Financing Agricultural Value Chains in Africa

Focus on Dairy and Mangos in Kenya

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List of Abbreviations and Acronyms

ADC	Agricultural Development Corporation
AFC	Agricultural Finance Corporation
AFD	Agence Française de Développement
AIS	Artificial Insemination Services
ASAL	Arid and Semi-Arid Land
ASCU	Agricultural Sector Co-ordination Unit
ASDS	Agricultural Sector Development Strategy
ATM	Automated Teller Machine
CAADP	Comprehensive Africa Agriculture Development Programme
CBK	Central Bank of Kenya
COMESA	Common Market for Eastern and Southern Africa
COMPETE	Competitiveness and Trade Expansion Program
CRM	Customer Relationship Management
DCA	Development Credit Authority
DFID	Department for International Development (UK)
EAC	East African Community
EC	European Commission
ECOWAS	Economic Community of West African States
EDS	Enterprise Development Services
ECX	Ethiopian Commodity Exchange

FBO	Farmer-Based Organisation
GDP	Gross Domestic Product
GIS	Geographic Information System
GIZ	Deutsche Gesellschaft fur Internationale Zusammenarbeit
ICT	Information and Communication Technology
IT	Information Technology
IFC	International Finance Corporation
IFIs	International Financial Institutions
ITFC	Integrated Tamale Fruit Company (Ghana)
KARF	Kenya Access to Rural Finance
KARI	Kenya Agricultural Research Institute
KENFAP	Kenya National Federation of Agricultural Producers
KERUSSU	Kenya Rural Savings and Credit Societies Union
Ksh	Kenya Shillings
KIRDI	Kenya Industrial Research and Development Institute
KUSCCO	Kenya Union of Savings & Credit Co-operatives
MFIs	Microfinance Institutions
MIS	Management Information Systems
MoA	Ministry of Agriculture
MRL	Maximum Residue Limits
NEPAD	New Partnership for Africa's Development
NGOs	Non-Governmental Organisations
POS	Point of Sale
PPP	Public Private Partnership
RAG	Red-Amber-Green
RDAs	Regional Development Authorities
SACCOs	Savings and Credit Co-operatives
SADC	Southern African Development Community
SIDA	Swedish International Development Cooperation Agency
SME	Small- and Medium-sized Enterprises
TA	Technical Assistance
USAID	United States Agency for International Development
US$	United States Dollars
VC	Venture Capital
ZGU	Zero-Grazing Unit

1 Executive Summary

This study is part of a series on agricultural finance in Africa, sponsored by GIZ and executed by Maxwell Stamp PLC. The aim is to examine access to finance for agriculture, with a view to identifying strategies and tactics that will improve access for commercially-oriented agriculture. These recommendations will be used to inform policy development by government and development agencies, both at country level but also for the continent overall. To ensure the success of the studies, it is crucial that they draw lessons from each other, and become a sum greater than their parts.

The countries studied are Kenya, Ghana, Burkina Faso and Ethiopia. Each country report includes analysis of a small number of agricultural sub-sectors. 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. A synthesis report that aggregates and analyses all the findings, and makes recommendations that can be considered by other countries in Africa trying to address similar challenges, is also being produced.

This study reviews the agricultural finance environment in Kenya, with particular reference to the dairy and mango value chains. Accompanying the value-chain analysis is an overall review of both the agricultural and financial sectors in Kenya, with a performance dashboard for each. We hope these dashboards will be useful in highlighting the relative performance in certain key indicators between each of the countries studied and drawing the attention of policymakers to examples of particularly good (or bad) practice.

In studying Kenya, we found a relatively advanced financial system compared to the rest of the economy, but financial services, and particularly credit, are focused on corporate and retail banking. The rural Savings and Credit Co-operative (SACCO) network has decent coverage, but has a modest consolidated balance sheet in comparison. They are under-resourced in both capital and human resources, and naturally veer towards a conservative short-term portfolio of salaried employees, traders and entrepreneurs. There is a small but growing pool of microfinance institutions (MFIs), which concentrate on providing small amounts of short-term credit for the urban mass-market.

Kenya also has a robust capital market, with a well-functioning stock exchange, and a small but innovative insurance market. In addition, the Kenyan financial sector is an enthusiastic adopter of new technology and is considered a leading player in mobile banking.

As expected, we found the agricultural sector in Kenya weak in comparison with some other sectors of the economy. However, we felt that Kenya, despite the failures of the past, has made significant progress in establishing both the structures and plans required to modernise the agricultural sector and to make it more attractive to financiers.

In terms of value chains, we felt that the dairy industry demonstrated real potential for increased financial sector activity, and we found that the financial sector was genuinely interested in expanding its involvement. On the other hand, mango was found to be a difficult value chain to finance due to low profitability, high capital costs (e. g. plantation development), longer payback periods, and the lack of a strong domestic market.

Typically, the important role that agribusinesses, and particularly local processors, play in underpinning the stability and structure of a sub-sector was obvious. Agribusiness in Kenya is weak, and generally perceived as undercapitalised with poor management skills.

The report is structured as follows:

- **Section 2 Agriculture,** includes a high-level review of the agricultural sector in Kenya, together with sub-headings which break the analysis into the macro-, meso- and micro-level factors which we feel have the most impact in enabling access to finance for agriculture. A RAG (Red-Amber-Green) flag has been assigned against each factor, which reflects our subjective view of the status of that factor in terms of having a relatively negative (red) or positive (green) impact on agricultural finance. It should be stressed that this is a device to draw the attention of the reader to areas of most interest, particularly where remedial action is most required, or where there are notable examples of good practice. It is not intended to be a rigorous quantitative tool.

- **Section 3 Business Environment**, is a short section with some cross-cutting factors that do not fit easily into either Section 2 or Section 4. Again, each factor has been assigned a RAG flag.

- **Section 4 Financial Sector**, is in the same format as Sections 2 and 3 but is focused on the financial sector.

- **Section 5 Value Chains**, is an overview of the structure of the dairy and mango agricultural sub-sectors, the current role of financial services within these value chains, and some suggestions for practical interventions.

- **Section 6 Recommendations and Critical Success Factors**, is a high-level articulation of some key strategies and policies which we feel would have a major beneficial impact on access to finance for commercially-oriented agriculture, based on the information and expert opinion we have assimilated.

The key recommendations are as follows:

- ➲ To improve the alignment of agricultural finance interventions with the national agricultural strategy, and to establish formal links with providers of extension services;

- ➲ To consolidate the agricultural finance interventions of various development agencies in a structure which enables them to respond to the market effectively, better manage knowledge, and to retain high-calibre staff;

- ➲ Support the ability of the agricultural co-operative movement, and producer and commodity associations, to develop and deliver an effective public relations strategy to the financial sector;

- ➲ Develop a Public-Private Partnership (PPP) strategy for the Government of Kenya, focused on working with the private sector on developing agricultural infrastructure;

- ➲ Establish a specialist equity investment fund seeded by capital from the Government of Kenya, International Financial Institutions (IFIs), and the private sector, with a mandate to generate investor returns by focusing on the emerging agribusiness sector;

- ➲ Support small producers in accessing working capital by establishing a dedicated agricultural sector supplier finance guarantee fund, to share risks with commercial banks and private sector intermediaries in extending short-term credit to farmers;

- ➲ Deepen value-chain relationships between small farmers and agribusiness, through supporting contract farming, outgrower schemes, and related financial services relationships;

- ➲ Strengthen the rural banking movement and assist in integrating it with the commercial banking sector, through the deepening of wholesale credit markets;

- Ensure the continuing electronic capture and analysis of the financial behaviour of small farmers, by making sure that cash flows are directed through bank accounts, and by making sure rural banks have the required technology and skills to support this;

- Make sure that reform of the business environment continues, particularly land tenure, the registration of collateral, and the operation of the court system;

- Develop a comprehensive Enterprise Development Service (EDS) for high-potential enterprises at all levels of the value chain, to improve the quality of business and financial management skills;

- Support the commercial financial sector with expert advice and assistance, where there is a coincidence of interests in agricultural finance; and

- Continue to support the programme to develop the financial sector infrastructure, which is being spearheaded by the Central Bank of Kenya (CBK).

2 Analysis of Agricultural Sector

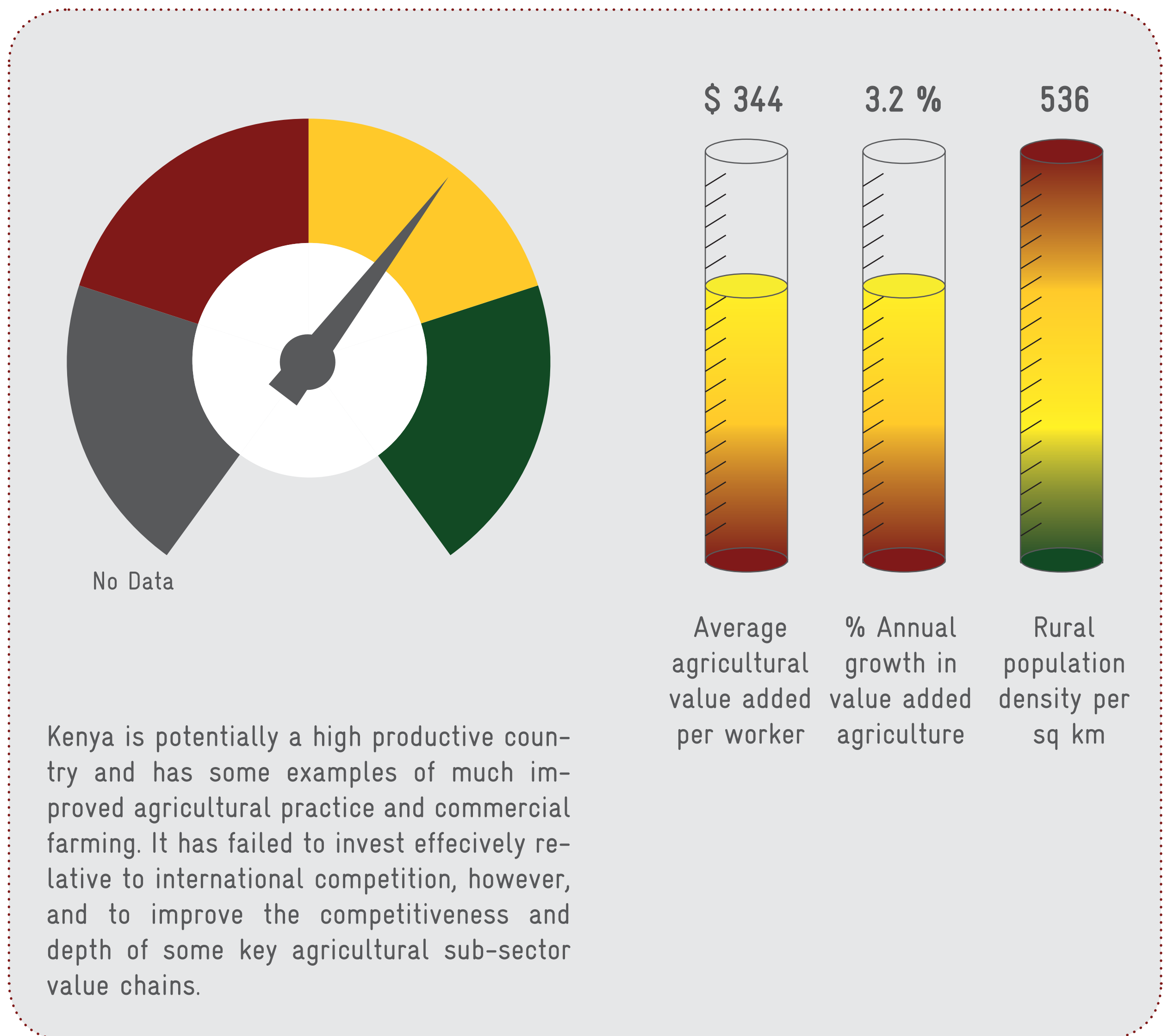
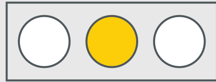


Figure 1: Performance Dashboard for Agricultural Sector

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 jet 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 an 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.

