Promoting Financial Sector Dialogue: Making Finance Work for Africa



# Financing Agricultural Value Chains in Africa

## Focus on Pineapples, Cashews and Cocoa in Ghana

giz Partner for the Future. Worldwide.

On behalf of
Federal Ministry
for Economic Cooperation
and Development

# Published by

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

Friedrich-Ebert-Allee 40
53113 Bonn, Germany
Phone: +49 228 44 60-0
Fax: +49 228 44 60-17 66

Dag-Hammarskjöld-Weg 1-5
65760 Eschborn, Germany
Phone: +49 61 96 79-0
Fax: +49 61 96 79-11 15
Email: info@giz.de
Internet: www@giz.de

**Authors:**
Mike Coates, Richard Kitchen, Geoffrey Kebbell,
Catherine Vignon, Claude Guillemain and Robin Hofmeister

**Pictures:**
All pictures © GIZ
Except pictures on the front and back page
(left picture: © KfW-Bildarchiv/Fotoagentur photothek.net,
right picture: © KfW-Bildarchiv/Bernhard Schurian)

Name and logo of consulting company:

MAXWELL STAMP PLC

**Design:**
Alexandra Müller

Eschborn, April 2011

On 1 January 2011, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH was formed. It brings together the long-standing expertise of the Deutscher Entwicklungsdienst gGmbH (DED), the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH and InWEnt – Internationale Weiterbildung und Entwicklung gGmbH. For further information, go to www.giz.de.

# Contents

## List of Figures



## List of Abbreviations and Acronyms

| | |
|---|---|
| ADB | Agricultural Development Bank |
| AFD | Agence Française de Développement |
| ATM | Automated Teller Machine |
| CAADP | Comprehensive Africa Agriculture Development Programme |
| CDC | Centers for Disease Control and Prevention (US) |
| COCOBOD | Ghana Cocoa Board |
| COMESA | Common Market for Eastern and Southern Africa |
| CRM | Customer Relationship Management |
| DANIDA | Danish International Development Assistance |
| DED | German Development Service |
| DFID | Department for International Development (UK) |
| ECOWAP | ECOWAS Agricultural Policy |
| ECOWAS | Economic Community of West African States |
| EDS | Enterprise Development Services |
| ECX | Ethiopian Commodities Exchange |
| EDIF | Export Development and Investment Fund |
| FASDEP | Food and Agriculture Sector Development Policy |
| FBO | Farmer-Based Organisation |
| GDP | Gross Domestic Product |

| | |
|---|---|
| GH¢ | Ghana Cedi |
| GIZ | Deutsche Gesellschaft fur Internationale Zusammenarbeit |
| GIS | Geographic Information System |
| GPRS | Growth and Poverty Reduction Strategy |
| IFI | International Finance Institution |
| IFC | International Finance Corporation |
| ICT | Information and Communication Technology |
| IT | Information Technology |
| ITFC | Integrated Tamale Fruit Company |
| LBC | Licensed Buying Company |
| MFIs | Microfinance Institutions |
| MiDA | Millennium Development Authority |
| MOFEP | Ministry of Finance and Economic Planning |
| NBFI | Non-Bank Financial Institution |
| NEPAD | New Partnership for Africa's Development |
| NIM | Net Interest Margin |
| NPL | Non-Performing Loan |
| MRC | Maximum Residue Limits |
| MSME | Micro, Small and Medium Enterprise |
| MT | Metric Ton |
| NGO | Non-Governmental Organisation |
| NPL | Non-Performing Loan |
| POS | Point of Sale |
| PPP | Public-Private Partnership |
| PR | Public Relations |
| RAG | Red-Amber-Green |
| SACCO | Savings and Credit Co-operative |
| SADC | Southern African Development Community |
| SEC | Securities and Exchange Commission |
| SWAp | Sector-Wide Approach |
| SME | Small and Medium Enterprise |
| UK | United Kingdom |
| US | United States |
| USAID | United States Agency for International Development |
| US$ | United States Dollars |
| VCTF | Venture Capital Trust Fund |
| VC | Venture Capital |

# 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 Ghana, with particular reference to the cocoa, pineapple and cashew value chains. Accompanying the value-chain analysis is a review of both the agricultural and financial sectors in Ghana, 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.

The researchers noted many parallels between Ghana and Kenya. Both countries have a relatively advanced financial system compared to the rest of the economy, but financial services, particularly credit, are focused on corporate and retail banking. The rural banking network has decent cover, but a modest consolidated balance sheet. The rural banks are under-resourced in both capital and human resources, and naturally veer towards a conservative short-term portfolio of salaried employees, traders and entrepreneurs. Some microfinance institution (MFI) type institutions and credit unions provide small amounts of short-term credit for the urban mass market.

The comparisons are not as valid when the agricultural sectors are compared. Kenya, despite the failures of the past, has made significantly more progress in establishing both the structures and strategies required to modernise the agricultural sector and make it attractive to financiers.

In terms of value chains, we felt that despite the drawbacks of state involvement, the cocoa industry demonstrated the importance of strategy and structure for the bankability of agricultural sub-sectors. Financial institutions felt this was a much more orderly environment, where they could more easily understand, evaluate, and price risks. Pineapple shows promise in the right circumstances, partly because of its relatively swift turnaround and particularly where there is a reliable off-take partner. Cashew is more difficult because of its relatively low yield, the intensity of international competition and, as with other tree fruits studied, the long payback period needed for replanting.

Once again, the important role that agribusinesses, and particularly local processors, play in underpinning the stability and structure of a sub-sector was obvious. Agribusiness in Ghana is weak, and generally perceived as undercapitalised with weak management skills. We believe that the strengthening of agribusiness through direct investment and building long-term partnerships with financial institutions is the best way to extend finance to producers.

The report is structured as follows:

- **Section 2 Agriculture,** includes a high-level review of the agricultural sector in Ghana, 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 cocoa, cashew and pineapple 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 better co-ordinate the development and implementation of agricultural finance initiatives with the national agricultural strategy, and to facilitate deeper relationships between financiers and providers of extension services;

➲ To improve the integration of initiatives by development agencies to develop agricultural finance, in particular to improve market responsiveness and knowledge management, and to retain high-calibre personnel;

➲ Develop the nascent producer association movement, notably its professional management and technical capacity to support effective engagement with financial institutions;

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

➲ Help establish a specialist equity investment fund focused on agribusiness (particularly agriprocessing) with capital from the Government of Ghana, International Financial Institutions (IFIs), and the private sector;

➲ Develop an agricultural sector supplier finance fund to provide risk enhancement facilities for commercial banks and agribusiness wishing to support small producers with improved working capital facilities;

➲ Support the development of contract farming, outgrower schemes, and other similar formalised relationships between market participants to strengthen access to finance;

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

- Improve the electronic capture and analysis of the financial behaviour of small farmers through the increasing formalisation of cash flows, and support rural banks in acquiring the technology and skills needed to achieve this;

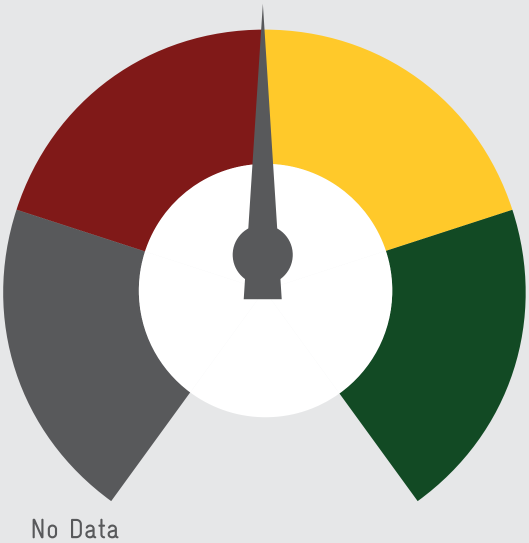
- Make sure that reform of the business environment continues, particularly land tenure, the registration of collateral, and the operation of the court system;

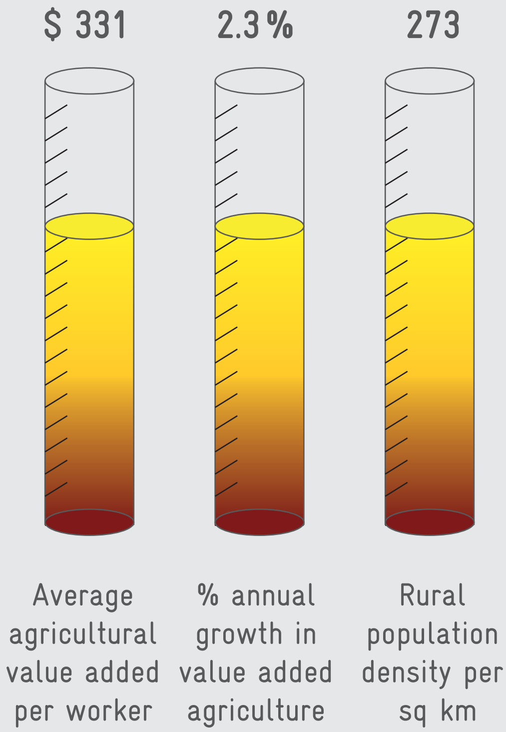
- Develop comprehensive Enterprise Development Services (EDS) for high-potential enterprises at all levels of the value chain, to improve the quality of business and financial management skills;

- 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 Bank of Ghana, the country's central bank.

# 2 Analysis of Agricultural Sector




Ghana has significant natural resources and can competitively produce a wide range of different products for a relatively small country. The agricultural sector has badly missed effective leadership, and significant improvements to the organisation and development of smallholder farming in particular are required.

**Figure 1: Performance Dashboard for Agricultural Sector**

## Macro-Level

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

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

## Meso-Level

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

| | |
|---|---|
| Parastatal Organisations | There are a large number of parastatal an academic institutions but underinvestment and lack of co-ordination has hampered effectiveness. |
| Producer Organisations | Farmer-based organisations are recovering after years of systemic abuse, but there is a distinct lack of national structures to support development. |
| The Development Community | Ghana is well served by the development community, however, there are improvements 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 Ghana have relatively low productivity.

| | |
|---|---|
| Producer Viability | Most Ghanaian agricultural production is by small-scale producers, many of which lack economies of scale as well as the required technical and business skills. |
| Access to Inputs | Producers use relatively low levels of inputs due to lack of finance and expertise. The input supply industry lacks scale. |
| Water and Irrigation | There is very little irrigation in Ghana, despite the availability of large, secure water sources. Public management of irrigation has been poor. |
| Agricultural Extension Services | There is a 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 Ghana remains competitive in this area. |

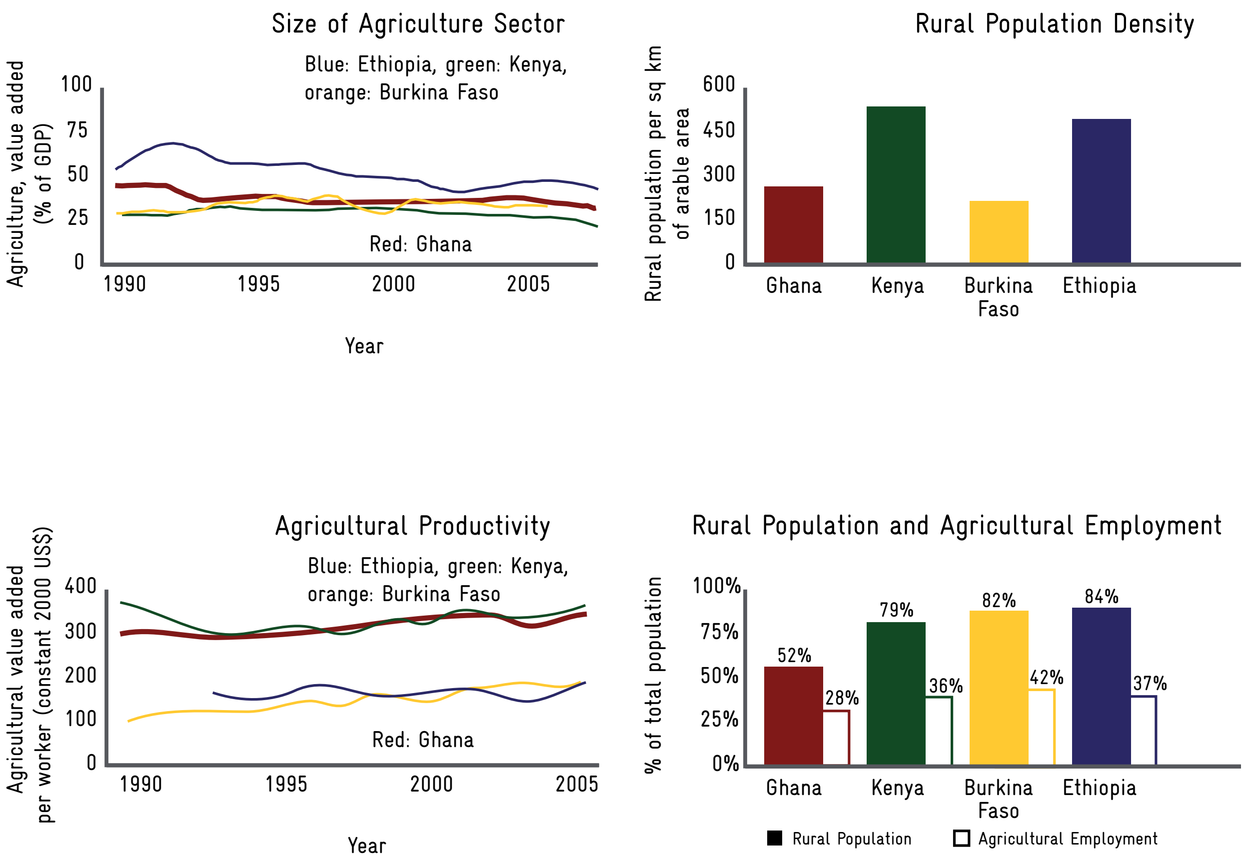



**Figure 2: Comparison of Key Agricultural Statistics**

**Macro**

**LEADERSHIP**

The strength of both the leadership structures and the qualities of the individuals who make up the cadre is vital. The ability to influence stakeholders and manage change is more important than technical experience.

