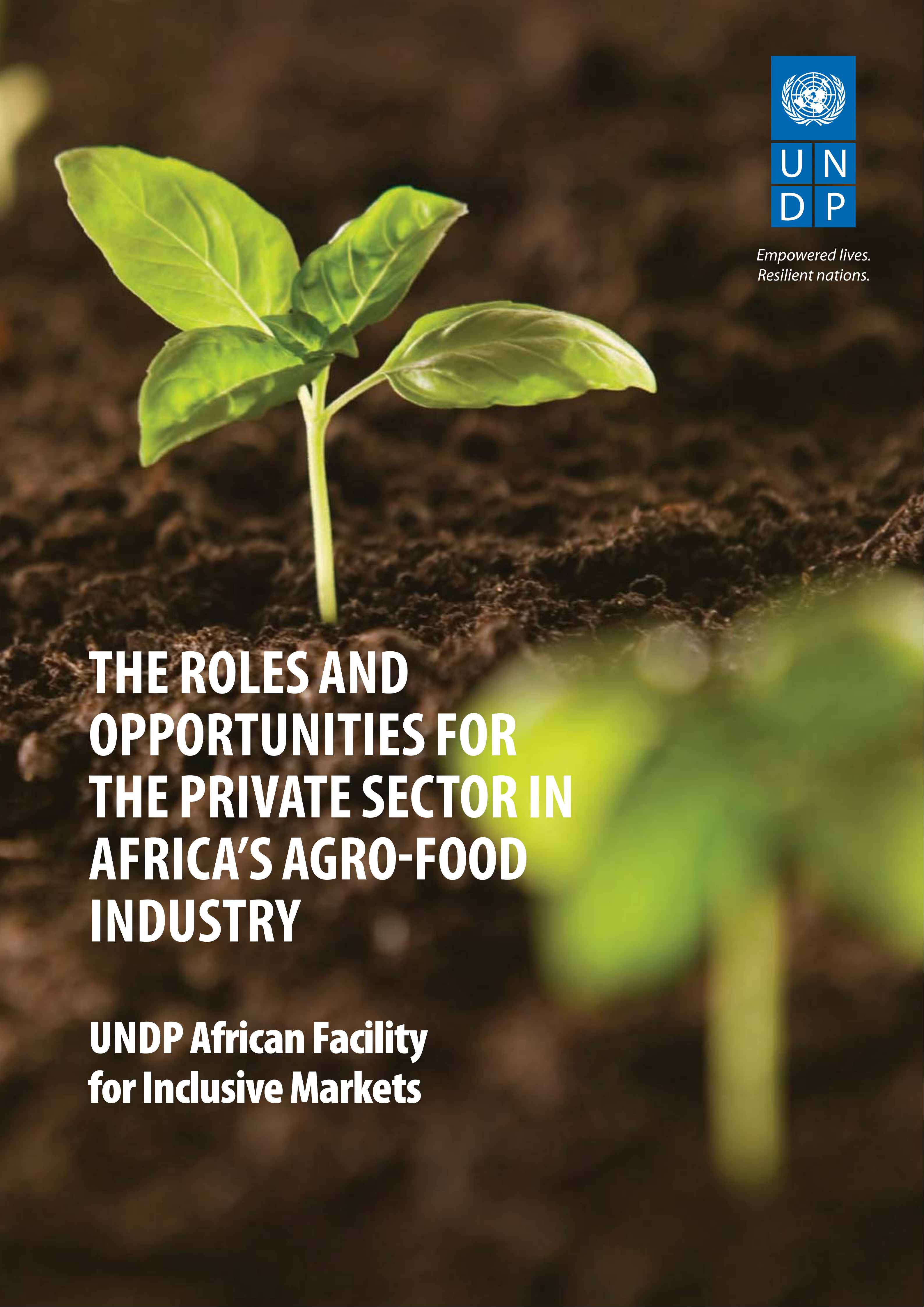


Empowered lives.
Resilient nations.

THE ROLES AND OPPORTUNITIES FOR THE PRIVATE SECTOR IN AFRICA'S AGRO-FOOD INDUSTRY

UNDP African Facility for Inclusive Markets

The United Nations Development Programme

The United Nations Development Programme (UNDP) is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in 177 countries and territories, UNDP offers global perspective and local insight to help empower lives and build resilient nations.

UNDP's regional project, African Facility for Inclusive Markets (AFIM), is working to reduce poverty and accelerate progress towards the Millennium Development Goals (MDGs) by supporting pro-poor economic growth and inclusive market development (IMD) across Sub-Saharan Africa. AFIM's strategy seeks to provide low-income people with the tools and resources to lift themselves out of poverty through private sector initiatives at the regional and country levels.

For more information, please visit:
www.undp.org/africa/privatesector

Acknowledgements

Abraham Sarfo, Juliana Asante-Dartey, Jerry Brown, Edward Baarfi and Murray Smith provided technical inputs for the study. Larry Amekuse, Joseph Agyiri, Prince Manu and Akua Benewaa Okrah supported literature review and report writing.

The contribution of the UNDP AFIM team (Tomas Sales; Juergen Nagler; Tiina Turunen) and the inputs of Babatunde Omilola, UNDP Regional Practice Leader, are greatly appreciated.

We also appreciate the contributions made by the various institutions, companies and individuals visited.

This report was authored by Dan Acquaye and supported by Abishag Frimpong-Manso.

Empowered lives.
Resilient nations.

THE ROLES AND OPPORTUNITIES FOR THE PRIVATE SECTOR IN AFRICA'S AGRO-FOOD INDUSTRY

UNDP African Facility for Inclusive Markets

Table of Contents

List of Figures

Abbreviations and Acronyms

3ADI	African Agribusiness Agro-industries Development initiative
AAIFP	African Alliance for Improved Food Processing
AECF	Africa Enterprise Challenge Fund
AECF	African Enterprise Challenge Fund
AFD	Agence De France Developpment
AfDB	African Development Bank
AFIM	African Facility for inclusive Markets
AFK	Amiran Farmer's Kit
AGOA	African Growth and Opportunities Act
AGRA	Alliance for A Green Revolution in Africa
AMTRIP	Agricultural Marketing Promotion and Regional integration Project
ASNAPP	Agribusiness in Sustainable Natural African Plant Products
ATP	Agribusiness Trade Promotion
AU	African Union
AUC	African Union Commission
B2B	Business-To-Business
CAADP	Comprehensive Africa Agriculture Development Programme
CATISA	Cassava Transformation in Southern Africa
CFC	Common Fund for Commodities
CIDA	Canadian international Development Agency
CMA/AOC	Conférence Des Ministres De L'agriculture De L'afrique De L'ouest Et Du Centre
CMA/WCA	Conference of Ministers of Agriculture of West and Central Africa
COMESA	Common Market for Eastern and Southern Africa
CPF	La Confédération Paysanne Du Faso
EABL	East African Breweries Limited
EAC	East African Council
EAGC	Eastern Africa Grain Council
EAT	Enabling Agricultural Trade
ECCAS	Economic Community of Central African States
ECOWAP	Ecowas Agricultural Policy
ECOWAS	Economic Community of West African States
ESIPP	Eu-Sadc investment Promotion Programme
EU	European Union
EXPECT	Exports Promotion and Enterprise Competitiveness for Trade
FAAP	Framework for African Agricultural Productivity
FANR	Food, Agriculture, and Natural Resources
FAO	Food and Agriculture Organization
FBO	Farmer Based Organizations
FDI	foreign Direct investment
FDS	Family Drip System
FMS	Farms To Market Synergies
FPEAK	Fresh Produce Exporters Association of Kenya
FTA	Free Trade Agreement
FTF	Feed The Future
GDP	Gross Domestic Product
GEF	Global Environment Facility
GGP	Ghana Grains Partnership
GHG	Greenhouse Gases
GIIF	Global index insurance Facility
GIZ	Gesellschaft Für internationale Zusammenarbeit
GLOBAGAP	Global Good Agricultural Practice
GPC	Gundaa Produce Company
HA	Hectare
HGSF	Home-Grown School Feeding
ICAs	investment and inter Enterprise Cooperation Agreements
ICRISAT	international Crops Research institute for The Semi-Arid Tropic
ICT	information and Communication Technology
IDRC	international Development Research Centre
IFAD	international Fund for Agricultural Development
IFC	international Finance Corporation
IFDC	international Fertilizer Development Centre
IFPRI	international Food Policy Research institute
IMD	inclusive Market Development
IMF	international Monetary Fund
inRA	French National institute for Agricultural Research
ITC	international Trade Centre
JSE	Johannesburg Stock Exchange
KACE	Kenya Agriculture Commodity Exchange Limited
KARI	Kenya Agricultural Research institute
KENFAP	Kenya Federation of Agricultural Producers
KENYAGAP	Kenya Good Agricultural Practice
LDCs	Least Developed Countries
MCA	Millennium Challenge Account
MDA	Ministries, Department, and Agencies
MDG	Millennium Development Goal
MHTF	Millennium Hunger Task force
MMW4P	Making The Markets Work for The Poor
MNCs	Multinational Corporations
MT	Metric Ton
NA&FSIP	National Agricultural & Food Security investment Plans
NAIP	National Agricultural investment Plan
NBF	Nepad Business Foundation
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organization

NIB	National investment Bank
OECD	Organization for Economic Co-Operation and Development
PANAAC	Pan-African Agribusiness & Agro-industry Consortium
PFCL`	Premium Food Company Limited
PMUs	Produce Marketing Units
PPP	Public Private Partnership
RAIP	Regional Agricultural investment Programme
RAP	Regional Agricultural Policy
RECs	Regional Economic Communities
REforM	Regional Food Security and Risk Management Programme for Eastern and Southern Africa
RELPA	Regional Enhanced Livelihoods for Pastoral Areas
RISDP	Regional indicative Strategic Development Plan
ROPPA	Network of Farmers' and Agricultural Producers' Organizations of West Africa
RTFS	Improved Regional Trade in Food Staples
SACAU	Southern African Confederation of Agricultural Unions
SADC	Southern African Development Community
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
SLM	Sustainable Land Management
SLWM	Sustainable Land and Water Management
SMEs	Small and Medium Enterprises
SMS	Short Message Service
SPS	Sanitary & Phyto-Sanitary
SSA	Sub-Saharan Africa
TNCS	Transnational Companies
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNIDO	United Nations industrial Development Organization
USAID	United States Agency for international Development
USDA	United States Department of Agriculture
USG	United States Government
WAMCO	West Africa Milk Company
WATH	West Africa Trade Hub

Executive Summary

The study commissioned by the United Nations Development Programme's (UNDP) African Facility for Inclusive Markets (AFIM) seeks to identify the roles and opportunities for the private sector in Africa's agro-food industry. It focuses on successful inclusive market development models in Africa and highlights the incentives required for the private sector to capture business opportunities and deepen investment in the agro-food sector. Furthermore the study explores mechanisms through which the private sector can engage smallholder farmers and turn them from subsistence farmers into viable agri-enterprises.

Perspectives on the subject were drawn from Chief Executive Officers (C.E.O.s) and Directors of over 55 global, multinational, regional and national agro-business firms comprising: Regional Economic Communities (RECs), Farmer-based and Development Organizations, Financial Institutions, Agro-input Suppliers, Agro-processers, Supermarkets and Agribusiness Platforms details of which are presented in annexes 1 and 2. In-depth discussions with these firms provide succinct investments opportunities in Africa's agro-food industry and reveal Africa's successful inclusive market development models, modern trends in agro-food financing, incentives required to engage and deepen private sector investment in the National Agricultural and Food Security Investment Plan (NA&FSIP).

The private sector in Africa's agro-food industry has over the years extended their roles from off-takers to providing more value added services through forward integration of agro-input suppliers, backward integration of agro-processing firms and supermarkets, provision of extension services and employing innovative financing and market systems to enhance productivity.

The era of public-sector led agro-industrialization, especially within the agro-processing sector, has given way to a private-sector led agro-industrialization through privatization, divestiture and new establishments.
Key among these investment are the newly installed \$50million grain processing facility by Olam in Ghana, a \$60million new agro-processing factory in South Africa by Nestle and furthermore a \$160million edible oil complex and oil palm plantation investment in Uganda by BIDCO Oil Refinery Limited. The agro-processing firms, the fulcrum of agro-food sector development are investing in hard and soft infrastructure including electricity, roads, warehouses and cold chain facilities. They also provide land, input credit, technology, extension services and direct market access to smallholder farmers and provide

the highest number of formal jobs within the agro-food industry–BIDCO, DanGote and ILLOVO work with over 20,000 smallholder farmers and employ over 2,000 employees each. Supermarkets such as ShopRite, Pick n Pay, Massmart, Nakumatt, Uchumi, Woolworth and SPAR are extending and expanding their reach in Africa

Both supply and demand incentives have palyed an important role in attracting private sector investment. Agro-input supply firms are incentivized by the critical mass of consumers at the community level, well-organized producer organizations and possible tax reductions. Producers require stable prices, technical expertise, infrastructure, efficient tractor services, warehouses and cold storage facilities, access to credit, improved agro-inputs, land, and rural infrastructure are fundamental incentives to producers. Similarly, long term financing with lower cost of borrowing, macro-economic stability, strategic government investment in specific value chains, access to regional markets, reduced cross border challenges, development of trade corridor infrastructure, rural infrastructure and supply of energy underly the key incentives for agro-processing firms and supermarkets.

The study further reveals that increasing competitiveness of large scale operator underpins its decision and willingness to engage inclusive market development. Specifically, critical mass of produce, competitive price, consistent supply and adherence to contracts, consistent quality produce, minimum logistical constraints and aggregation of suppliers are key incentives for inclusive market development. The growth corridor concept, backward integration of agro-processing firms and supermarkets, forward integration of agro-dealers and aggregation centres are some of the models that encourage and facilitate inclusive market development.

Key successful models and emerging approaches identified during the study include; Backward Integration Model exhibited by agro-processing firms and supermarkets; Inclusive Value Chain Development Model of agro-input dealers; Integrated Services and Value Chain Financing Model exhibited by micro-finance institutions; Innovative Technologies for Inclusive Market Access as well as Tourism and Inclusive Market Development. Some of these models have increased the income levels of 1,400 producers from $66,000 to $2million in 4 years; increased yield of maize by 68% in 2 years and 10,000 micro-agri-enterprises to secure micro-finance in the range of $450-3,500. Trade Corridor Infrastructure Development; Value Chain Investment; Regional Outlook of Large Scale Actors; Warehouse Receipt Systems, Commodity Exchanges; Guarantee Funds; Crop Insurance and the use of Information Communication Technology for Market Access and Financing are among the key approaches adopted by public and private sector to increase production and productivity in the agro-food industry.

The private sector firms endorsed the strategic commodities identified by the regional economic for targeted investments. These include Maize, Rice, Sorghum, Soya bean, Sugar Cane, Oil Palm, Fruits and Vegetables, Cassava and Livestock. Despite an increasing production of the commodities, Africa remains a net importer of agro-food. According to FAO Statistics, import of commodities such as wheat, maize, rice, palm oil, sugar, soy oil, soya beans and milk increased from a cumulative amount of $35.8billion between 2001-2003 to $92billion between 2007 and 2009. The report projects Africa's import of same commodities to a cumulative amount of $200billion by 2013 and 2015. Nigeria alone imports over $900million of fish. Field interviews with Friesland, Chi-Vita, Coca-Cola and DanGote shows that West Africa imports over $2billion and $1billion milk powder and fruit juice concentrate respectively. Demand for crude palm oil, sorghum, cassava starch, bio-fuel, ethanol and processed foods far outstrip supply.

Beside the strategic commodities of regional importance, other crops also are high value and are produced mainly by smallholder farmers for domestic, regional, export and niche markets. Key among these are: indigenous leafy vegetables; spices (paprika[1], birds eye chillies, ginger, garlic[2], black pepper[3], onions); nutritious plants (Moringa and Dandelion[4]); agro-forestry plants (Gum Arabic[5], Shea[6]); herbal teas (Rooibos[7] and Hibiscus[8]) and other tree crops such as cashew and macadamia nuts.

Key challenges confronting the agro-food industry include: Access to arable land, poor infrastructure, high product mobilization cost, lack of agro-economic data, lack of appropriate skills set and productivity, cross-border and

1 Most processing companies in South Africa do not have enough raw materials for processing
2 Most countries in SSA import Garlic which can be grown in Africa
3 South Africa imports from Brazil whereas Madagascar, Uganda and West Africa have comparative production advantages
4 Being promoted at national and regional level to for nutrition
5 Major export commodity for Nigeria, Sudan, Senegal and other West African Countries
6 Regional Commodity in West Africa
7 High international market; produced mainly in South Africa
8 Produced and exported from Sahelian countries in West Africa, Sudan and North Africa

regional trade bottlenecks, poor local market infrastructure and access to finance. Access to equipment and the ability to respond to changes in quality requirements pose key challenges to medium and small-scale agro-processors. The level of value chain development, measures to mitigate production and marketing risk and the dearth of industry information are fundamental for banks to make informed decision on lending.

Africa remains a strategic continent for the world's agro-food industry as it holds 60% of the world's uncultivated arable land. According to McKinsey and Standard Bank Reports, about US$9.2 trillion in cumulative investments will be necessary to feed the world by 2050. The population of Africa could by then nearly be doubled and reach 2 billion. Sub-Saharan Africa alone will need US$940 billion of investment and about 66 per cent of these will be required for agribusiness and agro-industries capital outlays. By 2040 it will be home to one in five of the planet's young people. Again, it is estimated that by 2030, the continent's top 18 cities could have a combined spending power of $1.3 trillion and by 2020 will have a middle class far more than India. Food and beverage spending is projected to increase more in absolute terms than any other consumer category and New Partnership for Africa's Development (NEPAD) studies also show that Africa's local and urban markets will reach $150billion by 2030, far more higher than foreign demand for traditional commodities and high value exports which are projected at $10billion each.

Individual in-depth interviews with major agro-processing firms during the study revealed an overwhelming $10billion Private Sector Investment Opportunities in the agro-food industry including: Establishment of fruit concentrate processing facility in Nigeria to supply over $1billion market in West Africa; Investment in large scale cassava plant to exploit over $2billion starch market in West Africa; Commercial cultivation of soya bean and other oil seed plants in Common Market for Eastern and Southern Africa (COMESA) and West Africa to meet over 400,000tons supply gap; Investment in commercial production of sorghum in East and West Africa to serve the breweries and the World Food Programme; Intensive production technologies for fresh vegetables to exploit increasing urban market demand; Production of milk concentrate in West and Southern Africa to exploit over $2billion urban market; Aquaculture/Fish Production; Maize and rice production to exploit over $5billion domestic market

Cross-Border and Regional Value Chain Programmes and the Role of Regional Financial Institutions: Three (3) major cross-border and regional value chain programmes in Grains (Rice, Maize, Soya bean and Sorghum) and Horticulture are recommended for AFIM's interventions. These commodities play significant roles in food and nutrition security, income generation, employment creation and foreign exchange savings. There are also significant import figures, increasing marketing demand and readiness of private sector to deepen investment. The recommended programmes below provide cross-cutting solutions/interventions within the two subsectors: a) Development of Agribusiness Centres (Aggregators) through Backward Integration of Agro-processing Firms; b) Cross-Border Horticultural Production for Urban Markets in Southern and West Africa using intensive production technologies and c) the establishment of Aggregation Centres in selected countries to facilitate markets and reduce post-harvest losses.

Regional institutions have tremendous investments to make in a more consolidated and coherent manner especially on staples and horticulture which impact more on food security on income generation. African Development Bank, International Finance Corporation, Bill and Melinda Gates Foundation as well as other development organizations play critical roles in the implementation of these programmes. Specifically AfDB will play a critical role by supporting infrastructure development including community and village level warehouses, establishment of regional tractor and mechanization/training centres, establishment of aggregation centres and promotion of village level cold chain facilities. International Finance Corporation (IFC) should expand and speed up its programme on Crop Insurance, providing guarantee funds to reduce production risk and introducing innovative financing system such as credit vouchers to support demand driven research activities. Bill and Melinda Gates Foundation should support programmes aimed at increasing planting materials of grains especially rice, sorghum and soya bean and focusing on building the technical capacities of value chain actors medium scale agri-enterprises.

ECOWAS Commission Report 2009 indicates that twelve (12) selected West African countries will require $4.58 billion investment to develop value chains. UNDP-AFIM should ensure Inclusive Market Development (IMD) of National Agricultural Investment Plans (NAIPs) and Regional Agricultural Investment Plans (RAIPs); Develop platforms to champion and mobilize private sector for effective engagement; Facilitate dissemination of investment opportunities within the National and Regional

Investment Plans; and Promote successful inclusive market development models within the investment plans.

In addition, AFIM-UNDP should support regional value chains capacity building for public and private sector. Value chain development has become one of the best strategies public sectors employ to engage and attract private investment in the agribusiness sector. ABSA Bank, for example, considers the level of value chain development as one of the critical considerations for agribusiness financing. Similarly, Johannesburg Stock Exchange highly recommends value chain capacity development of public sector to enhance sustainability of commodity exchanges. The recommendations were not dissimilar from large-scale agro-processing firms such as BIDCO, Nestle, Coca-Cola, ETALON and DanGote.

Emerging trends and successful models, specifically commodity exchange, crop insurance, warehouse receipt systems and guarantee funds have reduced some of the financing challenges faced by actors within the sector. Further investment by AFIM to scale up these models will benefit large populations especially the smallholder farmer. The models respond to risk concerns of financial institutions and attract them to provide funding. The piloting of a Credit Reference Bureau for Smallholder Farmers and Small Scale Agri-enterprises will increase credit opportunities for most producers.