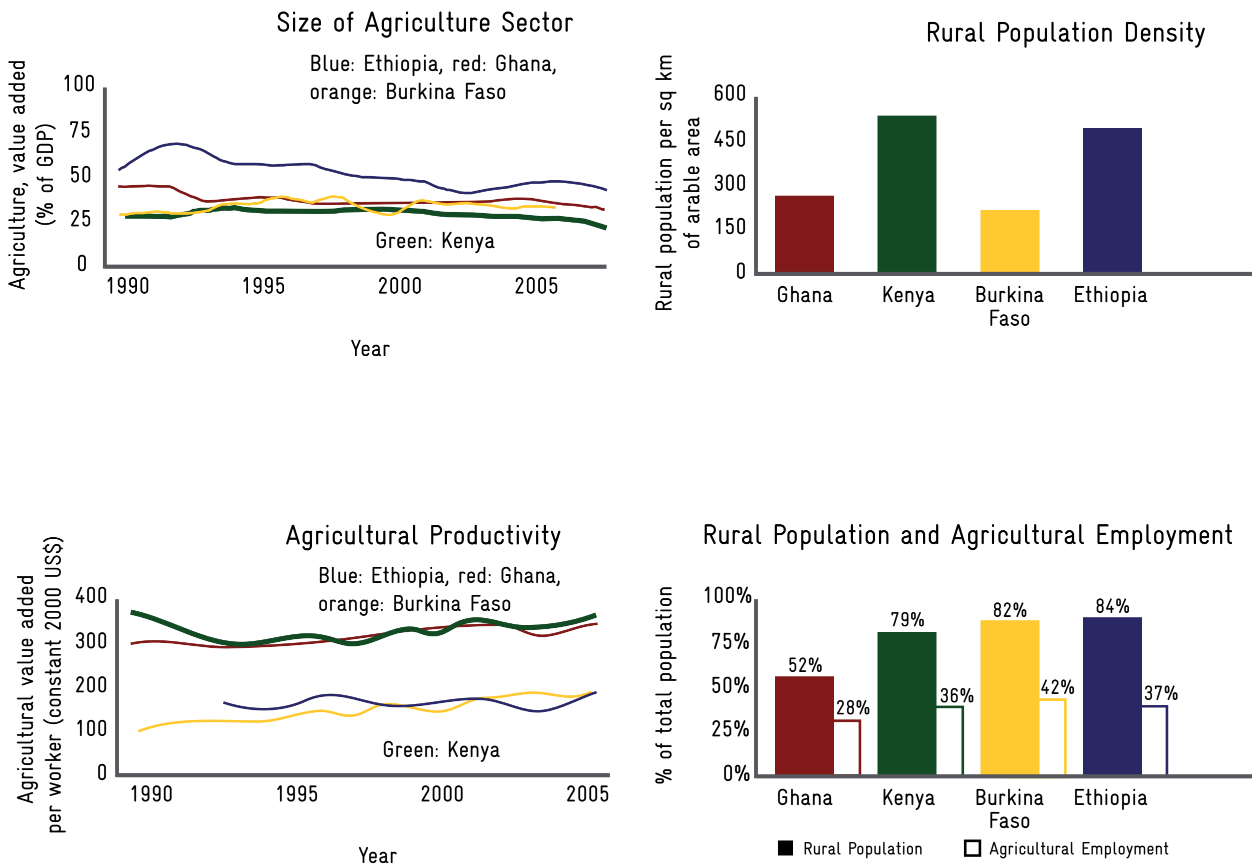


Figure 2: Comparison of Key Agricultural Statistics

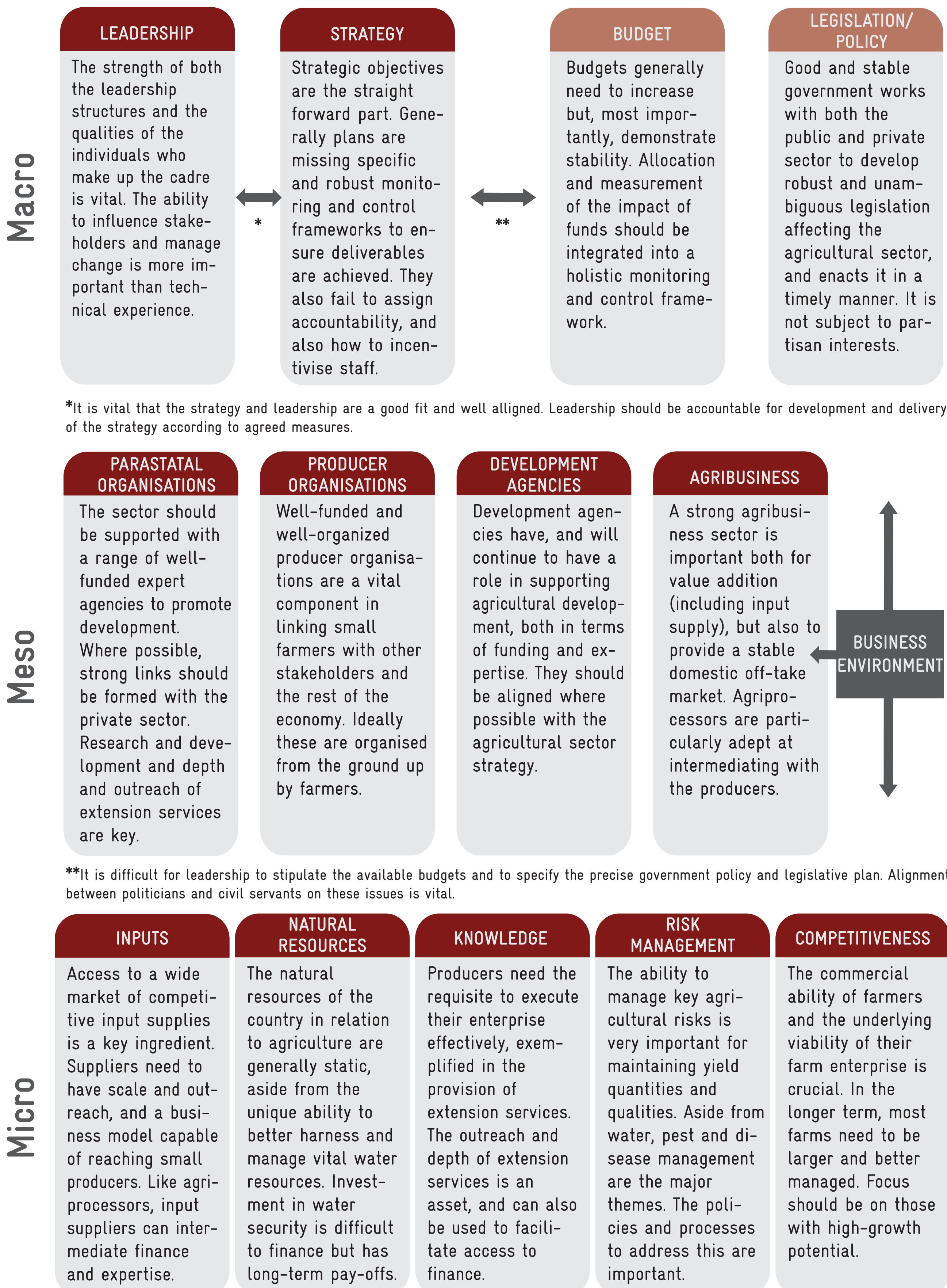


Figure 3: Key Factors Affecting Agricultural Markets

2.1 Overview

Amber status:

Kenya is potentially a highly productive country, and has some examples of much improved agricultural practice, and commercial farming. It has failed to invest effectively relative to international competition, however, and to improve the competitiveness and depth of some key agricultural sub-sector value chains.

Kenya is a low-income, food-deficit country with a Gross Domestic Product (GDP) per capita of about US$1 400. Agriculture plays a dominant role in the country's economy, contributing 23.9 % of national GDP (with a further 27% through linkages with manufacturing, distribution and service related sectors), 60% of the total export earnings and 45 % of government revenue.

Sixteen percent of Kenya is land of medium-high agricultural potential suitable for rain-fed farming. This land is split between 31 % commercial agriculture, 30 % grazing, 22 % forest and the rest used for a mix of other non-agricultural uses. Eighty-four percent of Kenya is Arid and Semi-Arid Land (ASAL), which may be suitable rangeland for grazing.

Agricultural production is dominated by smallholder farmers – 80 % of the population derives their livelihood from agriculture. Farms of less than 3ha account for 75 % of total agricultural output and 70 % of marketed produce. In some areas, population density has risen to a level where the subdivision of farms has led to an average farm size which is uneconomical. Development of agriculture is also important for poverty reduction since most of the vulnerable groups (pastoralists, the landless, subsistence farmers) depend on agriculture as their main source of livelihood.

High initial post-independence growth rates gave way to relative stagnation in the 1990s, especially compared with other major developing agricultural producers. This is attributed to low investment, the collapse of vital agricultural institutions, poorly organised privatisation initiatives, and the mismanagement and neglect of agricultural extension and research.

The development of agriculture is therefore a major priority for policymakers and, for politicians, positive perceptions of their ability to address the needs of small farmers is crucial for electoral success.

Thirty percent of marketed agricultural produce is produced on large-scale farms oriented around value chains such as tea, coffee, maize and wheat. Horticulture is undergoing a major, export-driven expansion, and now contributes 33 % of agricultural GDP and 55 % of agricultural exports. By contrast, food crops contribute 32 % of agricultural GDP and only 0.5 % of exports.

While overall production of many crops expanded gradually, yields are far below potential, due to a combination of inadequate inputs, inappropriate agricultural practices and environmental and climatic factors. Typically, the value chains for much of the agricultural produce in Kenya are too long, inefficient and opaque. Competitiveness is relatively poor, and the legal and institutional environment supporting agriculture is weak.

In Kenya, combined with the international crises in food, fuel and finance, there was a period of severe domestic violence following the 2007 election. Riots broke out in various parts of the country following the results, forcing hundreds of thousands of people out of their homes. Many of the displaced were farming families from the Rift Valley, the country's grain basket. The country's food deficit rose as many farmers were unable to plant in 2008. Since 2008 the high cost of inputs and fuel coupled with consecutive seasons of erratic rainfall and serious drought drove down annual maize production, making it difficult for the country to replenish its cereal stocks and left nearly four million people at risk of hunger. The near total failure of the 2009 »long rains« was especially disastrous, with widespread crop loss reported in several parts of the country.

Despite a good short rainy season in 2009/10, which is expected to result in a favourable national harvest, food and fuel prices are still high in Kenya, making it difficult for poor urban and rural communities to access the food they need. Despite a recent easing in the price of many staples, the price spikes during the 2007/08 food crisis show how vulnerable net food buyers such as pastoralists and urban consumers are to food insecurity. In June 2009, the price of maize, the country's most important staple, was nearly double what it was two years earlier. Production response is also constrained by the high cost of fertiliser, which has doubled in recent years.

2.2 Macro-Level

Amber status:

There appears to be a concerted effort to establish more effective leadership, clearly define the challenges, and to set strategies to address these challenges. The new Agricultural Sector Development Strategy (2009-2020) (ASDS) sets a clear direction, but there is little detail on implementation, or monitoring and control.

The Comprehensive Africa Agriculture Development Programme (CAADP) is an initiative sponsored by the New Partnership for Africa's Development (NEPAD), an economic development programme adopted by the African Union. The aim is to reach an average annual growth rate in agriculture of at least 6 % by 2015, principally by increasing the minimum threshold for public expenditure on agriculture to 10 %.

CAADP has been working closely with development partners, NEPAD, and the Regional Economic Committees such as. the Common Market for Eastern and Southern Africa (COMESA), Southern African Development Community (SADC) and, Economic Community of West African States (ECOWAS) since 2003 to support institutional development, and the articulation of the CAADP Pillars, a series of broad policy statements which member countries subscribe to. CAADP is also meant to act as a focus for harmonisation of donor support and administration of finance through the CAADP Multi-donor Trust Fund.

COMESA, is a preferential trading area with 19 member states including Kenya. COMESA incorporates two other African trade blocs, the East African Community (EAC), of which Kenya is also a member, and SADC, as well as some additional members. Regional markets, such as the COMESA block, are the major destination for Kenya's agricultural produce. The government aims to strengthen regional integration to promote market development.

COMESA's aim is to promote economic prosperity through regional integration and improved trade. It is also a key stakeholder in the African Union and NEPAD. COMESA agricultural programmes are supposed to be aligned strategically with the CAADP, and address problems at a regional level.

2.2.1 Leadership

Amber status:

The Ministry of Agriculture (MoA) seems to recognise the importance of working with other ministries to deliver well co-ordinated and comprehensive policies. The effectiveness of cross-ministerial co-operation will be tested in implementation, however.

The MoA takes the lead on design and implementation of the national agricultural policy. MoA's mission is »to promote and guide sustainable development of agriculture, livestock, fisheries and agro-based production systems and strengthen related institutions now and in the future«. The Agricultural Sector Co-ordination Unit (ASCU) has been formed with members from each of

the three agricultural ministries co-ordinating the policy implementation.

2.2.2 Strategy Development

Amber status:

The new agricultural strategy certainly seems to identify the key challenges and proposes a wide range of common-sense approaches to address these issues. It is not a criticism of the strategy to say that it is still very much a high-level piece, and there is very little detail on the specifics of the recommendations, especially as they relate directly to agricultural finance. To some extent we hope that this study might help with this process.

The ASDS was released by the national government very recently. It details the government's strategy to developing a more productive and competitive agricultural sector. This is linked to the ruling party's stated vision of a »Food Secure and Prosperous Nation« and a targeted 7 % sector growth rate as outlined in the overarching Vision 2030 strategy. In the ASDS, the foreword by the current President echoes the agricultural sector's mission to become »An innovative, commercially-oriented and modern agriculture«.

To this end, the foreword goes on to announce the government's key messages:

- Their intention to withdraw from production, processing and marketing where the private sector will be more competitive;
- Reforming and streamlining public sector institutions servicing famers; and
- Policy, legal and regulatory reforms to encourage farmers towards market-oriented agriculture.

The document was compiled by ASCU which co-ordinated stakeholder ministries from:

- The Ministry of Agriculture;
- The Ministry of Lands;
- The Ministry of Livestock Development;
- The Ministry of Water and Irrigation;
- The Ministry of Regional Development Authorities;
- The Ministry of Forestry and Wildlife;
- The Ministry of Development of Northern Kenya and Other Arid Lands; and
- The Ministry of Co-operative Development and Marketing.

The strategy envisages a subordinate level – the Interministerial Co-ordination Committee will engage other relevant ministries at Permanent Secretary level.

Vision 2030, the overarching national economic development plan, and the ASDS supersede the 2003-2007 Economic Recovery Strategy for Wealth and Employment Creation; the National Poverty Eradication Plan (1999-2015); and the Strategy for Revitalising Agriculture 2004-2014. These policies included many similar initiatives, however, including:

- Legal and institutional reforms;
- Research and extension outreach;
- Rural infrastructure development;
- Improving access to credit;
- Irrigation development;
- Capacity building of the co-operative movement;
- Improving the marketing infrastructure; and
- Promoting diversification and value addition as priorities.

2.2.3 Legislative and Policy Development

Amber status:

It is very difficult to make a general assessment of the effectiveness of this area. However, it seems that policies are being formulated and legislative acts passed in a reasonably orderly and timely manner.

The ASDS estimates that over the past five years, more than 15 policies and six legislative Acts have been introduced in relation to agriculture including:

- The National Dairy Development Policy;
- The National Agricultural Extension Policy; and
- The Co-operatives Policy.

The ASDS intimates that the government will introduce further legislation specifically aimed at encouraging MFIs to lend to small-scale agricultural producers. It will also implement policy to encourage the mobilisation of financial resources for agriculture through SACCOs and community-based lending organisations. The government is also keen to strengthen PPPs and increase its ability to deliver infrastructure and services, and it may need to introduce further legislation to create an enabling environment for this.

2.2.4 Budget Allocation

Red status:

Kenya has a poor record for budget allocation to agriculture, both in terms of level and stability. The sheer lumpiness of changes over the last two decades must have been hugely disruptive, and Kenya still has some way to go to meet its stated objectives.

National budget allocation stood at an average of 13 % for the first two decades following independence in 1963. It dropped to as low as 2 % during the 1990s, a result of implementing a Structural Adjustment Programme. The budgetary allocation improved to an average of 4.5 % after 2003. Under the Maputo Declaration of 2003, Kenya along with other African countries committed itself to the CAADP and the allocation of 10 % of the national budget to agriculture, so it is currently missing this target by some margin.

2.3 Meso-Level

Amber status:

Kenya has a wide range of players at the meso-level. Parastatal institutions have mandates to support agricultural development in a range of different ways, though many have been affected by under-investment in terms of both money and expertise, and are not working effectively. In terms of farmer organisation, Kenya has a legacy of co-operative development which may play a crucial role in improving the structure of markets. Agribusiness is generally much weaker than expected is under-capitalized, and lacks management and technical skills. The country is well served by a large number of development agencies and non-governmental organisations (NGOs), though they do not appear to be well co-ordinated or aligned to the national strategy.

2.3.1 Parastatal Organisations

Amber status:

There are a large number of parastatal and academic institutions geared to supporting the agricultural sector. The issue has largely been under-investment, leading to low capacity. Greater co-ordination in terms of strategy and implementation has been highlighted as a priority in the ASDS.

A wide range of parastatal institutions are designed to support the agricultural sector, including bodies such as the Kenya Agricultural Research Institute (KARI) and the Kenya Industrial Research and Development Institute (KIRDI), of which we gained indirect knowledge in relation to the value chains under study. For example, KARI was involved in developing and disseminating exotic mango varieties, and KIRDI in developing small, low-tech equipment such as slicers and dryers.

There are also a range of statutory boards in relation to specific commodities, which provide regulatory and specialised services.

The ASDS aims to make these institutions more effective for users, and to have them establish much stronger relationships with other public, private and academic research bodies. Presumably some type of strategic approach to national programme and knowledge management is envisaged, but this is not spelled out in detail. In relation to regulatory institutions, the ASDS points to a strategy which transfers their development mandate to the private sector.

Regional Development Authorities (RDAs) are mandated to drive economic growth in particular areas through the development and delivery of integrated strategies and plans that co-ordinate a range of different infrastructure investments and related programmes.

The Agricultural Development Corporation (ADC) is a parastatal institution initially conceived in 1965 to facilitate the land transfer programme from European settlers to locals following the country's independence.

The functions of the corporation were redefined in 1986 to include the promotion of agricultural development through a range of strategic interventions, including:

- The production and supply of quality seed (including maize);
- Transfer of modern farming technology – e. g. tilling machinery, seeding equipment, processing machinery – through fabrication, repairs, hire etc. and provision of ploughing, planting and shelling services;
- Custodianship of the national livestock studs and artificial insemination programmes;
- Production of animal feeds; and
- Training farmers through field days and agricultural shows; and training students through attachments to provide hands-on experience.

The ASDS refers to a long period of under-investment and management of agricultural parastatals in general, and points to the revitalisation of ADC as one of the objectives.

2.3.2 Producer Organisations

Amber status:

Kenya has a history of co-operative development, which was interrupted by a series of crises relating to mismanagement, negligence and corruption. These badly damaged the reputation of the sector. The Ministry of Co-operatives and Marketing is leading initiatives to rebuild the sector, particularly through improved regulation and governance. There is also a growing movement of producer organisations, mainly grouped under the Kenya National Federation of Agricultural Producers (KENFAP).

Kenya's co-operative movement has a long history. It entered a new era of economic liberalisation and release from effective state support and control in 1997. Unfortunately, the many gross abuses of trust which happened subsequently left its reputation badly damaged in the eyes of the public. The co-operative movement has never fully recovered in some agricultural sectors and is effectively defunct in some, for example cotton. In others it is booming, such as dairy. To compound matters, the Kenya National Federation of Co-operatives effectively collapsed due to mismanagement, and the cooperative movement in Kenya at present struggles because of a lack of structure, leadership and advocacy.

Co-operatives are currently regulated by the Co-operatives Societies Act as amended in 2004, and are regulated under the Ministry of Co-operatives and Marketing. The ASDS feels that the current act is no longer aligned with government policy in this area and will need substantial revision.

Nevertheless, the co-operative movement has 12 000 registered co-operatives of which 49 % are in agribusiness. There are more than seven million members, of which agricultural co-operatives make up about 46 % or three million members.

Co-operatives are vital for the bulking, processing, transporting and marketing of produce for member producers. Many also provide members with access to discounted farm inputs and/or trade credit to help with the production process.

Most co-operatives are failing in their role to add value for members, particularly through developing new products and markets, and value addition. They are typically under-capitalised and under-managed, and are unable to effectively transform themselves into more professional, competitive and commercially-oriented groups.

