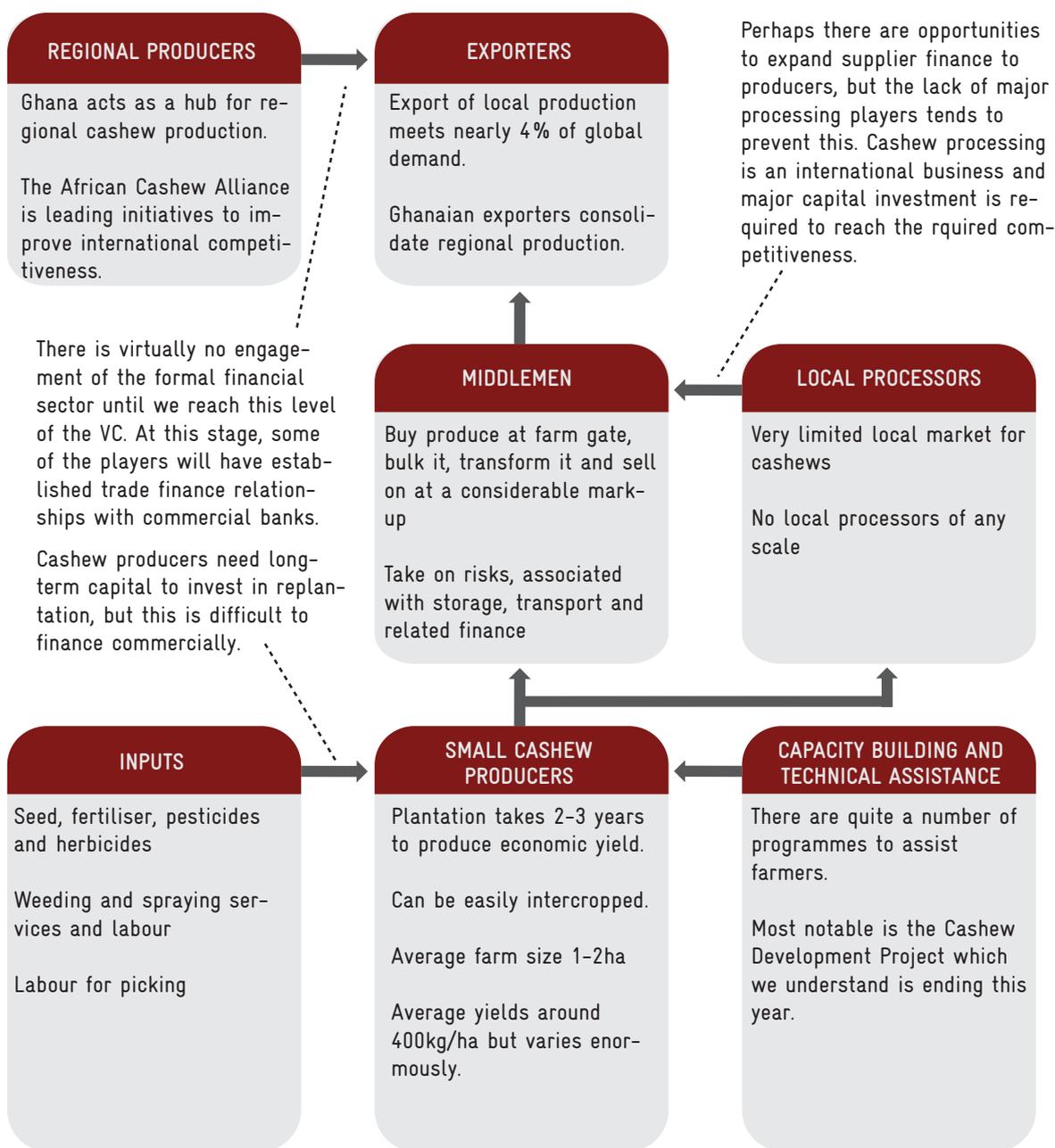
### Cassava/Manioc in Burkina Faso