UNDP-AFIM can play four key roles in the development and implementation of growth corridor projects: Creating a Project Facilitating Platform aimed at attracting private sector to dialogue with public sector to accelerate implementation of corridor projects; Synthesizing and packaging specific agribusiness investment opportunities within corridor projects and using its networks to attract private sector investment; Reviewing Growth Corridor projects and assessing the level to which inclusive market development models have been incorporated and "Last Mile" Infrastructure challenges addressed; Encouraging its bilateral offices to invest in selected components of commodity value chains

Several mechanisms can be used by AFIM to implement programmes recommended in this report. However, the following five mechanisms are recommended for immediate adoption: the use of Project Facilitation Platforms to strengthen regional value chain programmes; working through existing regional institutions such GIZ, CMA, PANAAC, ROPPA and SACAU; using In-house structures and systems, outsourcing to experts/consultants/institutions.

Chapter 1

Introduction

Background

In the 21st century, agriculture remains pivotal to the economies of Sub-Saharan Africa (SSA). The sector is a major source of food supply, income and livelihood for over 60% of the rural population in the sub-region and is an important contributor to foreign exchange earnings. The World Bank Development Report for 2007 indicates that the agricultural sector contributes 25% of Gross Domestic Product (GDP) in SSA and provides employment for over 60% of the labour force. This makes it the lead sector with sufficient scale and comparative advantage to engender broad-based economic growth and poverty reduction to achieve Millennium Development Goal 1 (MDG1). Indeed, the World Bank estimates that GDP growth originating in agriculture has more impact on poverty reduction than growth in any other economic sector.

Agriculture in the sub-region however continues to face numerous challenges that have hinder its capacity to spur economic growth. Notable among these are climate change, globalization and the recent global recession, increased pressure on the natural resource base, unfavourable external market conditions, poor rural infrastructure, weak institutions, low research and access to innovative technologies, low productivity of smallholders, reduced investment by governments and official development assistance and the limited engagement by the private sector.

Conversely, as noted in the 2010 joint evaluation of African Agriculture and Rural Development by International Fund for Agricultural Development (IFAD) and African Development Bank (AfDB), progress (albeit varied) has been made in the past 15 years leading to improved economic and agricultural performance in SSA. Economies in the region have grown by over 5% per annum and factors such as more stable macro-economic environments, improved governance, reduced conflicts, market liberalization, improved sector policies, donor re-engagement and expanded space for private sector engagement has resulted in an improved investment climate and presents opportunities for enhanced agricultural development.

However, in order for agriculture to serve as the engine for economic growth in SSA the need to boost productivity cannot be overemphasized. Agricultural productivity growth is largely transformative and leads to raised farmers' incomes, lower food prices, increased demand for industrial goods, low inflation, increased employment opportunities for unskilled labour, increased entrepreneurial activities, growth of rural service sectors and emergence of agro-processing industries (Diao et al, 2008).

Although arguably in SSA, innovation, inputs, infrastructure and engagement with new markets are fundamental to advancing agricultural productivity enhancement, the critical role of the private sector to provide the needed investment, leadership and impetus cannot be overstated. As outlined by the Global Harvest Initiative policy paper 2011, overall developing countries' have an investment gap in the agricultural sector of nearly $90 billion annually. Whilst part of the needed investment can be met by increasingly robust public and private donor programmes and growing governmental support, private investors offer the most feasible option for effectively filling this gap. A point reinforced by the United Nations Development Programme (UNDP), IFAD, AfDB medium term strategy (2008-2012) and McKinsey, among others, all of whom conclude that transformation of African agriculture and rural economies depend largely on private sector engagement, investment and operations at all levels.

African countries are also embarking on the implementation of the principles of the Comprehensive Africa Agriculture Development Programme (CAADP). More than 18 African countries have developed their National Agriculture and Food Security Investment Plans and attempts are being made to allocate 10% of their annual budget towards Agriculture.

Key questions arising from this conclusion are;
How do we effectively mobilize more private sector investments for agricultural productivity growth and how can existing constraints be significantly mitigated or removed? How can the private sector be incentivized to include smallholders in value chains? A good number of studies have been conducted in an attempt to answer these questions on attracting and increasing private sector investment to enhance competitiveness of SSA agriculture. However, they have been heavily skewed towards foreign private investments and foreign direct investments (FDIs). This study, commissioned by African Facility for Inclusive Markets (AFIM) of the UNDP builds on the existing body of knowledge and seeks to address the roles and opportunities for the private sector in Africa's Agro-food Industry from the perspective of African businesses with a focus on documenting successful home-grown inclusive African agribusiness solutions and models for learning and replication.

Inclusive Market Development (IMD) is an outgrowth of the traditional private sector and enterprise development field, which seeks to help small enterprises, producers and distributors to participate in, and benefit more from the existing and potential markets in which they do business.

Again, in line with AFIM's inclusive markets initiative and goal of developing the African private sector, this study seeks to solicit the inputs and opinions of African agro-food agribusinesses in the design of effective mechanisms for engagement or interventions that are demand-driven and based on the realities and peculiarities of the African situation instead of the traditional supply, donor-led assistance.

Objectives

Specifically, the key objectives of this study are to;

- Map the private sector's role within the agro-food sector
- Perform evidence-based analysis on how the private sector can be engaged to increase its investment and participation in the agro-food sector
- Identify opportunities for the private sector to invest
- Identify lead firms and growth points in priority continental commodities
- Document successful African models and best practices including innovative partnerships, looking for opportunities to replicate or scaling up
- Identify mechanisms to increase the competitiveness of the private sector (inclusiveness, performance, etc.)
- Recommend innovative institutional and financing mechanisms to stimulate private sector investment and inclusiveness in agro-food development
- Recommend interventions to shift agro-foods industry development from public to private sector-led
- Provide profile fact sheet of opportunities, stakeholders and entry points for AFIM's immediate action.

Approach and Methodology

The study concentrates on the Sub-Saharan African agro-food industry and not agriculture more as a broad topic. Additionally, it centres on the African private sector engaged in agro-foods and seeks to draw on their input, through an evidenced-based approach in the formulation and implementation of effective inclusive interventions to enhance productivity and growth. The narrowed down scope is to allow for a deep understanding and appreciation of particular challenges and opportunities in the sector and to enable targeted application of limited resources that will result in significant improvements in agro-food value chains and its attendant benefits in improved access and opportunities for the poor, increased food security, poverty reduction and economic growth.

Steps used to conduct the study:

a. ***Consultative Meeting:***
   After signing the contract, the consultant held meetings with the AFIM team to further deliberate on the scope of work. The meetings provided further understanding to the assignment; scope and expectations were clearly defined and both parties established a better rapport for effective communication and interaction.
b. ***Inception Report:***
   After the consultative meeting, the consultant presented an inception report to UNDP. The inception report outlined the approach, expected outcome of the study, and established a clear understanding between UNDP and the consultant on the approaches and expected output of the assignment. The inception report scoped the specific objectives, methodology and approaches to be employed, indication of the type of data to be collected and analysed as well as value chain actors and support service institutions to be engaged in data collection. The inception report also included a Draft Report Format for the assignment, schedules including dates of travel, countries to be visited and timeliness for report delivery.
c. ***Literature Review:***
   This involved preliminary desktop research to provide theoretical basis underscoring the complexities of African agriculture and the agro-foods industry, the historical and emerging contribution to economic growth, and the role of the private sector in enhancing productivity in the face of growing opportunities for the continent's agricultural sector to transform the region. Information was obtained from regional and international bodies such as United Nations Industrial Development Organization (UNIDO), United Nations Economic Commission for Africa (UNECA), the Food and Agriculture Organization of the United Nations (FAO), United States Agency for International Development (USAID), International Fund for Agricultural Development (IFAD), World Bank, National Ministries, Departments and Agencies (MDAs), Non-governmental institutions, newsletters and reviews conducted on the topic of interest.
d. ***Field Visits:***
   This entailed field visits to South Africa, Kenya, Ghana, Nigeria, Burkina Faso and a teleconference with Zambia. The countries were selected based on discussions and prior agreement with AFIM, to cover the major regional economic blocks within the continent. The goal was to gather primary field data to supplement the literature research findings. Largely, qualitative and some quantitative data was collected and analyzed. Data was gathered through interviews with key actors along the food value chain obtained in each market as well as key stakeholders and support service providers. Farmer-based-organizations, Input Dealers, Agro-processing Firms, Supermarkets, Agribusiness Platforms, Regional Economic Commissions, Industry Experts, Development Organizations / Partners and Public Sector Institutions were interviewed. Survey instruments including closed and open-ended questionnaires, focus group discussions, observations, and individual-in-depth-interviews were deployed in data gathering. Perspectives were sought on the role of the private sector, their key challenges, opportunities in the sector, incentives required to deepen private sector investment, investment decisions, strategic commodities, emerging trends, successful models, readiness to partner with public sector in adopting inclusive market development models and potential projects ready for implementation. The following companies and institutions were interviewed:
   South Africa: NEPAD Business Foundation (NBF), Johannesburg Stock Exchange (JSE), Agricultural Business Chamber, USAID Regional Office, International Fund for Agriculture Development (IFAD), Agribusiness in Sustainable Natural African Plant Products (ASNAPP), Nestle, Dynamic Intertrade, Premier Foods and ABSA Bank.
   Kenya: BIDCO, Amiran Kenya Limited, East Africa Breweries, GIZ, Pan African Agribusiness and Agro-industry Consortium (PanAAC), Kenya Federation of Agricultural Producers (KENFAP), Africa Enterprise Challenge Fund (AECF), Alliance for Green Revolution in Africa (AGRA), East Africa Grain Council (EAGC), Kenya Agricultural Commodity Exchange, TechnoServe and Fresh Produce Exporters Association of Kenya (FPEAK).
   Burkina Faso: ETALON, Network of Farmers' and Agricultural Producers' Organizations of West Africa (ROPPA), Burkina Paprika, UNDP, Millennium Challenge Account (MCA-BF), NANKOSEM, Association of Agricultural Processors (SODEPAL) and La Confédération Paysanne Du Faso (CPF).
   Ghana: Agribusiness Trade Promotion (ATP), West Africa Trade Hub, YARA, Chemico, Wienco Ltd, Africa

Lead, ASNAPP,ESOKO, TechnoServe, Zenith Bank and Africa Development Bank.
Nigeria: DanGote/Dansa Foods, CHI Ltd, Nestle, Coca-Cola, Friesland Compina WAMCO Nigeria PLC, Swiss Biostadt, Best Foods Global Nigeria Ltd and Nigeria Economic Summit Group.
Zambia: COMESA and ShopRite

e. Back to Office Report (BTOR):
A back to office report was submitted to AFIM. The BTOR contained a summary of meetings held, key challenges and opportunities identified, follow-up plans and contacts of persons met. The BTOR provided a regular update of the assignment, institutions that have been contacted and interesting outcomes from the country.

f. Agribusiness Forum:
The consultant further solicited additional inputs from: presentations and business to business meetings held at the UNDP/EMRC Agribusiness Forum in Johannesburg; the Public Private Dialogue which led to the JOHANNESBURG DECLARATION ON ENGAGING THE PRIVATE SECTOR IN FURTHERING AFRICA'S AGRIBUSINESS AND FOOD SECURITY AND NUTRITION AGENDA. Additional inputs were sought from the Private Sector Inclusive Market Development Training Programme and the Community of Practice of UNDP staff organized in Johannesburg from the 17th -21st of October 2011. The forum also helped confirm some of the key findings and recommendations identified during the field trips.

g. UNDP/EMRC Agribusiness Forum 2011:
During the EMRC Agribusiness Forum, business-to-business dialogues were held with PanAAC, ILLOVO Sugar, Nestle, NEPAD Business Foundation, Osun Rural Enterprise & Agriculture Programme (O-REAP, Nigeria), Bill and Melinda Gates Foundation. Similar meetings were held with Amiran Kenya, Common Market for Eastern and Southern Africa (COMESA), ECOWAS EXPECT Project, East Africa Council, the Conference of Ministers of West and Central Africa, and the UNDP office representatives from Ghana, Burkina Faso, Kenya, Cameroon, Democratic Republic of Congo, Liberia, Sierra Leone and Malawi.

h. Report Writing:
The report writing primarily involved distilling a cogent set of lessons learnt, innovations and recommendations to inform the formulation of appropriate and effective interventions by AFIM. A draft report was submitted to the UNDP for comments and inputs after which the final report was presented.

Structure of the Report

The report has been organized into eight (8) chapters. Chapter 1 focuses on the background, objectives, approach and methodology and the report output. Chapter 2 synthesises major regional programmes relating to the agro-food industry. Chapter 3 provides an overview of the agro food industry with emphasis on major commodities, demand, supply, import and export. It also gives projections on Africa's imports for the next 5 years. Chapter 4 identifies the roles, opportunities, challenges, incentives and emerging trends in the agro-food industry with emphasis on input dealers, agro-processors, supermarkets, women and value chain facilitating agencies. Chapter 5 analyses key findings of the study including strategic commodities, competitiveness of the private sector and SWOT analysis. Chapter 6 documents successful inclusive market development models. Chapter 7 out-lays investment opportunities. Chapter 8 outlines various recommendations for AFIM's short, medium and long-term interventions.

Study Output

The final report among others has outlined and provided recommendations on:

a. Future African strategic commodities to be championed by the private sector;
b. Strategies, priorities, specific interventions and concrete actions to accelerate involvement of the private sector in African agriculture in general and agro-foods sector in particular;
c. Actions for developing value chains which efficiently and effectively deliver high quality products whilst contributing to broader rural development;
d. Synthesis of African successful inclusive market development models;
e. Specific investment opportunities for the private sector and low-hanging fruits for immediate exploitation;
f. AFIM's potential role to promote systemic inclusive and sustainable market facilitation as well as a list of specific entry points and opportunities for AFIM's immediate action;
g. Developing database of private sector companies in the African agro-foods sector; developing roles and engagement approaches with prospective lead firms having a lead role in regional value chains.

Chapter 2

Overview of Agro-Food Sector

Introduction

The agro-food sector ranging from input supply (e.g. seeds and fertilizers) to retail, has experienced a strong drive towards globalization both in terms of the reach of its sourcing and engaging suppliers in many developed/developing countries to participate in the global value chains co-ordinated by buyers and supermarkets. A relatively small group of very large multinational corporations (MNCs), spreading their reach across the globe dominate this sector. Notable MNCs operating on the African continent are: Unilever, Parmalat, Nestle, Lactalis, Royal Friesland, Promisador, Charoen Pokphand, Danone, Savola, Cadbury and Hayel Saeed Anam Group.

Indigenous African agro-food companies are slowly emerging on the continent as relevant players. Of the 500 companies listed in the Jeune Afrique ranking, 111 are active in at least one segment of the agro-food value chain. The range of income among them is extensive, from revenue of more than $11 billion to a minimum of $90 million. Nonetheless, private investment in the sector is still small and African producers take part in the agro-food global value chain in a rather passive way, capturing only a small share of the value generated along the chain. Notable indigenous companies include: Tiger Brands and Clover Ltd, South Africa; BIDCO & AFN Enterprises, Kenya; Dangote and Flour Mills, Nigeria; Blue Skies, Wienco and Chemico, Ghana; Camlait and Bien VU, Cameroon; Giplait, Cevital, Soummam and COGRAL, Algeria and Al Doha, Egypt.

The Agro-foods industry plays a fundamental role in the creation of income and employment opportunities in developing countries. The agro-processing sector is by far the most significant component in the agro-food industry and covers a broad area of postharvest activities, packaged agricultural raw materials, industrial and technology-intensive processing of intermediate goods and the fabrication of final products derived from agriculture.

As shown in figure 1, the food and beverage sector records the highest concentration of agro-processing companies and forms more than half of the entire agro-processing sector. This is more pronounced in the lower to upper middle income where processed food is the most preferred choice.

Figure 1: Concentration of Agro-food sector

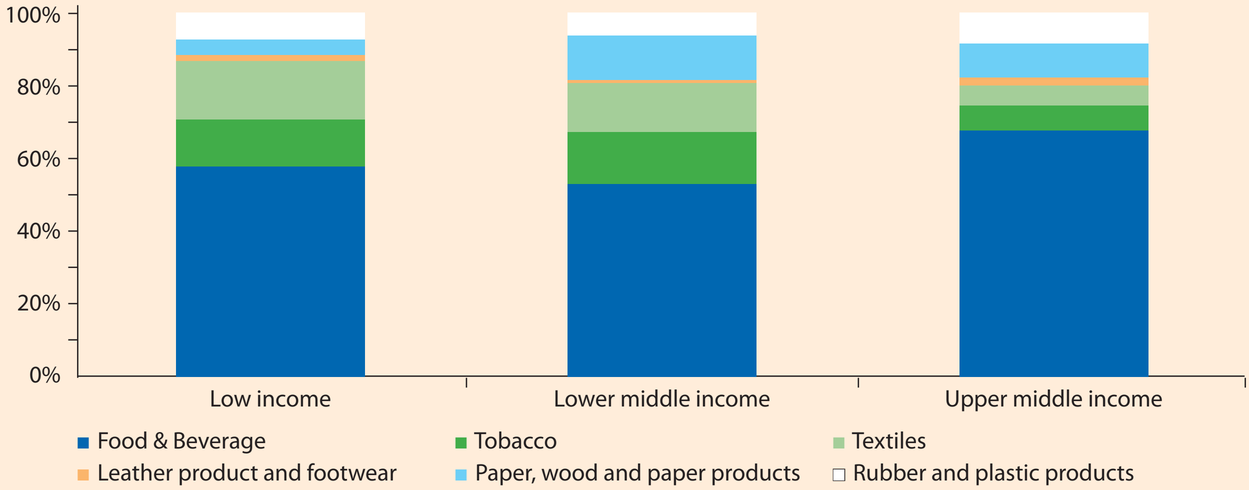


Figure 2: Regional African Food Consumption in 2009

Commodity	Central Africa	East Africa	North Africa	Southern Africa	West Africa	Africa
Maize	2.6	**30.6**	17.0	**32.0**	17.7	100
Beans	5.4	**44.6**	2.1	9.8	**38.1**	100
Rice	2.4	19.8	2.2	7.2	**48.5**	100
Oil seeds	8.1	20.8	4.1	5.1	**61.9**	100
Beef	5.7	**26.0**	**30.6**	**23.1**	14.6	100
Milk	2.5	22.5	**52.0**	15.0	8.0	100
Poultry	2.7	7.8	**38.2**	**36.6**	14.7	100
Fish products	7.9	**38.0**	**21.2**	10.1	**22.8**	100
Cassava	5.0	**45.9**	0.4	14.2	**34.5**	100
Millet	3.6	10.7	5.0	3.1	**77.6**	100
Sorghum	5.7	17.0	**23.3**	3.8	**50.2**	100

Source: UNECA

Strategic Commodities of Regional Importance

Commodities with significant consumption patterns both within and across regional blocs present a viable basis for strategic regional development. As depicted in figure 2, maize is an important regional crop in East and Southern Africa and averagely accounts for 60% of total consumption in Africa (UNECA 2009). Similarly beans, rice, oil seeds, cassava and fish products are critical in East and West Africa where they account for 60% to 80% of total consumption in Africa (UNECA 2009). Over 70% and 52% of all millet and milk consumed in Africa are in West and North Africa respectively (UNECA 2009). Beef is an important product in East, North and Southern Africa where the combined consumption exceeds 75% of total African consumption (UNECA 2009).

Demand of Key Agro-foods

Growth in the average Gross Domestic Product (GDP) of Sub-Sahara Africa of 5% coupled with rising per capita income, higher urbanization and growing numbers of women in the workforce is fuelling demand for high-value commodities, processed products and ready-prepared foods. This is buttressed by rapid growth in the packaged food market in Africa of 8.3% between 2005 and 2009 (EIU, Euromintor). The market share of the top 50 packaged food companies in Africa and Middle East expanded from 25% to 34% since 2001. As shown in Table 1, selected companies have increased their market share by as much as 40% to 60% (EIU, Euromintor).

Table 1: Market Share of Selected top 50 packaged food companies in Africa & Middle East

Market Share (%)			
Company	2001	**2008**	% increase
Lactalis group	0.2	**0.6**	0.4
Mars Inc	0.7	1.3	0.6
Cadbury	0.7	1.3	0.6
Danone	1.3	**1.8**	**0.5**

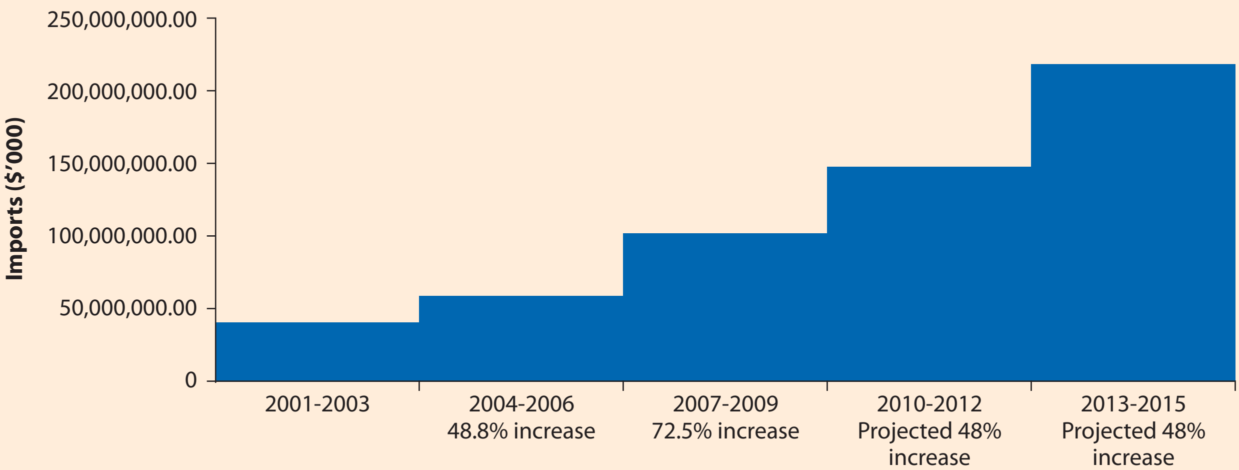
The development and concentration of agro-processing companies vary in different parts of Africa. Whereas in South Africa the top 5 agro-processing companies account for 39% of the agro-food revenue, they account for only 11% in Nigeria as depicted in figure 3. This demonstrates the tremendous opportunities for agro-processing firms to expand operations and capture more formal markets.