**STRATEGY**

Strategic objectives are the straight forward part. Generally plans are missing specific and robust monitoring and control frameworks to ensure deliverables are achieved. They also fail to assign accountability, and also how to incentivise staff.

**BUDGET**

Budgets generally need to increase but, most importantly, demonstrate stability. Allocation and measurement of the impact of funds should be integrated into a holistic monitoring and control framework.

**LEGISLATION/ POLICY**

Good and stable government works with both the public and private sector to develop robust and unambiguous legislation affecting the agricultural sector, and enacts it in a timely manner. It is not subject to partisan interests.

*It is vital that the strategy and leadership are a good fit and well alligned. Leadership should be accountable for development and delivery of the strategy according to agreed measures.

**Meso**

**PARASTATAL ORGANISATIONS**

The sector should be supported with a range of well-funded expert agencies to promote development. Where possible, strong links should be formed with the private sector. Research and development and depth and outreach of extension services are key.

**PRODUCER ORGANISATIONS**

Well-funded and well-organized producer organisations are a vital component in linking small farmers with other stakeholders and the rest of the economy. Ideally these are organised from the ground up by farmers.

**DEVELOPMENT AGENCIES**

Development agencies have, and will continue to have a role in supporting agricultural development, both in terms of funding and expertise. They should be aligned where possible with the agricultural sector strategy.

**AGRIBUSINESS**

A strong agribusiness sector is important both for value addition (including input supply), but also to provide a stable domestic off-take market. Agriprocessors are particularly adept at intermediating with the producers.

**BUSINESS ENVIRONMENT**

**It is difficult for leadership to stipulate the available budgets and to specify the precise government policy and legislative plan. Alignment between politicians and civil servants on these issues is vital.

**Micro**

**INPUTS**

Access to a wide market of competitive input supplies is a key ingredient. Suppliers need to have scale and outreach, and a business model capable of reaching small producers. Like agri-processors, input suppliers can intermediate finance and expertise.

**NATURAL RESOURCES**

The natural resources of the country in relation to agriculture are generally static, aside from the unique ability to better harness and manage vital water resources. Investment in water security is difficult to finance but has long-term pay-offs.

**KNOWLEDGE**

Producers need the requisite to execute their enterprise effectively, exemplified in the provision of extension services. The outreach and depth of extension services is an asset, and can also be used to facilitate access to finance.

**RISK MANAGEMENT**

The ability to manage key agricultural risks is very important for maintaining yield quantities and qualities. Aside from water, pest and disease management are the major themes. The policies and processes to address this are important.

**COMPETITIVENESS**

The commercial ability of farmers and the underlying viability of their farm enterprise is crucial. In the longer term, most farms need to be larger and better managed. Focus should be on those with high-growth potential.

**Figure 3: Key Factors Affecting Agricultural Markets**

## 2.1 Overview

**Red/Amber status:**

Agriculture in Ghana underperforms generally, though it has the natural resources required, and its strategic location means it could be a competitive producer. It is a major international player in the cocoa industry, however, which is a major feature of the economy. A reliance on the export of unprocessed agricultural produce is a weakness.

Ghana is a low-income, food-deficit country with a per capita Gross Domestic Product (GDP) of just under US$1 600. Agriculture accounts for 36 % of GDP and 55 % of foreign exchange earnings. It is characterised by smallholder farmers producing about 80 % of Ghana's total agricultural production and up to 50 % of the labour force are engaged in agriculture. Ninety percent of holdings are less than two hectares in size.

Ghana's rainfall can be erratic, causing major variations in production, but poor soil quality also has an ongoing impact. However, Ghana has a wide network of water bodies and a relative diversity of agricultural zones, which make it suitable for a range of different types of agricultural production. It is also close to a large and growing regional market in the Economic Community of West Africa States (ECOWAS) region, and close enough to European markets to be internationally competitive.

Cocoa is the mainstay of the agricultural economy and a pillar of Ghana's public finances. It employs 60 % of the agricultural workforce, for many of whom cocoa is the main source of income. Most are small farmers with less than 3 ha but most of the production is by the top quartile of producers. The international trade is monopolised by the state-owned Ghana Cocoa Board (COCOBOD), which operates in the local market through a range of private sector trading enterprises. Ghana is the world's second largest producer of cocoa beans after Cote d'Ivoire. Despite its importance, cocoa production in Ghana is relative unproductive, with an average yield of about 300 kg/ha compared to more than 1 000 kg/ha in parts of Asia.

The main food crops are maize, yams and manioc, and Ghana is also suitable for growing a wide range of horticultural crops. Other important agricultural production includes oil palms, kola nuts and cashews. Productivity in both crop and livestock production is generally low.

There is increasing population pressure on land, causing some stress. A contributory factor is the customary system of land tenure which does not give security of tenure or ownership to particular individuals. Investment in land therefore tends to be low and levels of custodianship weak.

Despite these problems, Ghana has the potential to be internationally competitive, particularly in horticulture. Yet it lags far behind the major producers in Latin America and East Asia, and even against some other countries in West Africa. One of the main problems for domestic food production and processing is chronic inflation, combined with both high interest rates and an unstable currency. These factors combine to make local agriculture uncompetitive in the face of imports.

In addition, the agriprocessing industry is limited, with agriculture heavily reliant on the export of unprocessed produce. Combined with a limited local appetite for some of Ghana's strongest horticultural sub-sectors, prices tend to be low and unstable.

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 (e. g. Common Market for Eastern and Southern Africa (COMESA).

## 2.2 Macro-Level

**Red/Amber status:**

There seem to be comparatively serious weaknesses in co-ordinating the development and delivery of strategy for the agricultural sector. This perhaps explains why, while Ghana's budget allocation is relatively high, realising benefits for growth and productivity has been low. The cocoa industry is relatively independent of the rest of the agricultural sector and has different dynamics.

Southern African Development Community (SADC) and 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 harmonising donor support and the administration of finance through the CAADP Multi-donor Trust Fund. Specific examples of programmes which may directly impact on the value chains under study are:

- NEPAD is working closely with the African Union Commission and the African Development Bank to establish the Africa Fertiliser Financing Mechanism which has mobilised US$35m to be directed to countries through country roundtable processes; and
- The UK's Research Into Use Programme recently launched the African Enterprise Challenge Fund to finance agribusiness joint ventures and other business-to-business alliances.

- All countries are supposed to adopt the CAAPD principles in their strategic plans for agriculture, and in Ghana these are elaborated through the Food and Agriculture Sector Development Policy (FASDEP II).
- ECOWAS is a preferential trading area, which has developed a common agricultural policy to address food security in the region, called ECOWAP. It supports many common sense principles, as well as further embedding the importance of regional trade for market development.

Particular programmes proposed relevant to this study include:

- Improved water management and irrigation;
- Dissemination of improved technologies;
- Development of value chains, logistics and agriprocessing; and
- Co-ordination in policy development and funding.

The Ghana CAADP Compact subscribes to the target of 10 % of government expenditure on agriculture, and goes on to mention some specific elements of their approach which are of particular interest including:

- Taking a value chain approach to agricultural development;
- A focus on specific strategic commodities or value chains depending on their relative importance to food security and/or local/international competitiveness;
- Improvements to irrigation; and
- Increased use of PPPs where appropriate.

### 2.2.1 Leadership

**Red/Amber status:**

While the Ministry of Food and Agriculture has taken the lead in spearheading agricultural development in Ghana, there seems to be very little tangible progress towards engaging other important stakeholders and developing a joint strategy for many of the cross-cutting issues.

The Ministry of Food and Agriculture takes the lead on designing and implementing the national agricultural policy. Its current strategic approach highlights the failure to co-operate effectively with public sector colleagues and the private sector, and attempts to outline a solution.

FASDEP II highlights the need for co-ordination, and makes many suggestions on what this constitutes and the stakeholders involved, but the structure does not seem particularly clear. It seems there is not a current, functioning inter-ministerial steering committee responsible for the co-ordination of agricultural strategy.

In addition, a clear framework for measuring success is lacking, and monitoring has focused on activities and deliverables rather than results and benefits.

The passage of the Local Government Law (Act 462) apparently means that central policies need to be implemented at the district level. The lack of capacity to implement at this level has been highlighted as an impediment to progress.

### 2.2.2 Strategy Development

**Amber status:**

The new iteration of the agricultural strategy aims to address the weaknesses of the first. Unfortunately the strategy seems to be a relatively standalone piece, and there does not seem to be a clear framework for integrating agricultural development with the rest of the economy, particularly infrastructure development and growth of agribusiness micro, small and medium enterprises (MSMEs).

Ironically, FASDEP, launched in 2002, aimed to realise the President's vision of turning Ghana into a leading agro-industrial country by 2010. The policy had little impact, with food imports and food aid (a measure of food security) remaining static over the last 15 years.

FASDEP was revised in 2007 with the publication of FASDEP II which admitted the failures of the first policy, and aimed to focus efforts on the commercialisation of agriculture and emphasised market-driven growth. A few specific commodities are to be selected for priority measures.

It is aligned with the overarching national Growth and Poverty Reduction Strategy (GPRS II) and also CAADP. GRPS II also reinforces some areas with a strong overlap of interests with FASDEP II, notably the reform of land and property rights.

FASDEP II sets high-level sector growth targets of 6%-8% for the sector over four years (2007–2010). Based on reported growth for 2007 and 2008, the policy has already failed. This highlights the demoralising danger of selecting single targets which are substantially outside the control of the implementing agency.

Notably, FASDEP II outlines:

- A food security strategy which focuses on five different staples (maize, rice, yam, cassava and cowpea). The approach is to work at district level to select at most two of these staples with which to work;
- A specific workstream to focus on cash crops where competitive advantage can be identified; and
- A range of other workstreams including domestic and international market development, sustainable land management, improved science and technology, and improved co-ordination.

There are also a range of sub-sector policies for crop development, cocoa, livestock and fisheries, as well as specific plans for developing extension services, irrigation, mechanisation etc.

Attached to the strategy is a brief monitoring and control framework. As it stands, it is a work in progress, though it has gone so far as to identify the measures which will be used to monitor implementation. As yet, there is no specific detail on the precise targets and the key strategic initiatives which will be required to reach them.

### 2.2.3 Legislative and Policy Development

**Amber status:**

It is very difficult to make a general assessment of the effectiveness of this area. Ghana's government and political environment, however, is one of the more advanced and stable in Africa, which should bode well for the timely passage of good legislation. Policymakers need to make sure that policy development is developed in co-ordination with stakeholders from other ministries and the private sector.

FASDEP II identifies a number of cross-cutting national policies which impact on the proposed programme, including:

- The Decentralisation Policy;
- Private Sector Development Policies generally;
- The National Transport Policy;
- The Land Policy; and
- The National Water Policy.

Ghana is recognised as a country that has made significant progress in its political development. This was tested in recent closely contested elections, which still resulted in an orderly transition of power.

There are, however, major concerns about the long delays for the passage of legislation, with some Acts taking years to pass through parliament.

### 2.2.4 Budget Allocation

**Red/Amber status:**

Ghana has made significant progress towards meeting its commitments to budget allocation to agriculture. Unfortunately the impact expected has not resulted, which makes it likely that Ghana will have to raise levels beyond those originally forecast and build performance measurement and accountability into its spending plans.

Under the Maputo Declaration of 2003, which committed African governments to increase public investment in agriculture to a minimum of 10 % of their national budgets, Ghana, along with other African countries committed itself to the CAADP and the allocation of 10 % of the national budget to agriculture.