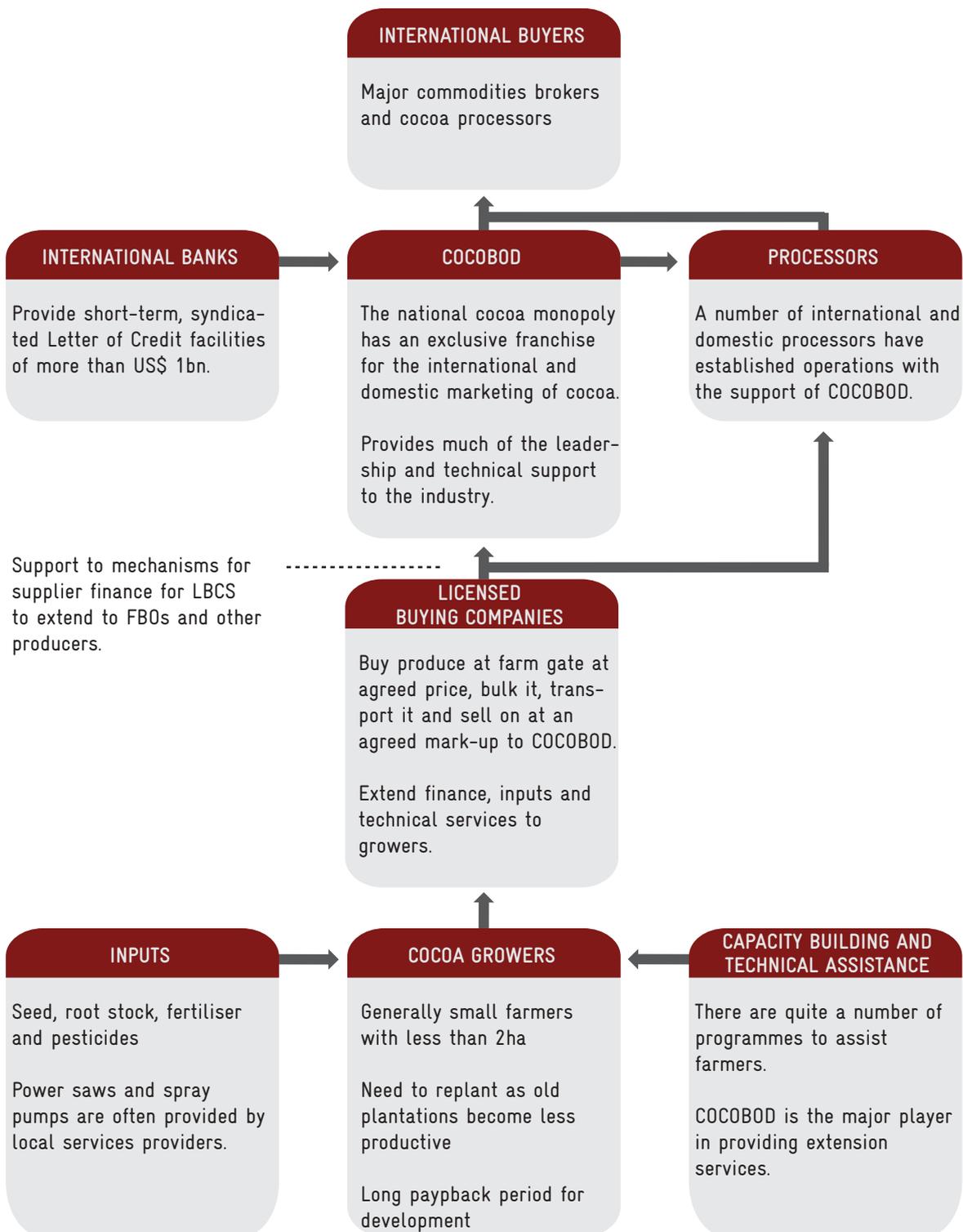
### Coffee in Ethiopia



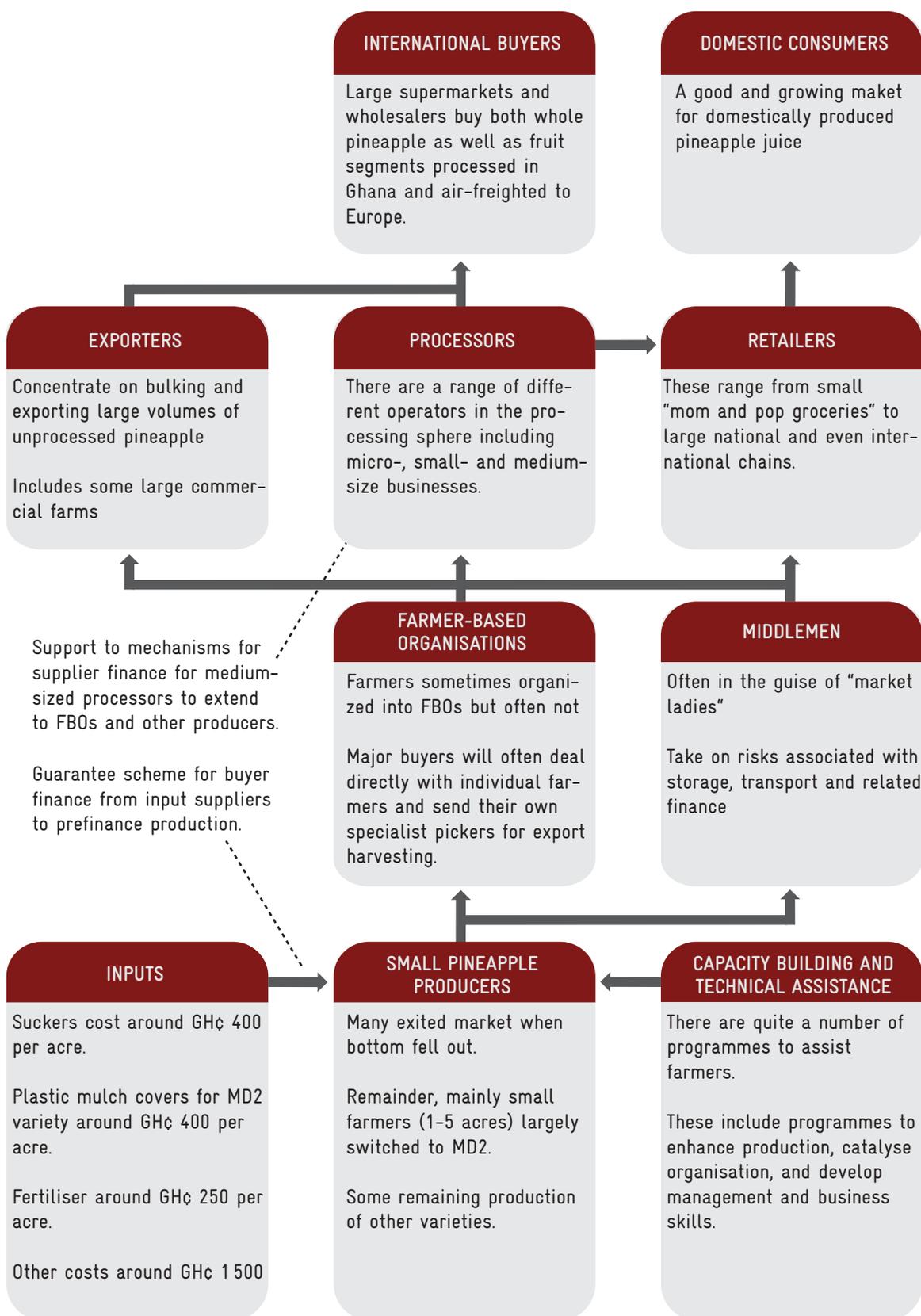