Whiles Africa possesses some production capacity, the region is still heavily reliant on imports to supplement domestic demand. Over the past 10 years, there has been as much as 72% increase in imports of selected major commodities across the continent as presented in Table 2.

Import of commodities such as wheat, rice, palm oil, sugar, soy oil, soya beans and milk increased from a cumulative amount of $35.8billion between 2001-2003 to $92billion between 2007 and 2009. Whereas soybean was not among the key import commodities between 2001 and 2003, over $2billion was spent importing this commodity to Africa between 2007 and 2009. Similarly, soy oil import increased from $1.8billion to $5.3billlion within the same time period. Grains (maize and rice) and oil seed crops (oil palm and soya) remain the most important commodities in terms of import.

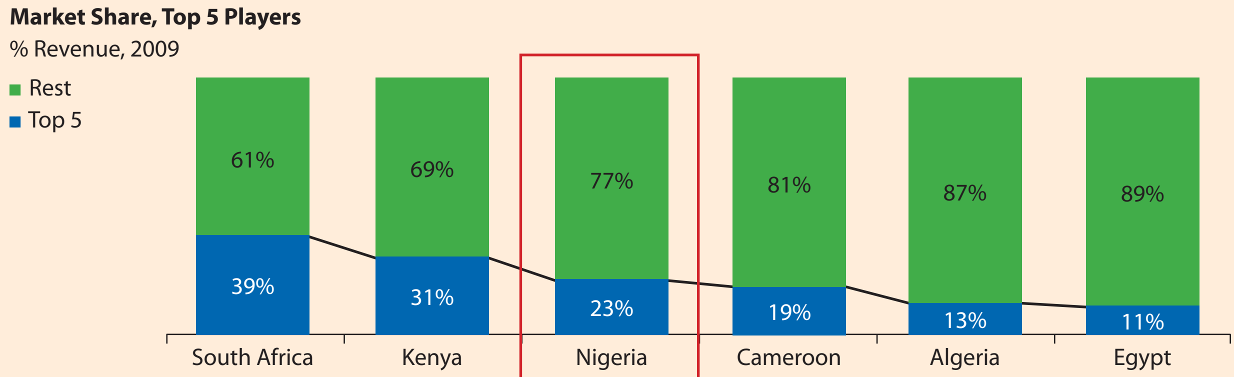
The report also projects Africa's import of strategic commodities to a cumulative amount of over $200billion by 2013 and 2015 as shown in figure 4. This is an overwhelming increase of over 400% in less than 2 decades.

Figure 4: Import Projections of Strategic Commodities into Africa



Source: FAOSTATS, Dan Acquaye 2011

Figure 3: Market Share of Top 5 Agro-processing Companies in Selected African Countries



Top 5 Players

	South Africa	Kenya	Nigeria	Cameroon	Algeria	Egypt
Foreign	• Parmalat • Unilever • Nestlé	• Unilever • Charoen Pokhand • Nestlé	• Indofood • Royal Friesland • Promisador	• Lactalis • Nestlé • Royal Friesland	• Danone	• Savola • Nestlé • Cadbury • Hayel Saeed Anam Group
Domestic	• Tiger Brands • Clover Ltd	• Bidco • AFN Enterprises	• Dangote • Flour Mills	• Camlait • Bien VU	• Giplait • Cevital • Soummam • COGRAL	• Al Doha

Source: Euromonitor

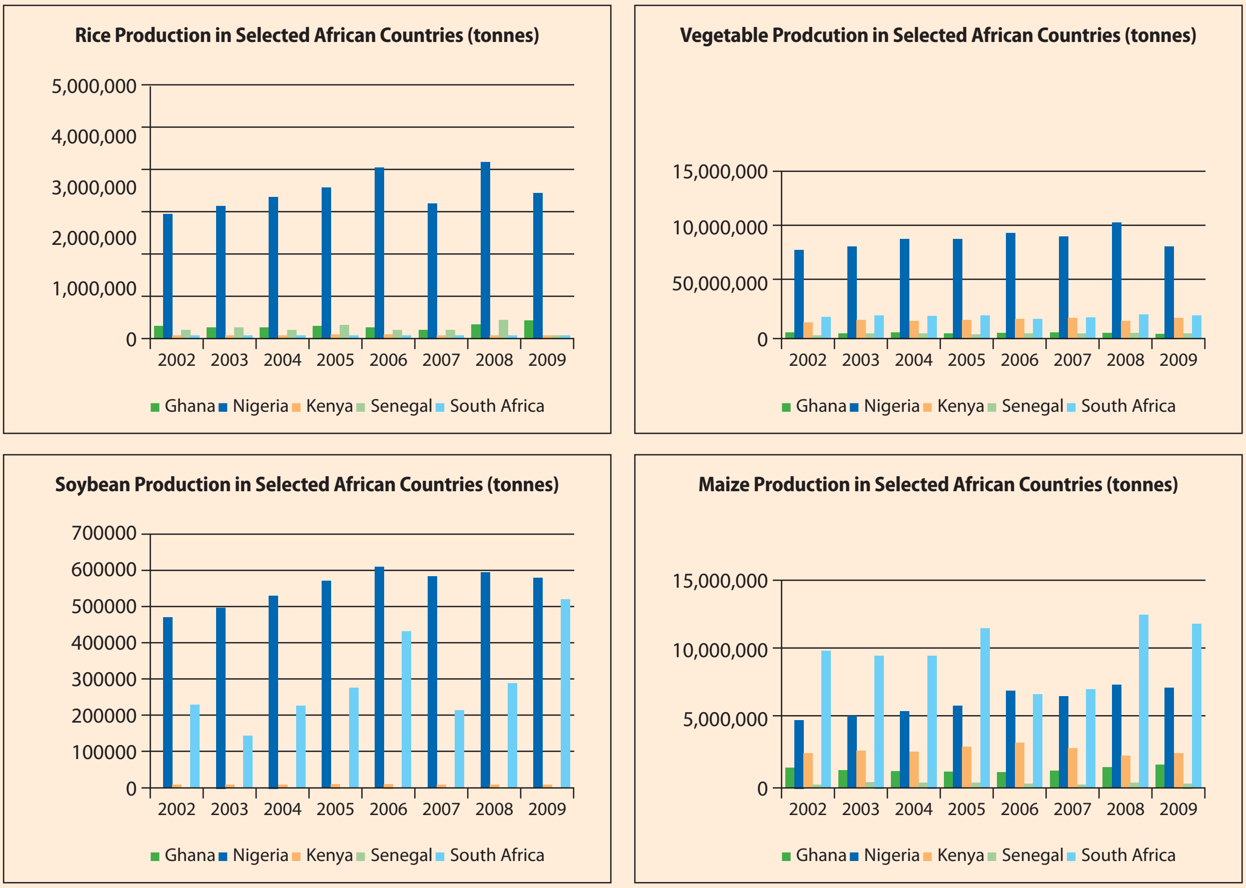
Table 2: Imports Trends of Major Commodities

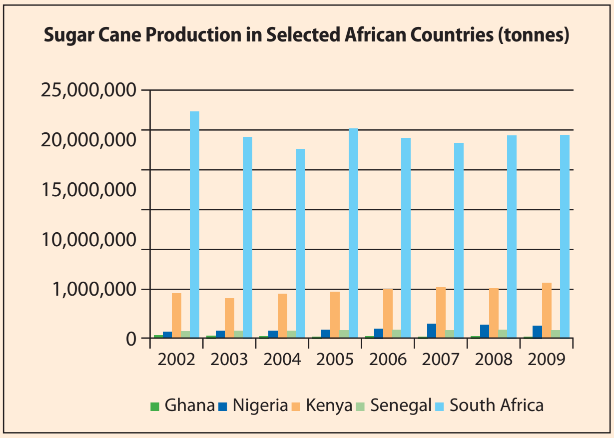
Commodity	2001-2003	2004-2006 48.8% Increase	2007-2009 72.5% Increase
Wheat	11,251,912.00		30,156,582.00
Palm oil	2,429,179.00	5,091,282.00	10,543,082.00
Maize	4,423,114.00	5,773,650.00	8,567,510.00
Rice Milled	3,459,069.00	5,386,857.00	7,325,568.00
Soybean oil	1,806,654.00	2,497,448.00	5,231,364.00
Milk Whole Dried	1,834,100.00	3,314,553.00	4,794,284.00
Sugar Refined	3,316,151.00	3,970,167.00	5,069,707.00
Sugar Raw Centrifugal	1,386,861.00	2,568,803.00	4,054,009.00
Rice Broken	1,169,908.00	1,623,503.00	2,994,170.00
Flour of Wheat	1,605,791.00	2,015,510.00	2,704,906.00
Chicken meat	549,418.00	1,399,568.00	2,501,795.00
Cake of Soybeans	1,499,318.00	1,881,270.00	2,577,522.00
Milk Skimmed Dry	1,127,041.00	1,367,190.00	3,187,680.00
Soybeans	–	1,725,540.00	2,358,994.00
TOTAL	**35,858,516.00**	**53,362,929.00**	**92,067,173.00**
Per cent Increase		**48.8%**	**72.5%**

Source: FAOSTATS

Figure 5: Production Trends of Major Commodities

Source: FAOSTATS, Compiled by ASNAPP





Supply of Key Agro-foods

From 2002 to 2009, there has been a steady rise in the production of selected agro-foods. Nigeria is by far the leading producer of most agricultural commodities: 3million tons of rice, 9million tons of vegetables and 0.5million tons of soya beans annually. However, there has not been any significant increase in volume of production since 2002 (FAOSTAT 2009). Production of rice increased marginally from 2.8million tons in 2002 to 3.2million tons in 2009. Similarly, vegetable production has remained almost at the same level of 800,000 tons between 2002 and 2009 as presented in figure 5.

South Africa on the other hand is the leading producer of maize and sugar cane in SSA producing about 12million and 22million tons per annum respectively. However, its production levels decreased from 22million tons in 2002 to 20million tons in 2009 (FAOSTAT 2009).

Chapter 3

Review of Regional and International Agro-Food Development Programmes

Introduction

Developing regional value chains for strategic agricultural commodities, especially those identified by the African Union (AU) Food Security Summit in Abuja, is essential for African countries to enhance their agricultural transformation and global competitiveness (AU, 2006). Since the turn of the new Millennium, there has been renewed political interest in supporting agriculture as a sectoral priority. The New Partnership for Africa's Development (NEPAD) has been instrumental in bringing up agriculture on the national and international policy agenda in the 2003 Comprehensive Africa Agriculture Development Programme (CAADP) framework. Given the limited financial resources available to most African governments, it has become critically important to mobilise additional resources, including those coming from bilateral and multilateral donors and the domestic and international private sector.

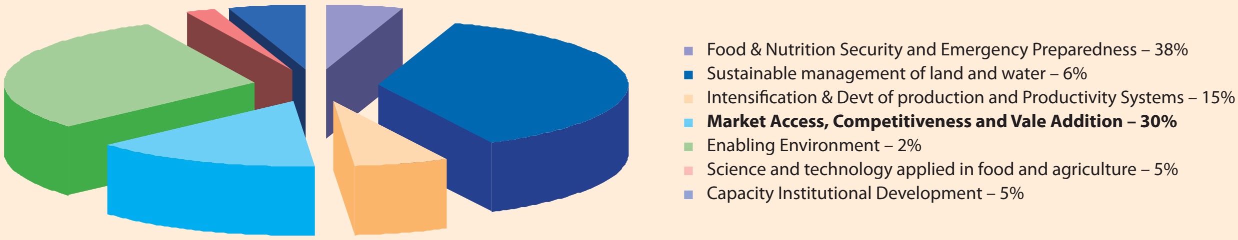
Having already funded a wide array of projects and programmes in agriculture and agribusiness, donors are increasingly placing an emphasis on the need to promote agro-based private sector development.

The international aid effectiveness agenda highlights the importance of aligning donor activities to the recipient country's priorities and improving co-ordination among donors, to minimise duplications and reduce the bureaucratic burden on the local administration. In this respect, various aid modalities have been devised, including sector-wide approaches to agricultural development. Given the cross-cutting nature of such aid, which is closely connected to aid for trade and private sector development, the formulation and implementation of effective agricultural development programmes will remain a major challenge to many African countries.

African food and agricultural markets are extremely fragmented along regional, national, and even local lines. This often results in segmented markets of sub-optimal size, which do not encourage sizeable private investments in the different stages of the commodity chain (FAO, 2007).

It is therefore imperative to review key agro-food development programmes to assess their impact over time, identify gaps and/or opportunities for investment by the private sector. This section thus seeks to provide synthesis of the various regional value chain programmes relevant to the development of agro-foods in Africa.

Figure 6: Key Investment in Priority Areas



Source: "Status, Experience and Lessons with the National Agriculture & Food Security Investment PLans", presentation at CAADP PP 2011 held by Ousmane Djibo (NEPAD Agency – GIZ).

CAADP Role in African Agro-food Industry Development

Recognizing the role of agriculture in combating hunger and poverty in Africa, the African Union (AU)/ New Partnership for Africa's Development (NEPAD) initiated the Comprehensive Africa Agriculture Development Program (CAADP) to accelerate growth and eliminate poverty and hunger among African countries. The main objective of CAADP is to help African countries reach a path of higher economic growth through agriculture-led development, which eliminates hunger, reduces poverty and food insecurity, and enables expansion of exports.

NEPAD's overall vision for agriculture seeks to maximize the contribution of Africa's largest economic sector to the achievement of self-reliant and productive economies. In essence, NEPAD's aim for agriculture is to deliver broad-based economic advancement, to which other economic sectors, such as manufacturing, petroleum, minerals, and tourism, may contribute in significant ways, but not to the same extent as agriculture. CAADP, as a common framework for agricultural development and growth for African countries is based on the following key principles and targets: the principle of agriculture-led growth as a main strategy to achieve the Millennium Development Goal (MDG) of poverty reduction;

- The pursuit of 6 percent average annual agricultural growth at the national level;
- The allocation of 10 per cent of national budgets to the agricultural sector;
- The exploitation of regional complementarities and cooperation to boost growth;
- The principles of policy efficiency, dialogue, review, and accountability;
- The principles of partnerships and alliances to include farmers, agribusinesses, and civil society communities; and
- Implementation principles that assign roles and responsibilities for programme implementation to individual countries,

Through the CAADP process, a number of countries have developed their National Agricultural and Food Security Investment Plans (NA&FSIP) with the aim to provide a road map where private sector, investors, development organizations and the public can invest to stimulate national and regional economic development agenda. So far 25 countries have signed the CAADP compact, 21 countries have formulated their NA&FSIPs, 19 countries have had external review of their investment plans, 13 countries have held their business meetings and 5 out of 8 have obtained CAADP aligned Global Agricultural and Food Security Programme. The key priority areas of the investment plans and the allocation of budgetary resources are presented in figure 6. In all Food and Nutrition Security and Emergency preparedness account for 38% followed closely by Market Access, Competitiveness and Value Addition (30%).

CAADP Pillar 1

CAADP's Pillar 1 aims to extend the area under Sustainable Land and Water Management (SLWM) throughout Sub-Saharan Africa. It is one of four continent-wide entry points, or pillars, that CAADP has identified for investment and action in pursuing increased and sustainable productivity in agriculture, forestry, fisheries and livestock management. Founded on the recognition of the importance of SLM and water strategies in the efforts of improving agricultural productivity throughout Sub-Saharan Africa, CAADP Pillar 1 is based on three elements:

- Sustainable land management
- Agricultural water development
- Land policy and administration

The TerrAfrica[9] partnership initiative has mobilized US$1 billion of investment in country programmes for sustainable land and water management through the Global Environment Facility (GEF) Strategic Investment Programme. Initially, GEF provided US$150 million; whilst a further US$900 million was invested by the Initiative. The design of country programmes and disbursement of funds is already under way.

According to the TerrAfrica review on "The Role of Sustainable Land Management (SLM)" in Sub-Saharan Africa, climate change can offer new opportunities for productive and sustainable land management practices such as reforestation, improved water management, integrated soil fertility management, conservation agriculture, agroforestry, improved rangeland management and others.

The review further states that new opportunities for SLM are arising from regulations and emerging markets to mitigate global emissions of greenhouse gases (GHG). It further suggests that if payments for these carbon mitigation services were available, it could provide large flows of funds (more than $10 billion per year if only half of the potential reductions were achieved) to help promote SLM activities in Africa.

In 2008, the Norwegian Government committed US$4 million in response to the high food prices, but with a special focus on conservation of agriculture. The funds are being used in a joint NEPAD-FAO programme (2008-10) to scale up the adoption of conservation agriculture in Southern Africa. The project aims to reach 23,700 rural households and farmers in Lesotho, Mozambique, Swaziland and Zimbabwe to be trained and be supplied with improved seed varieties and appropriate technologies such as the jab planter and planting basin methods.

Under Pillar 1, NEPAD coordinates, aligns, and manages knowledge initiatives across the continent on water and irrigation and ensures that regional resource mobilization directly supports country CAADP processes in irrigation investments.

CAADP Pillar 2 (Market Access and Rural Infrastructure)

CAADP Pillar 2 aims to increase market access through improved rural infrastructure and other trade-related interventions. It intends to accelerate growth in the agricultural sector by raising the capacities of private entrepreneurs (including commercial and smallholder farmers) to meet the increasingly complex quality and logistic requirements of markets, focusing on selected agricultural commodities that offer the potential to raise rural (on-and off-farm) incomes. Pillar 2 has the objective to create the required regulatory and policy framework that would facilitate the emergence of regional economic spaces that would spur the expansion of regional trade and cross-country investments.

Key agro foods under the programme include rice, legumes, maize, cotton, oil palm, beef, dairy, poultry, fisheries, cassava, sorghum, and millet (as defined by the AU/NEPAD Abuja Food Summit). Actual implementation of the agenda under Pillar II is carried out through the following five main clusters of activities or strategic areas guided by CAADP main objectives.

- Raising competitiveness and seizing opportunities in domestic, regional, and international markets;
- Investment in commercial and trade infrastructure to lower the cost of supplying domestic, regional, and international markets;
- Value-chain development and access to financial services;
- Strengthening the commercial and technical capacities of farmer organizations and trade associations;
- Benchmarking, monitoring and evaluation

Achievements: According to NEPAD's annual report eight (8) African countries have so far exceeded the 10% target and most have made significant progress towards it. Ten (10) countries have met the 6% target and another nineteen (19) have achieved productivity growth between 3% and 6%. The same report indicates that twenty-five (25) countries have signed CAADP Compacts and incorporated them into their agricultural agenda.

The Pillar 2 Secretariat has facilitated and coordinated the final technical review and validation processes for the CAADP Pillar 2 Framework (June 2008) on increasing market access through improved infrastructure and trade-related interventions. The framework is ready for widespread distribution and will have to take the due process for political endorsement by the AU Heads of State and Government.

Fertilizer Programme: Following up on the Declaration of the Abuja Food Security Summit (2006), New Partnership for Africa's Development (NEPAD) has worked closely with the African Union Commission (AUC) and the African

9 A partnership that aims to address land degradation in Sub-Saharan Africa by scaling up harmonized support for effective and efficient country-driven sustainable land management (SLM) practices)

Development Bank (AfDB) to establish the Africa Fertilizer Financing Mechanism. Already over US$35 million has been mobilized and will be directed to countries through country roundtable processes.

Regional trade: Facilitation programmes are currently being funded in the COMESA and ECOWAS regions to promote the integration of regional markets and raise the competitiveness of local products in these markets.

Other initiatives: The UK's Research into Use Programme recently launched the African Enterprise Challenge Fund (AECF) to finance agribusiness joint ventures and other business-to-business alliances. The USA African Growth and Opportunities Act (AGOA) streamlines the rules for African exports.

CAADP Pillar 3 (Increasing Food Supply, Reducing Hunger and Improving Responses to Food Emergency Crises)

CAADP Pillar 3 focuses on the challenge of ensuring that vulnerable populations have the opportunity to both contribute to, and benefit from agricultural growth – a focus that operationalizes CAADP's commitment to broad-based agricultural growth as the best way of achieving sustainable food security in Africa. CAADP Pillar III also recognizes the need to reduce the vulnerability of poor households to economic and climatic shocks, because of the clear linkages between repeated exposure to shocks, the erosion of household assets and coping mechanisms, and deepening poverty. Finally, Pillar III highlights the linkages between poverty, hunger, and malnutrition – and the enormous threat posed by chronic hunger and malnutrition to the current and future productivity of Africa. The key elements of Pillar III are:

- Improve domestic production and marketing
- Facilitate regional trade in food staples, and
- Build household productivity and assets.

Some of the key programmes being undertaken by Pillar 3 include:

- **Regional Enhanced Livelihoods for Pastoral Areas (RELPA),** funded by USAID ($19.8 million) to enhance livelihoods of pastoralists across three countries in the Horn of Africa.
- **Regional Food Security and Risk Management Programme for Eastern and Southern Africa (REFORM) funded by the European Union (€10 million):** This programme is mostly capacity building (i.e. skills transfer, technical studies, documentation of best practices, information sharing, policy dialogue, etc.)
- **Making Markets Work for the Poor:** Enhancing Food Security and Productivity Growth in Eastern and Southern Africa (MMWP), funded by World Bank/ DFID-UK ($3.8 million): This project involves a three-year programme of practical analysis, policy outreach, consensus building, and capacity strengthening to promote the goals of national and regional food security, poverty reduction, and agricultural productivity growth.
- **Improved Regional Trade in Food Staples (RTFS),** total $5 million, with start-up funding by the World Bank: This programme of work aims to assemble spatial evidence on existing regional production and trade in food staples and to develop predictive analytical tools that will enable spatial mapping of the outcomes resulting from common natural and policy shocks.
- **Cassava Transformation in Southern Africa (CATISA),** total $2 million, with start-up funds from Canadian International Development Agency (CIDA). The CATISA project aims to analyze and help accelerate cassava commercialization in Southern Africa in order to help improve food security in the region.
- **Home-Grown School Feeding (HGSF),** funded by the World Food Programme and DFID-UK ($25 million): NEPAD, WFP and the Millennium Hunger Task Force (MHTF) launched a pilot Home-Grown School Feeding and Health Programme designed to link school feeding to agricultural development through the purchase and use of locally and domestically produced food.