While budget allocations have radically improved from levels of around 3 %-4 % early in the decade towards 8 %-9 % in more recent years, there is real concern about the lack of responsiveness in agricultural growth. It is notable that a large proportion of this budget is allocated to the strategically important cocoa industry.

So, while it is notable that Ghana has made significant progress towards meeting its proposed targets, the expected results have not been delivered. One report estimates that for each 1 % allocation of the national budget that there is a corresponding growth rate of 0.15 %, which is considered quite poor even in the African context. The same report attributed this to the low rate of investment in agricultural research and the fragmented structure of its institutions.

## 2.3 Meso-Level

**Amber status:**

Ghana has a wide range of players at the meso-level, particularly parastatals, and there are far too many to cover in detail. These institutions have mandates to support agricultural development in a range of different ways, though many have been under-invested in terms of both money and expertise, and are not working effectively. Farmer organisation in Ghana is weak, partly due to the excesses of past governments in relation to the co-operative movement. Agribusiness is underdeveloped, with low capitalisation, and management and technical skills missing. The country is well served by a large number of development agencies and non-governmental organisations (NGOs), though they don't appear to be well co-ordinated or aligned to the national strategy.

### 2.3.1 Parastatal Organisations

**Amber status:**

The large number of parastatal and academic institutions geared to support the agricultural sector suffer from a chronic lack of expertise (with the exception of COCOBOD). The issue has largely been one of under-investment.

There are a wide range of parastatal institutions designed to support the agricultural sector, including bodies such as the Council for Scientific and Industrial Research, the Plant Protection and Regulatory Services Directorate, and the Rural Technology Information Unit.

There have been strident criticisms of the effectiveness of some of these bodies, which have probably been hampered by under-investment and a lack of management control.

In relation to this assignment, a particularly interesting body is COCOBOD, the national cocoa marketing monopoly. COCOBOD assumes responsibility for:

- Developing and delivering policies and strategies to improve the competitiveness of the cocoa industry in Ghana;
- Purchasing (and to some extent financing) cocoa production throughout Ghana, implemented through a network of approved private sector buying agents;
- Bulking, warehousing, grading and quality control of the cocoa bean harvest; and
- Marketing, selling and exporting the national cocoa crop to international markets.

It includes technical divisions such as the Seed Production Unit, the Cocoa Research Institute of Ghana, and the Cocoa Swollen Shoot and Virus Control Unit. COCOBOD is careful to point to its successes, but some highlight examples of the systemic neglect of some programmes.

Nevertheless, COCOBOD is at least a large institution, with both access to finance and the outreach to implement major change. While some may have ideological objections to such overt state involvement in the sector, the structure of the cocoa industry is more amenable to facilitating finance than other more disorganised subsectors.

## 2.3.2 Producer Organisations

**Red/Amber status:**

The coverage and depth of producer organisations in Ghana is weak. The co-operative movement was very badly damaged during periods of state sector interference, asset stripping and corruption. It has recently begun to recover, alongside other types of Farmer-Based Organisation (FBO), but is still much undeveloped for both finance and expertise. There does not seem to be a strong system of apex structures for producer organisations to lobby for and drive development.

The term farmer-based organisation seems to be used generally in Ghana as a euphemism for both agricultural co-operatives and other types of producer organisation. This may stem partly from the disastrous reputation that co-operatives have in Ghana after years of state sanctioned abuse.

The organisation of farmers in Ghana is generally weak, with most farmers operating on an individual basis. Where FBOs exist, they are typically weak in terms of financing and organisation.

There is a strategy to continue to encourage the development of FBOs. A danger is the temptation for outside agents to artificially stimulate their creation, which is generally an unsustainable approach. There must be a genuine long-term business need and benefit realised (among other ingredients) for FBOs.
There is also a small movement of financial services credit unions. These include the more formal model generally oriented around workplaces, and also the Ghanaian tradition of Susu.

The promotion of agricultural co-operatives and other FBOs is sponsored by a component of the Agricultural Sub-sector Investment Programme, the Department of Co-operatives under the Ministry of Manpower Development and Employment, the Ghana Co-operative Council, and the Ghana Co-operative College. There are also various other governmental and NGOs using co-operatives as a tool to meet developmental goals. However, capacity to develop and implement change is generally very low.

### Farmer-based organisation

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

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

**Figure 4: Profile of Farmer-Based Organisation**

### 2.3.3 The Development Community

**Amber status:**

There are simply too many players in this sector to go into any detail. There does not appear to be a clear mechanism for co-ordinating and synergising activity though, nor a joint attempt to address knowledge management for the sector. Nor is it clear how these institutions will be adapting their strategy and approach to support the government and the implementation of FASDEP II.

Ghana is a relatively attractive environment for development agencies, and as of 2007, there were 13 separate agencies operating in the agricultural sector, implementing over 60 separate interventions.

FASDEP II refers to the commitment of the government and its development partners to a Sector-Wide Approach (SWAp), supposedly to better co-ordinate and focus activities. It alludes to a preference for direct budget support, which appears to be beginning to pall with a number of donors. A range of players emphasise the promoting of the competitiveness of private sector agriculture, including the DFID (UK), GIZ (Germany), USAID (US), DANIDA (Denmark), and AFD (France). FASDEP II makes specific mention of the development community's express intention of improving co-ordination, but goes on to say that there is very little detail on how this is to be achieved.

Notably, Ghana is a compact member of the US-funded Millennium Challenge Corporation, giving it access to a large pool of US$550m over five years to focus on agricultural development in particular. Much of this funding is being spent on valuable transport infrastructure, though there are some concerns that in other spheres the Millennium Development Authority (MiDA) is crowding out the private sector, distorting the market, and embedding a poor repayment culture through non-enforcement of loan conditions.

The cocoa industry is notable for engaging private sector players in development initiatives. Major cocoa buyers and brands are involved in supporting and/or delivering extension services and inputs to certain farmers, particularly where they are linked to traceability measures required for organic, fair-trade, UTZ, or other standards increasingly expected by end-consumers. They also claim a vested interest in sponsoring more general livelihoods programmes in these areas, which they believe will help the communities supplying their produce to become more sustainable, as well as providing good public relations (PR).

### 2.3.4 Agribusiness

**Amber status:**

Generally agribusiness in Ghana suffers from a marked lack of capital and expertise. The situation is quite different in the cocoa industry, where COCOBOD has been able to facilitate the entry of a number of major international processors to operate locally.

There is very little value addition in most agricultural sub-sectors in Ghana. Most produce is exported unprocessed, and indeed much of Ghana's processed food is imported. Cocoa is something of an exception with the establishment of some major factories producing products such as cocoa cake, cocoa liquor, cocoa butter, and cocoa powder. COCOBOD delivered about 17 % of its stock to local processors and COCOBOD has plans to gradually increase this percentage over time.

The cocoa industry also has a significant number of private sector players in the Licensed Buying Companies (or LBCs). These include many local firms, which exist fundamentally to make a profit from their market knowledge and economies of scale in bulking and logistics. Some international commodities firms and processors maintain a presence as LBCs (even though they are ultimately disintermediated by COCOBOD at the export stage) claiming that having an on-the-ground operation improves their understanding of the market and product, helps them support traceability and other international standards that they require, provides positive relationships with COCOBOD, and ultimately might place them in an advantageous position should the industry be liberalised. The cocoa industry, given its scale, also supports a number of important input suppliers, both domestic and international.

Cocoa is also distinguished by the existence of some relatively more robust producer associations, often linked with private sector partners.

## 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 Ghana'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« (this includes off-farm income);

- They must be experienced and have an enthusiasm for developing their expertise;

- They need to capable of thinking long-term about their business, and open to receiving advice and adopting new ideas; and

- Capable of working well with others where there is demonstrable mutual benefit, and of understanding their rights and responsibilities in a group structure, and to external stakeholders.

These criteria further restrict the scope of agricultural finance and, 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.

### 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 lack size, scope and efficiency in terms of products, distribution and sales.

As expected, anecdotal evidence on the use of inputs showed that this was very low, though firm statistics were elusive. One report cited that less than 10 % of small farmers with less than 1ha used any fertiliser at all, though this increased to 30 % for those with more than 5ha.

There are some major local input suppliers, including the market leader Wienco, which has a distribution network throughout the country.

Once again, cocoa is significantly different. Growers have access to a more sophisticated system of input supply, often mobilised by the LBCs. LBCs will often prefinance production to some extent by providing trade credit for inputs which they provide directly, or sometimes through a cash loan. Both of these are usually repaid through the proceeds of the sale at the end of the season.

### 2.4.3 Water and Irrigation

**Red/Amber status:**

There is very little irrigation in Ghana, with a big opportunity for the private sector to get involved, as long as their investments would be adequately protected.

Most agriculture in Ghana is rain-fed, though there are some small areas (perhaps upwards of 10 000 ha) that are irrigated (less than 1 % of arable land).

FASDEP II identifies that about 500 000 ha could be suitable for irrigation. The Ghana Irrigation Development Authority is nominally in charge of promoting irrigation development.

The record of management of publicly-owned irrigation infrastructure is poor, with operating efficiency measured at approximately one third (mainly due to poor design and maintenance).

### 2.4.4 Agricultural Extension Services

**Amber status:**

Ghana generally has a wide suite of extension services for different sub-sectors. There is some criticism that the depth and scope of services is limited, and that many do not encompass the business skills farmers need to succeed. The cocoa industry is a particular focus of attention.

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, to encourage use and facilitate access to the right inputs, and to improve marketing, for example.

In the past, extension services have suffered from variations in funding, particularly on the withdrawal by large donor-funded schemes.

### 2.4.5 Agricultural Standards, Pests and Disease

**Amber status:**

Ghana 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.

This is particularly noticeable in the cocoa industry, where international standards (notably Organic, Fairtrade, Rainbow Alliance, UTZ, and other major certifications) are a critical differentiator in terms of the desirability of 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.

Interestingly, Ghana proposes an increased use of standards in the local market as a measure to curb low-quality imports and to stimulate domestic demand.

# 3 Analysis of Business Environment

## 3.1 Land Tenure

**Red status:**

Ghana has a very poor system of land tenure, based on customary and traditional title. There is little registered title, and the system is hampered by inefficiency. The difference is particularly stark when compared with some other countries in West Africa (e.g. Cote d'Ivoire), and many Ghanaians aspire for an equivalent system.

The vast majority of land tenure is restricted to usufruct rights only. Traditional authorities such as the chiefs or clan heads generally hold absolute title on behalf of their members. Though they sometimes grant longer-term leases and rentals, title must revert at expiry. Negotiations are also time-consuming and cumbersome.

This is combined with a wide variety of variation in arrangements, and an inconsistent and inefficient land titling system. This deters material investment in improving and upgrading land. Land ownership is also beset with disputes, with up to 60 % of cases in Ghana's legal system related to title issues. Notably, women are not allowed to own any tangible assets, including land.

The current Land Policy outlines a wide range of initiatives to be implemented, to improve security of tenure and title. These are all common sense, but it remains to be seen how effectively they can be implemented given the entrenched culture.

One interesting initiative is by Opportunity International, a major NGO and MFI, which surveys a client's property using GIS technology. This can be used to produce a paralegal deed that is recognised by the government.

The cost of the mapping is repaid through a loan extended by Opportunity International, and Opportunity International can then use the metrics collected to help make lending decisions. Opportunity International is very much of the view that the size of a land holding is an important indicator of a farmer's ability to repay.

## 3.2 Legal System

**Amber status:**

Ghana 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. Combined with the inadequate land tenure system, this means the courts are heavily tied up with land disputes.

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.

Where 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 that 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:**

Development of 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 agroindustry in Ghana 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 the 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.

The current trade policy does recognise the importance of developing specific agribusiness infrastructure such as cold chains and phytosanitary inspection services, but these initiatives are not well aligned to the needs of small-scale agriprocessors.

Also, demand for electricity is increasingly outstripping supply. This is exacerbated by the use of inefficient machinery and equipment. Finally, the single-phase electricity supply, which predominates in rural areas, is apparently not adequate and needs to be replaced with a three-phase system.

## 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 issues in the commercial culture and skills of both producers and processors in Ghana. 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/Green status:

The government leans towards a business-friendly tax policy for both the agriculture and MSME sectors. It should be careful in the application of tariff policy to enhance local consumption, however, lest it have a long-term impact on competitiveness.

Interestingly, according to FASDEP, tax policy towards the agricultural sector is very supportive. Apparently tax holidays of up to 10 years are available for the right type of investment. The success of this policy has been undermined by failure to provide a competitive infrastructure and utilities environment.

Current policy also makes strategic use of import tariffs to improve the relative competitiveness of local produce. The government's ability to manipulate policy in this area is necessarily constrained by its membership of ECOWAS.

An interesting development has been a recent call from the Minister of Finance and Economic Planning for tax exemptions for equity investments in smaller businesses, particularly to support the nascent venture capital sector.