The government's strategy is to revitalise this sector as highlighted in the ASDS, particularly through improving governance and management, marketing, and the adoption of ICT. The government has reviewed the Co-operative Societies Act, formulated a new Co-operative Development Policy, and also a Co-operative Investment Policy, with a view to encouraging and guiding the co-operative movement in the future.

Perhaps the major contribution of the co-operative movement in Kenya has been in the area of financial services. The Co-operative Bank and the wide network of Savings and Credit Co-operatives (SACCOs) are evidence of this. This is discussed at length in the analysis of the financial sector (See Section 4).

At the grassroots level are what is called »Farmer Groups«. Farmer Groups are coalitions of small numbers (20-50) of farmers with a strong overlap of interests in a particular produce/commodity and also geography. They are usually peers and have close community bonds. Increasingly they are being grouped into sub-national or commodity associations, which are linked to the Kenya National Federation of Agricultural Producers.

To some extent the growth of this organisation is a reaction to the breakdown of the old state-controlled marketing boards and the loss of faith in the co-operative movement. Its aim is to advance co-operation between members at all levels, to provide an interface for measures to advance the situation of farmers, and to lobby and raise the profile of farming in Kenya.

Agricultural co-operatives

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.

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

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

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

Figure 4: Profile of Dairy Co-operative

2.3.3 The Development Community

Amber status:
There are simply too many players in this sector to go into any detail, though a lot of positive growth-oriented value chain projects are underway. There does not appear to be a clear mechanism for co-ordinating and synergising activity though, nor a joint attempt to address knowledge management in the sector. Nor is it clear how these institutions will be adapting their strategy and approach to support the government and the implementation of the ASDS.

A wide range of development agencies and NGOs are involved in a plethora of agriculture-focused projects in Kenya. Examples particularly relevant to the value chains under study include the usual bilateral agencies such as DFID (UK) (e.g. Improving Livelihoods for Small Holder Dairy Sector and Support to Kenya Land Reform Phase II), AFD (France), which has implemented, or is in the process of implementing, a number of projects in relation to water, transport and rural electrification, for example, USAID (e.g. Kenya Dairy Sector Competitiveness Program and Kenya Horticultural Development Program), SIDA (Sweden) (National Agriculture and Livestock Extension Programme), the International Finance Corporation, European Commission, World Bank, and International Fund for Agricultural Development (e.g. Smallholder Dairy Commercialization Programme).

2.3.4 Agribusiness

Amber status:
The environment for agribusiness varies from sub-sector to sub-sector, though is generally underdeveloped. Kenya has a thriving domestic retail market that is largely served by imports. There are some large agribusinesses, often focused on exports of strategic commodities like tea. Though the ASDS refers to agribusiness, it does not go into detail on the quite extensive measures that should be adopted to address it, considering its importance to the overall stability and profitability of agriculture in the country.

There is very little value addition in most agricultural sub-sectors in Kenya. Dairy is a notable exception, with most of the produce processed locally for local consumption. In contrast, mangos undergo very little local processing, and despite the fact that Kenya has a mango surplus, it imports much of its mango juice and other mango products. A strong agriprocessing sector is vital for creating a truly robust and stable domestic market for agricultural produce.

The view of banks is that agribusiness generally is chronically undercapitalised and lacking the professional management and technical skills required.

Typically, small entrepreneurs have a good understanding of markets, and many launch agribusinesses on the back of a successful produce trading career. Their abilities are severely stretched as their business grows, however, and their skills in administration, finance, human resources, and strategy are not usually good enough. They also often have difficulty in delegating and in recognising the value of outside expertise. They tend to overestimate their own abilities and fail to identify relatively obvious pitfalls which would occur to seasoned management professionals.

Entrepreneurs commonly overvalue their businesses, and can sometimes fail to invest sufficient risk capital of their own to satisfy serious investors or lenders.

Technical skills are also in relatively short supply. Skilled agriprocessing personnel are in high demand and command good wages. Similarly, those with experience in business administration are not easy to find, and have good opportunities in the large corporate and business services sector.

Agribusiness in Kenya is also negatively affected by an uncompetitive business environment. Notably, the costs to business of frequent power shortages and poor transport infrastructure are particularly high.

While this is a brief overview, many of the recommendations in this report reflect on the huge importance of agribusiness to enabling access to finance and underpinning the competitiveness of agriculture. Its relative absence in Kenya is stark and strategies to address this must be implemented as a matter of priority.

2.4 Micro-Level

Amber status:

At the micro-level we are looking at the discrete factors which impact on agricultural value chains at both a producer and processor level. These vary wildly from one sub-sector to another, however, some common themes are outlined in this section.

2.4.1 Producer Viability

Amber status:

Most of Kenya's agricultural production comes from small-scale farmers, and their productivity is generally much lower than it should be. This is the result of a range of factors related to social and cultural values and behaviours (e.g. attitudes to enterprise, risk, property, and advice), technical and financial skills, and the availability and quality of land.

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 be reinvested in growth and improvements;

- 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 people whose livelihood, while it is wholly or partially dependent on the land, does 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 is from another source (i. e. another job);

- Subsistence agriculture, where most of the 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 resulting 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.

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«;

- 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 (e. g. business partners and the financial sector). These criteria further restrict the scope of agricultural finance and, while 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.

Increasingly, the high population in some areas of the country, the practice of subdividing land for inheritance purposes, and the fact that Kenyans tend to live on the their plots has led to fragmented and uneconomic land use. Subsequent pressure sometimes forces the conversion of marginal land with related environmental degradation.

There is a current proposal to develop a National Land Policy, the critical ingredients of which will include a national land-use plan encompassing investments in the necessary infrastructure, but also the establishment of a national Geographic Information System (GIS)-based land registry.

2.4.2 Access to Inputs

Amber status:

Input supply lacks scale, and suppliers are inhibited in their ability to develop their franchise as farmers as they tend to underspend on inputs. Generally the private sector players in agriculture tend to lack size, scope and efficiency in terms of products, distribution and sales.

Use of fertiliser is still relatively low, at about one third the level used in India and one quarter of the level used in Indonesia, for example. The low use is attributed to the high price, made up of high transport and distribution costs. There is a major fertiliser cost-reduction programme outlined in the Vision 2030 and Medium-Term Plan.

Concentrated animal feeds are produced locally from crop by-products by about 100 different companies. The local industry currently has a capacity to produce 800 000 tons, ranging from about 1 000 tons a year by smaller companies to about 90 000 tons by the very biggest. About 58 % of this capacity is utilised, generating a turnover of about Ksh7bn.

Use of equipment and machinery has been in a long decline in Kenya. The high costs of taxation and maintenance are singled out as the principle causes. As might be expected, most agricultural equipment and machinery are imported, contributing to the expense. The increasingly small size of farms also tends to make buying an item uneconomical for individual farmers.

Inputs are distributed by a wide range of stockists and merchants throughout the country, and are also provided by some co-operative societies and commodity boards, sometimes on a subsidised basis or on trade credit.

2.4.3 Water and Irrigation

Amber status:

Water is becoming an increasingly scarce resource in Kenya, for a range of reasons. That said, Kenya apparently has the necessary rainfall and reservoir resources to manage this.

Irrigation is mainly ad-hoc arrangements by smaller farmers, and customised schemes developed specifically for the needs of large commercial famers. Significant parts of the country are affected by chronic water shortages for agriculture of different kinds.

The ASDS postulates that with average rainfall of 400mm, Kenya has the potential to harvest and apply water for agriculture much more effectively. It states that the economic impact of improved water management is great, and estimates that irrigated land could be expanded from 105 000ha to 540 000ha or even 1 000 000ha through basin development programmes.

Financing irrigation and other major infrastructure schemes is expensive and requires a long payback period. PPP structures should be considered to help leverage more long-term private finance for these initiatives.

2.4.4 Agricultural Extension Services

Amber status:

Kenya generally has a wide suite of extension services for different sub-sectors. There is some criticism that the depth and scope of services has eroded due to budget cuts, and that many do not encompass the business skills farmers need to succeed.

For the uninitiated, extension services aim to increase the productivity of farmers through a structured programme of skills and technology transfer. They are delivered by a mix of the public sector, development agencies, private and co-operative marketing groups, and NGOs. Typically, they are aligned along specific agricultural sub-sectors, and a specialist extension officer is assigned to a group of farmers (maybe a few hundred) in a given locality to develop their expertise in this sub-sector.

The extension officers work with individual farmers or, commonly, groups of farmers to transfer best practice knowledge in farming, encourage use and facilitate access to the right inputs, and to improve marketing, for example.

Financiers interviewed were keen to point out the importance of extension services when they were considering the viability of a sub-sector. Bankers do not have the time or expertise to monitor or control the technical skills of farmers. They need to feel that their borrowers are getting additional support to improve productivity.

2.4.5 Agricultural Standards, Pests and Disease

Amber status:

Kenya has the knowledge and expertise to address this challenge, but lacks some of the infrastructure and organisation required to be entirely effective.

Export markets in particular are becoming increasingly concerned about making sure the produce that they import meets the required traceability, safety, sanitary and phytosanitary standards, and Maximum Residue Limits (MRLs). MRLs are standards on the maximum safe levels of input chemicals which are left on the produce.

Crop disease is a major factor in pre- and post-harvest losses for farmers, with much of this attributable to poor handling and storage.

In relation to livestock pests and disease, adequate control requires good surveillance, mass vaccination, management of animal movement, test-and-slaughter, port sanitary controls, and veterinary public health services. These services have been negatively affected by public sector cut-backs, and previously controlled diseases have re-emerged such as foot-and-mouth, anthrax, East Coast fever and rabies.

It is not imperative that these services are provided by the public sector. In many cases, a competitive private sector market could insource some of these activities, perhaps in a PPP-type structure, which would ease budgetary pressures and potentially improve service levels.

3 Analysis of Business Environment

3.1 Land Tenure

This section addresses a few cross-cutting issues in the general business environment, which affect the performance of both the financial sector and the agricultural sector. We have not broken them down into macro-, meso-, and micro-levels, arguing that to fully review the business environment for Kenya is beyond the scope of this study.

Rather, we have largely assumed for the purposes of this study that the business environment is a static feature of the Kenyan environment (it is not), in order to draw attention to some of those areas which may be deserving of the highest priority in relation to agricultural finance.

Amber status:

Though Kenya has a relatively stronger recognition of private property rights than some other African countries, the practical and cultural difficulties of using land as collateral prevent rapid expansion of agricultural finance underpinned by realisable security. The legal processes required to perfect and realise security are very slow, and risk-averse farmers are also reluctant to pledge their land.

Land can be divided into three broad legal categories:

- Government trust land;
- Private land; and
- Communal land.

Lands laws are quite complicated and restrictive, and limit the use of land as collateral for finance. In addition, there are inconsistencies and incompatibilities between various land Acts, which means the adjudication process is very slow and complex. The process is further complicated by an extremely inefficient manual land registry. Despite the fact that over 3.5m records have been digitised, there is still no computerised information management system to effectively manage them. Land adjudication and registration covers only one third of the country, a deliberate ploy to avoid placing people in a position where they feel a need to assert their rights over land, and the related conflict which could be caused.

3.2 Legal System

Amber status:

Kenya has a relatively well-developed commercial legal code, but the effectiveness of this code is undermined by an inefficient judicial and enforcement system. The informality of relationships between producers and processors/buyers means that banks are unwilling to finance production. Even where contracts are in place, laxness in enforcement and sanction means that they are not very well respected.

A major challenge to the success of value-chain finance is the informality and laxness of the contractual environment. When contracts for production are agreed with producers, which have the potential to offer comfort to lenders, they are often verbal rather than written. Even when written contracts are established, buyers claim that side-selling by producers is rampant.

When formal partnerships can be formed between agribusiness, in the form of processors, buyers, and commercial farmers, and small-scale farmers, this should be encouraged. It is vital that these arrangements are underpinned by good, enforceable contracts, which provide security of supply to the agribusiness while ensuring a market for the producer. These arrangements have a much better record in enabling access to finance, as they provide greater assurance of repayment.

3.3 Infrastructure

Amber status:

Developing agricultural infrastructure is vital for supporting both producers and processors. Producers lose a great deal of their income due to poor storage and transport arrangements, and processors and buyers are uncompetitive.

One of the major problems affecting the agro-industry in Kenya is poor infrastructure and organisation in relation to logistics. The return to individual small farmers is greatly undermined by their failure to co-operate in the aggregation, storage and transport of their produce. This role is assumed by middlemen who buy produce at the farm gate, usually at a heavy discount, from farmers who are often running out of working capital and desperate to sell to the first cash buyer who appears. Regardless of the relative fairness of this process, the industry overall is hurt by the lack of investment in decent, quality storage facilities and transport infrastructure. Much value is also lost by failing to adequately sort, grade and certify produce according to the increasingly strict standards expected by major buyers.

Kenya is only just keeping up with its rapidly growing power requirements, of which agro-industry, like any other sector of the economy, has a growing need. The ASDS recognises the importance of co-ordinating the development of infrastructure with the relevant ministries. For example, there is an initiative to work with the Rural Electrification Authority to develop a master plan to enhance agro-industry. Encouragement will also be given to programmes which encourage new energy sources such as solar, wind, biogas, geothermal, woodlots and hydropower, and engaging with the private sector will be solicited. There are also plans in progress for the development of a national bio-fuel production capacity.

3.4 Financial and Business Education

Amber status:

Strengthening of financial and business education throughout the agricultural sector is important, but there does not seem to be a clear strategy for achieving this.

There appear to be concerns about the commercial culture and skills of both producers and processors in Kenya. The complaints are that many producers do not take a professional approach to the management of their farm, their financial affairs and their commerce with others. This includes major contractual breaches such as defaulting on loans or side-selling, but also a plethora of values and behaviours which make financiers uncomfortable with large exposures to small farmers.

Further up the value chain, processors and buyers need capacity building. Particular problems include the reluctance of entrepreneurs to heavily commit their own risk capital to a venture. Similarly, they also tend to be reluctant to make significant concessions in management control and ownership in return for outside capital. They also tend to overestimate their own management abilities and underestimate the risks of their business.

3.5 Taxation

Amber status:

The ASDS states that the current tax structure is a disincentive to development, with multiple taxes and levies throughout the value chain. While it is well beyond the remit of this study to suggest alternatives, it seems that simplification of current taxes on agriculture would be aided by their amalgamation into a consumer sales tax.

3.6 Information Environment

Amber status:

The collection, aggregation and analysis of agricultural data is not as advanced as it should be. There should be a clear strategy to address gaps in this area.

It became apparent during the assignment that the lack of reliable data was a source of frustration for all stakeholders. To develop an effective credit portfolio, financial institutions need objective, accurate and timely data on the performance of the sector at sub-sector and regional level. A tremendous amount of data is being collected through a vast number of initiatives, but there doesn't seem to be an overall strategy for knowledge management in the sector.

Also, the informality of many of the financial relationships through the value chains means that valuable data on the cash flows of farmers and farm enterprises is being lost. When it is possible to formalise this through increasing current account use for income and expenditure, a colourful record of financial activity can be built. This can be used to help identify bankable customers at both sub-sector and individual level.