## Sesame in Ethiopia



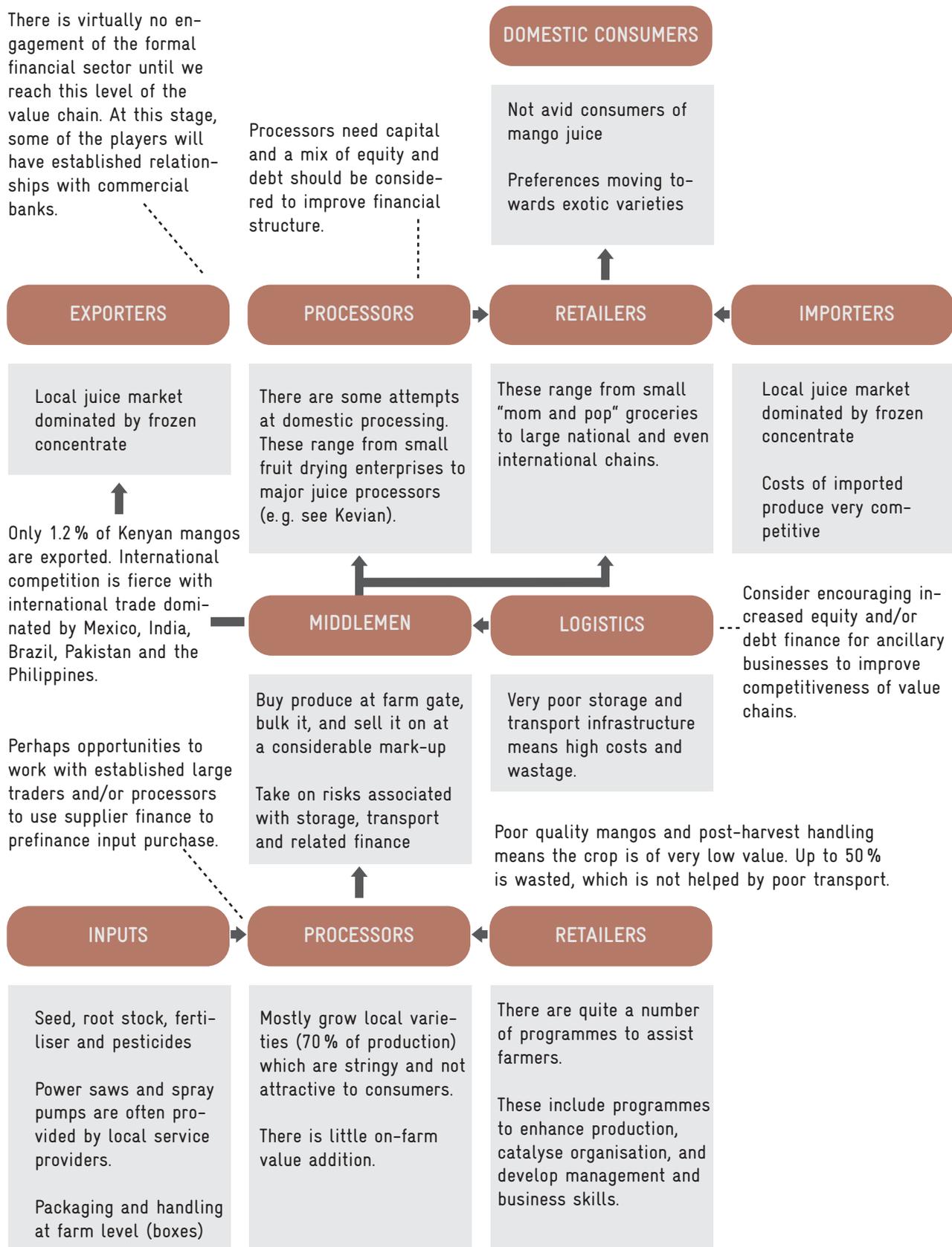
**Cashew in Ghana**