## 3.6 Information Environment

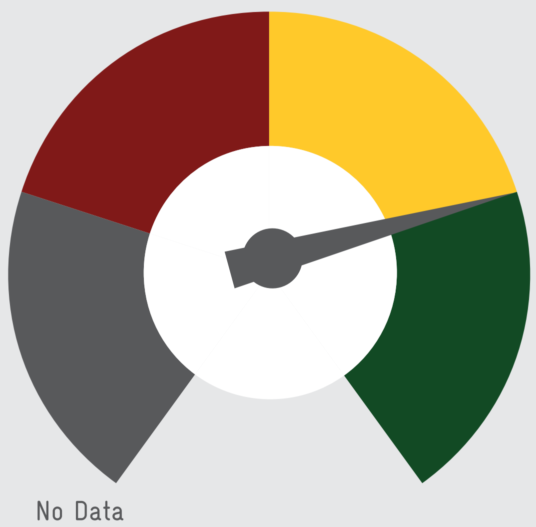
### Amber status:

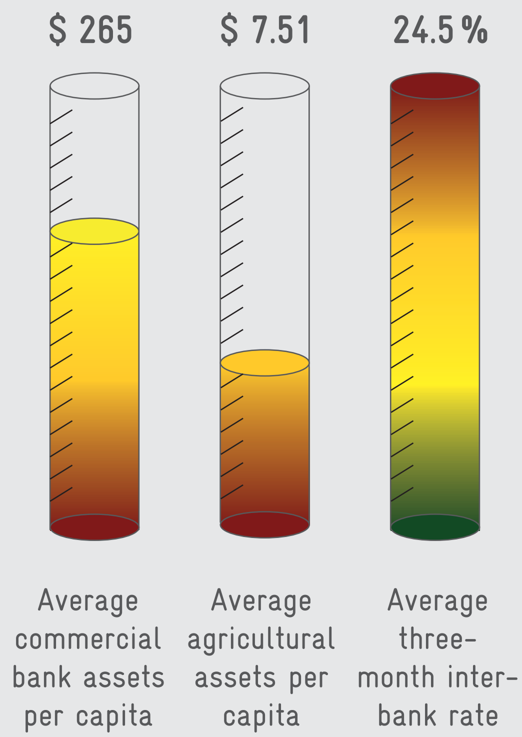
The collection, aggregation and analysis of agricultural data is not as advanced as it should be. There should be a clear strategy to address gaps in this area.

It became apparent during the assignment that the lack of reliable data was a source of frustration for all stakeholders. In order 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. There is a tremendous amount of data being collected through a vast number of initiatives, but there does not 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 the farm enterprises is being lost. Where this can be formalised through increasing use of current accounts for income and expenditure, they build a colourful record of financial activity, which can be used to help identify bankable customers at both sub-sector and individual level.

# 4 Analysis of Financial Sector




Ghana has a relatively advanced financial sector, with well developed capital and debt markets, and a strong central bank. Macroeconomic factors mean interest rates are exceptionally high. Agricultural lending is a very small component of the market, though outreach to rural areas is through the rural banks. There are also active insurance and leasing companies.

**Figure 5: Performance Dashboard for Financial Sector**

## Macro-Level

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

## Meso-Level

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

## Micro-Level

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

## 4.1 Overview

### Amber/Green status:

While there are many long-term improvements which remain to be implemented, in general Ghana 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 SME and agricultural lending which is a particular focus of this study.

Ghana has a relatively advanced financial sector with an increasingly competitive and well-managed banking system, a comparatively sophisticated insurance market, and a small but functional stock market.

The sector is dominated by the commercial banks (of which there are about 20 or so active institutions), most of which are in private hands. The sector has been growing quickly in recent years, fuelled largely by rapid increases in corporate lending and growing retail franchises. The sector is competitive in the sense that banks will work hard to attract premium clients, but is burdened by exceptionally high interest rates designed to fight endemic inflation.

Bank of Ghana is a generally well-respected regulator with some high-calibre and experienced staff. Their concerns about unalloyed asset growth have been mitigated recently as capital adequacy measures have improved markedly, and lending growth slowed.

It is notable that the Government of Ghana is a major player on the debt market which, while having positive aspects, also means that banks tend to hold a high proportion of government paper which could otherwise be allocated to the private sector.

That said, there seems reason for optimism from a macro standpoint. The central bank feels that inflation is beginning to come under control and is gently easing monetary policy.

While commercial banks dominate the market through their size, the sector is also distinguished through a large network of around 125 rural banks spread throughout the country. Though small, they are linked through an apex institution (ARB APEX Bank) which is currently providing some payment and settlement, and short-term liquidity support. The rural banks provide outreach, particularly for conurbations of rural salaried classes and entrepreneurs.

There is also a community of both deposit-taking (known as Savings and Loans) and non deposit-taking institutions (typically NGOs) which are regulated separately as Non-Bank Financial Institutions (NBFIs). This regulation also covers a growing number of mortgage companies, insurers and leasing companies. This exemplifies the relative diversity and innovation of the sector in Ghana, though typically these institutions are very small.

In relation to agricultural finance in particular, its share of commercial bank lending dropped from 25% (prior to liberalisation of the financial sector in the 1990s) to about 7% in 2005. It is also estimated that the share of lending dedicated specifically to agriculture by even the rural banks is only around 15%.

Finally, Ghana has a small but effective stock exchange with around 30 current listings with a capitalisation of about US$12bn. The market is dominated by local manufacturing and brewing in particular, with some financial services.

FASDEP II, the current iteration of the national agricultural strategy, includes improved access to financial services as a key component. While it recognises that its ability to directly influence this is limited to some extent, it articulates a range of strategies including:

- Strengthening the lending process;
- Improving the education of borrowers;

- Deepening linkages in the financial sector; and
- Creating an Agricultural Development Fund.

These are all common sense recommendations but neither is there much detail on how the ministry intends to approach these issues, nor is there recognition of how to better integrate financial services with the other elements of the strategy.

## 4.2 Macro-Level

### 4.2.1 Market Liberalisation

**Amber/Green status:**

Ghana has been a leader in implementing reforms to encourage market-based financial sector, many as a result of its membership of ECOWAS. Success is exemplified in the rapid growth of a diversified financial sector with financial institutions both domestic and foreign keen to enter the market.

Ghana'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 Bank of Ghana 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 rarely, if at all 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.

The principle concerns of the Bank of Ghana are the implementation of monetary policy and the effective supervision and regulation of the financial sector. The bank has been battling Ghana's endemic inflation problem for some years, with resulting high interest rates and currency fluctuations.

On regulation and supervision, the Bank of Ghana is well thought of, and stability has been brought to the banking sector. Concerns about excessive portfolio growth have relaxed slightly over recent months.

Finally, the bank is also conscious of its role in supporting economic growth through improving access to finance. It sensibly sees its role as helping to build the financial sector architecture required to ensure increasing efficiency and transparency. Current initiatives include:

- Adopting an open licensing system to encourage competition;
- Modernising the payments system; and
- Establishing a central securities depository.

## 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 is showing tremendous ambition in innovation, though to some extent is held back by the slow pace of legislative reform required to support such bold initiatives. Effective implementation is also a concern.

Bankers in Ghana have a clear perception of what the sector needs, though implementation has not been as effective or rapid as hoped for.

That said, the regulations for the operation of credit reference bureaus were laid down in 2007, and at least one bureau is now operating with another planning market entry. It remains to be seen how effective the system will be in sharing default data and improving access to finance for good borrowers.

A new Real Time Gross Settlement system was also introduced in recent years. A major programme to develop a national payment and settlement network (e-ZWICH) has ambitious goals, but there is some criticism that the implementation has not been well co-ordinated. Nevertheless, it has allowed the entry of mobile banking operators and mobile phone operator MTN has joined the market in collaboration with some leading commercial banks.

This has been combined with a simultaneous initiative to introduce a national biometric database which, when combined with the new payments system, would deliver one of the most advanced integrated systems in the world, assuming it reached its potential.

The establishment of a Central Securities Depository which instantly registers and transfers title of various securities instruments was spearheaded by the central bank, and listings on the Ghana Stock Exchange are expected to transfer to this new platform in due course.

Finally, the central bank has planned an initiative to computerise the rural banking network, and integrate it into the national payments system. This is a laudable goal, but delays in the implementation are leading to a sense of frustration from the rural banks.

Particularly forward thinking is the introduction of regulation by the central bank to strengthen transparency in pricing and consumer protection. This is partly to deflect public outrage at the high interest rates and perceived profiteering, and to stave off the potentially disastrous introduction of interest rate controls.

### 4.3.2 Scope, Depth and Integration of Market

**Amber/Green status:**

Overall, the sector is well-capitalised, but this capital tends to be concentrated in 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. Total assets are around GH¢12bn (about US$8.5bn). If anything, the sector is criticised for being too conservative in its portfolio development (by the private sector anyway). On the other hand, the rural banking sector is comparatively under-capitalised, at least for the purposes of term finance for agriculture. Total assets for the rural banking sector are around GH¢550m (about US$400m). It is difficult to find statistics for the NBFI sector (encompassing lenders such as MFIs and Savings and Loans companies) though one source suggests that that they may be around US$200m in total, although this appears to include some rural banks. There is an active interbank market operating between the major commercial banks, but there little intermediation with these smaller niche players.

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 rural banks. Rather, the aim should be to help release the liquidity of commercial banks for the benefit of rural borrowers by facilitating the development of a robust local wholesale funding market for financial institutions. Deepening these markets allows a way of channelling 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 at present to develop a healthy and profitable rural bank/MFI portfolio. It remains to be seen whether the rural banks, in particular, have an appetite for longer-term funding, as most are inherently conservative institutions. However, where, ways of strengthening individual rural banks and improving their ability to grow their balance sheet into term lending can be found, this opportunity should be taken.

### 4.3.3 Product and Market Development

**Amber status:**

In general, commercial banks still have significant doubts about increasing their exposure to the agricultural sector. While rural banks are much more conscious of this franchise, they lack the balance sheet and expertise to effectively address this segment with term finance. There is evidence, however, that some rural banks are beginning to offer longer terms to some farmers of up to, and even three, years.

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 buyers or input suppliers. Indeed, this may be the most effective route to improving the access to working capital for small producers.

Some can get small loans by joining a rural bank and engaging in compulsory savings. There is evidence of improved product development from the rural banks, with some offering products tailored to attractive subsectors (e.g. cocoa) with appropriate tenors and grace periods. Most are unsuitable for any sort of capital investment activity, however, and this remains a major gap in the market.

The commercial banks feel that the agribusiness SME segment is generally under-capitalised 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.

Interestingly, Ghana is experiencing rapid growth in the leasing sector, and several commercial banks have now launched leasing arms. These are generally focused on industrial, mining and manufacturing companies, however. It may be worth investigating in further depth the appetite to develop leasing products for agribusiness.

### 4.3.4 Interest Rates

**Red/Amber status:**

While prices for agricultural finance are high, this is largely symptomatic of a fundamentally high interest rate environment. Part of this is macroeconomic, however Ghana has typically high net interest margins, probably due to a higher than average default rate on their portfolios. Competition for good customers is generally fairly robust.

Interest rates in Ghana are very high for all borrowing (inter-bank rates in the region of 20%-25%), a result of measures to curb the rampant inflation caused by an over-inflated currency.

It is not yet clear to what extent the government is succeeding in winning this battle, but interest rates for agricultural finance are likely to stay relatively high even in the event of a more benign environment.

The rapidly growing commercial banking and retail sectors have a major appetite for credit, and are a priority for allocation by the commercial banks. On a risk-reward basis, agricultural finance is still likely to be associated with relatively high interest rates.

Interest rates for agricultural finance are typically high, because of the low appetite for risk and the high costs of distribution. While attempts to address the distribution costs through various practical interventions are possible, 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. 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, Ghanaian bankers are highly adept, but there are large gaps in knowledge and culture around the subject of this study. Rural banking staff generally have quite weak financial sector skills and training.

Ghanaian bankers are generally well regarded, having the benefit of a relatively strong education and a well-established commercial culture. As already outlined, Ghanaian commercial banks have successful retail and corporate franchises, and the calibre of staff to match. Unfortunately, the situation in agricultural and SME finance is not equivalent.

While the skills can be taught, the business culture associated with SMEs (in this case, agribusiness) and agricultural finance is very different from that associated with corporate or retail banking. Frontline staff need to have both empathy and understanding of 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 a mercantile or trading background, and are then taught the banking skills they need on the job.

Rural bank staff are much closer to their customers but many lack the basic financial services education they need. The lack of a structured career progression also makes retaining talented personnel difficult.

### 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. Rural banks 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 to address mass-market agricultural finance. Banking this market has not been their strategy so it is understandable that they have not invested in the operating model required. This needs heavy application of data and technology to reduce costs and improve consistency and predictability of lending, as well as 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.

Rural banks have the branch network, but many 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.

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 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 technologies in particular are likely to be required.

### 4.3.7 Technology

**Amber/Green status:**

Comparatively, Ghana 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 salesforce.