4 Analysis of Financial Sector

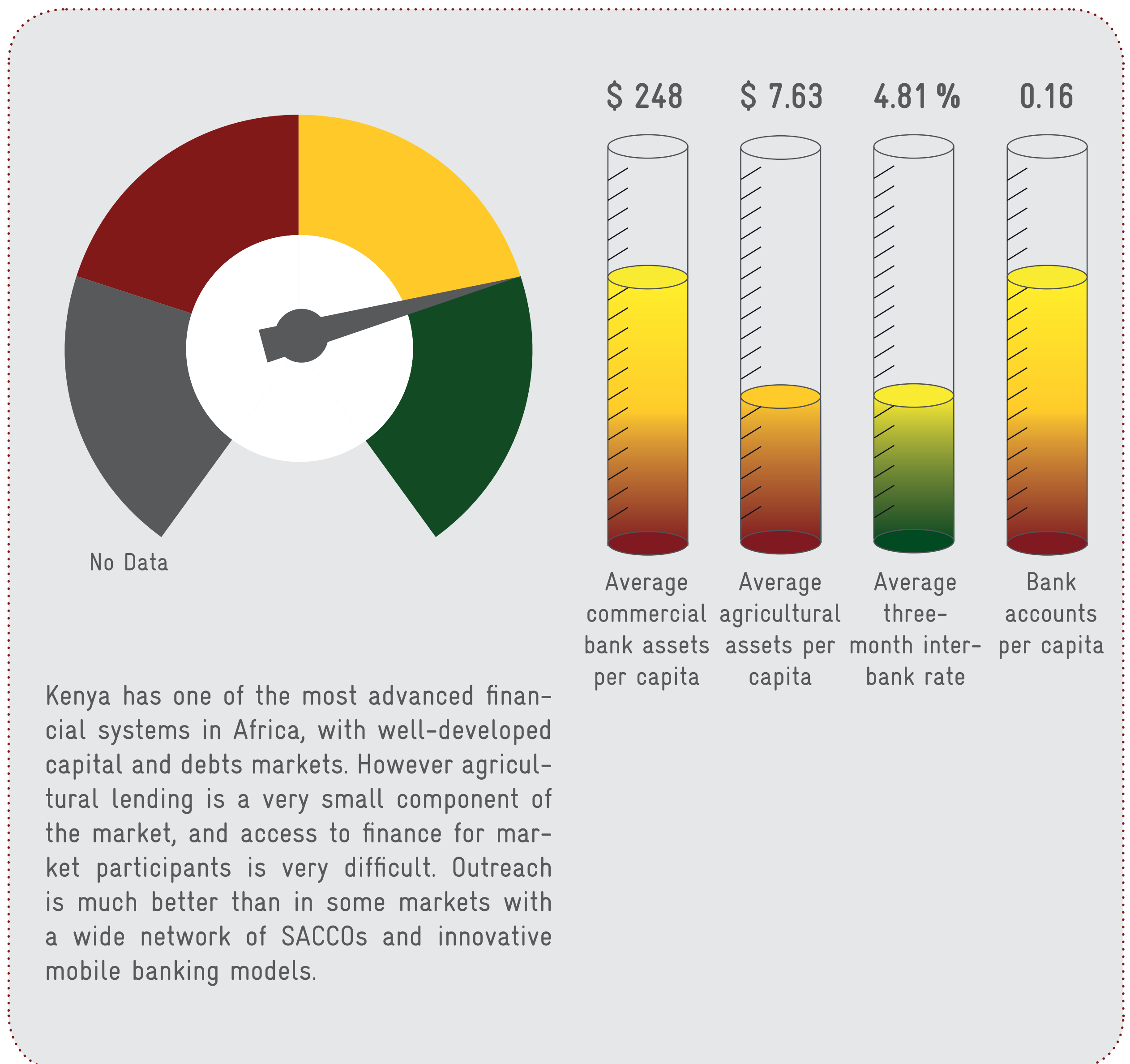


Figure 5: Performance Dashboard for Financial Sector

Macro-Level

Market Liberalisataion	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.
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 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.

4.1 Overview

Amber/Green status:

While there are many long-term improvements which remain to be implemented, in general Kenya has a relatively large, diverse and sophisticated financial sector which is prudently regulated by a well-experienced central bank. It serves some parts of the economy (e.g. retail and corporate customers) very well indeed for a developing country. As expected there is a huge discrepancy in the level of small and medium enterprise (SME) and agricultural lending, which is a particular focus of this study.

Kenya has an advanced financial system when compared to countries of similar low levels of economic development. It has the region's largest stock exchange, 43 commercial banks, and a burgeoning insurance industry. The banking sector continues to grow quickly, underpinned by a solid commercial and corporate lending franchise, and a rapidly expanding retail and consumer finance market. For example, the industry posted an 11% growth in assets for the year ended September 2009 to Ksh1.31 trillion with total deposits rising to Ksh1 trillion.

While the expansion is welcomed by the private sector, the CBK is concerned to make sure growth is stable and sustainable. Its central worry is that the historical and ongoing information asymmetry presents a real risk to bank balance sheets. Put simply, information asymmetry is when the banks know markedly less about their customers, their finances, and their values and behaviours in relation to credit than the customers themselves. This can crystallise itself, particularly in a downturn, as a bank realises that its portfolio is not nearly as robust as it had assumed, and that customers are defaulting at an unexpectedly high rate.

However, mid-year results for 2009 showed that Kenyan banks were not badly affected by the financial crisis though this clearly varied from bank to bank. Overall pre-tax profit for the sector rose 2.9% in the first half to Ksh24.6bn.

Kenyan banks are focused on expansion, especially regionally. To some extent this is a result of growth ambitions, but also a genuine fear about long-term political stability in Kenya. They are currently able to raise funds for these purposes on the local stock-market, but also in other markets such as Rwanda and Uganda.

The CBK has been critical of commercial bank's high interest rates and a perceived lack of competition around lending business. Attempts to inject cash into the market by cutting the cash reserve ratio have not had much effect. Banks are reluctant to grow market share at the expense of margins, with nervousness about rapid expansion and loss of the buffer that high profitability provides against loan losses. Rather, they often take the easier option and take up government bonds.

In terms of distribution, the total combined bank branch network grew by 154 branches during the year ended September 2009 to 918. Mobile banking has had a major impact on expanding access to basic account and transactional services. However, while commercial banks hold most of the financial sector's liquidity, outreach is provided by more than 3 000 SACCOs, microfinance institutions (MFIs) and many other community-based lending models.

SACCOs are regulated by the Ministry of Co-operatives and Marketing, and MFIs by the Central Bank of Kenya. SACCOs and MFIs are typically undercapitalised, with relatively weak institutional capacity, however. Kenya also has a vibrant insurance industry, with some innovative products under development. The lack of depth in the reinsurance market restricts growth, though. Finding a way to play to the relative strengths of different types of financial institutions is the key to enabling access to finance for agriculture.

4.2 Macro-Level

4.2.1 Market Liberalisation

Amber/Green status:

Kenya has been a leader in implementing reforms to encourage a market-based financial sector. Success is exemplified in the rapid growth of a diversified financial sector with financial institutions both domestic and foreign keen to enter the market.

Kenya's financial sector is one of the most liberal in the economy, and compared to many other countries in Africa allows the market to function effectively.

It is characterised by:

- Ease of market entry by both domestic and international competitors;
- Free movement of funds and capital internationally;
- A floating exchange rate;
- Absence of interest rate caps on lending;
- Absence of directed lending, or government mandates to lend to specific sectors or enterprises (especially state-owned ones);
- A relative absence of government-owned lenders capable of distorting the market; and
- An open and transparent government bond market.

4.2.2 Regulation and Supervision

Amber/Green status:

The CBK is a well-respected institution, with some expert staff. It still requires capacity building to make sure it keeps up with developments in the financial sector, but seems to have a forward looking approach to the market. The central bank was not cited as an impediment to developing agricultural finance. Naturally, it must be understood that they would be concerned about any rapid expansion in lending to any sector that was not well understood.

Aside from monetary policy, the CBK is principally focused on the overall stability of the financial sector in Kenya. With that in mind, it is generally concerned to make sure that the portfolio growth of both banks and MFIs is steady, well understood and expertly managed. Its principle initiatives to expand access to finance include improving the financial and legal infrastructure required to support successful market growth. Examples include improving the deposit protection regime, developing a system of credit bureaus, and improving payment and settlement infrastructure.

4.3 Meso-Level

4.3.1 Financial Sector Infrastructure

Amber status:

The current financial sector infrastructure does not meet the ambitions or demands of the sector. It shows huge capacity to adapt quickly where a market need is identified (e.g. mobile banking) but hesitation where institutional co-operation is required (e.g. credit bureau).

Kenyan banks are leading the way in Africa's mobile finance revolution. The runaway success of M-Pesa, telecom operator Safaricom's mobile money transfer service has jolted traditional bankers into action. The service is now used by 39.9 % of Kenyans, according to the FinAccess 2009 Survey by the Financial Sector Deepening (FSD) Trust. Mobile banking services, or tie-ups between banks and mobile phone companies, are set to become a major part of Kenya's financial landscape.

Kenya's credit bureau infrastructure is still embryonic, though the central bank is implementing significant measures to address this. Regulations have been passed to authorise the creation of private sector credit bureaus, and several providers have entered the market. In addition, the Banking Act has been amended to oblige banks to share credit information, and they are working with the Kenya Bankers Association to draw up a framework of practical rules and regulations to facilitate this. It remains to be seen how effective this will be, though it is clearly a move in the right direction.

4.3.2 Scope, Depth and Integration of Market

Amber/Green status:

Overall, the sector is well-capitalised, but this capital tends to be hoarded by commercial banks. Ways of deepening financial integration through the gradual development of wholesale credit markets should be encouraged.

The commercial banking sector is generally well capitalised for current purposes and highly liquid. If anything, the sector is criticised for being too conservative in its portfolio development (by the private sector anyway). On the other hand, the SACCO sector is comparatively undercapitalised, at least for long-term finance for agriculture.

We believe that in a healthy financial sector, financial institutions should be allowed to develop niche markets and differentiate themselves from the competition. It is not necessary or desirable for all financial institutions to aspire to become universal banks. It is better to deepen financial integration so that high-performing institutions of any type have the opportunity to access competitively priced capital, funding and risk management solutions which enable them to manage their balance sheet according to sound principles.

It seems illogical, costly, and wasteful for most commercial banks to go to the expense of developing an extensive branch network in competition with SACCOs. Rather, we should be helping release the liquidity of commercial banks for the benefit of rural borrowers by facilitating the development of a robust local wholesale funding market (e.g. where SACCOs can borrow money from commercial banks for the purposes of onlending to their customers) for financial institutions. Deepening these markets allows a way to channel funds to those institutions judged by the market as best able to handle them.

Most commercial banks, however, do not seem to have the desire, capacity or expertise to develop a healthy and profitable SACCO portfolio. It remains to be seen whether the SACCOs have an appetite for longer-term funding, as most are inherently conservative institutions. Where, however, it is possible to find ways of strengthening individual SACCOs, and improve their ability to grow their balance sheet into longer-term lending, this opportunity should be taken.

4.3.3 Product and Market Development

Red/Amber status:

In general, commercial banks still have significant doubts about increasing their exposure to the agricultural sector. While SACCOs and MFIs are much more conscious of this franchise, they lack the balance sheet and expertise to effectively address this segment with term finance.

It is clear that agricultural finance is very much the poor relation to other sectors. Finance is available to large commercial farms and agribusinesses through the commercial banking sector but the options for smaller farmers are limited. Some can access short-term trade credit through their relationships with agribusiness or co-operative buyers. Indeed, this may be the most effective route for improving access to working capital for small producers.

Some can get small, short-term loans by joining a SACCO and engaging in compulsory savings, or perhaps by borrowing from an MFI. Almost without exception, these loans tend to be six to 12 months in tenor, repayable monthly, and on high-interest terms.

This makes them unsuitable for any sort of capital investment activity and, indeed, some ambitious farmers beggar themselves by seeking to use these instruments for unsuitable purposes.

From an agribusiness SME standpoint, the commercial banks feel that this segment is generally undercapitalised with weak management. They feel that these fundamental problems need to be addressed before they can develop a viable business model around them. This is quite aside from the sector specific risks that they perceive in agriculture.

We see the opportunity to help both banks and SACCOs to develop a business model which can help make the agricultural sector more profitable. A range of services are required including deposit and savings accounts, cash management facilities, leasing and asset finance, insurance and retirement planning. In any market, profitable banking of small enterprises is underpinned by cross-sales of other products linked with a cost-effective distribution model and exceptional data management.

4.3.4 Interest Rates

Amber/Green status:

While interest rates for agricultural finance are high, this is a function of the market in general. Improvements can be made in distribution costs, but there is relatively little distortion of the market by government (except through the issuance of government paper). We can perceive a significant tightening in net interest margins as the financial sector begins to understand particular agricultural risks more precisely.

Interest rates for agricultural finance are typically high, because of the low appetite for risk and the high costs of distribution. While the distribution costs can be addressed through various practical interventions, the perceptions of risk and reward in the minds of the financial community are likely to prove much more intransigent.

Interest rates are a market pricing mechanism, and attempts to directly interfere with the pricing and allocation of credit must be resisted. A much more effective approach is to reduce the risks to the financial sector through indirect approaches. These include introducing greater structure and regulation to agricultural markets, and deepening extension services. By gradually reducing the inherent risks in agriculture, banks should tighten their pricing correspondingly.

From the financial sector side, we need to be much more specific about how risks can vary between specific customers, agricultural sub-sectors, and lending products. At present, agricultural finance is broadly lumped together as a generally difficult proposition. Data and skills are not currently applied in an effective way to segment the market and to introduce risk-based pricing.

4.3.5 Financial Sector Expertise and Culture

Amber status:

By and large, Kenyan bankers are highly adept, but there are very large gaps in knowledge and culture where the subject of this study is concerned. SACCO staff generally have quite weak financial sector skills and training.

It is very subjective, but Kenyan bankers are generally well regarded, having the benefit of a relatively strong education and a well-established commercial culture. As already outlined, Kenyan commercial banks have successful retail and corporate franchises, and the calibre of staff to match. Unfortunately, many agricultural and/or SME divisions have been allowed to wither.

While the skills can be taught, the business culture associated with SME (in this case, agribusiness) and agricultural finance is very different from that associated with corporate or retail banking. Frontline staff need both empathy and understanding with their customers, and also the commercial awareness to make sure the bank gets viable business from them. They need to be prepared to engage with farmers and small business on their terms, travelling and visiting premises and farms to see the enterprise first hand. In essence, they need to have an entrepreneurial spirit themselves, and often the best recruits come from an agricultural mercantile or trading background and are then taught the banking skills they need on the job.

SACCO staff tend to be much closer to their customers but many lack the basic financial services education they need. There is also a clear lack of structured career progression which means the retention of talented personnel is difficult.

There does seem to be a reasonably comprehensive and expanding range of training and development options for Kenyan financial sector professionals, but cost and outreach remain a challenge. Recently, a Certificate in Agricultural Finance was launched by the Kenya School of Monetary Studies, in collaboration with USAID.

4.3.6 Financial Sector Operating Model

Amber/Green status:

Commercial banks broadly have the operating model they want, and have a record of strong investment in change to meet their strategic objectives. SACCOs have the front-line exposure to small-scale farmers in particular, but have limited capacity to move into this market if they chose to.

Broadly, the commercial banks are not well set-up at present to address mass-market agricultural finance (perhaps with the exception of Equity Bank). It has not been their strategy to bank this market so it is understandable that they have not invested in the operating

model required. The operating model required needs both heavy application of data and technology to reduce costs, improved consistency and predictability of lending, and a widely distributed network of highly trained frontline staff who can engage with customers face to face. This is expensive and difficult to implement, and requires a long-term approach to the market.

SACCOs have the necessary branch network, but many of them lack the technical and management capacity (as well as the balance sheet) required to meet customer needs in a much deeper way. MFIs are best suited to high-volume, microlending which naturally gravitates towards urban households in lower socioeconomic groups.

It should be recognised that one of the key ingredients in expanding access to finance for agriculture is the ability to make a healthy profit from it. This is unlikely to come solely through lending operations. Rather, financial institutions will need to develop and sell a range of financial (and perhaps non-financial) products to customers to generate sufficient cross-sell income to cover the costs associated.

Investment in product development, staff sales skills and customer relationship management (CRM) technologies in particular are likely to be required.

4.3.7 Technology

Amber/Green status:

Comparatively, Kenya is relatively advanced in terms of banking technology. While technology will be extremely useful in reducing costs of business and generating additional income, it does not replace the need to have a highly trained and motivated sales force.

The Kenyan financial sector is an enthusiastic adopter of technology. While this is exemplified in popular culture through M-Pesa and other successful mobile and ATM/Point of Sale (POS) banking services, commercial banks in Kenya have generally recognised the benefit of investments in other banking technologies (e.g. CRM, risk management systems etc). Successful implementation is always a challenge but organisations learn from experience and become better at this over time.

Mobile banking has been a huge success at expanding outreach to basic transaction services. Private sector counterparts from the mobile banking industry were keen to stress that the success of mobile banking in Kenya is principally due to effective innovation and a ready market. There was a sense of annoyance at the perceived »hijacking« of mobile banking success by the development sector, which they felt were relatively ancillary to the initiative. They warned of the dangers of »forcing« markets to adopt certain models, and they had little doubt that most African markets would adopt and adapt the technology when the time was right.

Mobile banking will, however, never replace face-to-face contact in the world of lending. Perhaps in the long term, the data and information environment for financial services will be so rich that true automated, credit scoring can be applied for larger loans, but in the foreseeable future the lending officer has a secure role. Mobile banking is likely to play a much greater role in enhancing the data environment and helping to model customer behaviours, both from a risk management and marketing standpoint.