CAADP Pillar 4 (Improve Agricultural Research and Systems In Order to Disseminate Appropriate New Technologies)

CAADP 4 adopted a Framework for African Agricultural Productivity, prepared under the leadership of the Forum for Agricultural Research in Africa, which has allowed a broad group of development partners to start scaling up support to science and technology programmes at the regional and national levels.

CAADP Pillar 4 focuses on:

- Institutional reform, including the efficient use of resources for activities that are most likely to achieve productivity increases;
- Increasing total investment;
- Promoting harmonization of internal and external actions and actors

The Framework for African Agricultural Productivity (FAAP) developed by FARA estimates that in aggregate some US$2.5 billion is spent annually on Africa's agricultural productivity programmes (including public and private expenditures at local, national, sub-regional, and global levels). The report further shows that on average, African agricultural research and development intensity is around 0.75% of agricultural GDP, which is less than a third of that of developed countries, further suggesting a substantial increase in investment to at least US$4 billion to boost Africa's agricultural productivity is needed. The current annual investment of $25million at sub-regional and continental investment levels would need to increase to US$500 million.

Gaps Identified and Interventions required in CAADP Programmes

- **Awareness:** Most of the private sector institutions are not aware of the existence and contents of the national investment plans. In some cases, government has been unable to provide the needed policies to attract private sector investment. The investment plans are often not known to the private sector which results in minimal cohesion between the the overall investment plans if the government and private sector investment.. despite the fact that several of the private sector firms know of CAADP, less than 10% of the CEOs interviewed were aware of National Agricultural Investment Plans.

- **Bankable Projects:** Despite the significant investment into the development of a national and regional agricultural investment plan at both the country and regional levels, the study observed that most of the countries have not been able to unpack the investment plans into projects. What is required within the National Investment Plan is the development of bankable projects within specific value chains. The bankable projects will be incentives for private sector investment and consolidate public investment into a more cohesive, coordinated and coherent manner. Eight (8) CEO's suggested that the development of bankable projects would increase private sector participation and investment.

- **Use of Pillar Tools:** Significant effort and investment has been made to prepare tools which enhance the development of national and regional agricultural and food security investment plans. However, both public and private sector institutions are often not aware of the availability of such tools. There is little sensitization, awareness and education on the utilization of the tools for programme development. Some of the tools are the Sustainable Land Management (SLM)-Pillar 1; Framework for Trade-related Infrastructure and Market Access (FIMA)-Pillar 2; Framework for African Food Security (FARS)-Pillar 3 and Framework for African Agricultural Productivity (FAAP)-Pillar 4.

- **Regional Agricultural Investment Plans:** Even though ECOWAS has developed its Regional Agricultural Investment Plans, most private sector firms are not aware of regional and cross-border opportunities. Over 80% of the interviewees did not know of any regional agricultural investment plans.

- **Private Sector Platforms:** Private sector engagement at both national and regional levels is weak. The need for the establishment of Agricultural Chambers, Agribusiness Foundations, and Commodity Alliances at national and regional levels to mobilize domestic private firms for agribusiness investment cannot be over-emphasized. Eastern Africa Grain Council, Pan African Agribusiness and Agro-industry Consortium (PanAAC) and Agricultural Business Chamber (South Africa) are some of the models that can be replicated in other regions and countries.

- **Regional Value Chain Promoters:** Critical among the implementation strategies is the establishment and support for Regional Value Chain Champion Institutions. These institutions will champion and develop regional commodity value chains; resolve cross-cutting issues using successful models and inclusive market development tools. The value chain champions are likely to mobilize key non-state actors to invest in national and regional value chains in a more coherent and coordinated manner.

ECOWAS Investment Plan

The ECOWAS Commission and the secretariat of NEPAD worked together to produce a single framework for the schedule of interventions in the agricultural sector within the West Africa sub region (ECOWAP/CAADP). In 2005, the ECOWAS Heads of States adopted the ECOWAS Agricultural Policy (ECOWAP) as an instrument for the coordination of CAADP and the agricultural component of NEPAD within the region. This policy has a vision of "a modern and sustainable agriculture, based on the effectiveness and efficiency of family farms and the promotion of agricultural enterprises through the involvement of the private sector". This initiative was designed to achieve significant results in the short and long term. It has a component that focuses on the development of the different value chains (food, peri-urban agriculture, export crops, short-cycle breeding, agro-forestry products, non-industrial fishing and aquaculture), the development of product processing, the strengthening of support services provided to operators and the promotion of national, regional and international trade. These projects have direct implications on the development of Africa's agro-food industry. Key agro-foods include fish, rice, maize, cassava, meat and milk, agro-pastoral systems as well as poultry.

SADC Investment Plan

The Southern Africa Development Corporation (SADC) Regional Agricultural Policy (RAP) is a regional instrument for stimulating sustainable agricultural development and food security in the SADC region. It defines common agreed objectives and measures to guide, promote and support actions at regional and national levels in the agricultural sector. In March 2008, the Food, Agriculture and Natural Resources (FANR) Directorate of SADC initiated the preliminary processes in the formulation of the SADC Regional Agricultural Policy (RAP).

The FANR Directorate is one of four directorates at the SADC Secretariat. Its main function is the coordination and harmonization of agricultural policies and programmes in the SADC region, in line with priorities in the RISDP. The focus of FANR is to ensure food availability, access, safety and nutritional value; disaster preparedness for food security; equitable and sustainable use of the environment and natural resources; and strengthening institutional framework and capacity building.

The FANR Directorate mandate comprise the following:

- Development, promotion and harmonization of agricultural policies and the promotion of gender sensitive development strategies and programmes;
- Ensuring sustainable food security policies and programmes;
- Development, promotion and harmonization in biodiversity, phytosanitary, sanitary, crop and animal husbandry policies;
- Development of measures to increase agricultural output and the development of agro-based industries;
- Development, promotion and harmonization of policies and programmes aimed at effective and sustainable utilization of natural resources such as water, wildlife, fisheries, forestry, etc.;
- Development and harmonization of sound environmental management policies;
- Promotion of trade in agricultural products

Feed The Future (FTF)

Feed the Future (FTF), the U.S. government's global hunger and food security initiative, renews its commitment to invest in sustainably reducing hunger and poverty. President Obama's pledge of $3.5 billion for agricultural development and food security over three years helped to leverage and align more than $18.5 billion from other donors in support of a common approach to achieve sustainable food security.

The United States, through Feed the Future is engaging the private sector in a meaningful, comprehensive way to develop models that are integral to core business strategies and meet the global food security challenge. These "win-win" partnerships will advance the impact of sustainable development and will foster private sector-led growth in emerging markets, critical to reducing poverty, fighting hunger, and improving nutrition.

"Private sector companies can bring fresh perspectives to addressing the principal development challenges of our day – from food security and global health to climate change and inclusive economic growth" (USAID Administrator Rajiv Shah, UN Private Sector Forum 2010).

COMESA Strategy in Agro-foods

Common Market for Eastern and Southern Africa (COMESA) was formed to achieve sustainable economic and social progress in all member states through increased co-operation and integration in all fields of development particularly in trade, customs and monetary affairs, transport, information and communication technology, industry and energy, gender, agriculture, environment and natural resources.

COMESA is currently developing a regional agro-foods sector strategy on processed foods. The strategy development process is taking a participatory approach used to develop the leather and leather products strategy, and cotton to clothing strategy. The development of the strategy is being implemented within the tripartite arrangement with East African Council (EAC) and Southern Africa Development Corporation (SADC) secretariats. The main objective of the strategy is to accelerate growth in the agro-food sub-sector by raising the capacities of private entrepreneurs to improve the performance of agro-food value chains along the main trade corridors across the Eastern & Southern Africa region. Further to this, it is anticipated that the strategy will contribute to the expansion and strengthening of regional integration by:

- Supporting the development of coordinated value chains and capture value addition opportunities in strategic food and agricultural commodities along the major trade corridor;
- Mapping/Defining/Confirming regional value chain priorities for development including what is needed to improve productivity, competitiveness and the enabling environment at regional as opposed to national levels;
- Addressing and integrating cross-cutting issues including, Sanitary and Phyto-Sanitary (SPS) priorities along major trade corridors

3ADI

At the High-Level Conference on the Development of Agribusiness and Agro-Industries in Africa (HLCD-3A), the African Union Commission (AUC) and its New Partnership for Africa's Development (NEPAD) through the Comprehensive Africa Agriculture Development Program (CAADP), initiated the African Agribusiness and Agro-industries Development Initiative (3ADI). The goal of 3ADI is to have an agriculture sector, which by the year 2020 is made up of highly productive and profitable agriculture value chains that effectively link small and medium size agricultural producers to markets. Interventions within the value chains aim at supplying higher-valued food, fibre, feed and fuel products; contribute to increasing farmers' incomes, utilize natural resources in a sustainable manner and generate increased and high quality employment. African Heads of State developed this initiative in partnership with the African Development Bank (AfDB), Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), the United Nations Economic Commission for Africa (UNECA) and the United Nations Industrial Development Organization (UNIDO). The initiative aims at spurring the development of competitiveness, sustainable and inclusive agro-industries and agribusinesses in Africa as a pathway to increased economic growth and food security in the continent.

EU-SADC Investment Promotion Programme

EU-SADC Investment Promotion Programme (ESIPP) is an European Union (EU)-Southern Africa Development Community (SADC) partnership programme for the promotion of investment and technology flows to enterprises operating within key growth sectors in the SADC member states. This will be achieved through a two-dimensional approach: to support intermediary organizations and business associations, and to facilitate through Business-to-Business (B2B) events, the promotion of investment and inter-enterprise cooperation agreements (ICAs) between North-South and South-South enterprises in the targeted key sectors. Targeted sectors include tourism, mining, agro-industry, light engineering, and construction and building materials sector. Through the EU-SADC Investment Promotion Programme (ESIPP), SADC has adopted a private sector driven approach to agricultural development. Culminating with an important event organized in Dar es Salaam in 2008, business partnerships between firms of different SADC countries were supported and the formulation of policy positions by the agri-private sector facilitated.

ECOWAS EXPECT Initiative

The Exports Promotion and Enterprise Competitiveness for Trade (EXPECT) Initiative by ECOWAS was launched in 2010 with the objective of building a sustainable structure to support export competitiveness by promoting high export potential value chains and increasing exports through engaging the region's private sector, donors, partners and other valuable stakeholders. It more specifically aims to support Small and Medium Enterprises (SMEs) in these value chain sectors through capacity and skills building and empowering them through different ways. Six (6) lead potential value chains were carefully selected using the International Trade Centre's (ITC's) Market Analysis Tools. The ECOWAS Commission through the EXPECT Advisory Committee ensures that it makes inputs into priority discussions with Export Actors Platform and oversees EXPECT Facilitation and partners' contributions.

EXPECT liaises and forms strategic partnerships with lead partners in value chain and export development. These partners include: ITC in the Mango Chain Development and building of an export capacity, USAID West Africa Trade Hub (WATH) for technical collaboration with the Africa Cashew Alliance and the Shea Alliance in value chain development activities of those two (2) commodities, and is exploring partnership with the SIFCA Group for Palm oil value chain development.

Chapter 4

Review of Private Sector Involvement in Agro-Food Industry in Africa

Introduction

Though government and public sector institutions engage in the development of agro-food industry in SSA, the private sector remains a critical driver with the highest level of investment and impact in the agro-food industry.

Despite the numerous challenges and high level of risk involved in agribusiness investment in the region, there has been a significant increase in private sector investment and engagement over the last decade. With nearly 70% of Sub-Saharan Africans involved in agriculture or agriculture-related business and as much as a third of GDP being derived from agriculture, growth in Africa is founded upon growth in agriculture. Sub-Saharan Africa's agricultural exports increased from $14.7 billion to $25.3 billion in 2006 and while global foreign direct investment inflows worldwide fell by an estimated 21% in 2008, FDI inflows to Africa grew by 15% to $61 billion in 2009 (Business Trends 2009).

To feed the world in 2050, some US$9.2 trillion in cumulative investments will be necessary worldwide. The population of Africa could by then nearly be doubled, and reach 2 billion. Sub-Saharan Africa alone will need some US$940 billion of investment. About 66 per cent of these will be required for agribusiness and agro-industries capital outlays (High Level Conference on Developing Agribusiness and Agro-Industries, Abuja 2010).

Though agribusiness is seen to be one of the risky business ventures in Africa, most Chief Executive Officers (CEOs) who have invested in the sector are seen to be motivated by growing market demands, increasing profits and are willing to expand operations despite perceived unfavourable investment climate. Within a particular agro-food value chain, it is common to see varying scale of operations and investment ranging from a $1,000 agribusiness investor to a multi-million dollar company, all operating in specific segments along the chain and feeding into one another. However the key segments of the industry that drive and control growth in the sector are: agro-dealers, food processors, supermarkets, support service institutions and financing companies. The role of support service institutions to the agro-food industry is as significant as the role of the key value chain actors themselves. Key agro-food participants are: Agro-dealers, Producers, Processors, Wholesalers and Retailers (including supermarkets), Value Chain Facilitators and Aggregators.

Role of Agro-dealers in the Agro-food Industry

Sub Saharan Africa has the lowest world record of agro-inputs application and utilization (Africa Fertilizer Summit, June 2006). It is a cruel irony that a farmer in Sub-Saharan Africa, where half the population survives on less than $1.25 a day pays two to four times the average world price for fertilizer. African farmers apply only five to ten percent of the fertilizer amounts used in other developing regions, such as Asia and more than 90% of fertilizers used in SSA are imported (Arie Kuyvenhoven 2007). Key agro-dealer companies in the region are YARA and Chemico – Ghana, Amiran – Kenya, Swiss Biostadt-Nigeria, NANKOSEM-Burkina Faso and Hygrotech-South Africa.

All the major agro-dealers in the countries visited played several roles beyond the traditional supply of inputs, in order to increase their sales. In most cases, the agro-dealers have become key value chain service providers. Their activities range from research through extension support to market linkages and infrastructure development.

Supply of agro-input: The fundamental function of agro-dealers is to sell and distribute agro-inputs to every potential buyer even at the remotest part of the country of operation. Agro-dealers are motivated by profits through margins and volume of sales. By selling these products, they provide producers the necessary fertilizers, seeds, agro-chemicals, farm equipment, machinery and irrigation systems to increase production and productivity. Various strategies are adopted by the agro-dealers to meet their primary and secondary objectives.

Applied Research and Trials: Almost every major agro-dealer engages in research activities with existing in-country research institutions. Seeds and fertilizers are tested to determine optimum levels of applications, efficacy and utilization cost. YARA for example conducts fertilizer trials with in-country institutions and its research centres in Malawi, Tanzania, Ivory Coast, Mozambique and Ghana.

Extension Services and Transfer Technologies: They also provide extension support and technology transfer to farmers on efficient utilization of the agro-inputs. In most cases, agro-dealers have had to directly pick up the role of extension provision, and have extension officers on their payroll, as they recognize it as the weakest support service within agribusiness value chains.

Figure 7: Opportunities and Incentives for Agro-dealers

OPPORTUNITIES AND INCENTIVES FOR AGRO-DEALERS

Whereas several opportunities for growth exist for agro-dealers, their capacity building is critical to the development of well-functioning input markets as they provide valuable technical information to farmers to boost their yields.

KEY OPPORTUNITIES IDENTIFIED FOR AGRO-DEALERS

- Increasing farm activities and increasing demand for agro-inputs
- Increasing engagement of agro-dealers in value chain activities
- Initiatives to increase farmers' productivity and the intensification of Alliance for Green Revolution in Africa (AGRA) activities
- Vast majority of un-served, yet- to-be reached farmer population provide enormous market opportunity

INCENTIVES

- Attractive profit margins and opportunities to expand sales
- Availability of critical mass of demand at the community level
- Presence of a well organized Producer Organizations to enhance efficient movement of agro-products from urban areas to rural communities
- Presence of advocacy groups to dialogue with Government on tax incentives
- Tax incentives and conducive environment for agro-dealers
- Guarantee funds to reduce the risk exposure of agro-dealers and support for agro-credit schemes
- Market opportunity for farmers to sell their produce

EMERGING TRENDS

- Donor initiatives and guarantee funds supporting agro-credit is increasing farmers access to agro-inputs
- Input Vouchers for supplies especially in Malawi increases farmers applications of agro-input
- International Fertilizer Development Corporation (IFDC) training programmes in mobilizing agro-dealers is also increasing access to agro-input and efficiency in utilization
- Agro-dealers replacing and extending extension support services to farmers

Table 3: Challenges Confronting Producers

Agro-inputs
• Low quality planting materials and agro-chemicals • High cost of inputs • Poor access to input due to roads and economy of scale • Poor application of agro-input • Minimum incentives to use agro-inputs (high input use-high production-low prices)
Finance
• Difficult accessing affordable credit to purchase high quality inputs • Untimely delivery of agricultural credit • High interest rates of commercial bank • Producers are unable to provide the needed collateral and other financial requirements of banks • Limited access to medium to long-term agricultural loans • High transaction cost of disbursement of agriculture loans to smallholders • Cumbersome loan application procedure • Short repayment period
Human and Technical Capacity
• Lack of technical capacity to implement good agricultural practices • Lack of extension services hence most programmes tend to be training-based rather than development-based • Trainings are adhoc and mostly not consistent • Sometimes trainers provide conflicting technical know-how
Market
• Market instability • Demand and supply parity • Low prices during bumper harvest • Ability to meet SPS and non-tariff barriers • Poor market infrastructure
Infrastructure
• Low warehousing capacity in the remote areas – high rental cost, low availability • High post harvest losses due to lack of warehouses, cold chain facilities, irrigation, tractor services and quality infrastructure • Poor access to production areas • High transportation cost
Support Services
• Dispersed and inconsistent support services • Inability to use modern technologies (including videos) to transfer technologies • Wide gap between research findings and technology transfer

Backward Integration: To ensure repayment for agro-credit, agro-dealers have developed backward integration models; they provide inputs to farmers, train them on proper application and in the end buy the produce from farmers. The system offers guaranteed market to producers, an incentive to re-use agro-inputs for subsequent seasons. In certain instances, the agro-dealer has collaborated with farmer associations to construct warehouses for farmers' produce.

Key Challenges and Development Areas

Poor infrastructure and high transportation cost are among the key challenges confronting private sector in the agro-dealer industry. For example transporting fertilizers from an African seaport to a farm 100 km inland costs more than to ship the same fertilizers from North America to Africa. Also the current low demand for fertilizer in Africa reduces potential benefit of economies of scale in procurement. Poorly managed fertilizer subsidy programmes across Africa fuels smuggling and ultimately results in higher fertilizer prices for farmers. Inputs sometimes become political commodities with interventions, which destabilize sustainability measures, create inefficient utilization and make the private sector uncompetitive. Lack of harmonized regional regulations and standards make cross-border trade in fertilizer difficult. Donor-driven projects are not coordinated and more often, farmers are left confused with the different products offered. It is also difficult to eliminate charlatans who supply sub-standard products at lower prices to farmers.

The Role of Producers

Producers form the largest component of the agro-food value chain. They can constitute over 80% of the actors within the agro-food value chains. Producers invest in land and provide labour and resources to generate the needed raw materials for processors and supermarkets. Regional farmers' federations such as ROPPA, SACAU and KENFAP represent over 1million farmers each and transfer production technologies, advocate for sound government policies and help provide the critical mass of produce for processors and supermarkets.

Opportunities

- Increasing demand for agricultural commodities
- Realization of public-private partnerships focusing on inclusive market development
- Innovative financing mechanisms such as crop insurance, backward integration, guarantee funds to reduce production and marketing risk

- High prices of agricultural commodities providing opportunities for increased profit margins
- Government interest to modernize agriculture
- Increasing public sector investment in agriculture and rural infrastructure development

Incentives

- Increased productivity and profit margins
- Stable markets and prices
- Availability of technical expertise
- Availability of requisite infrastructure to reduce production and post harvest risks including presence of irrigation facilities, efficient tractor services, warehouses and cold storage facilities, access to credit, improved agro-inputs, land and rural infrastructure are fundamental incentives to producers.
- Crop insurance, backward integration of agro-processing firms, forward integration of agro-dealers, warehouse receipt systems, modernization through production and marketing technologies are some of the models that incentivized producers to deepen their investments.

Role of Agro-food Processing Companies

Food processing companies drive the agro-food industry in Africa. Considering the high incidence of post-harvest losses in Africa, agro-processing companies have a vital role in turning primary agricultural products into consumable commodities. They range from cottage-level small-scale processors to state-of-the-art multinational companies. It is the subsector within the agro-food industry that creates the needed agribusiness opportunities for investment as well as reliable and sustainable livelihoods from small-scale producers. In South Africa for example, the government has identified agro-processing as a key sector for the creation of sustainable jobs and enterprises, thus a number of government export and investment promotion initiatives exist to support the sector. The agro-processing sector (also known as agri-processing) contributes about 10% to South Africa's gross domestic product (GDP). Food and beverages is also the third largest sector under manufacturing after the petroleum and chemicals, iron and steel sectors. Agro-processing contributes 10% to South Africa's GDP. The food market is largely controlled by multi-nationals, only 10% of the agro-processing companies are responsible for 70% of industry turnover. Of the 5 top brands listed on JSE, TIger Brands holds 50% market concentration (Gauteng Enterprise Propeller, March 2009). Other multinational companies include Nestle and Unilever.