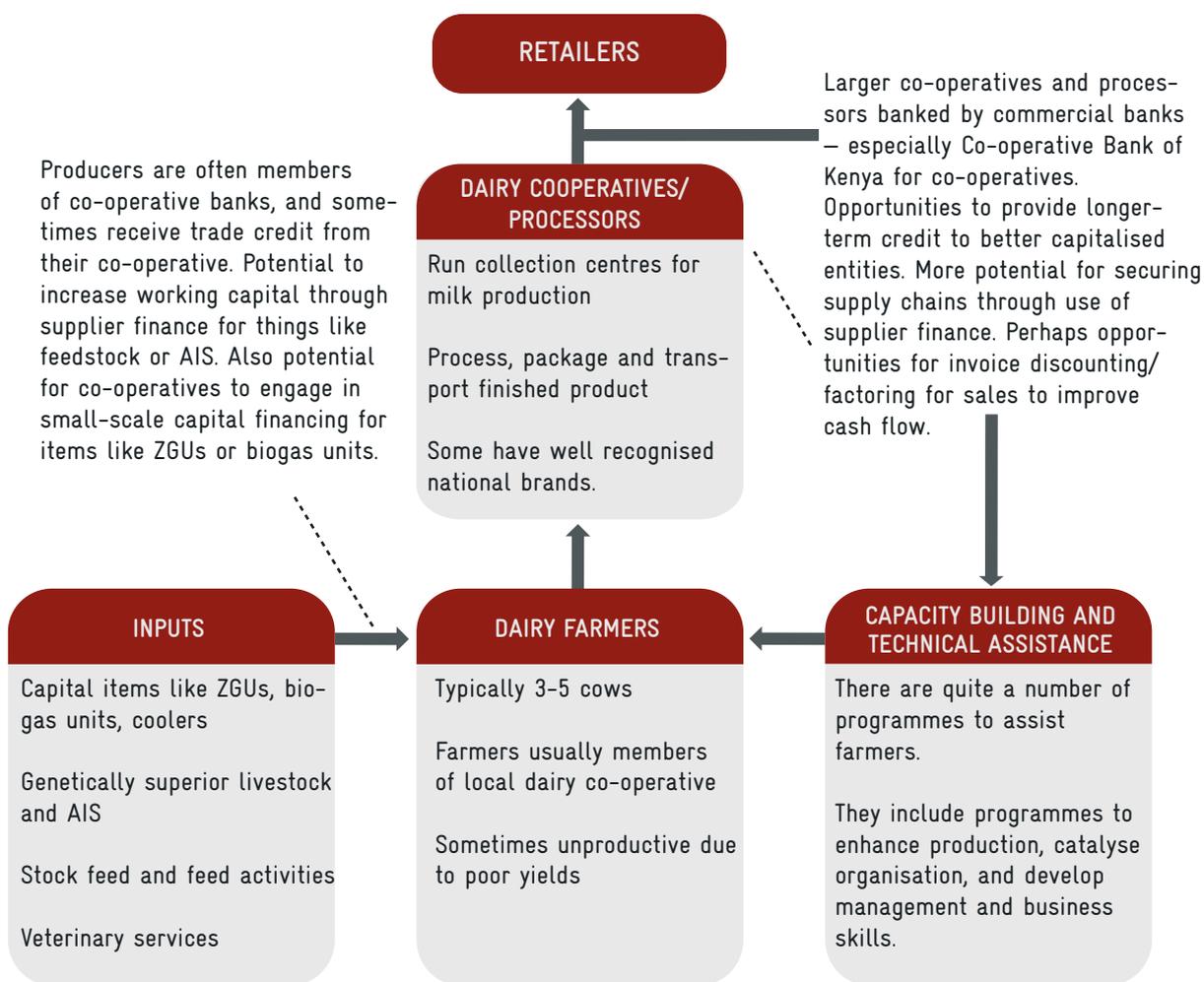
## Cocoa in Ghana



### Pineapple in Ghana



Mango in Kenya



**Dairy in Kenia**



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