Telecommunications development seems to be proceeding apace in Kenya, and the development of national high-speed internet access will no doubt play a crucial role in expanding access to finance. It enables branches and sales teams to travel more widely and remotely, while remaining integrated with the organisation. They will be able to sell products and use in-house credit assessment tools while on the road.

4.4 Micro-Level

4.4.1 Commercial Banks

Amber/Green status:

The commercial banking sector in Kenya is recognised as one of the most advanced in Africa. Some of the innovations in the retail sector have been pioneering, and the country has a robust if uncomplicated corporate banking business. Staff are generally well-educated and motivated, and management well organised. That said, the sector has very little exposure to SME and agricultural finance which affect the scope of this study. Convincing and helping commercial banks to increase exposure to this sector is instrumental to success.

Since independence, Kenya's banking sector has been largely dominated by the local operations of large, international British banks such as Barclays and Standard Chartered. They have since been joined in the top-tier by Kenya Commercial Bank, a locally-owned institution. The big commercial banks in Kenya tend to be focused on corporate banking, international trade and retail banking, particularly for the upwardly mobile, urban, salaried classes. They generally have niche exposure to the agricultural sector through lending to large commercial farms or agribusinesses, and are wary of mass-market agricultural finance.

Other entrants include a range of national (e.g. Nigeria's Diamond Trust Bank and United Bank for Africa), regional (e.g. Stanbic) and international banks (e.g. Citibank). Many of these have strategies based on picking up niche corporate or retail customers, and underpinning the parent group with a more diversified risk and revenue base. A couple of recent entries by Islamic banks have had remarkably rapid success in picking up market share.

Other major local players include the Co-operative Bank of Kenya and Equity Bank. Their strategy, market franchise and operating model are more geared towards generating exposure to smaller farmers and agribusinesses than the largest commercial banks.

Co-operative Bank was formed out of the co-operative movement to be its principal financier. This is a common development globally, as co-operatives generally find it more difficult than true »private« enterprise to access finance. While the sector is competitive and Co-operative Bank has been floated, SACCOs still hold an overwhelming share of the bank and provide most of its business.

It is interested in agriculture where the market is well-structured and organised. For this reason it is keen on dairy, coffee and horticulture. It sees the mango industry and other fruit trees as particularly chaotic and inefficient.

Equity Bank is a commercial bank differentiated by its strategy to address broad-based, socioeconomic development. It has the largest market share of bank accounts by virtue of its expansion into both urban and rural lower-income groups. The bank is supporting agriculture, though the strategy was questioned after heavy losses over its exposure to the maize sub-sector.
Both institutions expressed how vital co-operation with development agencies and extension services are when they are considering extending their lending policy.

4.4.2 SACCOs

Amber status:

In our view, SACCOs are an absolutely vital frontline financial services provider. Though it is unfair to generalise, most are undercapitalised to meet the riskier profile of longer-term agricultural finance, and also lack the banking skills to manage more complex portfolios. They are currently under-regulated and relatively disorganised as a sector, though this is changing.

One of the most successful examples of co-operative development in Kenya is found in financial services. The country is served by a large number of local credit unions, also known as SACCOs.

SACCOs range from small community-based organisations running a compulsory savings, member-based lending scheme to more developed models encompassing a diversified product range open to non-members.

Small SACCOs typically have a voluntary management committee, elected by the members from the local community, with little commercial or financial sector experience. Their capacity to develop and adapt to new markets is relatively low, though they tend to recognise their weaknesses and run a conservative, compulsory savings-based, short-term lending model. They are also comparatively small. For example, the total combined outstanding portfolio of the SACCO movement would be roughly equivalent to a mid-cap commercial bank in Kenya.

SACCOs in Kenya are effectively decentralised, unregulated and independent. This is beginning to change, however, with the recent introduction of a new SACCO law which will give some regulatory powers to the Ministry of Co-operatives and Marketing through a new SACCO Regulatory Authority.

SACCOs group together in a number of associations for the purposes of mutual support and representation. The most notable of these include KUSCCO (Kenya Union of Savings and Credit Cooperatives) and KERUSSU (Kenya Rural Savings and Credit Societies Union). They provide a range of advocacy, training and other intangible and administrative support services.

4.4.3 Agricultural Finance Corporation (AFC)

Amber/Green status:

The AFC is an extremely weak institution with a history of problems. It is difficult to understand what role it wants to play, or is capable of playing, in the broader agricultural finance sector.

The AFC was set up post-independence by the government of Kenya to provide long-term credit for individuals and groups to buy farms, to finance farm improvement, and to provide seasonal credit for production. It was gradually run-down as an institution through a mix of political interference, mismanagement and neglect. Regrettably, the AFC also indirectly contributed to a poor, repayment culture by farmers, as the practical enforcement of default measures was prevented or ignored. Currently the AFC is very small, in terms of both its outreach and overall portfolio size. The ASDS points to a strategy to rebuild the AFC, however, this would be a long-term project.

4.4.4 Microfinance Institutions (MFIs)

Amber/Green status:

The microfinance sector in Kenya seems to be booming, though it has little engagement with agricultural finance. The model is well suited to short-term, high-interest household loans for the urban mass markets. They are not, as a rule, interested in term finance, though some institutions are transforming into microfinance banks with a wider mandate and authorisation to collect deposits.

MFIs rank well behind the SACCO sector with total combined assets representing a fraction of the assets of a mid-cap commercial bank.

As in other parts of the world, Kenyan MFIs work best when focused on a particular target group or market, offering short-term credit at high interest rates. Some have developed a successful franchise and hope to transition to become deposit-taking institutions and, in the longer-term, true commercial banks. MFIs are particularly concentrated on urban areas, where the population density facilitates their high portfolio churn.

4.4.5 Venture Capital and Private Equity

Amber status:

Investors are generally quite attracted to Kenya. It has a familiar legal code and commercial culture, which is generally supportive of investor rights. To that extent, it is ahead of many other countries in Africa. The major difficulty seems to be a dearth of investable opportunities, where local owners have the required management and financial skills, and are willing to make appropriate concessions to investors in order to attract capital.

Venture capital and private equity funds are still in a nascent state in Kenya, though seem to be expanding steadily. Of particular interest are funds focused on the SME sector, and especially agribusiness. Firms such as African Agricultural Capital, Citadel Capital, AfricInvest and Root Capital seem to be pioneering this niche, albeit in a small way. The future role of sovereign wealth funds in agricultural investment may be vital, as countries attempt to embed food security within their investment strategy. There is also a plan for the East African Development Bank to establish a venture capital fund estimated to be around US$40m (Ksh2.8bn) that will focus on SMEs, some of which could be directed towards agribusiness. At the top end, a fund like Act is makes larger transactions of US$2m plus, and they also have a mandate to target agribusiness.

4.4.6 Insurance

Amber/Green status:

Insurance is comparatively developed in Kenya, and the lack of certain products (e.g. crop/weather/herd insurance) cannot really be attributed to industry failure. These are difficult products to develop in even the most sophisticated markets. The major complaint from primary insurers was the lack of depth and competitiveness in the reinsurance market.

Kenya has a relatively well developed and innovative insurance industry, with a wide range of private sector suppliers and brokers. Particularly relevant to this study is the availability of livestock and crop insurance.

In relation to livestock, companies like Blue Shield and CIC Insurance recently began offering insurance for individual animal mortality. Growth of the market has been subdued, however, as take-up of the product is slow and portfolio growth is limited by limited reinsurance options.

Pastoral insurance, or insurance for herds is not currently available, and the fragility of livelihoods dependent on ranging herds is a major concern for development agencies and the government. A number of schemes have been mooted for index-based products linked to, for example, animal mortality rates at a district or regional level, rainfall, and/or satellite imagery indicating the relative dryness of defined geographical areas. Some of these may have applicability to both livestock and crops, but are very much in the concept phase.

One of the major barriers to this market is the lack of relevant and reliable statistical data on which to build actuarial models, and on which to base event triggers.

4.4.7 Development Agencies

Amber/Green status:

Kenya is an attractive destination for development agencies interested in the financial sector. As a result there are a wide range of initiatives. A donor financial sector co-ordination committee has been formed but it is not clear how effective this is in improving co-operation and the sharing of knowledge.

A number of initiatives from a range of development agencies target access to finance generally and agricultural finance specifically. The Kenya Access to Rural Finance (KARF) programme is a USAID-funded project, which also takes a value chain approach to the issue. Notable projects include an analysis of the financial services needs of the Omena fish value chain, the avocado value chain and, most relevant to this study, research and analysis of the dairy value chain. In addition, KARF is promoting a number of innovative developments including mobile-banking services and their integration with the nascent credit bureaus system. KARF also administers a credit guarantee scheme called the DCA (Development Credit Authority), which underwrites various development lending credit lines with commercial financial institutions.

The USAID COMPETE programme is also involved in a range of initiatives to support agricultural finance including:

- Establishing an agricultural finance network of financiers and value chain participants to support market-led development;
- Working with the Kenya School of Monetary Studies to develop a qualification in Agricultural Finance;
- Developing equity and loan guarantee funds for agriculture; and

- Developing information technology (IT)/Management information systems (MIS) platforms to help better capture financial services data in relation to agriculture.

DFID is engaged in the Kenya Finance and Legal Sector Technical Assistance programme, which mainly works on strengthening financial sector infrastructure and the operating environment. DFID is also a founding member of the FSD Trust, along with the Swedish International Development Cooperation Agency (SIDA), the World Bank, and the Ministry of Trade and Industry. The FSD Trust is an independent trust focused on financial sector development in a wide range of topics.

Relevant activity from AFD includes a EUR6mn bond guarantee for Faulu, a local MFI, a EUR10mn wholesale credit line for MFIs, and a Technical Assistance (TA) grant of EUR0.6m to support the Microfinance Sector Support Credit scheme project and to set up a microfinance unit within the Ministry of Finance. Signing of the financing agreement is expected soon. It is also involved in financing a number of large water and electricity projects which will impact rural areas.

PROPARCO is a subsidiary of AFD focused on private sector development. It has exposure of around US$100m through a variety of credit lines to local and international banks, for on-lending to SMEs. In terms of agribusiness, these lines have mainly been used for the tea and horticulture sub-sectors. PROPARCO also extends credit directly to larger private businesses, where requirements are in excess of US$2mn. It is also involved in equity investments through its holding in the Acacia Fund, a private venture capital fund.

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 smale-scale farming a challenge.

The SACCO provides basic savings, credit, transactional and cash mangement 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 6: Profile of Savings and Credit Co-operative

5 Value Chain Analysis

5.1 Dairy

Dairy is a major agricultural sector in Kenya, with a national herd estimated at 3.5 m head, mainly located in the medium-high rainfall areas. In 2008, milk production was estimated at 5.1 billion litres valued at Ksh100bn, which effectively makes the country self-sufficient in milk production at current demand. Small-scale farmers produce over 80 % of dairy produce.

We looked at the dairy value chain in general, and specifically at the adoption of biogas technology as part of the farming model. Briefly, biogas technology can be used to process the manure of the dairy cow into flammable gas which can be used for energy and/or heat. While biogas can be used to convert a wide range of biomass from crop production, food processing and other agro-industrial processes, it is particularly well-suited to dairy, as the business model revolves around a stable group of animals which produce a regular and consistent supply of manure.

The gas can be used to substitute for current farm gas expenses or to generate additional income. This is not a new idea, and Kenyan farmers have been experimenting with biogas since the 1950s. It has never been adopted on a wider scale, however. There are a range of different technical solutions from industrial scale commercial equipment costing millions of dollars to a pretty simple affair applying a plastic bladder and piping which costs several hundred.

In this case, the consultants were looking at an approach promoted by GIZ consultants involving the building of an underground brick dome, where the biomass is digested. This technology was chosen because, in the view of the experienced engineers, it combines the relative benefits of cost-effectiveness, simplicity and longevity, which are most appropriate for the target market of dairy farmers.

The economic benefits of biogas can come in four ways:

- Substitution for household fuel costs such as bottled gas and/or firewood;
- Additional income generation by using the biogas for on-farm enterprise (e.g. baking);
- Time savings and productivity improvements resulting from less time spent collecting fuel; and
- The resulting slurry is an effective fertiliser which can be used on a farm garden.

The size, (and therefore cost), of the units can vary from Ksh150 000 upwards, though GIZ provides some subsidy. Nevertheless, the cost is a large multiple of the accumulated capital of the average farmer. However, the full potential could be realised by also bringing in the strength of the dairy co-operatives, which could help select, assist and monitor borrowers. Dairy is a relatively attractive sub-sector in Kenya, of interest to both development agencies and bankers. Financial institutions are conscious of the strong domestic market, the stable prices, can understand the risks, and appreciate the vital role that dairy co-operatives play in providing a secure market.

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 succesful 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 coverts 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 7: Profile of Diversified Farm Enterprise

5.1.1 Producer Capitalisation

Buildings and Infrastructure

The modern model for dairy farming is the zero-grazing approach, where animals are farmed in an enclosure and fed with arable fodder supplemented with animal feed concentrates and additives. Zero-grazing units (ZGUs) vary enormously in design and size, but most in Kenya are constructed by local craftsmen using locally sourced materials. A wide range of plans which can be customised to the precise needs of the farmer are also available. This helps keep costs down, but a ZGU is still a major capital investment for the farmer. A ZGU for three to five cows, for example, may cost as much Ksh200 000 (about US$2 000) for building materials and labour.

The vision is to combine ZGUs with biogas digestion because, while biogas doesn't impact on the dairy value chain directly, it has other economic benefits for the farm enterprise. There are a wide range of different biogas models available including floating drum and tubes, but GIZ has determined that the best model for Kenyan dairy farmers is the fixed dome. The essence of this model is a large brick and concrete dome buried beneath the earth. The animal manure is fed into this chamber and digested, producing gas which rises to the top. The counterbalancing liquid slurry provides some pressure to the gas, which is tapped at the top of the dome and can be piped small distances. These biogas units, however, are a major capital item for a small dairy farmer with the GIZ product offer ranging between Ksh150 000 for the smallest 12m3 model up to Ksh500 000 for the very largest. The smallest 12m3 model is suitable for the average small dairy farmer with two-three cows and GIZ also provides a subsidy of Ksh35 000 k.

➔ Financing

Though some grant schemes and subsidies are available, the typical small dairy farmer would need access to medium-long term finance to capitalise their farm to the level of sophistication and modernity described. These are long-term productive assets and will need terms and conditions to match. While SACCOs seem to be enthusiastic about these projects, they are uncomfortable with taking larger, longer-term assets onto their balance sheet.

The capital financing of dairy producers requires the engagement of commercial banks, and there is certainly strong interest from at least a couple of institutions. Commercial banks will need an effective operating model to make this segment profitable, however, and we believe that the best approach is to leverage the relative strengths of the SACCOs and dairy co-operatives. Flexibility should be shown in approach but, for illustrative purposes, we could envisage the following scenario. A commercial bank would work with a specific SACCO to agree a shared credit risk and reward sharing arrangement, with the balance sheet of the SACCO supported by a competitive, long-term, stand-by, credit line. The dairy co-operative (perhaps with development partners) could be engaged to help screen and monitor borrowers, and perhaps be induced to guarantee at least a portion of the portfolio (as an incentive to apply the lending criteria rigorously). At the very least they should make sure arrangements with the SACCO are in place to make sure that producer's dairy sales are paid into a dedicated account.

An ancillary development should be the development of a suitable insurance product, either to replace the loss of these vital assets or to cover the remaining loan exposure. Arrangements should be in place to develop relationships between the SACCO and a local insurer. The adoption of insurance cover could become a compulsory part of the credit policy, or a potential income-generating cross-sell opportunity depending on the circumstances.

Livestock

The other major asset required for dairy farming is cows. A cow is typically worth between Ksh50 000 and Ksh100 000 for example, and most small farmers have up to five, with many having only two or three. Yields from dairy are currently at 5 litres per dairy cow a day, which is about 20 % of the potential of a high-producing dairy cow. This is largely due to the poor genetic make-up of the national dairy herd. The government has been trying to address this through multiplication farms and artificial insemination services, but the investment has been far lower than required.

➔ Financing

A mix of approaches can be applied to help farmers expand both the size and productivity of their herd. Finance could be made available for buying animals and, indeed, some financial institutions are entering this market. The feasibility of these loans is markedly different from many other types of agricultural lending because a dairy cow immediately becomes a producing asset. This means that the risk profile of the loan is reduced, and the tenor can be shortened, making it a much more attractive asset for the balance sheet. This product would be well-suited to SACCOs, however, one of the limiting factors is the shortage of livestock or loan insurance to protect the farmer against the untimely death of an animal.