Figure 8: Roles and Opportunities of Agro Processing Companies

CHALLENGES

- Challenging economic policy operating environment
- Low volume of local raw materials for processing especially soya bean, maize, rice, oil palm, sorghum
- High cost of imported raw materials due to world food price hikes
- Cash flow issues: upfront payment for raw materials but credit for down-stream value chain participants
- Most multinationals find it difficult to obtain high quality raw materials
- Lack of technical processing skills as well as engineering skills to efficiently operate processing equipment
- Ability to meet the high quality requirements of international markets
- Minimum support service institutions to provide the requisite technical know-how to suppliers

OPPORTUNITIES FOR AGRO-PROCESSORS

- Population growth with corresponding demand for agro-food
- Increasing urbanization and middle class and more disposable income levels
- Agro-food markets becoming diversified providing opportunities for diversity of products
- Young population interested in processed food more than unprocessed foods
- Changing lifestyle and increasing demand for ready-to-eat foods

INCENTIVES

- Long term financing to agro processing companies
- Favourable economic policy environment including fair taxes, import duties, fair competition from import markets and overall reduced cost of doing business
- Stability in raw material price
- Strategic focus and programmes to develop value chains of selected commodities
- Reduced transportation cost
- Developing regional markets with reduced cross border challenges
- Improved rural and urban infrastructure including road, storage facilities
- Smoothened border post charges, time and irregularities

EMERGING TRENDS

- Backward integration to assist smallholder to supply better quality and consistent volumes of raw materials
- Establishment of plantations and out-grower schemes
- Openness to engage in Public-private partnerships
- Willingness and efforts to source raw materials locally
- Willingness and efforts to source raw materials locally

Figure 9: The Pivotal Role of Agro-processor

THE ROLE AND IMPORTANCE OF AGRO-PROCESSING COMPANIES IN AFRICA AGRO-FOOD INDUSTRY

ECONOMIC CONTRIBUTION TO MILLENNIUM DEVELOPMENT GOALS 1 & 3
Spur Rural Development
Attract Foreign Direct Investment
Provide Enormous Employment to Women and Youth
Provide Market for Financial Institutions within the agribusiness setting
Contribute to Foreign Exchange Earnings

CONTRIBUTION TO HEALTH, NUTRITION AND HUNGER
Reduce Hunger and malnutrition
Ensure Year Round Supply of Food
Reduce Post Harvest Losses

ROLES
Provide Direct Market Access to Producers
Invest in hard and soft infrastructure at rural and urban levels
Transfer Production and Processing Technologies
Process and supply Food and food products to the population
Engage in Direct Export
Sometimes provide land

Kenya boasts of large agro-processing industries reflecting the importance of the agricultural sector in the Kenyan economy. Food processing is thus one of the key activities in Kenya's agro-processing industry. Del Monte, one of the leading world suppliers of pineapple, has operations in Kenya and exports almost all its pineapple concentrate. Other multinationals within the country include Unilever, Nestle and Coca-cola. There are however other large-scale African agro-processing companies whose operations span across and within regions. For example BIDCO, an edible oil processing company headquartered in Nairobi-Kenya, has operations in Uganda. BIDCO has asserted itself into a leading position as East and Central Africa's largest and most advanced edible oil, fats and hygiene products manufacturer and presently works with over 10,000 small scale producers, processing over 25,000 tons of grains annually. East African Breweries located in Kenya also has operations in Uganda and Tanzania.

Zambia and Malawi are noted for spice processing companies like Cheeteh Malawi, an indigenous spice processing company, that exports processed spices like Paprika and Nali across East and Southern African countries. Nali has strong presence in Zambia, Zimbabwe, Tanzania, Kenya, Mozambique and South Africa. The products of Nali can also be found in America, Europe and Asia markets. FreshPikt Zambia is the leading fruit and vegetable processing company within Zambia, Malawi and Mozambique.

In West Africa, most countries initiated agro-industrial economy in the colonial era as state-owned enterprises. For example, in Ghana and Cote d'Ivoire, there are several fruit and food processing companies which were vibrant and functional in post-independence era. However, most of these companies were privatized as part of the structural adjustment programmes instituted in the 1990's. Blue Skies in Ghana is a leading exporter of processed and packaged fruits to high-end markets in Europe. The company has diversified and integrated its operations from an exporter of raw fruits, mainly pineapple, to the EU market to a food processer competing in Ghana in the processed fresh fruit market with other giants like

Coca-cola. Ghana Agro Food Company Limited – GAFCO is a leading company in Tuna canning, wheat milling; feed milling and fishmeal production in Ghana. Ghana has commercial scale agri-feed industries that supply most of the West African poultry industry, notable among them being Afariwaa Farms, Agri-Feeds and Darko Farms.

In Burkina Faso, ETALON is a flour processing company with over 58 bakery outlets producing close to 350,000 loaves of bread daily.

It is important to mention that whereas global multinational and large scale processing companies dominate the formal markets, Sub-Saharan Africa is rather dominated by medium and small scale agro-processing companies who serve most urban (district and municipality) markets. These enterprises could account for close to 80% and 30% of the informal and formal markets for processed foods respectively. These enterprises rather have relatively low quality of produce, average-to-poor packaging and limited distribution outlets. Their operations are characterised by the use of un-sophisticated technologies, minimum quality standards and limited product ranges.

Agro-processing companies play the most critical role in the agro-food value chain. They are the link between producers and supermarkets playing both upstream and downstream value chain activities.
Key roles include:

- Providing immediate market for producers: For example BIDCO Kenya provides market for over 10,000 farmers; East Africa Breweries through East Africa Malting Company Limited provides immediate market for over 10,000 sorghum producers
- Investing in infrastructure including equipment, machinery, electricity, water supply, estate development, warehouses and transport systems. For example, Nestle South Africa helped connect electricity and other infrastructure to their suppliers in Johannesburg for milk production. In some instances the processing companies also invest in road construction or rehabilitation
- Providing technical training to farmers and supporting farmer mobilization: East Africa Malting, BIDCO and Nestle, among others, have agricultural departments that provide production technologies to farmers to increase their productivity
- Transferring food processing technologies to professionals
- Supplying markets with agro-food ensuring food is available over a long period of time
- Supporting rural infrastructure and community development, education and other career development initiatives through their corporate social responsibility programmes
- Feeding the population in urban areas

The role of agro-processing companies in the agro-food value chain offer direct employment not only to producers but also to agriculturists, food scientists and business management professionals. Agro-processing companies sit at the centre of the agro-food value chain and serve as the pivot upon which both producers and markets revolve. The agro-processing sector remains the key ingredient within the chain to attract Foreign Direct Investment (FDI). The activities of the agro-processing companies spur rural development through direct infrastructure investment and corporate social responsibilities. The contribution and role of agro-processing companies are summarised in figure 9.

Role of Supermarkets in the Agro-food Industry

In recent times, there seems to be a "movement" of supermarkets in Sub Saharan Africa spearheaded by a chain of South African supermarket giants such as ShopRite, Pick 'n' Pay, Woolworth, Spar, Massmart and Metcash. This growth has been fuelled by increased globalization, increased urbanisation, trade liberalization, increased economic growth, positive political changes, regional integration arrangements, increased per capita income and middle class population groups with more sophisticated taste and preferences and liberalization of foreign direct investment (University of Cape Town, 2000).

In South Africa, for example, supermarkets already account for more than 55 percent of national food retail (FAO 2003). Their impact can be felt in the fruit and vegetable markets in the region which has become integrated into a single, larger market. The Shoprite Group of Companies, Africa's largest food retailer, operates more than 1,068 corporate and 275 franchise outlets in 17 countries across Africa, the Indian Ocean Islands and Southern Asia. It employs more than 75,000 people across 9 trading and 7 operational divisions, serving over 55 million customers a month translating into serving the entire population of South Africa and more than twice that of Ghana every month (http://www.fastmoving..co.za/ 2011). Over the past 12 years, Shoprite has expanded its thrust northward beyond South African borders. Currently, 198 corporate outlets

Figure 10: The Strategic Role of Supermarkets

CHALLENGES
- Cross border barriers and port logistics
- Poor quality of produce especially from local suppliers
- High cost of imported raw materials due to world food price hikes
- Poor product packaging and traceability issues
- Lack of appropriate infrastructure to support supermarkets
- Lack of space at prime areas for supermarkets
- Frustration with SPS issues (not harmonized within the region)
- Lack of appropriate skill set in supermarket management
- Access to finance

OPPORTUNITIES FOR SUPERMARKETS
- Increasing middle class and disposable income
- Population growth with corresponding demand for agro-food
- Increasing urbanization and middle class and more disposable income levels
- Young population interested in processed food more than unprocessed foods
- Changing lifestyle and increasing demand for ready-to-eat foods

INCENTIVES
- Implementation of trade corridor infrastructure
- Reducing border barriers (time, procedures, cost)
- Government to reduce Taxes
- Stability in raw material price
- Consistent supply of materials
- Reduced interest rates and cost of borrowing
- Improvement in economic development and availability of disposable income

EMERGING TRENDS
- "Supermarket boom" in most African countries
- Willingness to source raw materials locally
- Willingness to allocate part of sales to materials supplied by smallholder farmers
- Backward integration using corporate social responsibility funds
- Openness to engage in Public-private partnerships
- Engaging integrated service providers to help secure produce

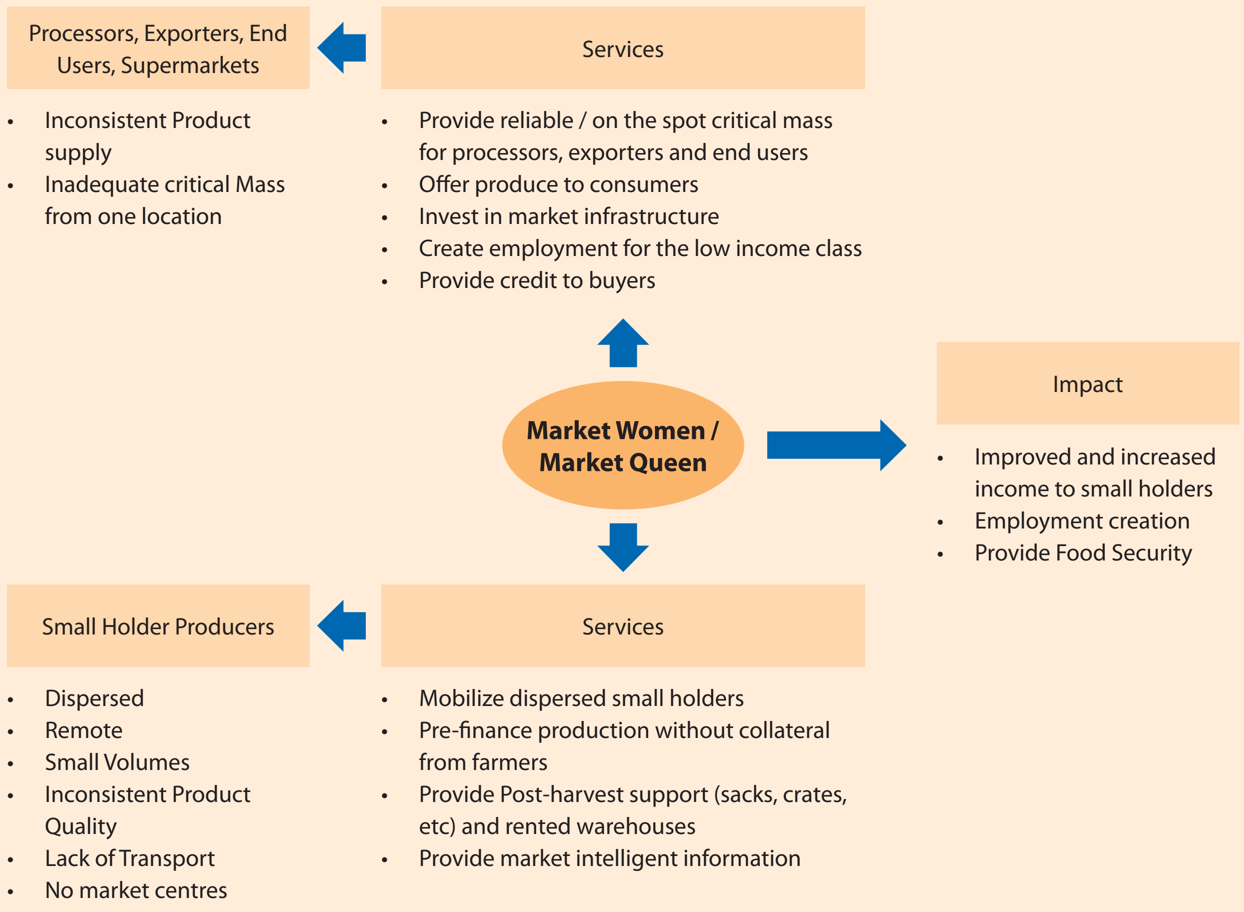
serve consumers in 16 countries outside of South Africa. In each of these countries (Angola, Botswana, Ghana, India, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Nigeria, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe) the company is exploring the opportunity to source produce locally.

Woolworths (Proprietary) Limited – is also a chain of over 330 retail stores (including more than 150 franchise stores) offering a selected range of quality clothing, food, home ware, beauty and financial services under its own brand name in South Africa, Africa and the Middle East. Between 2003 and 2007, the company increased its number of stores from 226 to 345 (http://www.fastmoving.co.za/ 2011).

Massmart manages portfolio of nine wholesale and retail chains each focusing on high volume, low margin, low cost distribution of mainly branded consumer goods, in 13 countries in sub-Saharan Africa through four divisions comprising 235 stores, and one buying association serving 480 independent retailers and wholesalers. The Group is the third largest distributor of consumer goods in Africa, the leading retailer of general merchandise, liquor and home improvement equipment and supplies, and the leading wholesaler of basic foods (http://www.fastmoving.co.za/ 2011).

Kenya alone has some 200 supermarkets and 10 hypermarkets, equivalent in sales to some 90 000 small shops and accounting for up to 30 percent of food retail in the country. "Supermarkets in Kenya are already buying three times more produce from local farmers than Kenya exports to the rest of the world indicating the significant role of urban market in the agro-food industry." Propelled by the forces of globalization and urbanization, the rise of supermarkets across the developing world is an inevitable reality. Nakumatt and Uchumi are the leading supermarkets operating in Kenya. Nakumatt Holdings Ltd is the leading East Africa supermarket and the largest retail market player in East Africa and Rwanda, and still expanding to the wider East African region. Wal-Mart will be entering the African market through South Africa. This confirms the growing importance of agro-food industry in the region, improvement in agribusiness environment and opportunities within Africa agro-food sector. This trend is expected to continue because African consumers are becoming increasingly health conscious and convenient and ready-to-eat food is becoming popular and will continue to grow. According to United States Department of Agriculture (USDA) Foreign Agricultural Services Report May 2011, consumers in South Africa and in fact

Figure 11: Role of market Women/Market Queens in Agro-food Value Chain



entire urban areas in Africa are demanding longer store hours or even 24hour shopping. The report indicates that fresh fruits and vegetables, nuts, grains and legumes are increasingly part of the daily diets for the middle to high income consumers.

The rapid spread of supermarkets in terms of market penetration and geographical reach has resulted in an important restructuring within the agro-food system in many countries around the world. Supermarkets have increasingly become the dominant outlets of agricultural products, from fresh vegetables produced by farmers to foods processed by multinational companies (MNCs). Agro-food experts' intimate that supermarkets:

- Influence the rest of the agricultural chain up to the farmers' level;
- Provide markets for suppliers of processed and fresh produce;
- Support product aggregators and wholesalers to mobilize produce;
- Invest in infrastructure including building warehouses and storage facilities;
- Provide convenience for middle class grocery and spurs emergence of middle class in urban areas;
- Use part of their Corporate Social Responsibility funds to support community development and farmer groups development;
- Sometimes donate un-used equipment to smallholder farmers to increase their productivity;
- Transform informal markets to formal markets and tends to be the means through which government is able to receive tax payment on food items.

Role of Women in the Agro-food industry

Women make up almost 50 percent of the agricultural labour force in Sub-Saharan Africa, an increase from about 45 percent in 1980 (FAO 2011). Women play a vital role in advancing agricultural value chain development. They participate in many aspects of rural life – in paid employment, trade and marketing, as well as many unpaid activities, such as tending to crops and animals, collecting water and wood for fuel, and caring for family members. Food markets have traditionally been dominated by the private sector, with a high proportion of women traders.

The critical role of market women cannot be left out in the agro-food industry. Until the recent supermarket movement in African countries, local market centres remained the only choice for all classes of the economy for groceries. Despite the supermarket in-roll in the marketing of agro-foods, it can be guesstimated that more than 70% of the agro-foods are traded on the local market. Fresh vegetables, cereals, roots and tubers, legumes/pulses, fish, beef and almost all staple foods have their market concentrations in local markets. Women trades, as informal as they are dominate the sale of agro-foods at the local market and have organized structures, rules, regulations and systems to operate.

These traders are the direct link between smallholder producers/processors and the market. The traders are familiar with the areas where they operate, and are often well-known among the farmers there. They survey the areas and pass on information about expected production levels to other actors within the value chain.

In Sub-Saharan Africa, the women account for up to 80 per cent of the food produced, processed, stored and marketed (FAO 2007). Yet despite their important role in agricultural production and marketing, women's engagement is hampered by some bottlenecks in the agricultural value chain.

Figure 11 presents a summary of the key services provided by the market women / market queens[10] to the smallholder producers as well as the end users to smoothen the agricultural value chain.

Role of Value Chain Facilitators/ Champions

Agricultural markets in Africa have increasingly become dynamic and complex thus making it difficult for smallholders or agri-firms to make their debut in the agro-food industry without the support of a facilitator or 'champion'. Facilitators can be classified as private, government, donors (NGOs & regional initiatives) who lead the efforts in providing resources and needs. Their roles in the value chain include market linkages; engaging stakeholders to strengthen and deepen investment in value chains, supporting formation of Farmer-based Organisations (FBOs) and Trade Associations necessary for development and providing platform for information sharing; dialoguing and technology transfer. The role of the facilitators represents a new frontier of practices leading to more sustainable agro-food value chains. The significant role of value chain facilitators and champions is how they are able to analyse needs, identify potential stakeholders and bring everyone on-board to address challenges and exploit opportunities. Business to business linkages, public private partnerships, farmer-to-farmer exchanges and institutional linkages are the key roles of the value chain facilitator.

Agribusiness in Sustainable Natural Africa Plant Products (ASNAPP), an NGO in Africa, has over the last 10 years assisted development of markets for speciality vegetables, teas, spices and medicinals for farmer groups. ASNAPP has consistently linked producers to markets and acts as the honest broker ensuring that suppliers' meet buyers' quality requirements and specifications and buyers pay for goods supplied. Through facilitation, export of the natural products increased from $3m to $15m in four years (www.asnapp.org). Similarly, the West Africa Trade Hub with funding from USAID has established the Cashew Alliance, Shea Alliance and the Borderless Alliance programmes with the view to stimulate and smoothen the value chain for further investment. Value chain champions and facilitators bridge the knowledge gap between buyers and producers.

10 Market Queens are leaders of product associations at the market centres. They head smaller trader units, ensure that trading rules are adhered to. They are major wholesalers who buy food directly from field suppliers and sell to retailers. They have the powers to set and control prices.

Chapter 5

Findings And Analysis

This chapter is informed by the findings emanating from the synthesis of individual in-depth interviews and interactions with over 55 agribusiness companies, information obtained from newsletters, journals and articles, agro-foods reports, and the consultant's experience in the agro-foods industry.

Strategic Commodities for Regional Market Development and Private Sector Investment

Selection of strategic commodities for interventions and investment were based on:

i. Existing and growing market demand
ii. Recommendations and priority areas of regional institutions under the CAADP process
iii. Declaration of the Abuja Food Security Summit
iv. Recommendations by major agro-processing firms and supermarkets
v. Potential for inclusive market development
vi. Potential impact on gender, nutrition and food security, employment and income generation
vii. Potential for value addition

The above criteria including other important factors consider oil palm, maize, sugar cane, rice, sorghum, soya bean, cassava, livestock and horticulture as key commodities for regional development. Other emerging commodities of strategic domestic and community level interest include sesame, millet, indigenous vegetables, health-related plants such as Moringa and dandelion, spices including paprika, ginger and birds eye chillies, agro-forestry products including Shea and gum Arabic.