The Ghanaian financial sector is an enthusiastic adopter of technology. Commercial banks in Ghana have generally recognised the benefit of investments in other banking technologies (e.g. customer relationship management (CRM) and risk management systems). Successful implementation is always a challenge but organisations that learn from experience become better at this over time.

Mobile banking is growing rapidly, but success is increasingly dependent on the successful roll-out of the e-ZWICH platform. That said, there have been a number of new partnerships formed, notably between MTN and several major Ghanaian banks. Policy-makers and bankers are keen to replicate the success they have seen in other markets.

Nevertheless, mobile banking will 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 behaviour (both from a risk management and also a marketing standpoint).

One of the major gaps identified is the lack of computerisation and a standard IT software platform for the rural banking system. This has been identified at a priority by ARB Apex Bank on behalf of its members and plans are afoot to address this. There are increasing concerns, however, about apparent delays in the launch of the project and the capacity for successful implementations.

## 4.4 Micro-Level

### 4.4.1 Commercial Banks

**Amber/Green status:**

Ghana has a large, competitive, efficient and profitable banking sector for a country of its level of development. The country has a robust if uncomplicated corporate banking business and a thriving retail franchise. 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.

Ghana has a total of 25 operating banks, of which 13 are foreign-owned. Foreign-owned banks are among the largest players including Barclays Bank of Ghana, Standard Chartered Bank, Ecobank Ghana, and Stanbic. They are joined in the top tier, in terms of assets, by the locally-owned Ghana Commercial Bank and Agricultural Development Bank. Recently, as in other attractive markets in Africa, there has been a rash of new entrants from Nigeria. Names include Zenith Bank, United Bank for Africa (UBA), and Intercontinental Bank.

Commercial banks are growing robustly on the back of an expanding economy. Some have ambitious network development plans, and Barclays, Ghana Commercial Bank and Ecobank have been particularly active in opening new branches. Total branches increased from 530 to 665 during 2008 for example. In addition, coverage is being transformed through the expansion of ATM/ Point of Sale (POS) systems and mobile banking.

Assets have been growing rapidly and banks are beginning to test the waters with long-term lending. The response from the Bank of Ghana (also stimulated by the external financial crisis) has been an increase in minimum capital thresholds.

Although competition for key market share is intense, banks are maintaining and increasing profitability – even in the face of rising default rates caused by the high inflation and interest rates, and the depreciating currency. Despite the competition, interest rates are exceptionally high, a combination of both base rate and relatively high Net Interest Margins (NIMs). NIMs at 8 % have declined somewhat in recent years but are still high. This is partly a symptom of a traditionally high default rate.

Ghanaian banks are keen adopters of new technology and have been investing heavily in new distribution platforms, as well as core accounting systems, CRM and risk management platforms.

Ghanaian banks have little exposure to agriculture, preferring retail banking and established corporate clients from the industrial, retail, trading and real-estate sectors. They are active, however, in exporting agricultural produce through their international trade finance operations. Some banks interviewed were beginning to express an interest in supply chain finance for supermarkets, and are certainly interested in ancillary services like transport.

### 4.4.2 Rural Banks

**Amber status:**

In our view, rural banks are an absolutely vital frontline financial services provider. Though it is unfair to generalise, most are undercapitalised to meet the riskier profile of term agricultural finance, and also lack the banking skills to manage more complex portfolios. They need considerable assistance to upgrade their systems, processes and human resources to meet future challenges.

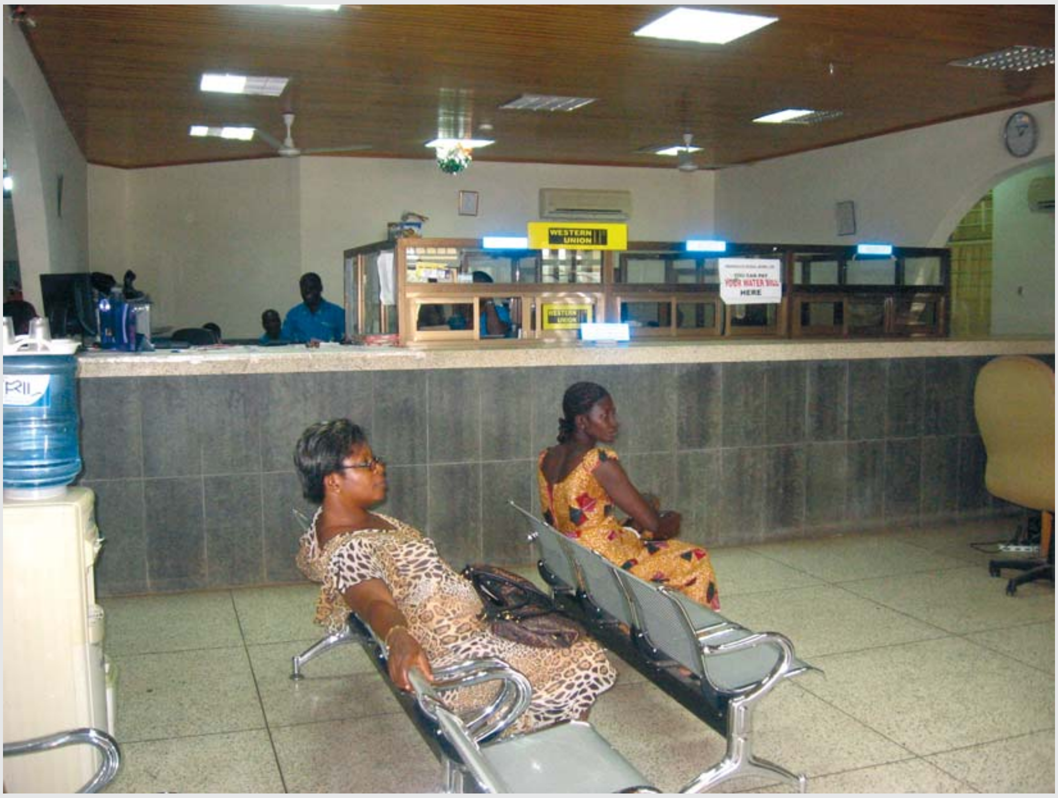
Since 1976, a large network of more than 125 rural banks has sprung up across the country. While they are well positioned in agricultural areas, their strongest franchise is the increasing working, salaried population serving rural conurbations and outlying areas. Total assets of the rural banking system are around US$400mn, compared to the assets of the commercial banking system of just under US$9bn. A recent study suggested that around 16 % of credit from rural banks was allocated to farmers.

Rural banks generally provide short-term finance for farmers and FBOs, underpinned by a compulsory savings scheme. Lending multiples are usually around three times the saved total, which is then frozen until the loan is repaid.

Rural banks are reluctant to move into longer-term finance. Not only are they wary of the higher risks attached to longer-term loans, they are conscious of the need to maintain a highly liquid balance sheet. They seem to have an appetite for expanding short-term finance to farmers, however, as long as it can be reconciled with their balance sheet strategy.

Rural Banks are organised under an umbrella bank, ARB Apex Bank, which provides its members with clearing services and some limited liquidity support. The individual member banks, however, are not interlinked and do not really constitute a formal network. It is hoped that the major roll-out of a harmonised IT platform will enable this, though this has been subject to delays. ARB Apex Bank also supervises the rural banks, and provides some audit and technical assistance services.

## Nwabiagwa Rural Bank



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

**Figure 6: Profile of Rural Bank**

### 4.4.3 Agricultural Development Bank

**Amber/Green status:**

The Agricultural Development Bank (ADB) has spent some years strategically exiting the agricultural sector after a series of disastrous experiences. It seems to be expressing a desire to build its portfolio again and could be a very useful partner.

Agricultural Development Bank is a state-owned bank established in 1965 to address the financial services needs of the agricultural sector. The bank suffered from chronic high default rates, and a decision was made to strategically exit the agricultural sector in the 1990s. Particularly damaging was the non-performing loan (NPL) legacy incurred from its disastrous entry into the cotton sector.

While ADB maintained a small agricultural portfolio, its major focus over the past years has been entering the corporate banking and retail markets. Since then it has essentially become a state-owned commercial bank. Several years ago there were rumours of an attempt to privatise the bank through a sale to Stanbic.

Conversations with ADB suggested an intention to strategically re-enter the agricultural market gradually, underpinned by a more careful and commercial approach.

### 4.4.4 Microfinance Institutions (MFIs)

**Amber/Green status:**

The microfinance sector in Ghana seems to be growing, 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.

Ghana has a small deposit-taking, microfinance sector, commonly called Savings and Loans. As with most MFIs, they are mostly focused on urban centres where they find a large ready market of customers with short-term credit needs.

### 4.4.5 Venture Capital and Private Equity

**Red/Amber status:**

Investors are, in principle, quite attracted to Ghana. It has a familiar legal code and a commercial culture which is generally supportive of investor rights. It also has a relatively robust macroeconomic environment, though the inflation issue and unstable currency are a major deterrent.

Venture capital and private equity options are limited in Ghana, though to some extent the business and macroeconomic environment are conducive to investment. Businesses will need to adopt greater transparency and disclosure of their financial affairs, however, as there is quite a degree of distrust between parties at present.

Though some pan-African funds such as the Modern Africa Growth Fund, the Commonwealth Africa Investment Fund and the African Enterprise Fund have entered the market, the country's unstable exchange rate is a major deterrent to other international investors, though there is a growing pool of local private capital.

The government has been attempting to catalyse the sector for nearly two decades now through the establishment of the Venture Capital Trust Fund (VCTF), with support in seed capital from USAID and Centers for Disease Control and Prevention (CDC). It essentially operates as a fund of funds, working with private sector investors to co-finance specialist sub-funds. The private sector is offered tax incentives to participate.

Until recently it has met with limited success but there have been several recent launches of new funds, with attraction of modest amounts of private capital.

Investment is largely centred on industrial, retail, and real-estate ventures, though the rules allow the VCTF to set-up Special Purpose Vehicles, one of which is a lending operation designed to prefinance sorghum production for a major local brewery.

### 4.4.6 Insurance

**Amber/Green status:**

Insurance is comparatively developed in Ghana, and the lack of certain products (e.g. crop/weather/herd insurance) cannot really be attributed to industry failure. These are very difficult products to develop in even the most sophisticated markets.

The Ghanaian insurance industry is relatively well developed, and considered to have high-growth potential. Activity, however, is currently concentrated on the core property and casualty market.

Industry observers expected that microinsurance could become a booming sector in Ghana, but that this is likely to focus on property and life insurance products for the urban mass market. GIZ is sponsoring a major project in collaboration with the National Insurance Commission of Ghana, a major initiative to catalyse agricultural insurance.

Early studies indicate that this may not be an insurmountable barrier in Ghana, with suggestions that the data environment may be rich enough to support robust product development. In terms of the value chains studied, however, anecdotal evidence suggests that bushfire insurance to cover cashew plantations in particular would be welcome. This was swiftly followed by the comment that it would be extremely hard to implement, and subject to fraud.

### 4.4.7 Development Agencies

**Amber status:**

Ghana is an attractive destination for development agencies interested in the financial sector. As a result there are a wide range of initiatives. It is not clear whether there is a specialist financial sector steering group for the co-ordination of donor activities, nor a joint strategy for approaching the sector.

SPEED Ghana is a credit facility jointly funded by GIZ and DANIDA. It is currently concentrating on extending credit lines to rural banks for the purpose of SME lending. GIZ is particularly interested in improving financial literacy and consumer protection, as well as capacity building for rural banks and credit unions. DANIDA is also planning a major intervention to support ARB Apex Bank and its rural bank members.

AFD is heavily engaged in Ghana, though mainly in infrastructure projects. The French development finance wing, PROPARCO, has provided long-term credit lines of up to US$50m to commercial banks to finance SMEs in particular. It is also engaged in financial support to a number of local leasing companies to the tune of US$2m.

USAID is using its Debit Credit Authority guarantee scheme to support 50 % guarantees for two local commercial banks to extend loans to the MSME and MFI sector in particular.

As Ghana is a compact member of the Millennium Challenge Corporation, it has been able to access large amounts (about US$80m) to support an agricultural credit line and also financial sector technical assistance programmes. Much of the technical assistance is being put towards enhancing the payment and settlement architecture in Ghana. Some concerns have been expressed that the credit line may experience major default problems.

The World Bank has a credit line focused on the SME sector, and the International Finance Corporation (IFC) has a small portfolio of agriculture related projects.

# 5 Value Chain Analysis

## 5.1 Cocoa

Cocoa is a mainstay of the Ghanaian economy with strong growth in recent years, particularly between 2003 and 2005. Interestingly, leadership of the cocoa industry falls under the remit of the Ministry of Finance and Economic Planning. This is mainly because of the strategic economic importance of the cocoa industry in Ghana. While some liberalisation has taken place, the industry is still fundamentally in state hands.