CIC Insurance has developed a cow insurance product. It is finding portfolio growth restricted by low customer take-up and the lack of a cost-effective reinsurance market to help diversify risks. While dairy cows are not exposed to some of the catastrophic drought risks that are presented by the large-scale insurance of cattle in the Arid and Semi-Arid Lands, they do present highly correlated risks in relation to disease. In terms of market development, we believe that the future for cow insurance (or perhaps an equivalent cow loan insurance product) lies in working with SACCOs to bundle it with cow loans, either as an intrinsic part of the product, or an optional cross-sell opportunity.

Other Equipment

Other machinery and equipment is often sourced by farmers from private sector suppliers or the farm shop attached to their local co-operative. One of the major deficiencies is the lack of farm-level milk cooling and storage equipment. Many co-operatives run a daily collection cycle, which means that a failure to adequately store and cool the milk from the evening milking means that much of this production has to be disposed of. It is clearly a product which can have an immediate and ongoing economic benefit for farmers, and consideration should definitely be given to developing a related financial product. Naturally, this also assumes that farmers have access to cost-effective energy supplies required to run it. This illustrates how thinking that makes the links between various strategies to address the agricultural sector is needed.

➔ Financing

Both SACCOs and commercial banks could consider developing loan products where the level of demand is sufficient. In our experience, tie-ups with strong local equipment importers and distributors work best, especially if there is a viable secondary market for used machinery and equipment. Unfortunately, the benefits of this are lost due to the disincentives for leasing products under the current tax regime, the lack of an effective moveable asset register, and an ineffective judgment and enforcement regime. However, should the co-operatives and development partners take a strategic interest in certain types of equipment as intrinsic to the dairy enterprise, then the financial sector is likely to take a more positive interest.

5.1.2 Working Capital and Input Supplies

While dairy cows will increasingly be raised in ZGUs, farmers still typically harvest their fodder, such as Napier or Bana grass, from their own lands. Increasingly, feed additives and concentrates are important in intensive dairy production. They markedly improve production and allow farmers to intensify production with a smaller landholding (or use the land for other productive purposes). Fodder and feed make up most of the operating costs of the dairy business, as much as 80 %.

Fodder and feed are available from a wide range of stockists, but prices are high due to market inefficiencies. Some stockists will allow a small amount of trade credit for reliable customers but this does not seem to be widespread. More commonly, farmers who are members of co-operatives will have access to discounted inputs through the co-operative store, and perhaps some trade credit. The lending balance is credited from the milk supplies the farmer sells to the co-operative.

The final major running cost for dairy farms is veterinary services, both routine and emergency. These are generally provided on a cash-on-delivery basis. Given the intangible nature of this service it is difficult to envisage a loan product built around it. Rather, the strengthening of the balance sheets of suppliers could help them to ease credit terms for customers in the longer term.

➔ Financing

The ability of many input suppliers to expand trade credit is limited at present due to their poor capitalisation. There are various ways to enhance access to finance to input suppliers (e. g. through some sort of credit enhancement from an IFI) but it should be a principle that a commercial bank would be willing to share some of the risk. Bankers feel that many companies are undercapitalised and undermanaged, and it doesn't help anyone to over-leverage these firms. It may yield longer-term benefits to look at the risk capital profile of these market participants, and whether direct equity investments in high-performing or high-potential businesses, may prove more successful in promoting growth and easing credit. A general comment was that input suppliers are sometimes lackadaisical in their approach to the quality, quantity and timeliness of supply compared with buyers and processors. The logic is that processors (co-operatives in this case) are more highly incentivised to effectively support producers (both as co-operative members but also clients). Perhaps supplier finance credit lines could be developed by commercial banks with promising co-operatives, partially guaranteed by development agencies or IFIs. Those co-operatives with strong relationships with extension programmes from development agencies would be a high priority, as banks get comfort from the engagement of professional, international, technical expertise.

5.1.3 Processing

Dairy Co-operatives and other processors

Dairy co-operatives are among the more successful examples of the co-operative movement in Kenya. They play a pivotal role in the off-take and marketing of dairy produce in the country. While many are very small and lack economies of scale, some have many thousands of members and are national brands.

Typically, dairy co-operatives are focused on a particular geographic area, and set up a network of collection centres that are accessible to farmers. Farmers deliver their milk to these centres, have the volume signed off at a certain price, and have payment made in due course to their bank account.

Co-operatives also facilitate access to a wide range of other services for farmers. As outlined, many have a farm shop attached to the collection centres, where farmers can pick up supplies and equipment. This takes natural advantage of the bulk-buying power of the co-operative and their inbuilt distribution network. They also use this network to provide or enable a wide range of extension services including EDS, Artificial Insemination Services (AIS), adopting ZGUs, and biogas units, for example. Despite the promising beginning, most co-operatives remain undercapitalised, and lack the professional management and skills required to manage a growth strategy. They are keen to expand services, including financial services, to members but lack the financial and business wherewithal to be more successful. An approach to simultaneously provide both financial and management support to selected Cooperatives should be adopted.

There are also a number of privately-owned processing operations which could show similar potential for development, and may be more attractive to commercial financiers if co-operatives prove particularly difficult to finance.

➔ Financing

Many cooperatives find financing more difficult than their private sector counterparts in processing. This is crucial in explaining the development of the cooperative banking movement throughout the world. The Co-operative Bank of Kenya is the natural financier of choice for cooperatives small and large, though some of the larger and more profitable cooperatives are attractive to the commercial banks.

TA and EDS to improve the performance of high-potential co-operatives should gradually instill confidence in their bankers. It might be feasible even to develop credit enhancements for this sector, but this should underpinned by a genuine risk appetite from the other commercial banks, particularly the Co-operative Bank of Kenya.

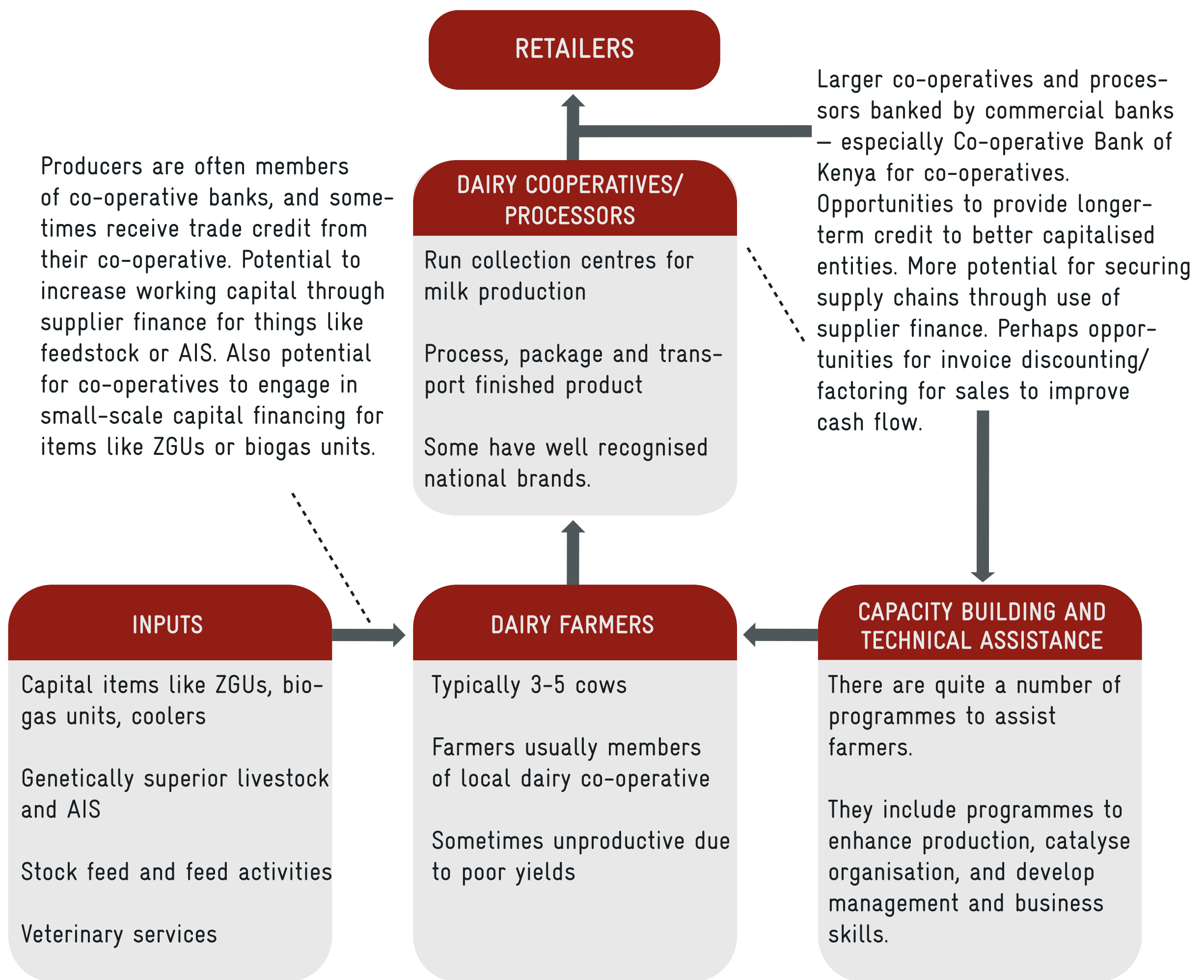


Figure 8: Diagram of a Typical Dairy Value Chain

5.2 Mangos

According to the latest data we can find, mango production in Kenya is estimated at more than 183 000 tons. Mango accounts for 11.4 % of total hectares under fruit production, after bananas, citrus and pineapples. Production is underpinned by small (a typical farm could be around two hectares for example), rain-fed plantations spread across the country. Mango farming is a relatively poor business, and the sub-sector has a significantly higher incidence of poverty than many other agricultural sub-sectors. The inter-cropping of other produce along with mangos appears to be a vital tactic in improving income.

Mango is a seasonal crop, and supply and demand fluctuates markedly throughout the year. Farm gate prices during gluts drop to as low as Ksh1 per piece (Ksh2.50 wholesale) for local varieties and Ksh5 for exotics (Ksh6-Ksh8 wholesale). Pests and disease are also major problems, affecting both the size and the appearance of the fruit. Mango production is a labour-intensive business with high use of expensive fertilisers, pesticides and fungicides. Financial studies of the feasibility of small mango plantations reveal a relatively slow payback period and low profitability.

The low quality of mangoes produced by Kenya and the poor post-harvest handling means that the crop is of low value compared to international competition. Hardly any of Kenya's mango crop is exported, and most is sold unprocessed in local markets for domestic consumption. Indeed, increasing urban incomes may lead to an even greater drop-off in demand for the local varieties, as consumer preferences switch to the creamy fleshed and juicier exotic varieties. Even locally-grown exotics (which make up about 30 % of current production) may be under threat from imports due to relatively higher costs and lower quality from poor production practices.

There is little local value addition at any level and, indeed, Kenya already sources much of its mango juice supplies from imported frozen concentrate. Currently, less than 1 % of mangoes produced in Kenya are processed. The better quality fruits are exported, and processors are left with the lowest quality fruit.

In speaking to financiers about agriculture, mango was singled out several times as a difficult sector, certainly in its current state. There are prospects for transforming productivity through adopting new exotic varieties, though investment at producer level by commercial finance will be difficult to facilitate. There may be are more opportunities in promoting value addition at the agribusiness level, particularly in processing local production for a growing domestic consumer market.

5.2.1 Producer Capitalisation

Plantation Development

One of the principal issues affecting mango production in Kenya is the poor quality of the local varieties. Most production is unsuitable for export and less than ideal for juice production. Naturally there is a need for capital to support re-plantation of huge areas of land if the industry is to be internationally competitive.

The typical life span of a mango tree is about 25 years. The first yield from mango tree can be expected within two to three years and yields can increase gradually for over 20 years. A mature tree can yield 300-600 fruits, are planted in densities of rough 125 trees per hectare, and production of about 10-15 tonnes per hectare is achievable if regular intensive maintenance is provided. The quality and quantity of mangos produced is also linked to location, where elevation, temperature, and soil effect the end product.

New varieties are usually purchased from nurseries, at maybe roughly Ksh100 a seedling. The bulk of the cost is made up of the time and expense of the regular application of chemicals (e. g. pesticides and fungicides) and fertiliser required in the early growing phases. Given the time it takes for a mango tree to become properly productive, estimates suggest that it could take between three and nine years for a mango-based enterprise to break even.

➔ Financing

While the general lack of term finance in Kenya is a problem, the major impediment to the capital financing of small-scale mango production is the very long payback. It is difficult to envisage local commercial finance being directed in this way. If market participants and stakeholders wish to strategically transform the production of mangos in Kenya, they must look to other solutions. Perhaps, if the environment was right, larger agricultural investors could be induced to establish factory farms, and one might envisage working with them to establish outgrower schemes. We are not aware of any industrial-scale mango producers in Kenya, however.

5.2.2 Input Supply, Equipment and Working Capital

Farmers have a range of requirements including:

- Seedlings for re-plantation, which are usually sourced from a specialist fruit tree nursery;
- Heavy requirements for fertilisers, pesticides and fungicides, available from a range of stockists across the country;
- Additional minor items such as basic tools, spraying equipment, and packing boxes; and
- Potential value addition equipment such as slicers and dryers.

➔ Financing

While none of these items are hugely expensive, the overall picture of mango farming is that it is a high-cost, low-margin business. Even in a situation in which trade credit was the norm, it is difficult to see how mango farmers would be a high priority for facilities. Perhaps MFIs with a development agenda could help address this need from a poverty alleviation point of view, but issues of sustainability should be highlighted.

In relation to input and equipment suppliers more generally, there may be real merit in expanding financial access for high-performing companies. While this may not have a huge impact on the development of the mango value chain specifically, it could have more far reaching implications for the agricultural sector as a whole.

5.2.3 Post-Harvest Handling, Transport and Logistics

Like many value chains, in both Kenya and the rest of Africa, mango is a sub-sector in which local traders (often called »middlemen«) play a major role. Farmers generally sell their produce at the farm gate to these traders who have the contacts, knowledge, initiative and finance (i.e. to pay for produce up-front and arrange for transport) to bulk the produce and sell for higher prices in various wholesale markets.

They are generally castigated for the considerable margins they make between buying and selling but then, as they point out, they do take considerable risks in the handling and transport of the fruit. To some extent improving the very high wastage rate is in the hands of the middlemen (i.e. better handling and packing approaches), but there are many other risks and costs including storage (e.g. the lack of cold storage facilities), transport (e.g. the lack of refrigerated transport), delays (poor transport infrastructure), bribes (required to keep a highly perishable crop moving), undetected disease or infestation, not to mention the uncertainty of market prices. They do have a reputation for »fast and loose« behaviour with formal and informal contracts, and payment obligations (though it appears that most participants in the value chain have a similarly lax interpretation).

Regardless of the relative fairness of these arrangements, middlemen are a feature of the environment. Working with middlemen rather than trying to disintermediate them in this instance, might have a greater impact on the overall productivity of the industry. This could include building the formality of their business practices, helping them to adopt more efficient supply lines, and using them to intermediate credit given their superior market knowledge.

➔ Financing

Opportunities for investing with traders, warehousing firms and hauliers may be a possibility, These, would benefit from the intervention of the development community. This could be in the form of some sort of credit enhancement for access to commercial bank finance, or perhaps even equity investments. Section 6 (Critical Success Factors and Recommendations) considers the approach which could be adopted towards commercial players in agricultural value chains.

A related facet is the poor state of the roads in Kenya, and related public investment. Where public sector spending plans are effectively aligned with development opportunities in agriculture, then perhaps there is scope for PPP arrangements to leverage the scale of finance available for long-term infrastructure. Again, potential approaches are discussed in more detail in Section 6.

5.2.4 Processing and Marketing

There is very little processing of Kenyan mangos for local markets, and most processed products (e.g. juice, jam and dried mango) are imported. Kenya has a large and growing consumer base, which represents an attractive market for domestic agriprocessors which can develop products that can compete effectively with imports. The adoption of exotic varieties could also encourage the growth of a high-value domestic and international trade in unprocessed fruit.

Though the direct economic benefits of import substitution and increased employment are to be welcomed, the expansion of local agriprocessing has major benefits for those further down the value chain. Agriprocessors provide a stable and predictable market for production, much more so than the highly competitive and unpredictable international market.