Demand for Crude Palm Oil

Sub-Saharan Africa continues to show considerable growth with consumer base of more than 200 million people. Ghana, Nigeria, and South Africa consume nearly 50 per cent of the 1.25 million metric tons (MT) of Malaysian palm oil imported to Sub-Saharan Africa. Imports to Benin, Togo and Ghana now account for 37 per cent (approximately 459,000 MT) of all Malaysian palm oil exported to Africa. The European Union's target of reaching 10% of automobiles using bio-fuels could lead to an up-surge in demand. BIDCO for example, is establishing about 40,000ha in Uganda and is seeking opportunities elsewhere in West Africa to invest in additional 20,000ha. Oil Palm could be considered as one of the highest employment generating commodity in SSA generating employment for over 3million farmers in West Africa and

Figure 12: SSA Rice Production, Consumption and Imports

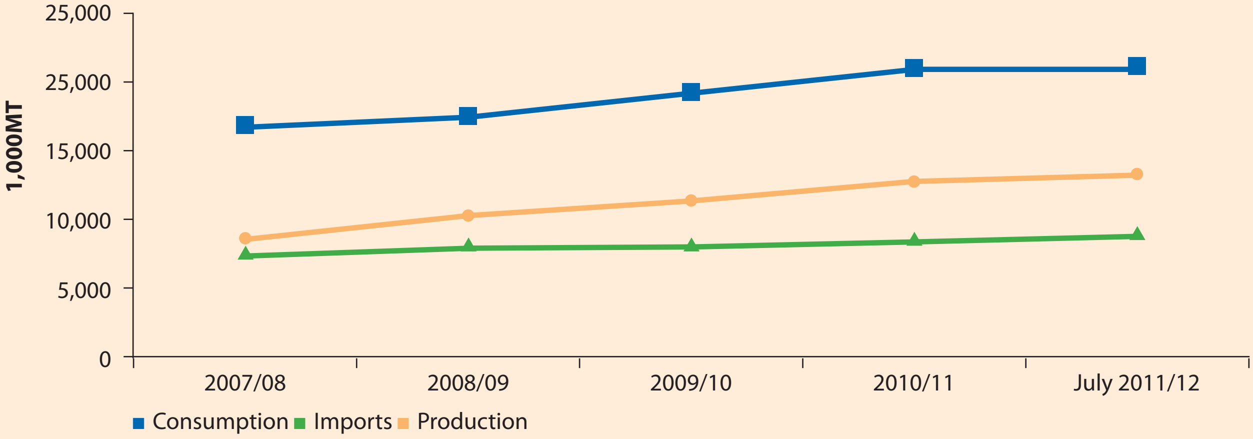


Figure 13: SSA Sorghum Production, Consumption and Imports

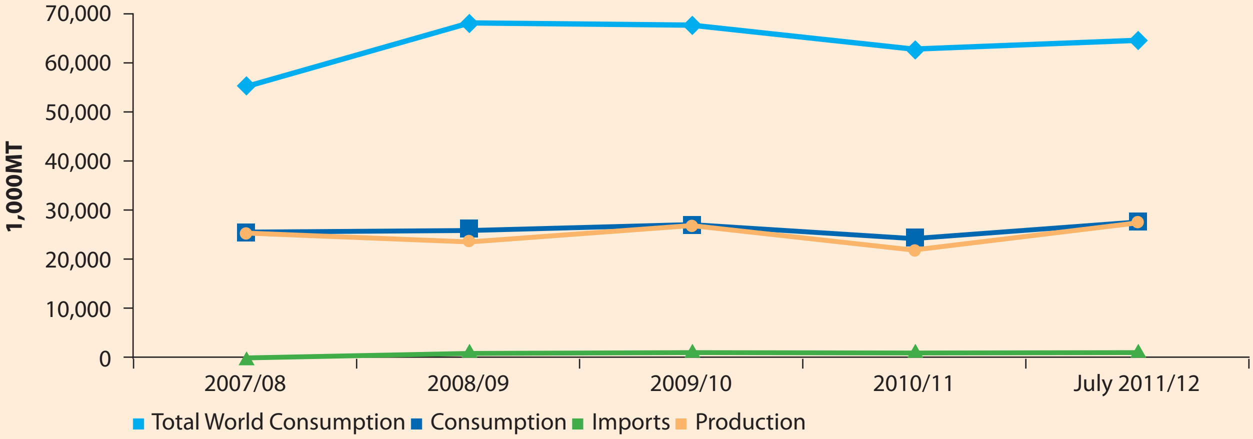
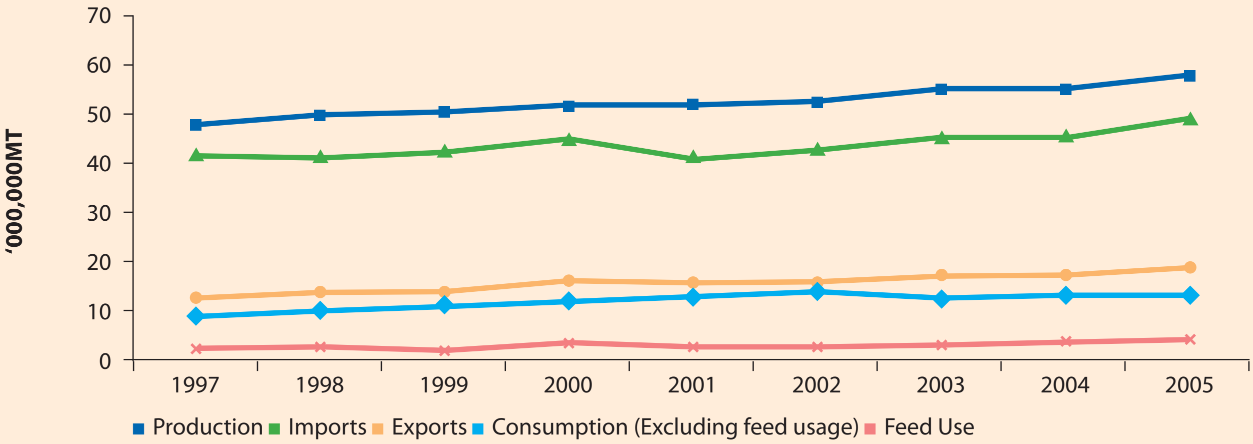


Figure 14: Maize Production, Consumption Import and Export Trend



also feeds into other value chains including agrochemicals, paints, pharmaceuticals, surfactants, electronics, leather and candles.

Demand for Sugar cane

In Sub-Saharan Africa about 10-20% of sugarcane produced is by smallholders or out-growers (FAO 2007). There is a growing demand for sugarcane production which is the precursor for sugar in most African countries. The soaring prices of agricultural goods fuelled sugar prices to a two decade record high of $ 845 a ton in February 2011 and experts predict an increase in demand of 50% by 2030 (http://www.afriqueavenir.org). Whiles production is predicted at 90 million tons, Africa currently produces only 9.9million tons out of its current demand of 16.1million tons (http://www.afriqueavenir.org). Mali, Senegal and Morocco have a supply deficit of 115,000, 60,000 and 700,000 tons respectively. Companies such as Dangote, Illovo, Senegalese Sugar Company (CSS), French sugar group Cristal Union, Moroccan Cosumar and French Louis Dreyfus are key investors in the sugar industry in Africa and are currently investing over $500million to increase sugar cane production. Sugarcane also feeds into other value chains – it is used for the production of ethanol, bio-fuels, pharmaceutical, non-alcoholic and alcoholic beverages. Sugar cane provides direct employment for most farmers and in Nigeria alone DanGote sugar project employs over 10,000 people.

Demand for Rice

Rice has become the most rapidly growing food source in Sub-Saharan Africa (Sohl, 2005) and it accounts for 32% of global imports, estimated at over 9 million tonnes. Rice is invariably on the frontline in the fight against world hunger and poverty. Several processing companies are emerging but production volumes are far lower than demand with most of them operating under 40% capacity (Sohl 2005).

Demand for Sorghum

Grain sorghum is produced in northern part of Nigeria, Sudan, Ethiopia and Burkina Faso and these countries account for nearly 70% of Africa's production with the largest world sorghum producer producing 21.6 million metric tons (Maunder, 2006). Current demands by breweries in Africa, feed companies and the World Food Programme to combat hunger and malnutrition have made sorghum a strategic regional commodity. Support by the Bill & Melinda Gates Foundation and TechnoServe to increase production in Kenya and Uganda could reduce demand-supply gap. However, future demands by Nigeria alone is estimated at over 900,000 tons.

Demand for Soybeans

Soybeans production in Africa has seen tremendous increase over the last 5 years. Average production is 1.26 million tons and Africa spent US$2billion in 2009 to import soybean and soy oil. Countries such as South Africa, Malawi, Zimbabwe, and Zambia in aggregate produce 33.4% of Africa's total production. Due to the versatility of soybean, its market demand is very high. BIDCO, CHI Ltd, Soy Africa, Nestle and other major agro-processing companies have high soybean demand needs. In addition the feed industry is substituting soya beans with maize in their formulations due to an increase in human consumption and industrial demand for maize.

Demand of Maize

Maize: Maize currently covers 25million ha of arable land in Sub-Saharan Africa (Deininger and Byerlee, 2011). From 2005-2008, maize represented an average of 27 percent of cereal area, 34 percent of cereal production and 8 percent of the value of all primary crop production. Aside protected and forested areas, an estimated 88 million ha of land that is not yet planted to maize is suited to the crop equivalent to four times the area now planted to maize and over half of the additional land area that is suitable for maize worldwide (Deininger and Byerlee, 2011). Presently SSA imports about $4billion worth of maize annually an equivalent of what is being lost through improper post harvest handling technologies (Deininger and Byerlee, 2011).

Demand for Cassava

Cassava is the third most important crop in the world, provides affordable food for rapidly growing urban populations, and has significant application in the pharmaceuticals, cosmetics, animal feed and confectionery industries (http://www.dfid.gov.uk). There is also a rising demand for cassava starch, bio-fuel, ethanol, chips, food processing, etc. Presently, Nigeria alone imports over $2billion of starch to feed its textile and other industries.

Demand for Fruits and Vegetables

Fruits and Vegetables: Horticulture is one of the fastest growing industries in the world export trade. Fruits and vegetable production is a major occupation by most women in SSA providing food, employment, income, and a significant contributor to food security and poverty reduction.

Analysis of Main Trends and Issues Faced by the Private Sector

Challenges limiting investment in agricultural sector in SSA are numerous, well known and documented, as succinctly outlined by Woblewski & Wolff, 2010 following review of literature from key international organizations like World Bank, International Monetary Fund (IMF), International Finance Corporation (IFC), Organization for Economic Corporation and Development (OECD), International Food Policy Research Institute (IFPRI) and US State Department. Notable among these are;

- Political, policy and macroeconomic instability that fuels uncertainty and capital flight
- Thin financial institutions and credit markets, high Illiquidity in capital markets and high cost of capital
- Uncertainty of investment returns and slow returns on investment due to high start-up investment requirements
- Expropriation, non-honouring of sovereign obligations, poor contract enforcement and loose definitions and protection of property rights
- Volatile trade terms and changing commodity prices
- Under-capitalization of smallholders
- Climate Change, overdependence on rain-fed agriculture and over exposure to changing weather conditions

These however are not the focus of this study; this section hopes to throw further light on the more nuance aspects as delineated by the private sector and key industry actors during interviews and interactions. Below are key points distilled from meetings with BIDCO, DANGOTE, YARA, ABSA and PANAAC among others.

Availability of Agro-Economic Data

In most Sub-Saharan African countries, information on agro-climatic trends, soil types, soil maps, vegetation and distribution of raw materials, production trends, price trends, labour availability, skills sets and support institutions are very difficult to come by. Where they exist, they are old and scattered amongst various government agencies. Also, different agencies are likely to have conflicting information on the same data. This makes country assessments, investment evaluations and decision making a herculean task; severely constraining private sector investment particularly in agriculture where the challenge is the most pronounced. To attract increased private sector investment, countries need to invest in consistent data gathering and making these readily available and accessible. Additionally agribusinesses can also significantly improve their data capturing and record keeping, to attract and facilitate partnerships and joint ventures.

Value Chain Financing

Several studies and research have documented the challenges of agricultural financing. This report focuses on the underlying causes of the inability of value chain actors to access finance from formal financial institutions. Discussions with banks in the course of the study revealed a disconnection between the private sector and financial institutions. Whiles the private sector tends to think that business plans and collaterals are a prerequisite to access bank loans, financial institutions base their lending decisions on the macro picture, such as whether or not there are developed value chains with the needed support infrastructure, raw material availability, market opportunities, price transparency, in addition to profitability. There also appears to be a general lack of understanding about the agricultural sector and the opportunities therein amongst the financial institutions. The lack of platforms such as agribusiness chambers, to promote better understanding, opportunities for interaction and exchange of ideas between the agribusiness community and stakeholders therefore pose a huge hindrance to effective functioning of the sector.

Again, the inability of smallholders to provide accurate and detailed information on their operations, past performance and markets served has severely limited their credit worthiness and ability to access finance. As noted by ABSA Bank, South Africa and Zenith Bank Ghana, availability and access to credit is not the issue. "The challenge for us is the poorly developed agro-foods value chains which significantly increase risks and exposure for the bank. Our inability to adequately evaluate the production and processing risks; assess market trends, opportunities, diversity and stability means that we do not have enough on which to base our lending decisions".

Product Aggregation/Mobilization

The preponderance of smallholder operations in Sub-Saharan Africa means that production is dispersed over a wide area. Production is disjointed; quality inconsistent and reliable information on product availability and volumes is not readily available. Business relations are very informal often resulting in disregard of supply contracts. Prices fluctuate wildly, making forward planning nearly impossible. Coupled with the lack of infrastructure (road networks, storage and warehousing, cold chain facilities etc), transactional costs associated with product mobilization are often very high rendering most businesses uncompetitive.

Land Availability and Tenure System

Though SSA has the highest share of the world's arable land (about 60%), obtaining land especially in a large continuum to support large scale investment in production and processing remains a huge challenge. Efforts at streamlining land documentation, registration and ownership processes have been very slow and unsuccessful in many African countries. The broken down systems coupled with the lack of enforcement results in unusually cumbersome land acquisition procedures, risks of double selling and long delays in land registration and regularization. For instance, it took DANGOTE –Nigeria, 3 years to secure a 10,000ha land to support its expansion drive in maize production and tomato processing.

In countries like Liberia and Sierra Leone, it is impossible for foreigners to own land through outright purchases but can only obtain 50-year leasehold. This is a disincentive in attracting private sector long-term investment. BIDCO-Kenya is looking for opportunity to expand its oil palm production and processing operation by establishing an additional 20,000ha plantation. Though land is readily available in Liberia and the country has the right climatic conditions to support oil palm production, the land acquisition laws pose enormous challenge as BIDCO may require more than 25 years recouping its investment made. In Ghana where land can be owned by foreigners and leaseholds are available for much longer years, obtaining a 20,000ha land is very difficult due to the land tenure system and the many different stakeholders that will have to be involved.

Skills set and Productivity

Many of the companies interviewed expressed frustrations with the labour market. Though labour in most cases is readily available, attracting and retaining people with the right skills in high level operations like commercial farming is a challenge. Generally, labour is unskilled with low levels of education, making their training and development very expensive. Added to this is the fact that a good percentage of those trained, move on to other industries perceived to be more lucrative and prestigious than agriculture. The issue is more pronounced in the area of processing where knowledgeable people with the appropriate technical expertise are scarce. Due to lack of training or inability to apply acquired skills, low motivation and non-conducive working environment, productivity is also quite low.

Coordinating Platforms

Another emerging issue constantly raised was the lack of networking and coordinating platforms to advance the course of agricultural development and growth. Most interviewees were of the opinion that strong, vibrant national and regional bodies consisting of public-private partnerships in the form of forums, Agribusiness Chambers and Trade Associations were needed to promote better engagement between agribusiness and public institutions, support service providers like financial institutions, development partners and smallholders. Furthermore, such bodies can help bring pressure to bear on national and regional programmes to ensure that issues such as harmonization of trade regulations and standards, cross border trade and movement of goods are addressed in a timely manner to create more favourable business environment.

Analysis of Emerging Approaches to Competitive Programme Design and Implementations

Synthesis of the views of leading agro-food processors, supermarkets, agro-dealers and regional agribusiness promotion programmes, and the lessons learnt from key Africa successful models have revealed six (6) strategic approaches for design and implementation of programmes towards success, sustainability and competitiveness.

i. Backward integration focusing on agro-processor as the pivot to drive the value chain
ii. Including regional dimensions in the programme
iii. Adopting value chain and sub-projects approach (including value chain champions and aggregators)
iv. Providing interventions targeted at trade corridors and market infrastructure
v. Adopting innovative and productivity enhancing technologies
vi. Employing cluster production and growth pole approach

Backward Integration of Agro-processing Companies

They invest in soft and hard infrastructure and integrate backward to provide input credit, extension services and technologies, direct market, land and sometimes pre-financing to smallholder producers. At the same time, the smallholder also meets the needs of the agro-processor through increased product volume, quality and consistency. DanGote, BIDCO, CHI Ltd, Nestle, East African Breweries and Unilever have successfully employed this approach. The backward integration approach is also being employed by leading agro-dealer companies such as YARA/Wienco in Ghana and Amiran in Kenya.

Regional Outlook and Dimensions

This is necessary due to production surplus and deficit imbalance across several countries in the sub-region and inherent trade opportunities offered; lack of information and knowledge between suppliers and buyers about existing opportunities.

Value Chain Approaches

In adopting value chain approach and addressing value chain challenges; it is critical to identify and assist champions to transform their operations to provide the necessary pull and transformation along the value chain especially the inclusion of smallholder operators. Usually, there is the need to incentivize these champions by; a) assisting them develop and implement growth strategies that will help them expand their brands, deepen market presence, enter new markets, diversify and expand product ranges; b) helping them develop rigorous risk mitigation plans and financial risk management c) providing guarantees and enabling environment to encourage them to make the required investment for expansion and growth.

By incentivizing champions to better serve markets and take advantage of untapped and emerging opportunities, the expanded demand provides the impetus for these companies to work with and assist smallholders to increase their supply base creating the required pull effect. However, working directly with many dispersed smallholders can be challenging and costly which can discourage many champions. Aggregators with the network and experience of dealing with smallholders provide a vital link and as much as possible, should be included or involved in the design and implementation of interventions.

In designing the value chain intervention, it is important to identify critical bottlenecks along the value chain from the beginning to the end of the trade route. The sub-project approach is then used to develop micro projects focused entirely on addressing and removing these bottlenecks with the view to transform the entire value chain. Usually, such projects are funded on a cost share basis with the project funds leveraged with the view to helping address a challenge that has a potential transformational effect on the entire value chain.

Market Infrastructure Development

Another essential area requiring intervention design for competitive agro-food programme is investment in local market infrastructure. Soft Market infrastructure including information on demand and supply situation, price trends, product availability, standards and market requirements are required. Hard market infrastructure– warehousing, cold storage facilities, temporary storage facilities in fresh produce markets, loading bays, well-designed and properly constructed market centres are critical.

Innovative and Productivity Enhancing Technologies

Emergence of the use of mobile banking and SMS to communicate market information and transfer technologies, audio-visuals, internet and other ICT systems has brought some level of efficiency and productivity among smallholder farmers. ESOKO market information system and Commodity Exchanges are key examples. Similarly, the use of modified, appropriate and easy to adopt greenhouse technology for production of vegetables in Kenya has attracted several youth and women to engage in high value agri-enterprises. The Amiran Farmers Kit in Kenya and ASNAPP intensive production technologies in Zambia are key examples of how innovative technologies have impacted on productivity. However, there is a critical need to scale up these successful models in almost every African country and regionalize some of these systems.

Cluster Production and Aggregation Centres

Cluster production encourages production of specific commodities in a defined geographical area. The intensity of activities generate the critical mass of produce, enhance concentration of infrastructure for mass use, create market centres and reduce product mobilization cost. Again, the approach allows easy transfer of technologies and also attracts agro-processing investment.

Competitiveness of Private Sector in Agro-food Value Chain Development

Competitiveness of SSA national, regional and international agro-food market is vital to the success and sustainability of all value chain actors and key stakeholders. Advancing competitiveness in production, processing and marketing of agro-food is a combination of the readiness of a country to attract agribusiness investment, providing the enabling environment to foster competitiveness and the operational efficiency and effectiveness of the private sector to compete within the agro-food environment.

Country Competitiveness (Readiness)

Whereas countries within Africa seek to attract investment in the agro-food sector, most of these countries have seen marginal investment growth due to poor preparedness or readiness to attract and retain the required level of investment. This chapter analyzes the concerns, ideas and recommendations of multinational, global, large and medium scale agro-industry actors[11] in response to the question of incentives required to attract their investment into agro-food value chains. It also builds on earlier studies conducted by FAO, UNIDO and other institutions that have conducted similar studies. Country Readiness will provide countries with tools to enrich the design and implementation of agricultural investment plans to stimulate and attract private sector investment and participation. The competiveness of countries to attract agro-food investment are presented in figure16 and is discussed below.

Driving Forces: The agro-food industry is driven by the private sector (agro-food actors) whose investment interests are vested in market opportunities, profit margins and economic development. The immediate or future attractiveness of these drivers keeps the private sector in business and allows deeper investment in the sector.

Ease of Doing Business: Political stability, macro-economic environment, cost of doing business, the World Bank Indicators and ranking on ease of doing business is used by agro-investors to determine which countries to invest. According to the World Bank and IFC, East Africa could match Japan in ease of doing business and it is therefore not surprising to see several surges in agro-processing companies and plantation establishment in the region.

Access to Land: Whereas every country in Africa has available arable land for cultivation access to land and land ownership are critical for investment decision. ***Example:*** *Liberia's Constitution prohibits foreigners from owning real property in fee simple and leaseholds for long terms, but does permit lease arrangements for limited terms, and foreigners may be granted concessions that confer extensive rights of easement and land use (Article 57). In Kenya, land can be leased to foreigners to for as much as 99 years.*

BIDCO Kenya for example, intends to invest in 20,000ha for oil palm but could not establish this business in Liberia nor Sierra Leone due to land ownership issues. Similarly a Nigerian investor who could not have long-term lease of 10,000ha in Nigeria for pineapple cultivation invested in Ghana, which had competitive land lease arrangements.

Level of Infrastructure Development: Infrastructure including road networks, warehouses, electricity, irrigation and ports is critical for agro-processing and export oriented companies.

Availability of Agro-economic Data: As seen in figure 1, information flow to the actor is critical for decision-making. The readiness of a country to avail agro-economic data, soil maps, soil type, labour distribution and cost, skills set available, vegetation and raw material distribution, production cost of commodities and production trends.

Support Services and Supporting Industries including extension, laboratories, research, quality assurance, trade promotion, etc as well as supporting industries including packaging, logistics, telecommunication etc are among the key investment considerations of the private sector.

Cluster Production of Raw Materials in Commercial Scale: Key Issues: Large volume availability of raw materials produced in a geographical area attract establishment of processing facilities. ***Example:*** *The high-level production of Passion fruit and Mango in Kenya and Uganda attracted Coca-cola and Gates Foundation to an investment in processing of fruit juice. Over 50,000 farmers are currently benefiting from new markets with about $11.5million investment. Similarly, the availability of pineapple in the Central region of Ghana has also attracted Coca-cola to invest in pineapple juice processing to serve local and regional markets.*

Private sector Competitiveness

The competitiveness of the private sector in the agro-food industry hinges on underlying country level competitive environment and internally, is a function of its ability to reduce cost of supply (price competitiveness), delivering high quality, consistent products and expanding market. Operational efficiency through adoption of appropriate production, processing and distribution technologies, effective and efficient mobilization system and availability of requisite skills are also critical inputs for the competitiveness of the private sector.