The key player is COCOBOD, the national marketing monopoly. COCOBOD raises over US$1bn of short-term finance annually on the international markets, syndicated between a number of international banks, which it uses to prefinance production.

Though it has an exclusive franchise on the marketing of cocoa, it has released some of its powers to the private sector further down the value chain. COCBOD uses a network of LBCs as agents to buy, bulk and transport production at the local level to its facilities.

The LBCs, in turn, are to some extent financed by COCOBOD, which allows them to extend trade credit and other finance to growers. LBCs and growers also use the formal financial system to a degree.

COCOBOD are also responsible for the overall development of the cocoa industry, and it has a variety of research and development and extension services units geared to the industry. Some have questioned the quality and outreach of these services, and there is anecdotal evidence of underfunding which is affecting outputs.

In terms of productivity, Ghanaian cocoa is still performing relatively poorly. Major buyers also expressed concern that not enough was being done to assure quality and to improve levels of certification. Standards such as Rainbow Alliance, Eurepgap, GLOBALGAP, and Organic are becoming increasingly important to buyers and they felt that other countries (notably Cote D'Ivoire) were significantly more advanced in their adoption.Though current domestic processing of the cocoa crop is low at less than 20 %, at least COCOBOD has facilitated the entry of some major industrial concerns into the market. COCOBOD also has an ambition to enhance local processing of cocoa to perhaps as much as 50 %.

Finally, the cocoa industry is differentiated by the involvement of some major private sector players, including well known brands such as Barry Callebaut and Cadbury. These companies sponsor major initiatives to develop both cocoa production and the livelihoods of cocoa growing communities.

### 5.1.1 Producer Capitalisation

#### Replantation

Many farmers need to replant substantial parts of their plantation. Firstly, the yield from cocoa trees gradually declines over time and, secondly, many trees have become infested with viruses (e. g. swollen shoot), which necessitates their destruction. Furthermore, new hybrid varieties offer greater yields and the potential for increased income in the future.

However, even new hybrid varieties need at least five years to produce a crop, and only reach full maturity after 10-15 years. Like the other tree crops studied, there is a major gap in finance to cover the capital investment required for plantation development.

To a large extent, COCOBOD subsidises this process through an extensive cocoa rehabilitation and extension services programme. This involves aggressive control of mistletoes infestation and the cutting down of old cocoa trees, and replanting of high-yielding and early maturing ones.

One positive aspect is that cocoa can be successfully intercropped during the early plantation development, which can provide farmers with a substitute income stream during the period. It is also possible to adopt progressive replantation, which means that cocoa farmers can phase the upgrade of their plantation.

### ➔ Financing

While the general lack of term finance in Ghana is a problem, the major impediment to the capital financing of small-scale cocoa production is the very long payback. That said, in contrast to some other tree crops studied, the stability and structure of the market means that some rural banks are expressing a willingness to finance cocoa replanting under the right circumstances.

The key player in any structure is COCOBOD, which basically provides the technical services, inputs and cocoa tree stock needed for any replantation exercise. Working with COCOBOD, perhaps a partial guarantee scheme could be developed for high-potential farmers which would encourage the entry of more private sector finance.

## 5.1.2 Input Supply, Equipment and Working Capital

Farmers have a range of requirements including:

- Seedlings for replantation, which are usually sourced from COCOBOD;
- Heavy requirements for fertilisers, pesticides and fungicides, available from a range of stockists across the country, or through COCOBOD extension services; and
- Additional minor items such as basic tools, spraying equipment, and packing boxes.

### ➔ Financing

There are currently three sources of financing for growers. They can borrow from rural banks using their own initiative, and buy the required inputs themselves. The downside is the high interest rate but the upside is the ability to more precisely control what they receive and when they receive it.

Input suppliers (e.g. Wienco) have begun to develop buyer finance schemes for well-organised farmer groups. These are a low-cost source of funds but some producers claimed that the supply is not sufficient and is sometimes delivered too late for maximum efficacy.

Finally, some of the LBCs provide trade credit and/or prefinancing for their suppliers. Sometimes the credit is in kind, in the form of the actual supplies, and sometimes it is in the form of cash.

All of these approaches have their relative advantages and disadvantages, and some farmers use a combination. The fact is, it appears that cocoa farmers do have options for working capital, but perhaps these could be leveraged through the application of development finance credit guarantees.

Certainly the private sector players welcomed the concept, as they felt their own balance sheets were becoming constrained.

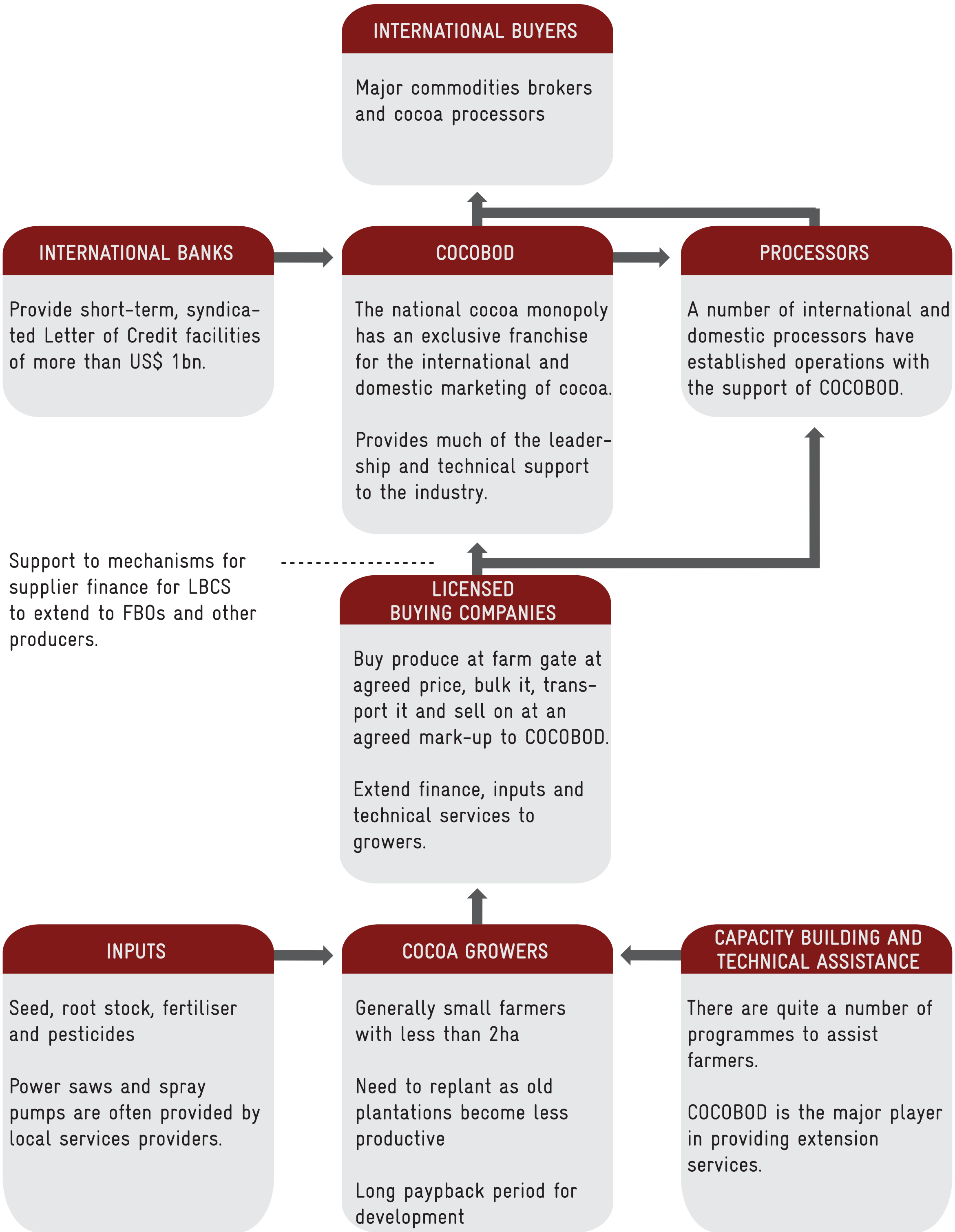



**Figure 7: Diagram of Typical Cocoa Value Chain**

## 5.2 Cashew

More than 60 000 farmers in Ghana are engaged in cashew production, with an average farm size of around 1ha-2.5ha. Cashew trees take two to three years to produce an economic crop, which starts at about 100kg/ha in year three and rising as high as 1 200kg/ha in the 10th year for the highest yielding grafted varieties. Average yields in Ghana have increased from 200kg/ha in 2 000 up to 450kg/ha in 2006. Cashew trees are particularly prevalent in the dryer areas of Ghana where they flourish.

Major inhibitors to productivity include:

- Poor disease control;
- Low yields;
- Lack of standardisation and certification;
- Poor grading and handling;
- Manual processing;
- A lack of organisation on the part of producers; and
- Poor marketing and related low prices.

World demand for cashew is around 430 000 tons as measured in 2006 and growing rapidly at a rate of 5 %-8 % a year. With a total production of around 16 000 tons, Ghana holds about 4 % of the global market share in terms of production. Ghana has also established a niche, however, as a hub for the export of cashews from the region, and in 2006 it exported over 40 000 tons or nearly 10 % of the global market. The value of this trade was estimated at around US$24m.

Cashew has a range of processing options including confectionary nuts, apple jam, wine and juices. Most of Ghana's cashews are exported raw, however, and processed in countries such as Brazil, India, and Vietnam, also major producers themselves.

### 5.2.1 Input Supply, Equipment and Working Capital

Farmers have a range of requirements including:

- New and improved planting materials, such as seeds or seedlings sourced from specialist nurseries (also include seeds for intercrops);
- Fertiliser, pesticides and herbicides for killing weeds; and
- Additional minor items such as basic tools, spraying equipment, and packing boxes.

An advantage of cashew trees is the ease with which they can be intercropped with annual crops such as ground nuts, soybean, maize, sorghum, yam, pepper or pineapple, at least until the tree canopy closes.

Prices for cashews vary during the harvest season, with estimates of around 60 pesewas per kg at the start of the season, falling to around 25 pesewas towards the end (100 pesewas equals one cedi). If we propose a midpoint of around 40-45 pesewas, a good farmer with 2ha of productive cashew trees should be grossing around GH¢600-GH¢700 or around US$500 a year.

#### ➔ Financing

As a tree crop, cashews are not an attractive option for small farmers. An income of just under US$500 a year from a well-run plantation of 2ha is not good. The situation changes radically as farms increase in size. This is recognised by the CDP programme, which is undertaking a major exercise to establish an accurate GIS map of cashew producers in the country. Like the approach adopted by Opportunity International, this can be used by financial institutions to effectively segment the market and target larger producers.

Ordinarily, this could be combined with an approach to supplier finance, but in Ghana cashew processing is so weak that it is difficult to find a reliable off-take partner.

### 5.2.2 Processing

There is very little domestic cashew processing, with most of the production being exported unprocessed to major processing centres in Brazil, India and Vietnam. There were very mixed views on the viability and attractiveness of local processing. Some enthusiasts suggested that the competitive advantage and economies of scale of the major international processors is being eroded through high labour costs. This was countered by cynics who suggested that new modern processing machinery would counter this loss of competitiveness.

Unfortunately, cashews are not a major feature of the Ghanaian diet. This means that it is even difficult for local processors to get a foothold by capturing local market share at least.

It is also clear that in processing cashews, scale is important. It is not really a suitable process for cottage industry, particularly given the lack of local market.

#### ➔ Financing

The transformation of the cashew processing industry in Ghana, if it happens at all, is likely to be led by the private sector. Efforts are being made to solicit international investment from leading cashew processors (particularly from Brazil) to establish a major plant in Ghana. Though their decision to do this would need to be underpinned by their own feasibility study, comfort could be provided in terms of offers of co-investment and/or tax breaks (or other financial and non-financial incentives).

Ideally, development partners would also plan early to work with the firm and the local financial sector to develop a supplier credit line for producers.