While a thriving micro- and small-agribusiness sector is vital for the future, it is likely that the greatest short-term improvements in expanding the segment lie in working with medium-sized and larger businesses. This also happens to be the segment in which the commercial banks are likely to have most interest, and have greater potential for co-operation. The growth of larger businesses need not have a detrimental impact on smaller enterprises (including producers), and often it has precisely the reverse effect.

➔ Financing

While commercial banks are generally wary of agriculture, they can be interested in agribusiness, particularly those on the larger side. Micro and small enterprises find it much more difficult to access finance, however. On the demand side, the agriprocessing sector is relatively small, and characterised by low capitalisation, and inexperienced management and technical personnel.

This means there is a real shortage of attractive opportunities for development agencies and financiers. Section 6 explores how EDS can be used to build the capacity of agribusinesses and make them more attractive to financial institutions.

This still leaves the problem of undercapitalisation that worries the banks. Development agencies could consider developing some sort of credit enhancement product to stimulate interest. However, this should be done only if they believe that the application of such tools is only to overcome a short-tem lack of confidence and experience on the part of banks.

Another more direct approach is to consider the use of equity capital. Assuming it is possible to find investable opportunities with owners willing to make appropriate concessions in terms of ownership and management control in return for capital, this can have several benefits:

1) It injects professional management expertise into the business;

2) It strengthens the balance sheet of the enterprises; and

3) Considering the above, facilitates the further access to debt finance as the attitude of banks is improved.

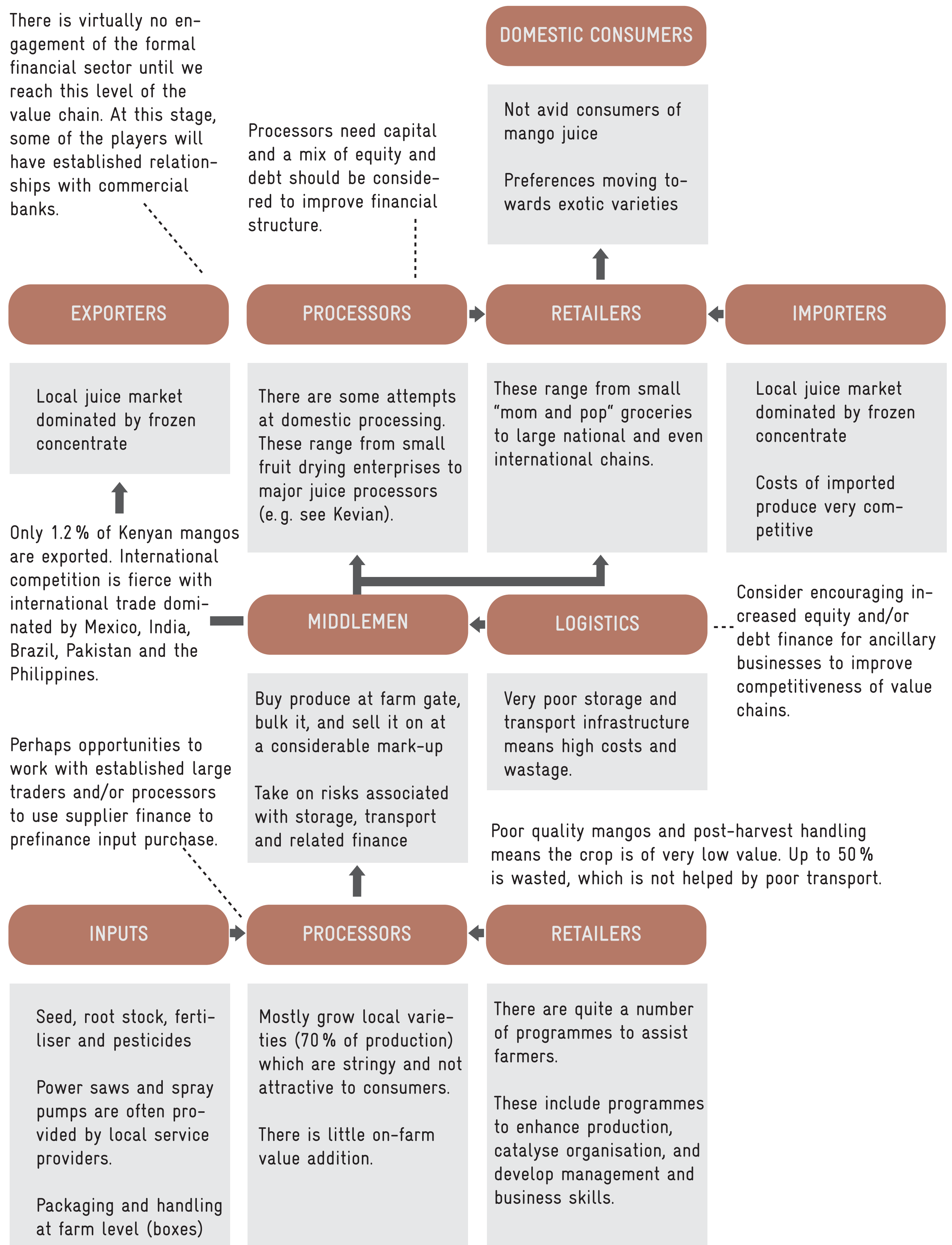


Figure 9: Diagram of a Typical Mango Value Chain

Case Study: Kevian Ltd. (Local Processing Company)

Kevian is exceptional in being a successful local agriprocessor. It was established 21 years ago as the first tetrapak packaging company in Kenya. Originally the company concentrated on packaging imported juice concentrate, but in the last couple of years has begun processing local mangos into juice and concentrate for both local and export markets. Currently it processes over 110 tonnes of fruit into juice every day, and are about to double capacity with a new factory near Thika.

Senior management fears that the business faces unreasonable hurdles including high taxes, poor infrastructure, and a lack of suitably qualified staff. There are major difficulties with finance as well, with high interest rates and all borrowings required to be fully securitised.

Figure 10: Profile of Fruit Processing Company

6 Critical Success Factors and Recommendations

This section of the report is a suite of broad recommendations which we feel will assist the value chain approach to financing the agricultural sector. They therefore tend to concentrate on aspects of value-chain development and financial sector reform that directly impact on the topic. It is not our intention to reflect all the well understood elements of successful value chain development which indirectly impact the financial feasibility of value chains and their participants.

The study is oriented towards promoting private sector capital towards endeavours which are mutually rewarding, and it does not reflect deeply on the poverty alleviation aspects of agricultural finance. This is not remotely dismissive of the efforts of colleagues working on this field, but rather a recognition that in relation to financial services we must recognise the following:

- Finance is limited, mainly in private hands and allocated by market principles;
- It is not allocated randomly, but by the principles of risk and reward;
- Governments and central banks have an overriding duty to ensure the stability of the financial sector;
- The overwhelming fiduciary duty of financial institutions is to shareholders, depositors and members; and
- Financial support must be sustainable as market exit and/or default events can create unnecessary hardship and ruin markets for others.

Many of the recommendations are mutually supportive and, to some extent, interdependent. It is difficult to separate them clearly but we have done so for the sake of readability. However, they should be viewed as a suite of proposals rather than a set of mutually exclusive options.

6.1 Macro-Level

6.1.1 Co-ordination with Agricultural Strategy and Co-operation with Extension Services

Government needs to show leadership in agricultural development to overcome the reservations of the financial sector. The ASDS and the establishment of the ASCU is hopefully a step towards this goal, and the pro-growth aspects of the plan will be welcomed.

In step, it is vital that development agencies co-ordinate their efforts in agricultural finance with this plan. Agricultural finance is difficult, and it requires all stakeholders to move in the same direction to be successful. It is therefore recommended that development agencies interested in financial sector development establish strong links with the ASCU. Ideally this would be as a unified voice as already suggested.

Related is the comfort that lenders gain from working with agricultural sectors that are well supported with extension services and other programmes offered by government, NGOs and particularly development agencies. Several commercial banks interviewed indicated it was as basic precondition of their interest that farmers were receiving intensive support from trusted counterparties. To this end, it is recommended that financial sector interest in a value chain is considered an integral factor in determining whether it should be a focus for pro-growth value-chain development. Furthermore, it should be considered that any value-chain development programme should include a strategy for engaging with the financial sector at some level.

6.1.2 Improving Co-oparation between Development Agencies in Financial Sector Development

It is not a specific criticism of Kenya or the development players in Kenya to stress the importance of continued co-operation between different international development partners. This is particularly so for those who are motivated to support the Kenyan government in its strategy to address poverty through economic growth.

While there is a financial sector donor co-ordination committee which brings together various stakeholders to improve communication, it could perhaps achieve more. We are impressed by the operations of the FSD Trust. Its funding and governance structure allow it great flexibility to respond effectively to the needs of beneficiaries. We believe that there is a lot to be said for the consolidation of financial sector development resources into independent trusts, which will support the concentration of resources, the harmonisation of advice, and the co-ordination of activities.

This will also address two related issues:

- **Improved human resources management:** in particular the ability to set reward and incentive policies that attract and retain highly skilled local and international staff. The development sector is generally ineffective in attracting high-calibre financial sector staff away from the private finance sector at present. It is essential for the credibility and effectiveness of any initiatives that they are represented by strong personnel; and

- **Improved knowledge management:** there is currently no clear framework for the collection and maintenance of data from financial sector development activities. Intangible knowledge is being developed and lost on a regular basis, and this is exacerbated by the constant turnover of personnel. Hopefully any framework developed would also be co-ordinated on a regional and perhaps continental basis, to make the most of synergies.

6.1.3 Improving Financial Sector PR through the Organisation of Small Farmers

The ability of small farmers to organise themselves into progressively more close-knit and larger groups is such a vital quality that it is difficult to over-emphasise. To some extent, from a financial sector perspective, it appears that it will be many years before individual small farmers are able to effectively engage (particularly for accessing credit) with the commercial financial sector. The cultural gap is far too large. While there are approaches that the financial sector can take to close it, experience shows that the organisation of farmer groups brings so many ancillary benefits that encouraging the building of Farmer-Based Organisations (FBOs) should be part of any comprehensive approach to agricultural finance in our experience.

In addition, the organisation of national commodity and producer federations should continue to be encouraged. Specifically in relation to improving access to finance, their role is vital. Credit is not allocated arbitrarily by the financial sector. It is, or should be, distributed according to an overall credit strategy which emphasises the desired exposure to certain sectors and segments. The commercial world generally understands this, and actively lobbies financial institutions in a businesslike way, underpinned by strong analysis and evidence. Agriculture needs to do the same, and to approach public relations with the financial sector with the appropriate level of professionalism and intellectual rigour. There appears to be a large gap in this area and significant improvements in the capacity and funding of agricultural associations required.

6.2 Meso-Level

6.2.1 Improving Agricultural Infrastructure through PPP Investments

A range of large-scale and long-term investments need to be made to improve the competitiveness of agriculture in Kenya. These include physical infrastructure such as roads, warehouses, port facilities, dams and irrigation channels, and power facilities, but could equally include more intangible services such as grading and inspection services, research services, and information technology support, for example.

Establishing a national fund (or budget allocation) should be considered, perhaps to be supplemented by IFIs under certain circumstances, focused on strategic investments in agricultural infrastructure. These investments should be mapped to the overall national policy for the commercial development of agriculture and implemented, as far as possible, in a PPP structure which invites private sector capital and expertise through improved risk allocation.

It was not clear whether the Kenyan public sector already has a PPP unit (usually located in the Ministry of Finance). If so, it should be engaged as a key counterparty by the Agricultural Sector Co-ordination Unit, so that they work together to develop a specific strategy for agricultural infrastructure, and identify high-potential investments and high-calibre private sector partners.

Irrigation PPP, Zambia

The Chiansi Irrigation Scheme in Zambia is a PPP arrangement sponsored by InfraCo Africa, a donor-funded infrastructure investment company. It is structuring finance of around US$30 million to fund an irrigation scheme and linked 2 400ha wheat and soya double crop operation. The 2 400ha is essentially underutilised land on a long-term lease from local smallholders. In addition, the smallholders benefit from secure water supplies and an equity stake in the project company. Full ownership and management of the company will revert to local ownership following the repayment of external debt.

6.2.2 Strenghtening Agribusiness through Equity Investments

To some extent, we feel that the most direct route to strengthening the agribusiness sector (including both input suppliers as well as produce buyers) is perhaps through direct equity investment rather than credit, particularly for 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 assumption 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.

TIFIs and private investors could combine to create an agricultural Venture Capital (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. Investments could also by synergised with EDS to strengthen management and technical capacity. This indirectly addresses access

to credit by strengthening balance sheets and enhancing growth prospects.

This could be combined with the development of a national agriculture investment pipeline. Private capital, both local and international, could be assisted to make their investment decisions in Kenya through establishing 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 EDS, 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 that 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.

To some extent this is replicated in the ASDS, which promotes the development of an Innovation Fund for Agriculture and Agribusiness. However, this is designed to be a competitive grant fund designed to cover investments in all sectors, including the piloting of PPP approaches to address agricultural development. The ASDS also refers to the need to develop an Agricultural Development Fund to invest in the sector. There is no detail on how either of these funds would structure themselves.

African Agribusiness VC Fund

This fund was established by the Rockefeller Foundation, the Gatsby Charitable Foundation and Volksvermogen NV (a Belgium-based social investment company) to invest specifically in agribusiness SMEs in Africa. It aims to return a minimum of 12 % on funds invested, and to work with other private sector investors to mobilise an additional US5mn in risk capital. Its portfolio is made up of a range of debt, equity or mezzanine instruments in a range of investees from Uganda, Tanzania and Kenya.

6.2.3 Developing Access to Supplier Finance through Credit Enhancements

Kenyan farmers, in general, need to use inputs much more effectively if they are to transform productivity. Unfortunately they lack access to credit products built around the seasonal nature of their business, allowing them to pre-finance production cost effectively.

One of the best ways to extend finance down the value chain is through supplier pre-financing. It will be some years before the liquidity of the commercial banks can be effectively distributed to small farmers and farmer groups directly. Agribusiness buyers, including co-operatives, have the network, operating model, knowledge and incentives to try and extend finance to suppliers. Given an appropriate sharing of risk between the fund, the supplier, and of course the ultimate borrower, this is the most feasible option. Consideration could be given to establishing a national agricultural sector supplier finance guarantee fund. It is important that the following elements are also in place:

- Co-guarantors should have a similar attitude to risk and reward, and be highly motivated to ensure that bankable counterparties are selected;
- The buying party should be a reputable and competent enterprise, and will contract with suppliers to off-take their produce; and

- Suppliers are supported by extension services to ensure that finance is spent on inputs and applied correctly.

From the financial sector, the banks with the most likely interest in developing this product line would be Co-operative Bank of Kenya and Equity Bank. We feel long-term benefits would also accrue if the local SACCO could also be engaged, particularly to help with loan applications and account administration. The whole process of cash management should be formalised and digitised, to make sure long-term records of customer behaviour are captured. In addition, written contracts between counterparties should be established and enforced as far as possible.

Buyer Finance, Ghana

Alternatively, input suppliers can be helped to extend buyer finance. Wienco is a major Ghanaian input supplier (mainly fertilisers but increasingly more innovative products like warehousing and transport as well). They are working with the Cocoa Abrabopa Association to extend trade credit to up to 10 000 small cocoa farmers. Their field officers help the farmers to get the best yield possible. Using local knowledge and expertise, they are able to identify productive farmers and help them expand their franchise (as well as their consumption of agricultural inputs). Wienco is keen to solicit additional finance to expand their operations.

6.2.4 Deepenening Value Chain Relationships through Contract Farming and Outgrower Schemes

The most important factor in any agricultural finance intervention is to make sure that there is a reliable, robust and hopefully growing market for the specific produce or commodity in question. Two approaches which help provide comfort to lenders interested in producers are contract farming and outgrower schemes. Contract farming is where the producers undertake to supply a certain quantity and quality of produce at some time in the future, and the buyer undertakes to buy it at a certain price. This helps ensure stability of supply for the processor whilst providing market security for the producer.

Outgrower schemes are generally underpinned by a large commercial farm, which often comes with the benefit of modern and professional farming techniques and technology, good infrastructure and equipment, and well-served by suppliers of inputs and logistics. Furthermore it usually has access to a strong market, for example, a major international buyer. As with the contract arrangements with a processor, nucleus farms can work with small producers in the surrounding area, making contractual arrangements to buy a certain quality and quantity of produce at a later date.