Fundamentally, the success of the private sector depends on the competitiveness of raw material suppliers. Appropriate planting materials, soil fertility, access to basic infrastructure and technologies and systems to enhance productivity of producers will reflect in the competitiveness of the private sector. Figure 2 provides a schematic presentation of private sector competitiveness. The function and role of value chain champion or facilitator to link the various stakeholders and advocate for appropriate business environment cannot be over-emphasized.

11 Kenya has some of the most business-friendly regulations for dealing with construction permits. Ugandan courts resolve insolvency relatively efficiently. And Rwanda is among the fastest places to start a business.

Figure 15: Competitiveness of Countries for Agro Food Investment

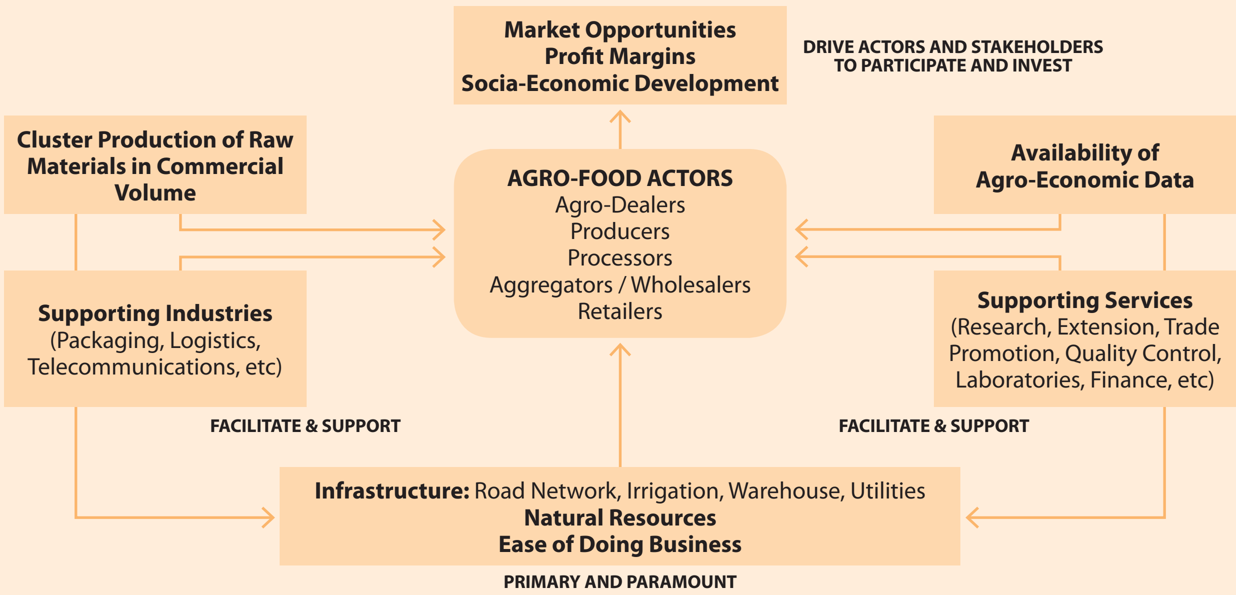
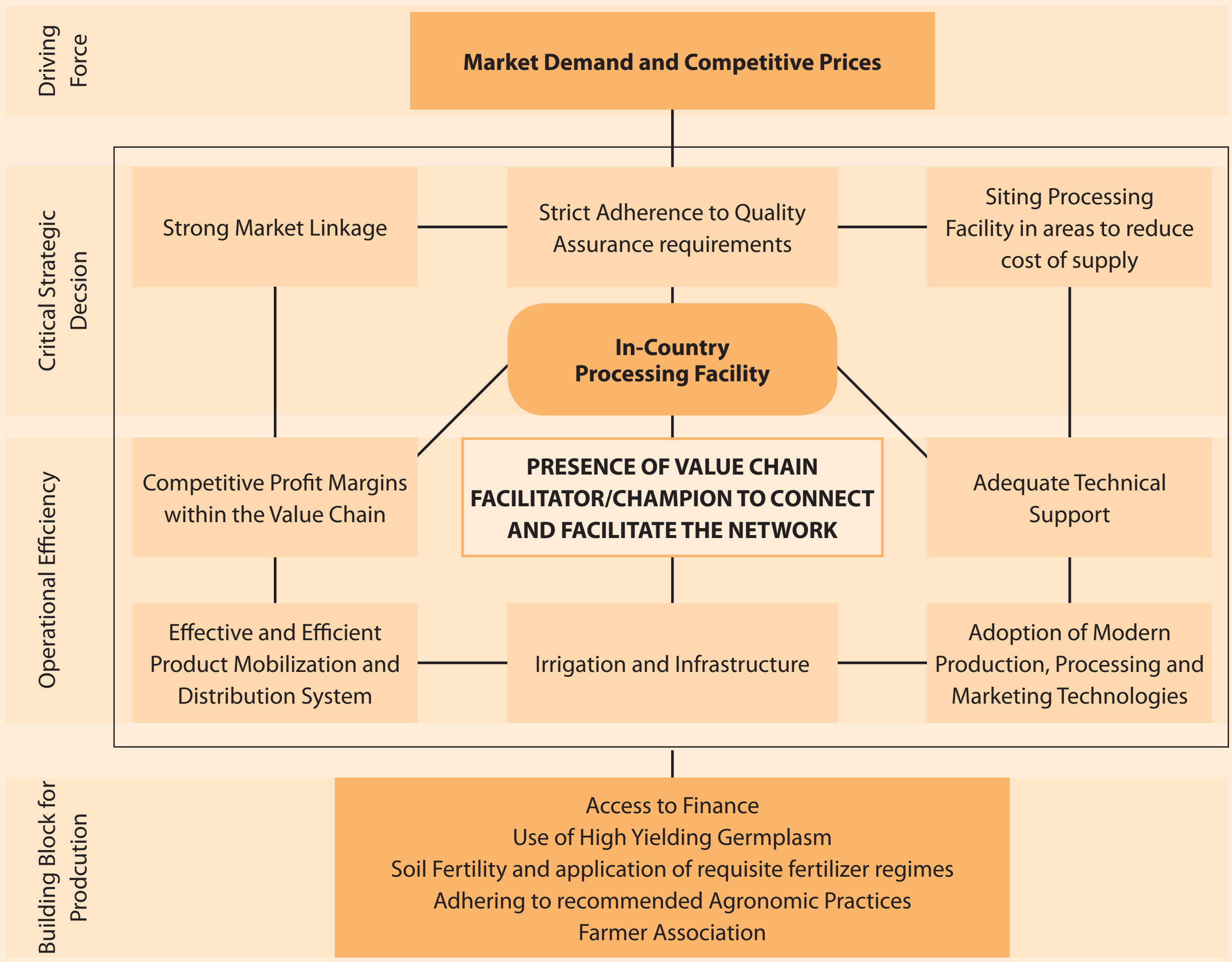


Figure 16: Competitiveness of Private Sector



Analysis of Strength, Weakness, Opportunities and Threats (SWOT)

A SWOT analysis was conducted on the agro-food industry to identify the major constraints that inhibit industry growth as well as the opportunities that can be exploited to promote investments and inclusiveness.

Strengths

Availability of Arable Land: Africa holds 60% of the world's uncultivated arable land (Mckinsey). The continent is at the verge of exploding into green revolution as it occurred and transformed agriculture in Asia and Brazil. This provides opportunity and security for companies investing in agro-food processing in the continent.

Availability of Labour Force: Reports indicate that by 2040, Africa will be home to one in five of the planet's young people and will have the world's largest working group. Labour productivity growth has increased from -0.5 in 1980-1990 to 2.7 in 2000-2008 and the labour force is projected to be 1.1billion. More significantly, agriculture employs over 60% of the population.

Favourable Agro-climatic Condition: Perhaps Africa is one of the continents with varied agro-climatic conditions. Africa has both temperate and tropical agro-climatic conditions that favour the cultivation of several ranges of crops: tree crops, grains, horticulture, root and tubers, cereals, agro-forestry, etc can be grown in the region.

Weaknesses in the Agro-Food Industry

Capacity to Handle Sanitary and Phyto-sanitary (SPS) Issues: Despite the successes made by COMESA, it is obvious that value chain actors continue to encounter SPS constraints in exporting to other member countries or overseas markets. For example Rwanda, which produces good passion fruits cannot export to South Africa due to SPS issues; Uganda is unable to export banana to South Africa due to same issues and similarly, Kenya is unable to export avocado due to same problem. Zambia is unable to export honey to South Africa and the issue of high aflatoxins levels in maize and peanut continue to hinder trade among member countries. A supermarket such as ShopRite is unable to export mangoes and other grapes from Zambia to South Africa due to SPS constraints. Whereas attempts are made at the macro level to address the weakness, value chain actors lack the capacity to respond to such requirements.

High Cost of Supply of Goods: According to most of the companies and institutions in the agro-food sector, there appears to be concerns about cost of supply of goods and services. This weakness in the industry is underlined by dispersed nature of farms and high cost of mobilizing goods from one point to the other. Secondly, production systems do not allow industry players to benefit from economy of scale.

Lack of Appropriate Skills: Agro-food industry requires technical skills in production, processing and equipment maintenance. Most of these skills at the high level are imported from China, India, Europe and America. The cost of service import is a challenge to most of the medium and small scale enterprises. Similarly there are only few agribusiness private firms to provide management and strategic services to the industry.

Networking Platforms: National and regional agribusiness platforms do not exist in most countries. As a result industry stakeholders are unable to advocate for right policies to shape agribusiness development. Similarly, they are unable to take advantage of opportunities that abound in the industry.

Low Agricultural Productivity: Sub Saharan Africa (SSA) has the least agriculture productivity level in the world.

Opportunities in the Agro-Food Industry

Market Opportunities (The Rise of the African Urban Consumer): According to McKinsey report (Lions on the move, 2010), Africa's long term economic expansion will create new domestic engines of growth through urbanization, an expanding labour force and the rise of middle-class African consumer. The report indicates that the number of Africans living in urban cities has increased from 28% in 1980 to 40% in 2010, a proportion close to China and larger than India. It is estimated that by 2030, the continents' top 18 cities could have a combined spending power of $1.3 trillion and the number of households with discretionary income over $5,000 will increase from 85million in 2008 to 128million by 2020 and have a middle class far more than India. Food and beverage spending is projected to increase more in absolute terms than any other consumer category. A study conducted by NEPAD secretariat estimates that urban market in Africa will increase to $150billion between 2005 and 2030. Today, the demand for soya bean, maize, rice, sorghum, oil palm and sugar cane far outstrips supply. High grain post-harvest losses coupled with demand by the World Food Programme offer additional opportunities for in-country agro-processing companies. The current surge for bio-fuel demand using sugar cane, maize and other agricultural commodities presents industrial agro-processing opportunities for companies that will invest in agro-processing in Africa. Similarly, Africa remains a net importer of fish and livestock products. Nigeria alone spends about $900 million per annum to import 1.2 million tonnes of fish to meet the country's demand (GAIN, 2010).

Macro-Economic and Political Stability: For the last three decades, an increasing number of countries in Sub-Saharan Africa are showing signs of economic progress, reflecting the implementation of better economic policies and structural reforms. These improved political and macro-economic developments have created an improved business climate. In 2007, according to the World Bank's annual Doing Business report, Africa ranked third in the world (trailing only the Eastern Europe- Central Asia group and the OECD countries) in the pace of economic reform. Two-thirds (2/3) of Sub-Saharan African countries made at least one significant economic reform in 2006, with Tanzania and Ghana being ranked among the top ten reformers in the world. The evidence for Sub-Saharan Africa suggests that the recent economic recovery was underpinned by a positive economic environment influenced either directly or indirectly by improvements in macroeconomic policies and structural reforms. Foreign investors have taken note of these changes. The net inflow of foreign investment increased from $6 billion in 2000 to $18 billion in 2005 (Health In Africa), an increase from less than one half of one percent to around two percent of global foreign investment. Close to half of the world's major investment groups now express interest in this region. With an overall increasing investment in the continent, demand for agro-food will go high, there will be more discretionary spending money and agro-food industries tend to be highest gainers with this trend.

Increasing Government Priority & Investment in Public Goods: Over the last few years, African countries have embarked on implementation of CAADP principles by investing 10% of their budget into agriculture and developing national and regional agricultural investment plans. The principles behind CAADP and the commitment of government to improve rural infrastructure to spur agricultural growth provide huge opportunity for all actors within the agribusiness value chain to benefit. Over 13 countries in West Africa have developed national agricultural and food security investment plans. Similarly, the trade corridor initiatives, regional agricultural programmes such as Agribusiness Trade Promotion, Trade Hubs and the regional integration championed by COMESA, SADC, ECOWAS and regional blocks is creating opportunities for agro-food firms to access regional markets whiles building on their competitiveness. Today, agro-processing firms, supermarkets and agro-dealers are adopting regional approaches to expand their markets within the region. Improvement in ports and port handling is also facilitating trade and providing additional opportunities to spur agro-food investment opportunities.

Threat in the Agro-Food Industry

In a global environment, competition remains a threat for national companies. Multinational companies compete for same market with national companies and the competitiveness is based on price, quality of produce and distribution network. Trade liberalization, high food prices, export bans, land acquisition by foreigners, civil strife, non-tariff barriers and natural disaster are the key threat to the agro-food industry.

Export Ban: As a result of world food crises, most countries banned export of cereals and other agricultural commodities. In East Africa, export ban of maize in Kenya affected downstream users in other East Africa countries. Export ban on cereals is a serious threat to commodity exchanges within the region.

World Food Prices: This is a negative implication for companies who import raw materials for processing. These companies are unable to increase price of the produce in same proportion as that of the raw materials. For example between 2009 and Jan 2011, the price of wheat increased from 260,000CFA to 450,000CFA/ton in Burkina Faso but the price of a loaf of bread remained the same. ETALON, a leading flour milling company in Burkina Faso suffered from shrinking profit margins.

Non-tariff Barriers and SPS Issues: Compliance to SPS measures is no longer a "wish" but a "must" if companies are to remain in competitive markets. In most developing countries, suppliers tend to respond to SPS compliance when there is a threat of loss of market access, for example fish and fishery exports to the EU on the part of Kenya, Tanzania and Uganda. The Agricultural Marketing Promotion and Regional Integration Project (AMTRIP) reports that SPS accounts for 12% of the non-tariff barriers to agriculture trade in the COMESA region.

Natural Disasters: Crop losses due to drought and flooding remain a threat to the agro-food industry. Burkina Faso, Niger and Northern part of Ghana experienced flooding in 2010 where farms were completely destroyed including on-farm storage houses. The situation is not different from Malawi which also experiences intermittent floods and drought.

Table 4: Traditional and Modern Approaches to Agribusiness Financing

Item	Traditional Approaches to Agro-food Financing	Emerging and Modern Approaches to Agro-food Financing
Financing Focus	Focus is on production with the aim of increasing volumes and enhancing productivity. Marketing of produce is less important.	Value Chain Approach; considers the market first and assesses the level of development of the value chain.
Integrated Approach	Funding is discrete. Financial institutions tend to finance individual projects and proposals rather than focus on a broader industry/subsector	Coordinated and Integrated Approach; Financial institutions are more interested in financing various actors along the value chain.
Collateral	Funding is based on ability to provide landed property as collateral	Emphasis is placed on cash flow rather than any form of collateral. This is a critical requirement by ABSA Bank.
Risk Mitigation	Collateral is the main security	Warehouse receipt system, Commodity Exchange, Crop Insurance and Guarantee funds are key
Partnership	Mostly one institution finances a discrete project	Multi institutions finance various investment components within the value chain to share risk and ensure effective monitoring. Public-Private Partnerships have become prominent. Example, The Tanzania Trade Corridor Financing involving Government of Tanzania and ABSA Bank.
Financial Institutions	Mostly financed by Agricultural Development Banks	Agricultural Development Bank, Micro-finance institutions and Commercial Banks are involved in financing.
Industry Knowledge	An understanding of the business plan of the agribusiness firm	An in-depth understanding of the inter-dependence of businesses along the value chain.
Loan Recovery Rate	Low loan recovery rate	Relatively higher recovery rate due to reduced risks.
Technical Support	Funds are provided without considering the technical expertise available to the firm	Availability of technical expertise is a pre-requisite for approval of any facility
Approval Criteria	Based on profitability of the business including investment returns	Focus is more on how production and marketing risks have been mitigated; the level of value chain development and profitability of the business.

Increasing Sophistication in the Market: Agro-food market is moving more towards finished and semi-finished products. Increasing sophistication in packaging requirements and stringent food safety standards requirements pose a competitive threat to medium and small scale agro-enterprises. Supermarkets require consistent large volume supply and are unwilling to deal with diverse and multiple suppliers which challenge direct linkages with smallholder producers.

Financing Agro-Food Industry

According to AfDB Agricultural Sector Strategy for 2010-2014, financing requirements for agriculture in Africa is estimated at US$ 8.1 billion annually. Over the years, public and private sector institutions have all been funding the sector in a more discrete and incoherent manner. Public investment has been directed mainly at roads, warehousing, irrigation, equipment and support services. Similarly, private sector has also invested in

12 Example is government using the school feeding programme to boost consumption of cereals, fruits and other commodities

13 These incentives are both tax and non-tax based with the objective of capacitating the private sector to increase its productivity and competitiveness. Examples include capacity building of smallholder, rural infrastructure including roads, water, irrigation, electricity, warehouses; guarantee funds, land tenure policies, market stimulating policies, research support, trade facilitation and credit vouchers

Figure 17: Agribusiness Finance Challenges

Agribusiness Finance Challenges	Risk	**Market**	• Price volatility: Factors influencing price volatility inclused, international production trends, international farming subsides, exchange rates, import and export tariffs, etc • Farmers have very little control over pricing levels and tend to be price takers • New import regulations, Sanitary and Phyto-sanitary issues and Market Requirements • Export bans
		Production Risk	• Production risk due to climatic condtions and climate change • Liberalization and deregulation • Rainfall dependency • Diseases and Pest
	Financial Institution	**Lack of Industry understanding**	• Most financial institutions do not understand agriculture and agribusiness sector • Untimely delivery of agricultural credit and cumbersome loan application procedures • Limited access to medium and long term loans
		Lack of Agribusiness Financing Competence	• Most financial institutions do not have technical competence in evaluating agribusiness investment plans • Agribusiness financing is not part of strategic focus of most financial institutions • Agribusiness departments/sections are limited or do not even exist
	Operational	**Operational**	• High transaction cost for service providers • Remoteness of clients • Property rights and unsecured land tenure system • Heterogeneity of community rights • Disperse demand for financial services due to low population density • A lag between investment needs and expected revenue due to seasonality and productivity • Under-developed communication and transportation infrastructure

agro-processing, post-harvest infrastructure, market development, equipment, human training, and service provision.

Public sector has recognized the need to engage private sector to deepen its investment in the sector and have commenced public private partnership in financing major agricultural projects. Several of such projects including the Government of Tanzania and ABSA Bank for SAGOT corridor project have become the trend which brings the two sectors to share investment, risk, opportunities and complement the activities of each other. To foster increased investment into the sector, it is important for government to understand and meet the expectation of the private sector. Most of the private sector companies interviewed during the study expressed the underlisted expectations as incentives to attract their needed investments.

Private Sector Expectations of Government Investment and Policies

i. Provide evidence-based road map and direction to priority areas for investment
ii. Present spread of possible investment opportunities for private sector to invest
iii. Invest in infrastructure and public goods
iv. Develop financial are agricultural policies that are coherent and private sector friendly
v. Create market pull by driving consumption and utilization[12] of selected commodities
vi. Provide incentives[13] that will attract private sector to invest
vii. Lower cost of borrowing

Traditional and modern approaches to AGRO-Food financing

The study captured traditional and modern approaches to agribusiness financing through interactions with various financial institutions including ABSA Bank-SA, Zenith Bank-Ghana and Kilimo Microfinance Company-Kenya. The output of discussions are summarized in table 5.

Chapter 6

Successful Inclusive Market Development Models/Best Practices

This chapter provides profiles of agro-food private sector companies that have employed technologies, innovative approaches and methodologies adopted by indigenous agro-food firms across Africa to address agribusiness supply chain challenges promoting inclusiveness of the smallholder farmer. The models have been selected because of the impact it has created in addressing employment, income, food security and poverty reduction. They are based on primary information generated during the current study, the consultant's knowledge in previous engagement with other institutions and to a smaller extent references from literature. The models and emerging trends identified include:

- Backward Integration Model
- Inclusive Value Chain Development Model
- Integrated Services and Value Chain Financing Model
- Innovative Technologies for Inclusive Market Access
- Tourism and Inclusive Market Development

Backward Integration Model

Backward integration was seen as the most effective means of implementing inclusive market development models by engaging smallholder farmers up the value chain. The integration model addresses most of the challenges encountered by the smallholder whiles addressing the bottlenecks of the agro-processor. Multinationals such as Nestle, Coca-Cola and Unilever; Regional agro-processing companies such as BIDCO, DanGote, East Africa Breweries and large-scale national companies use this approach.

HOW THE BUSINESS MODEL WORKS

The agro-processing companies engage smallholder farmers and assist them to form producer groups with each group having a lead farmer. Contracts are signed on price, volume and quality of produce to be supplied. In most cases, public-private partnership is dominant in the integration model. The roles and responsibilities of each partner in the model is clearly spelt out.

Role of Partners: The agro-processing company provides land, immediate market, input credit and technical support and extension services to the producers. They also provide market intelligent information to the farmers and guide them to produce to meet market requirements. The producers offer land, labour, raw materials and sometimes-indigenous knowledge, which may be critical to the success of the overall project. Governments involved in the project provide public goods, infrastructure and tax incentives for the agro-processor. Development partners sometimes provide guarantee funds to facilitate the process and resource service providers to extend technical support to the smallholder farmers.