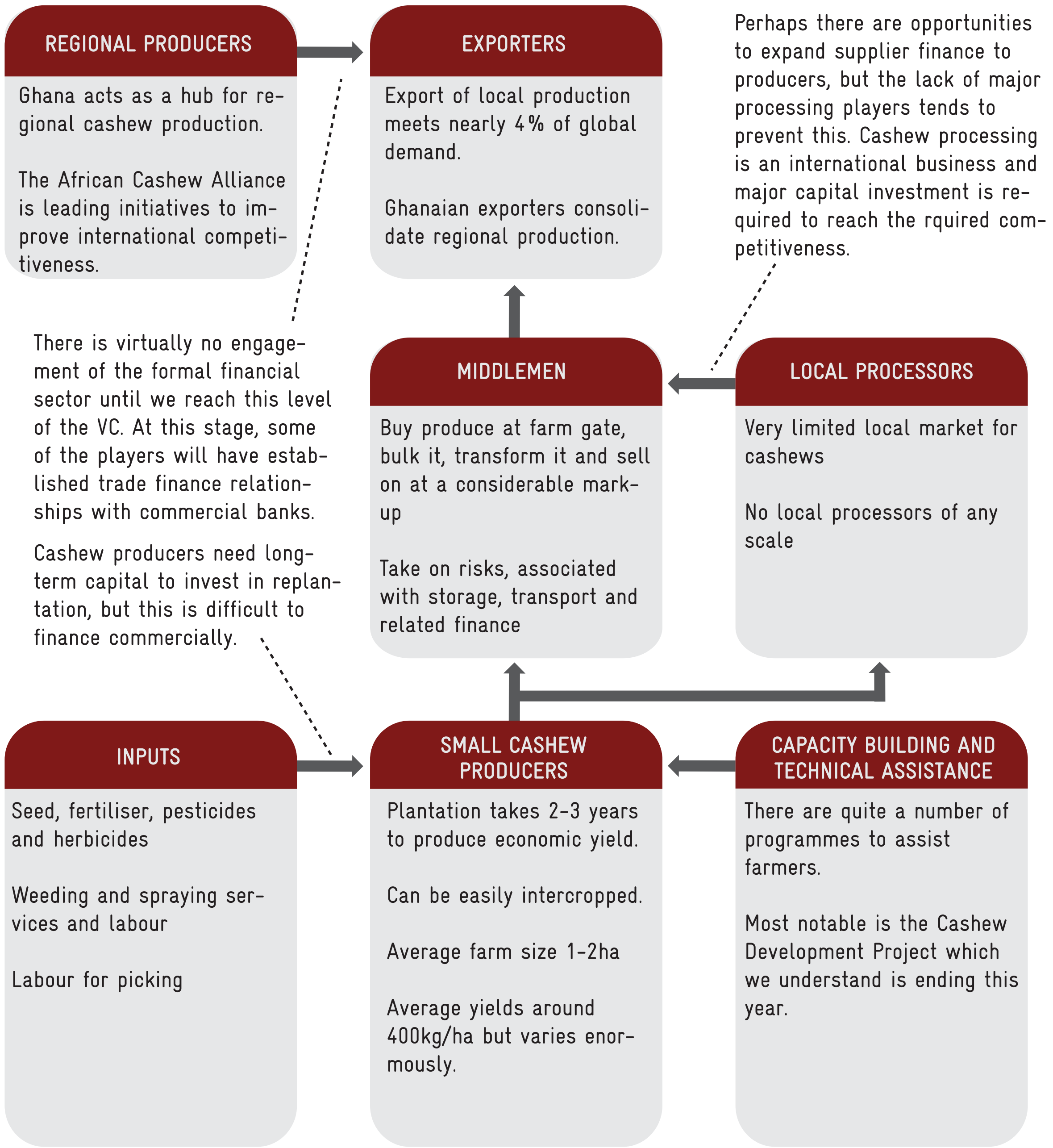



**Figure 8: Diagram of Typical Cashew Value Chain**

## Case Study: Kona Cashew Processing Plant

This depressingly empty photo is of the sorting and grading room at the Kona Cashew Processing Plant. It is one of a number of local processors which have closed their doors due to a mixture of poor management and fraud. Kona only started in 2008, before running out of working capital in early 2010. Management claim that lack of financing was a major cause, suggesting that their application for a loan under a African Development Bank/ADB credit line was refused as the proposed collateral (the warehouse) did not meet the required criteria. Also cited was the poor behaviour of local producers in relation to prefinancing. It was daimed that credit was routinely taken by farmers who went on to side-sell and default on their loan obligations.

**Figure 9: Profile of a Cashew Processing Plant**

## 5.3 Pineapple

The recent debacle in the Ghanaian pineapple industry, when it failed to respond effectively to global trends, brutally exposed Ghana's ineffectiveness in understanding international agricultural markets. Strategic suppliers in Costa Rica, the world's largest pineapple producer, collaborated with major buyers to introduce a new variety (MD2) produced by Del Monte scientists which they correctly predicted would dominate consumer preferences because of its yellower flesh, convenient size, and better transport qualities. Ghana failed to switch from its traditional Smooth Cayenne and Sugarloaf varieties in time and lost a huge amount of market share. While the industry has largely completed the switchover now, it is still recovering from the blow.

The downside of the switch to MD2 varieties is the more capital-intensive nature of production. The MD2 variety requires the use of plastic covers (they reduce evaporation and hasten the production cycle), fertilisers and herbicides. The more positive element is that pineapples have a relatively swift turnaround and payback period (especially when compared to tree fruits).

The ideal production process for pineapple is as follows:

- Producers prepare their plot for planting through ploughing;
- Suckers (i. e. sapling pineapple plants) are purchased from a nursery by the thousand and planted within plastic mulch covers;
- Regular application of fertiliser and herbicide during the growing cycle; and
- 14-18 months later, the pineapples are harvested.

### 5.3.1 Producer Capitalisation

#### Plantation Development

Illustrative cash costs per acre for MD2 are:

- Plastic mulching (estimated three rolls per acre of about 20 000 suckers) at a total cost of GH¢ 400;
- Cost of suckers about two pesewas (or potentially free if recycled from previous harvest) leading to a total cost of about GH¢ 400 per acre;
- Fertiliser costs of about GH¢ 25 per bag (there is a significant programme of government subsidies, however) and about 10 bags required per acre, leading to a total fertiliser cost of about GH¢ 250;
- Additional costs of around GH¢1 500 per acre. This includes a mix of casual labour for ploughing and spraying for example.

Discussions with producers and processors suggested that a cost of around GH¢2 500 per acre was a reasonable estimate, though this remains to be tested in detail.

Pineapple prices vary wildly depending on the market, the season, and the quality of the fruit. Sales of export quality of pineapples could reach pesewas 75 per fruit, while poor quality fruit in a glut market may receive as little as five pesewas.

This suggests, on the face of it, that pineapple production can be a relatively profitable business, with total sales (perhaps at the suggested »market lady« price of around 30 pesewas a fruit), of around GH¢ 6 000 (i.e. average annual earnings of around GH¢ 2 000 per acre).

However, if a farmer needs to prefinance production by borrowing at current interest rates, this radically affects profitability. A loan of GH¢ 3 000 per acre could generate interest costs of up to GH¢ 2 500, basically making this a very marginal business. Bear in mind that a typical farmer also has ongoing household costs as well.

### ➔ Financing

The most viable approaches are underpinned by access to cost-effective finance. Expansion of supplier finance is one of the most suitable approaches, and Blue Skies is one of those processors which extend low-interest credit to its producers (See Case Study in figure 11). Helping processors to strengthen their balance sheet to expand these facilities has promise.

Rural banks can, and do, engage directly with producers, particularly at FBO level (using a compulsory savings and group lending approach). Providing low-cost, credit enhancement for specific groups of borrowers could help significantly reduce the interest burden on producers.

## 5.3.2 Processing and Marketing

While most Ghanaian pineapple is exported unprocessed, there are some positive signs of the development of a vibrant local agriprocessing sector.

These vary from very small (even micro) operations, heavily dependent on donor support, up to major players in the fresh cut fruit industry which supply international supermarket chains.

We should probably also consider here the role of commercial farmers. Members of the Sea-freight Pineapple Exporters Group generally farm over 500 acres. Though active membership has been badly hit during the transition to MD2, this has been somewhat mitigated by the entry of Golden Exotics (a subsidiary of the large French industrial fruit farmer, Compagnie Fruitiere) which has opened a 5000 acre operation.

Some of the larger operations (over 2000 acres) have between 200-300 employees. Often they also act as a nucleus farm for outgrower schemes, helping build the competitiveness of small farmers in the surrounding area.

### ➔ Financing

While commercial banks are generally wary of agriculture, they can be interested in agribusiness, particularly the larger ones. Micro- and small-enterprises find it much more difficult to access finance, however. On the demand side, the agriprocessing sector is relatively small, 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 on Critical Success Factors and Recommendations looks at 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, but should do so only if they believe the application of such tools is only to overcome a short-tem lack of confidence and experience by banks.

Another more direct approach is to consider the use of equity capital directly. If investable opportunities with owners willing to make appropriate concessions in terms of ownership and management control in return for capital could be found, this could 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.

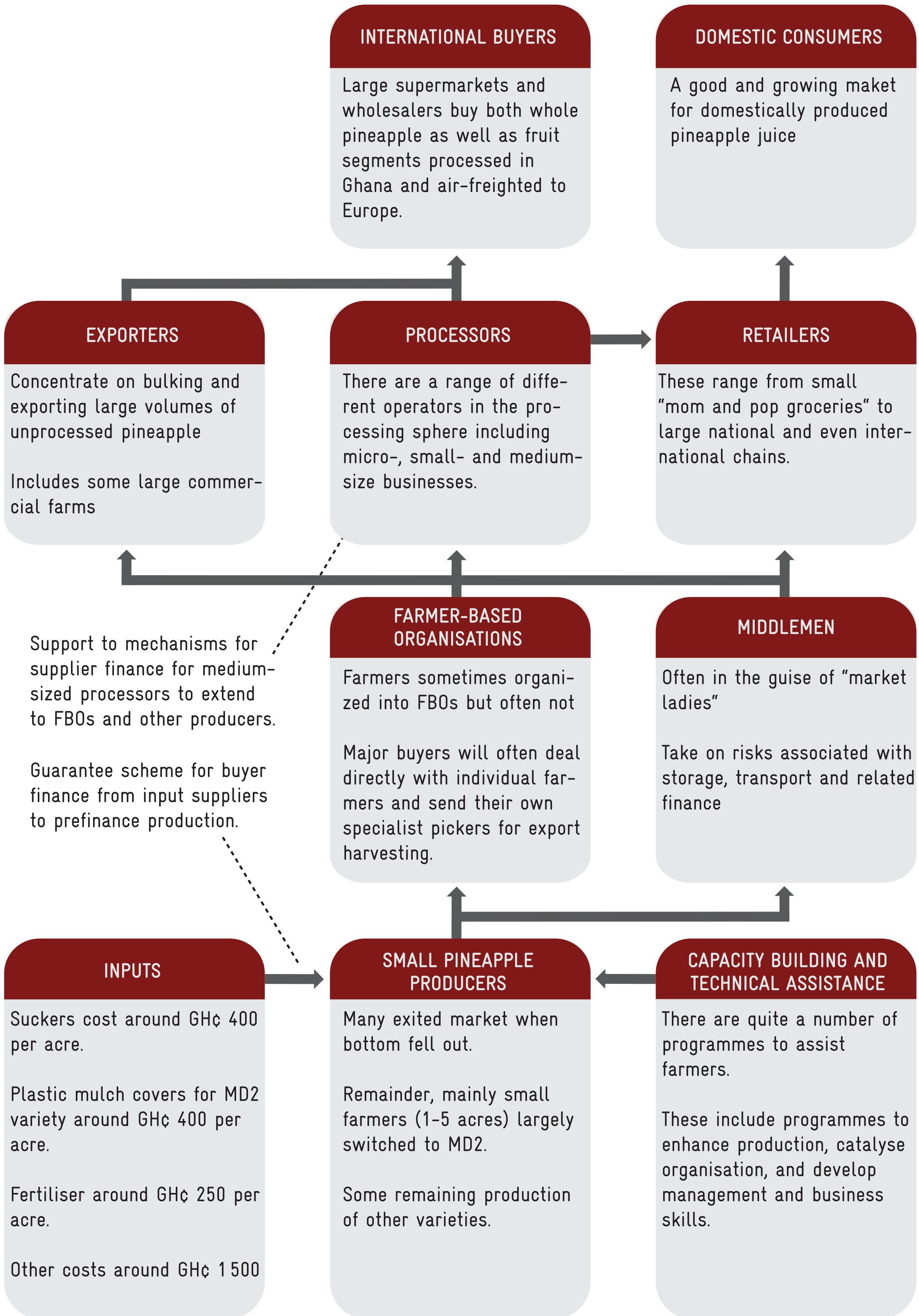



**Figure 10: Diagram of Typical Pineapple Value Chain**

## Pineapple: Small Enterprise

These two ladies, below and to the right, run seperate businesses drying fruit for both the domestic and international market. They are both supported by GIZ technical assistance and work next door to each other.

The ladies buy the fruit through their well-established contacts with farmers. The fruit is peeled and sliced by a team of part-time and casual workers before being dried in large machines like that above.


They produce small packages (right) of local produce for local retailers and supermarkets, and also export larger quantities (below) to Europe for use in cereals and other health foods.

Both businesses have been havily supported by donors and neither lady seems to have invested much risk capital. Both businesses are highly uncertain propositions at this stage and experience and business skills are missing.

## Pineapple: Medium Enterprise (Athena Foods)

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

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

## Pineapple: Large Enterprise (Blue Skies)

Blue Skies is a major processor and exporter of fresh cut fruit which it exports by air to Europe. It was started in 1998 by Anthony Pile (see right) and now has operations in four different countries and 3 000 employees. Blue Skies operates directly with individual farmers, helping prefinance production and providing technical assistance. The company stresses it is not an outgrower scheme though, and does not have formal arrangements with suppliers.