In both examples, but particularly with outgrower schemes, the small producers can be supported with technical and practical assistance to improve productivity. The produce also benefits from the professional post-harvest handling, storage, transport and marketing that comes with the economies of scale generated by larger agribusiness. In addition, some producers and nucleus farms facilitate access to inputs for their small producers, sometimes with a discount generated from bulk purchases and sometimes with some trade credit. Development agencies should be encouraging the formation of these relationships generally, but specifically by promoting the use of supplier finance lines to deepen access to finance for producers.

Unfortunately, as discussed in previous sections of this report, the business culture and legal environment sur-

rounding agriculture does not generally support these arrangements. Too often, promising relationships are undermined by lack of trust between stakeholders, a belief rooted in the widespread disregard for contractual norms and business ethics.

Outgrower Scheme, Ghana

The Integrated Tamale Fruit Company (IFTC) is a 155ha nucleus mango farm established in 1999. The farm cultivates certified mangos harvested from trees grown from high-yield, exotic grafted varieties. It also directly supports around 75 small farmers on the surrounding 50ha through an outgrower scheme. ITFC facilitates access for the farmers to high-quality inputs and advice, and provides a ready off-take market equipped with a modern packhouse and transport arrangements. The cost of the inputs is paid back when they begin to produce an economic crop in about five years. In turn, the ITFC begins to benefit from an increasing sales volume and the capacity to meet larger orders.

6.2.5 Strenghtening SACCOs and Deepening Financial Integration

SACCOs have a major role to play in expanding financial outreach to farmers. As already noted, however, most SACCOs are founded on basic savings and credit models, which severely limit (with some justification) balance sheet growth. Given adequate technical and financial support, it is reasonable to suggest that some of them can break out of this mould into agricultural finance.

The long-term growth of SACCOs is linked to close relationships with the commercial banking sector, as well as other financial sector players such as insurers. This could include the deepening of wholesale credit markets so that high-performing SACCOs can access credit lines to strategically expand their balance sheets. This would also entail working with commercial banks to help them develop an effective credit and marketing strategy for the sector, as well as assisting in developing the risk tools and models they would need to understand and manage this exposure.

The ancillary benefit of strengthening relationships between commercial banks and SACCOs is the transfer of financial sector expertise. This includes advice and practical support across a wide range of topics such as governance and management, marketing and product development, risk management and information technology. Indeed, Co-operative Bank of Kenya already has a specialist unit designed to support SACCOs in these areas.

More sophisticated relationships include strategic partnerships of different types to jointly develop and market products. There is resistance in some quarters to the possible »capture« of SACCOs by commercial banks but, assuming the parties are well informed and the market competitive, then we perceive these partnerships as a natural and welcome development.

Strategic Partnerships with Commercial Banks, Mexico

FINCA is a major Mexican MFI. In 2009, it entered into a partnership with HSBC Mexico to offer prepaid bank cards to FINCA clients. For years, FINCA had relied on an expensive, inconvenient check system for loan disbursements. After studying local markets, as well as reviewing the options available within the microfinance industry, FINCA identified a prepaid card system as the best option for improving its services and reducing its costs. Unlike a debit card, which is linked to an individual current account, a prepaid card is electronically loaded with cash derived from a single pooled account managed by the card issuer.

6.3 Micro-Level

6.3.1 Formalisation of Cash Flows through Financial Sector ICT

Ultimately, the viability of mass-market finance for small producers will depend on the ability of financial institutions to quickly and easily assess the positive cash flow of the farm enterprise. As the more viable producers run their income and expenses for the farm enterprise through a bank's core electronic accounting system, the more they will be able to demonstrate that viability through clear bank records. Furthermore, as financial institutions become more sophisticated in their customer data management, they can develop active strategies to address these segments and market appropriate products.

Producers should be encouraged to open and actively use both current and savings accounts where possible. This not only strengthens the balance sheets of financial institutions, particularly SACCOs, and contributes to the financial security of the producer by encouraging savings, but also supports the digitisation of financial activity.

Arrangements should also be encouraged where producers receive payment for their production directly into a bank account, which they also use to make payments for inputs. The role of mobile banking clearly has an important role to play, as does ATM/POS technology.

Finally, financial institutions need the ability to effectively warehouse and analyse data from their core accounting systems, even at the level of a small SACCO. This is likely to be achievable on a large scale only through the adoption of a certain level of standardisation in core accounting systems, and the development and implementation of a low-cost and user-friendly data warehousing system. Sharing of data between co-operating SACCOs and other financial institutions should be encouraged to promote effective product and market development. The low level of financial and IT skills at the grassroots SACCO level is a major hurdle to be overcome.

6.3.2 Improving the Business Environment

While it is beyond the scope of this assignment to cover in detail the many deficiencies in the business environment which affect the growth of the private sector generally, there are some areas of specific interest to agricultural finance. These include:

- **Formalising and strengthening the contractual environment**, particularly commercial relationships. The comfort that a strong contract offers lenders is lost when that contract is often ignored. While access to finance can provide an effective incentive to contracting parties, there also needs to be a swift and effective sanction in case of breach. This could be through an improved commercial court system and enforcement regime, or perhaps it could be implemented through measures implemented by other stakeholders (e. g. through denial of some preferred trading status or other privileges).

- **Development of land titling and registration** is vital should producers want to increase the ability to raise finance on the security of land. The current system is so inefficient and unpredictable that it is unfeasible. There are measures under way to address this but the importance of these initiatives needs to be reinforced.

- **Improving the data and information environment** in relation to agriculture. No doubt there is a plethora of information being collected on various sub-sectors, but there does not seem to be national strategy directed towards the collection, collation and analysis of timely data from a business user's perspective. With access to finance, financial institutions find the sector difficult to analyse from both a macro- and micro-level. They need good information to build an effective credit and marketing strategy for agriculture, to determine the high-priority targets and, correspondingly, those areas and types of business they wish to avoid. A national statistical database for agriculture would be a major boon to the financial sector as well as many others.

There are many business environment improvement initiatives under way in Kenya, and those wishing to improve the prospects for agricultural finance should make sure their interests are represented.

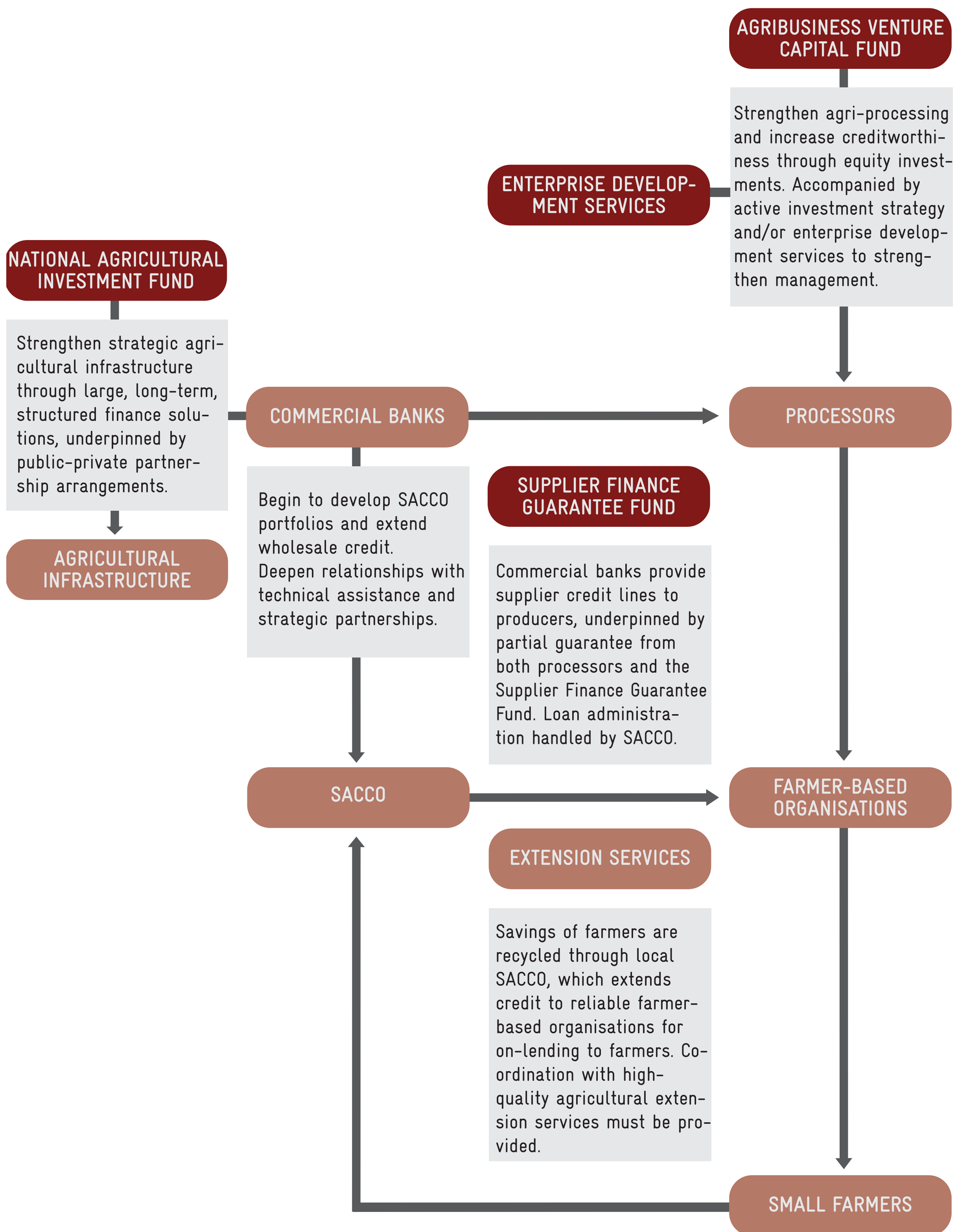


Figure 11: Diagram of Linkages and Synergies between Approaches to Agricultural Finance

6.3.3 Enterprise Development Services for both Producers and Processors

It is fair to say that while Kenya has a strong pool of entrepreneurial farmers and agribusinesses, major deficiencies in management and financial planning skills exist. Naturally this detracts significantly from their creditworthiness.

It does not appear that there is a major, well co-ordinated programme to deliver EDS to the agricultural market. In the case of producers, some limited EDS is occasionally incorporated as part of agricultural extension programmes, but these are usually 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 is limited.

Effective EDS requires a sophisticated approach and intensive effort, involving 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.

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

6.3.4 Strengthening the Commercial Financial Sector

The commercial financial sector includes the commercial banks, insurance, leasing and commodity markets. In general, they are well served by the local professional services community but there are specific gaps in relation to some aspects of our subject matter (which includes both agricultural and SME finance) where they require expert international input. Most financial sector players could afford this advice, but 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 are:

- **Credit strategy for agriculture:** helping financial institutions to develop a portfolio for the agricultural sector aligned to their balance sheet strategy, determine attractive sub-sectors and set suitable limits, 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, developing risk rating models and credit scoring methodologies, and effective bad debt management and collection;

- **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.

The local insurance market, while well served for providers of commercial and retail life and non-life policies, has a dearth of products for agriculture. Kenya is not unique in this, but perhaps it could promote the development of crop (or weather event) insurance for farmers heavily reliant on rainfall.

Index-based Crop Insurance, Malawi

Groundnut farmers were experiencing a shortage of credit for input supply, as banks were wary of the high risks of crop failure due to a lack of rainfall. Co-ordination between Opportunity International (a Christian microfinance NGO), NASFAM (a local agricultural marketing organisation), the Insurance Association of Malawi, and the World Bank has resulted in a simple, weather-based insurance product designed to facilitate access to finance for the farmers. A series of rainfall thresholds have been established through the growing cycle, below which certain payouts are triggered if rainfall measurements during the period fall below certain levels.

6.3.5 Continuing Development of Financial Market Infrastructure

Though financial markets in Kenya are comparatively well developed, there are some significant gaps which remain to be filled. To a large extent the CBK is attempting to address these, with the assistance of the World Bank-funded Financial and Legal Sector Technical Assistance Programme. Continuing focus should be placed on the following aspects:

- The development of a fully-fledged system of credit bureaus, a major initiative of the CBK;
- The creation of an effective moving asset collateral register, along with the legal support to quickly and cost-effectively seize assets in the event of default; and
- Continuing development of the land registry and the ability of financial institutions to perfect and realise valid security over land.

There are several aspects which we believe might bring additional benefit:

- Support for the development of a profession, well-regulated and responsible debt collection sector with powers to seize assets within the remit of the law; and
- Reform of the legal and taxation environment to improve the prospects for the development of leasing products.

Commodities Exchange, Ethiopia

The Ethiopian Commodities Exchange (ECX) is a government-sponsored initiative to establish a modern and transparent trading environment for key commodities. A network of warehouses has been established across the country, where produce can be bulked and stored. Trading takes place in an open outcry exchange based in Addis Ababa, where buying and selling agents strike deals. Control of the goods, deals and settlement is all underpinned by an integrated, real-time, software system developed specifically for the purpose. Current trade is dominated by coffee but the ECX is moving into other key commodities such as sesame.

Annex: Glossary of Financial Terms

This brief guide prepared by the authors explains some basic financial terminology used in the reports. The definitions given are to aid interpretation, and not to be relied on in preference to a good financial text book. Some of the terms may seem like jargon but they are not, and some financial terminology is imbued with quite subtle and nuanced meaning which can require some explanation.

Capital – money or assets used to generate income (e.g. in a business)

Capital Market – the mechanism by which long-term capital finance is allocated. An example is a stock market, though any kind of competition between financiers to provide capital finance to borrowers or investees is a capital market

Equity Capital – is money contributed by the owners of the business. Therefore equity investment is taking an ownership stake with a share of the profits (or losses)

Debt Capital – is longer-term loans which can be used to invest in fixed assets in particular

Guarantee Fund – a fund which underwrites some or all of the credit risk assumed by private sector lending, usually in order to encourage greater participation

International Financial Institutions (IFIs) – development banks such as the World Bank or African Development Bank

Liquidity – the cash or cash equivalents on hand for a business to meet day-to-day operational requirements

Long-term Credit – typically loans of more than five years in duration, often used for investment in capital items

Microfinance Institutions (MFIs) – financial institutions which specialise in small, short-term loans

Public-Private Partnership (PPP) – a deal structure whereby public good or services are provided by the private sector, while the public sector retains some project risk to incentivise interest

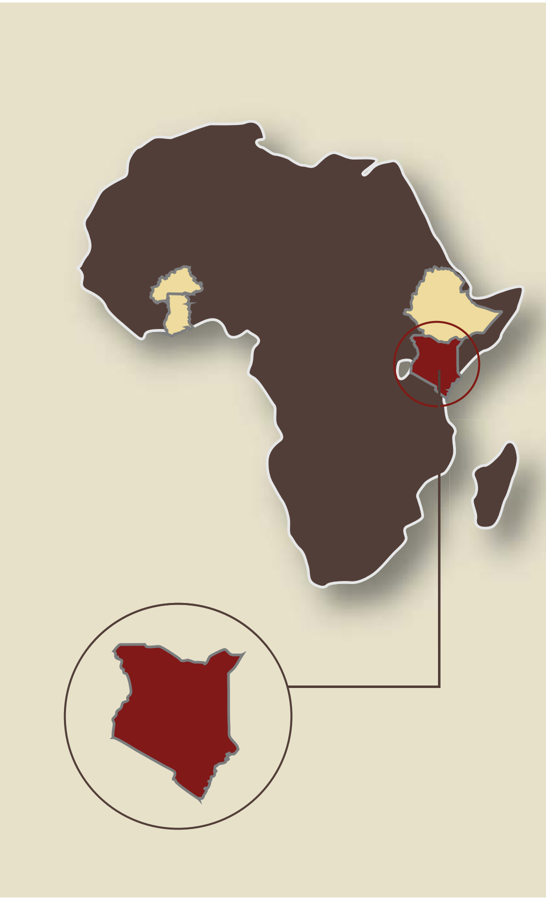
Savings and Credit Co-operative (SACCO)/Credit Union – member-based financial services organisations run along the co-operative model

Short-term Credit – typically loans of less than one year in duration, typically used for funding working capital

Under-capitalised – a business (which can include a bank) which is overly reliant on short-term borrowing to cover its day-to-day liquidity needs

Wholesale Credit – lending to other financial institutions (who will then presumably further intermediate the credit)

Working Capital – is the net position of the short term assets of a business (e.g. debts owed to it, inventory, cash etc.) less short-term liabilities (e.g. debts owed by it, loans etc.)



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