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

**Figure 11: Profiles of Pineapple Processing Enterprises**

# 6 Critical Success Factors and Recommendations

The final section of this report is a suite of broad recommendations which we feel will assist the value-chain approach to financing the agricultural sector0. They therefore tend to concentrate on aspects of value-chain development and financial sector reform that directly impact on the topic. The intention is not to reflect 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 the promotion of 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 in this field, but rather recognition that in relation to financial services the following must be recognised:

- 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 this has been done for readability. However, they should be viewed as a suite of proposals rather than a set of mutually exclusive options.

To a large extent they are similar to the recommendations put forward in the Kenya study. The parallels between the two studies are striking, and it is not a short-cut to suggest that similar solutions are applicable. The short case studies included in the report exemplify some of the elements of the recommendations. Readers are advised to follow-up these case studies if they require further details.

## 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. It is vital that development agencies co-ordinate their efforts in agricultural finance with FASDEP II, the overarching agricultural strategy. 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 Ministry of Food and Agriculture, and in the case of cocoa with COCOBOD. 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 highlighted as a basic precondition 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 engagement of the financial sector at some level.

### 6.1.2 Improving Co-oparation between Development Agencies in Finacial Sector Development

It is not a specific criticism of Ghana or the development players in Ghana 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 Ghanaian government in its strategy to improve economic outcomes through private sector development.

The establishment of a financial sector donor co-ordination committee is recommended. This would bring together various stakeholders to improve communication. The development of an independent trust is also advocated. This should include a mix of development and private sector partners, with a funding and governance structure that allows flexibility to respond effectively to the needs of beneficiaries. We believe that there is a lot to recommend consolidating financial sector development resources into independent trusts, which will support the concentration of resources, the harmonisation of advice, and the co-ordination of activities.

We believe that this will also address two related issues:

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

- **Improved knowledge management:** there is no clear framework for the collection and maintenance of data from financial sector development activities. Intangible knowledge is currently being developed and lost on a regular basis, a situation particularly 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, looking from a financial sector perspective, it does appear that it will be many years before individual small farmers are able to effectively engage (particularly in relation to access to credit) with the commercial financial sector. The cultural gap is far too large, and while there are approaches that the financial sector can take to close it, the organisation of farmer groups brings so many ancillary benefits that encouraging the building of 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 is needed.

## 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 Ghana. 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 supplemented by IFIs under certain circumstances, and focused on strategic agricultural infrastructure investments. These 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 does not appear that the required legislation and policy is in place to support PPP arrangements. The Ministry of Finance and Economic Planning (MOFEP) has certainly mooted such arrangements and made general proposals, but tangible initiatives to put a workable PPP framework in place appear lacking. This should certainly be an objective and MOFEP may need technical assistance in doing so.

### 6.2.2 Strenghtening Agribusiness through Equity Investments

#### 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.

To some extent, the most direct route to strengthening the agribusiness sector (including both input suppliers and produce buyers) is 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 induced to accept the necessary concessions in return for additional capital, this can simultaneously reduce the financial risk profile of the business while also introducing improved governance and better management.

The government in opposition actually proposed the creation of a national Agricultural Development Fund, which was to be integrated with the current Export Development and Investment Fund (EDIF). The aim was to support large-scale investments in commercial agriculture and infrastructure. At present, however, the proposal has been shelved, with the current budget suggesting that there were an oversupply of underused funds currently, and that the current EDIF could simply be refocused on agriculture.

IFIs and private investors could, however, combine to create an agricultural Venture Capital 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 be synergised with enterprise (or business) development services to strengthen management and technical capacity. This indirectly addresses access to credit by strengthening balance sheets and enhancing growth prospects. The fund could also be catalysed with seed capital from the government's Venture Capital Trust Fund. 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 Ghana through establishing 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 which meet their desired profile. This would also serve the development community in identifying strong private sector counterparts with which to co-ordinate initiatives of mutual benefit.

### 6.2.3 Developing Access to Supplier Finance through Credit Enhancements

Ghanaian 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 prefinance 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 buyer, 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. We believe 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 correctly spent on inputs and applied properly.

From the financial sector, we met several banks with a likely interest in developing this type of product line including Ecobank, which also sees itself as having a mandate to pursue projects with a developmental impact. Long-term benefits would also accrue if the local rural banks could also be engaged, particularly to help with loan application 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 apply the inputs correctly, and 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 its operations but it is fair to say they are slightly disappointed with the responsiveness and effectiveness of the development community.

### 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 support the comfort that lenders can find in loans to 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 while 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 for example. 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 with production to improve productivity. The produce then 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 surrounding agriculture is not generally supportive of 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 Rural Banks and Deepening Financial Integration

It is our contention that rural banks have a major role to play in expanding financial outreach to farmers. As noted previously, however, most rural banks are founded on quite basic savings and credit models, which severely limit (with some justification) balance sheet growth. That said, in our experience some rural banks were definitely happy to lend to agriculture under the right circumstances. The study of the pineapple value chain identified several FBOs which were receiving substantial credit lines of up to two years and beyond.

The long-term growth of rural banks is linked to close relationships with the commercial banking sector (as well as other financial sector players such as insurers). The role that ARB Apex Bank has to play in this development needs to be clarified. Is it a de facto supervisor and regulator, or is it a commercial co-operative bank? Its current governance structure means that it is owned by the rural banking system but effectively in thrall to the Bank of Ghana.

If the latter, the market for providing services to the rural banking system should be open to competition. This could include the deepening of wholesale credit markets so that high-performing rural banks 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 assistance 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 rural banks 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 IT. More sophisticated relationships include strategic partnerships of different types to jointly develop and market products.

## 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 be dependent 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 this 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 rural banks, and contributes to the financial security of the producer by encouraging savings, but also supports the electronic formalisation of financial activity.

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

Finally, financial institutions need to have the ability to effectively warehouse and analyse data from their core accounting systems, even at the level of a small rural bank. 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 rural banks and other financial institutions should be encouraged to promote effective product and market development. The forthcoming computerisation of the rural banks network spearheaded by ARB Apex Bank is eagerly awaited.

### 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 that affect the general growth of the private sector, there are some areas of specific interest to agricultural finance. These include:

- **Formalising and strengthening the contractual environment**, particularly in relation to 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, a swift and effective sanction in case of breach is needed. 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 we wish to reinforce the importance of these initiatives.

- **Improving the data and information environment** in relation to agriculture. A plethora of information is being collected on various sub-sectors, but there does not seem to be a 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 Ghana, and those wishing to improve the prospects for agricultural finance should make sure their interests are represented.

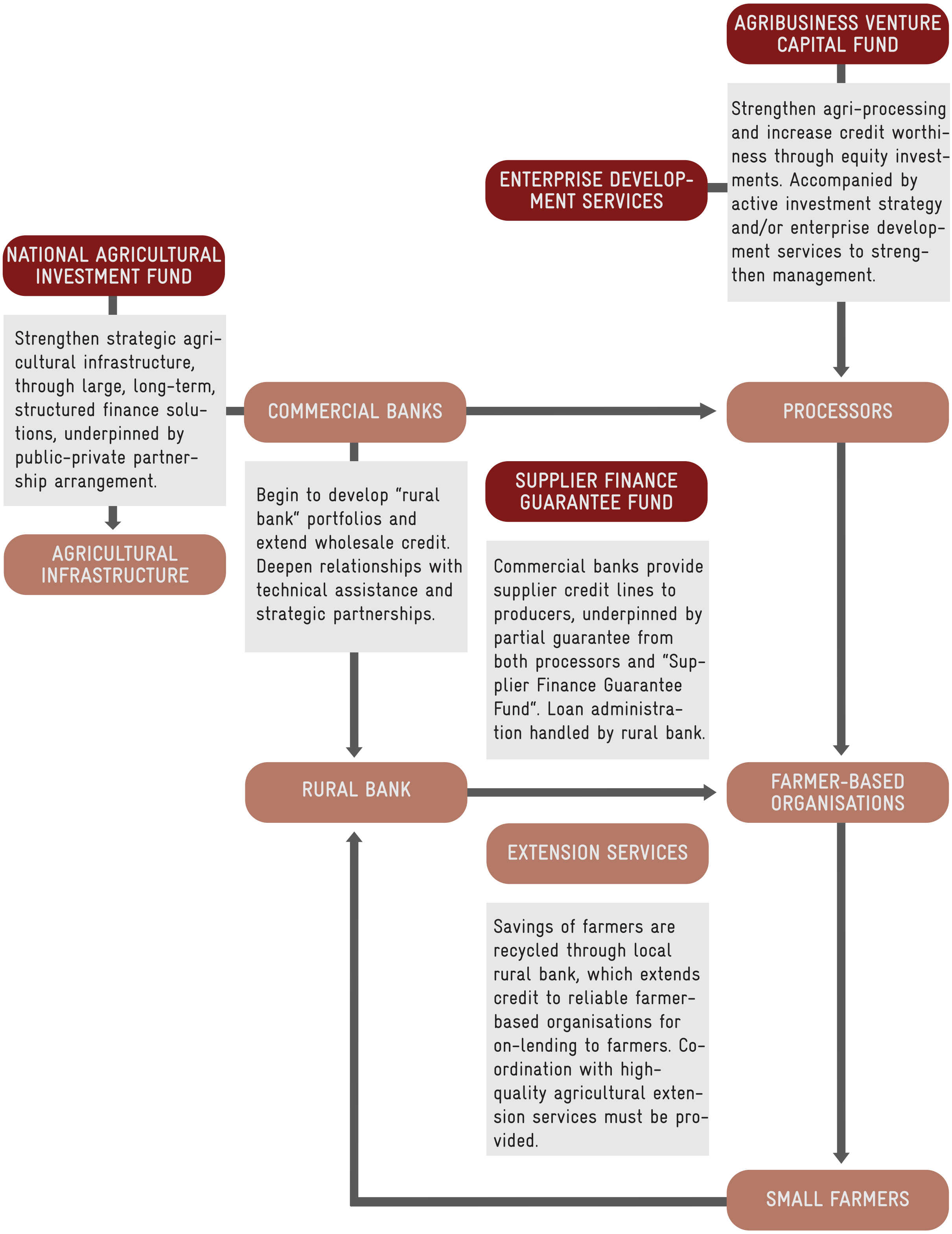



**Figure 12: Diagram of Potential Integration of some Key Recommendations**

### 6.3.3 Enterprise Development Services for both Producers and Processors

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

There are a number of EDS initiatives ongoing in Ghana from a range of development and public sector agencies. However, a major, well co-ordinated programme to deliver EDS to the agricultural market appears to be lacking. In the case of producers, some limited EDS are 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 require a sophisticated approach and intensive effort, and the involvement of highly intelligent and persuasive agents. They need to be concentrated on those with the potential and attitude to absorb the benefit, and to be customised to the local circumstances and environment. Enterprises in the small-medium range tend to have greater growth potential than those towards the micro end. With producers and small processors, efforts should be directed towards improving basic financial literacy, rather than attempting to be too ambitious.

### 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 some aspects, including 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 when an institution can afford to pay, they make some contribution to the costs of this technical assistance. Some of the areas of most value in our view are:

- **Credit strategy for agriculture:** helping financial institutions develop a portfolio for the agricultural sector aligned to their balance sheet strategy, to determine attractive sub-sectors and set suitable limits, to develop products fitting both the needs of customers and the balance sheet, and articulate a clear credit policy towards the sector;

- **Marketing strategy for agriculture:** working with financial institutions to develop a cost-effective operating model and distribution strategy, to set appropriate sales targets and to train and incentivise sales staff;

- **Risk management approaches:** including portfolio management strategies, developing risk rating models and credit scoring methodologies, and effective bad debt management and collection; and

- **Training:** in all of the above, making sure that the training is customised for the local environment, applies detailed local case studies and involves participants in intensive problem-solving group work.

### 6.3.5 Continuing Development of Financial Markets and Products

Though financial markets in Ghana are comparatively well developed, some significant gaps remain to be filled. One of the main initiatives tabled is the development of a local commodities exchange, and a feasibility study has been prepared with the World Bank to this end. The Securities and Exchange Commission (SEC) is prioritising trading in maize, groundnut, cashews, cotton, linseed, rubber and coffee. It would like to combine this with a warehouse receipts system, which could be used as collateral for lending. The major concern for the SEC, however, is the long time it appears to take to get the required laws passed. SEC is looking for any assistance it might be able to use to help mobilise the project.

#### 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.

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. Ghana is not unique in this respect, 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 short 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.

# 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.)

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Dag-Hammarskjöld-Weg 1-5
65760 Eschborn
Germany
T +49 61 96 79-0
F +49 61 96 79 11 15
E info@giz.de
I www.giz.de