INCENTIVES FOR SUSTAINING THE MODEL

The principle behind the backward integration inclusive business model is advancing the competitiveness of the large-scale operator and productivity of smallholders with a joint objective to reduce cost, increase profit margins, expand supply and markets. Specifically, the large-scale operator's incentives include:

- Assurance of consistent supply and respect to contract and supply schedules
- Receiving critical mass that is cost effective
- Obtaining competitive price
- Receiving consistent quality produce
- Having minimum logistical constraints with the ease to move products from suppliers
- Working with aggregation of suppliers (no need to deal with individual farmers)

Similarly, the interest of the smallholder includes:

- Assurance of consistent market
- Obtaining competitive prices and favourable payment schedules
- Respect to contracts

The model works best when parties involved have challenges in their operations and are looking forward to a solution that makes them competitive and productive. Government and donor incentives include income generated by the farmers, tax paid by processors and rural economic development. The following case studies are presented to provide clear understanding of the model.

IMPACT OF THE MODEL

The model employs large number of smallholder farmers. Over 30,000 farmers are involved in seed oil production with BIDCO; About 50,000 involved with Passion Fruit and Mango production with Coca-Cola; over 20,000 involved in Sugar Cane production with DanGote and ILLOVO. It also spurs rural development, infrastructure and enhance productivity of farmers.

KEY SUCCESS FACTORS

i. Commitment to partnership agreements
ii. Ability to meet the needs of each actor in the partnership
iii. Incentives to knit partners together in the model
iv. Transparency and easy flow of information
v. Presence of Lead Farmer, Champion or Facilitating Agent

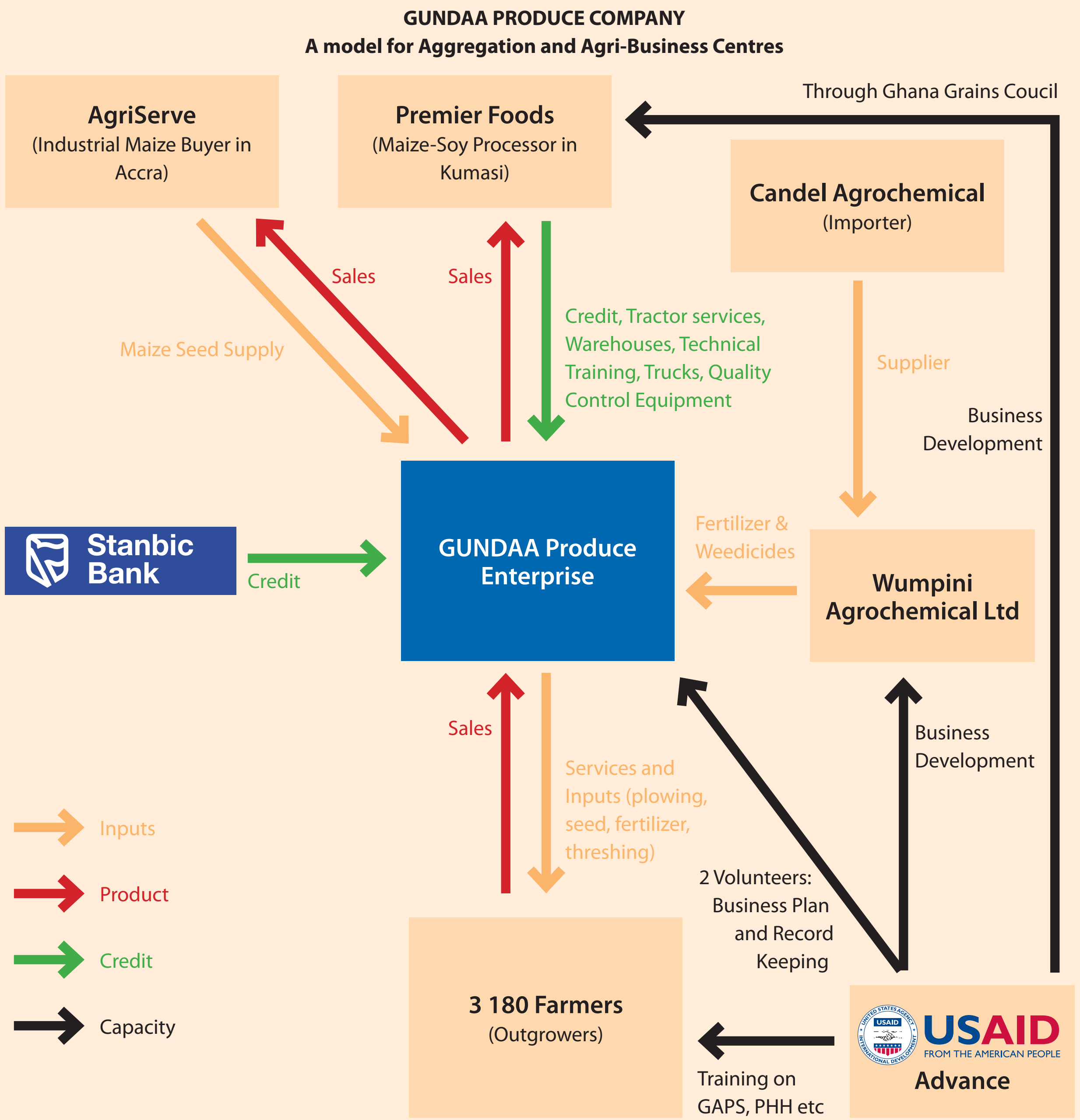
Example 1: Premium Foods Company Limited and GUNDAA Aggregator Model for Maize in Ghana

The GUNDAA Produce Enterprise is a perfect model for inclusive market development and value chain approach to develop the maize sector. The backward integration of agro-processing firms using aggregators is considered the most successful model for assuring productivity, increasing production and supporting inclusive market development. The model is used in multinational companies such as Nestle, Coca-Cola and Unilever; Regional agro-processing companies such as BIDCO (Kenya), Premier Foods (SA), East Africa Breweries (Kenya), and large-scale national companies such as Premium Foods Company Limited (Ghana) and Yedent Ventures Limited (Ghana). Most of the Agro-processing firms have to deal with numerous producers dispersed across large agricultural growing areas. Produce received from these producers/suppliers do not meet the quality requirements, minimum volumes and acceptable price range. In addressing these challenges, Premium Foods Company Limited (Ghana) identified and selected an Aggregator to serve as the intermediary between producers and the agro-processor. It built the technical and financial capacity of the aggregator into a viable enterprise known as GUNDAA Produce Enterprise. A Full description of the business model and how it works is presented in figure 18.

Roles of Partners

Agro-processing firms (Premium Food Company Limited-PFCL) selected an Aggregator (GUNDAA Produce Company-GPC) to serve as the link between the processor and producers. PFCL resourced GPC with the provision of warehouses, trucks, pre-financing to purchase produce, business management skills, technical training in maize production, post-harvest handling and warehouse management, provided immediate market and offered mentorship. GUNDAA then established as an Agricultural Business Centre providing extension services, tractor services, warehouses, markets, and negotiated for agro-inputs for the producers. The services provided by the Aggregator (GPC) addressed the key challenges confronting the producers. The producers offered land, labour, raw materials and sometimes-indigenous knowledge, which were critical to the success of the overall project. Governments and Development partners involved in the project provided public goods, infrastructure and tax incentives for the agro-processor. Development

Figure 18: Backward Integration using Aggregators



organizations built the capacities of the producers and resourced other service providers to extend technical support to the smallholder farmers. Stanbic Bank (Ghana) financed the Aggregator with pre-season credit for maize purchases, warehouses and other logistics.

Incentives For Sustaining the Model

The principle behind the backward integration inclusive business model is to advance the competitiveness of the large-scale operator and productivity of smallholders with a joint objective to reduce cost, increase profit margins, expand supply and markets. Specifically, the large-scale operator's incentives include:

- Assurance of consistent supply and respect to contract and supply schedules
- Receiving critical mass that is cost effective
- Obtaining competitive price
- Receiving consistent quality produce
- Having minimum logistical constraints with the ease to move products from suppliers
- Benefiting from aggregation of supply (no need to deal with individual farmers)

Similarly, the interests of the smallholder are met through;

- Assurance of consistent market
- Obtaining competitive prices and favourable payment schedules
- Respect for contracts
- Provision of production and post-harvest support services

The model works best when parties involved have challenges in their operations and are looking forward to a solution that makes them competitive and productive. Government and donor incentives include income generated by the farmers, tax paid by processors and rural economic development.

Impact of the Model

In about two years of its inception, the number of out-growers benefiting from the model grew by 185%; production increased by 205% and average yield of maize by the producers also increased by 68%.

The model employs large number of smallholder farmers. Over 30,000 farmers are involved in maize production with BIDCO in Kenya and Tanzania; About 50,000 involved with Passion Fruit and Mango production with Coca-Cola in East Africa; over 20,000 involved in Sugar Cane production with DanGote and ILLOVO in Nigeria and Malawi.

Key Success Factors

i. Commitment to partnership agreements
ii. Ability to meet the needs of each actor in the partnership
iii. Incentives to knit partners together in the model
iv. Transparency and easy flow of information
v. Presence of Lead Farmer, Champion or Facilitating Agents

Smallholder Inclusive Market Development Model of BIDCO in East Africa

BIDCO is an edible oil refinery company processing seed oils in Kenya, Uganda and Tanzania. The company's challenge is securing large volumes of oil palm, soybean, sunflower and any other edible oil for processing. It is currently operating under capacity and could process an additional 33,000 tons of oil seeds. BIDCO is collaborating with International Development Research Centre (IDRC) and DrumNet in developing the western Kenya sunflower supply chain and is also engaging out-growers to cultivate 40,000ha of oil palm in Uganda. BIDCO is now supplying supermarkets in 14 African countries.

The Business Model

The model first recognizes challenges faced by the parties involved and the determination to better existing conditions. BIDCO engages the smallholder farmer in buyer-supplier partnership and provides the necessary

Table 5: Impact of the Model

OUTCOME				
YEAR	# OF OUTGROWERS	# OF ACREAGES	PRODUCTION (MT)	END MARKETS
2009	1,117	2,234	600	Premium Foods and Local Market
2010	2,868	2,953	900	Premium Foods and Local Market
2011	3,180	3,976	1,830	Premium Foods, AgriServe and Local Market

incentives to the smallholder farmer to produce and supply high quality produce that meet its quality and price requirements.

Motivation for the partnership: BIDCO has expanded its market and product lines and is challenged with obtaining enough raw materials to feed its processing factories. Again, it has become expensive to import raw materials from Asia for processing. BIDCO needed more supply of seed oil plants to meet its market demand. The farmers on the other hand were seeking market opportunities and support to increase production and improve productivity. Farmers needed better income and livelihood and considered producing beyond subsistence living to meet their needs.

Role of BIDCO: In addressing its raw material supply needs; BIDCO provides assured market, extension services, input credit, modern technologies, improved seeds and land for smallholder farmers.

Role of Smallholder: The smallholder is producing to directly feed the factories of BIDCO.

Incentives for parties involved: The model has resolved the persistent challenges of markets, inputs and extension services that hitherto beset smallholder operations. Smallholder farmers now have direct access to assured markets irrespective of season and volumes to be produced. There is no issue of glut. BIDCO is also benefiting from local supply of raw materials better than importing it from Europe and Asia.

Inclusive Value Chain Development Models

INTRODUCTION

Application of agro-input is known to be critical towards productivity of smallholder producers. However, most smallholder farmers in SSA do not have easy access to these inputs and in most cases are unable to afford due to the high cost of the input. In addition, smallholder farmers are challenged with accessing profitable markets when they have adopted improved production technologies and have increased their production and productivity. It becomes viable for smallholders to apply agro-inputs if the net benefit in terms of cash is higher than the cost of production. Therefore lack of profitable markets when productivity of the farmer has increased is a huge dis-incentive for the farmer to adopt productivity enhancing measures especially by applying recommended agro-input practices. Value chain inclusive business models of agro-input firms have addressed most of the bottlenecks outlined above and have increased incomes and productivity of smallholder farmers in Ghana.

HOW THE MODEL WORKS

The agro-input company conducts assessment to identify the major challenges of the smallholder farmer in adopting improved production technologies, access to agro-inputs and factors that account for application of agro-inputs. It designs value chain interventions from production through to market to meet the needs of the farmers.

Farmer school fields and demonstration plots were established to prove additional benefits of the use of agro-input (increased yields, diseases and pest resistance, etc) to the farmers.

The agro-input company supports the farmers to establish stronger farmer-based organizations and strengthen their capacities to provide support services to the farmers.

The company collaborated with the FBO and government to establish warehouses, silos, shellers and tractor services in the community to increase farm sizes, reduce post harvest losses, and provide storage for the grains produced by the farmers.

Finally, the agro-input company purchases the grains from the farmers at competitive price and deducts its input credit from the sale of the produce.

INCENTIVES FOR SUSTAINING THE MODEL

The key incentives driving the business are increasing markets and profitability. For the agro-input dealer, increasing sales of input, accessing untapped markets and getting more farmers to apply recommended practices were the key incentives to drive the business. The key incentives for the farmers were the market access provided by the agro-dealer and increased profits/income due to increased yields of maize.

IMPACT

By employing the value chain inclusive business model, the agro-dealer has been able to increase its sale of agro-inputs to the farmers by over 30%. It has also been able to introduce improved varieties of maize to the farmers and there is significant adoption rate of good practices from the farmers. With assured market, the farmers have incentives to adopt improved and recommended practices. With this model, the farmers have increased their yields from 5-25bags per acre and with the introduction of improved maize varieties which are drought resistant; some farmers obtain as high as 45bags per acre.

KEY SUCCESS FACTORS

This model engages the service provider to work with smallholder farmers by supporting both production and market activities. It works on the premise that incentive for farmers to pay for service is their ability to sell their produce. The model is very evident among agro-dealers who train farmers on the use of inputs, provide input credit and ensure repayment, construct warehouses at community level and establish markets for the smallholder farmers.

Wienco and YARA Agro-Input Programme in Ghana

Wienco (Ghana) Limited is a joint venture Ghana-Dutch Company involved with the business of importing and distributing agricultural inputs. YARA International ASA is a leading chemical company that converts energy, natural minerals and nitrogen from the air into essential products for farmers and industrial customers. YARA is a leading global supplier of mineral fertilizers.

Smallholder farmers in Ghana typically face several challenges preventing them from realising better yields. Critical amongst these are poor quality seed materials, lack of other agro-inputs, over-reliance on rainfall, lack of storage facilities and infrastructure. An unrelated but equally restraining factor is the belief that increasing production only serves to make the local market crash and prices plummet.

YARA initiated a partnership with local growers in Ghana to address these challenges from production to market inviting a bottom-up dialogue including local growers under the Ghana Grains Partnership Project. This started in 2009 with the establishment of the growers' association Masara N'Arziki. Working with local government, donors, private sector, scientists and farming communities, they commenced with the provision of input services, market linkages, warehousing and logistics support that helped farmers to stabilise and optimise their production and market prices.

The Ghana Grains Partnership (GGP) focuses on maize, of which low production is a major problem in Western Africa. The initiative set out to offer a holistic approach to the challenges faced in the maize value chain. YARA Ghana, together with Wienco, financed the initial inputs requirements and coordinated the supply of fertilizers. A revolving credit fund was established helping to attract further private sector participation in rural agriculture. Along with YARA and Wienco, the partnership involves a variety of both public and private institutions: the Africa Enterprise Challenge Fund (AECF), Farmers' Associations, the Ghana Ministry of Food and Agriculture, Commercial Banks, Output Buyers and Traders. Capacity building in accessing appropriate credit, suitable inputs, and realizing profitable output value chains are also provided.

About 2,200 farmers initially signed up and over 10,000 acres were cultivated. Through relevant training, extension and inputs distribution, average yields improved significantly by the end of the first year and has presently increased from 5-25bags per acre.

Innovative Value Chain Micro-Finance Scheme- Juhudi Kilimo Organization, Kenya

INTRODUCTION

Juhudi Kilimo started as an initiative within K-Rep Development Agency, an NGO that performs Product Development for the microfinance sector in Kenya. Juhudi Kilimo focused on developing agriculture production and marketing for the smallholder farmer country wide in Kenya and attracted other funding partners namely Swiss Contact, KIVA Micro-funds, and Grassroots Business.

HOW THE MODEL WORKS

Juhudi Kilimo Micro-finance Company in Kenya was initially set up to provide finance for production and marketing of agricultural produce. But in order to expand the market for smallholder farmers and increase micro-finance clienteles, the company financed restaurant operators, milk packers and transport operators to expand their businesses so the farmers can have expanded market.

Juhudi gives loans to individual farmers through solidarity groups and the loan amounts range between Kshs. 40,000 to Kshs. 300,000 ($450-$3,500) at an interest rate of 18%. Repayment periods are also segmented – 12 months; 18 months; and 24 months and the financed assets are insured throughout the loan period. The loans are secured by the assets that are financed. Though loans are directed to individual farmers, Juhudi in collaboration with local leaders formed solidarity groups which serve as credit guarantee structures. The solidarity groups routinely hold meetings that serve as regular forums to mobilize savings and collect repayments. The routine meetings of the solidarity groups also provide Juhudi an opportunity to conduct technical and management trainings to farmers.

The training that Juhudi provides has been acclaimed by independent evaluations to have:

- Enhanced efficiency in production at the farm level groups
- Improved their general standards of living
- Transformed small scale subsistence farmers to small scale commercial farmers running profitable farming enterprises
- Enhanced social cohesion and networking through solidarity
- Prevented common livestock diseases

VALUE CHAIN FINANCING

Juhudi Kilimo Microfinance did not deliberately set out to develop agricultural value chains. Through increased production of various agricultural products, many sustainable businesses have developed in the Juhudi targeted areas; such as restaurants, milk packing and transport. The Juhudi credit-driven value chains developed by "default" but the institutions saw the opportunity, established linkages, and provided financing opportunities along the entire value chain. Some of the value chain and market upgrading strategies for the institution include:

- Facilitating farmers to carry out business with giant milk processors and packers such as KCC
- Linking them to Heifer International for information on improving quality of their herds
- Facilitating the provision of local Veterinary Services for the support in animal health care both preventive and curative

INCENTIVES FOR SUSTAINING THE MODEL

The key incentives for participants in the model are the increasing profitability and expansion of their businesses. Almost every participant was benefiting in the chain: large scale operator received high quality milk of larger volumes; smallholder farmers had access to market; transporters had enough goods to transport. In addition, Juhudi also had favourable loan repayment schedules affordable to the borrowers.

IMPACT

In all the regions targeted by Juhudi Kilimo, it is evident that milk, poultry, and pig production has significantly increased. There are milk packers in all the targeted production areas due to reliable supply of milk and they ensure the milk is kept in hygienic conditions. The milk packed locally is sold locally and transported to other towns. As at the first quarter of 2011, Juhudi Kilimo had a client base of about 10,000 who are taking agriculture from the level of subsistence to agricultural enterprises.

KEY SUCCESS FACTORS

i. Financing other value chain activities to expand opportunities for farmers
ii. The formation of the Solidarity Group to provide guarantee and ensuring loan repayment
iii. Increasing profit margins and income of various value chain actors
iv. Training programmes added to financing schemes
v. Market linkages and other linkages established for the farmers
vi. Various partnerships established within the financing schemes/value chain
vii. Effective and regular monitoring and coordination

Innovative Technology for Inclusive Market Access: Amiran Farmers Kits

INTRODUCTION

One organization that has adopted a successful model addressing the challenges mentioned above is AMIRAN KENYA LTD. Since its inception in 1963, Amiran Kenya has remained a driving force behind the floriculture and horticulture sectors in East Africa.

Recently, Amiran Kenya has chosen to address the issue of food security and livelihoods for small-scale farmers by bringing a new approach in the form of the Amiran Farmer's Kit (AFK) to the region. An all-inclusive agricultural kit coupled with tailored training geared towards offering the farmers access to affordable modern agricultural technology and the knowledge to achieve higher yields for their crops.

This initiative comes at the time when food security is a critical issue for the country. This approach opens a new door for next generation of farmers to the opportunity of agribusinesses based on modern technology and knowledge.

HOW THE MODEL WORKS

The AFK comes complete with installation, training and an agro-support package that would allow Amiran to teach the "Amiran Farmer" how to grow, and then stay with the farmer throughout the season to ensure the best results. The Amiran Farmer's Kit (AFK) is created with the aim of allowing small-scale farmers access to affordable modern agricultural technologies, methods and inputs of the highest standard and a tailor made Kit designed to meet the needs of the specific farmer or group of farmers by adapting the components of the Kit to suit the climate, terrain, and agricultural experience of the farmer.

The AFK incorporates innovative agricultural technologies including the Family Drip System (FDS), an easy to use gravity based drip irrigation system, a Farmer's Greenhouse and top quality agro-inputs such as seeds, fertilizers and agro-chemicals, a collapsible water tank, farmers' sprayer, nursery set, training and agro-support package. Each farmer is equipped with one kit which can be used as an individual or a household. In order to bring a complete solution to the farmers, Amiran has entered into partnership with CIC Insurance to provide insurance to cover the hardware component of the AFK and the crop itself.

The Amiran Farmers' Kit is based on the principle of making a difference between successful farming for agribusiness and subsistence farming through knowledge, know-how and very high quality inputs.

INCENTIVES FOR SUSTAINING THE MODEL

The key underlying incentive sustaining the model is the profitability, modernization of the system and availability of market for farmers to sell their produce. The production system/technology is far better than the traditional method of producing vegetables. Minimum weeding, less water, less agro-chemicals, high yielding, high quality and higher profitability incentivized farmers to embrace the technology. Again the holistic nature of the system provided a one-stop shop for farmers in terms of technology, market, credit and insurance.

IMPACT

Since 1989, Amiran has constructed almost 2,700 hectares of the 3,000 hectares of greenhouses in Kenya and it is today the leading agricultural one-stop shop in East Africa. UNDP, FAO, World Bank, Red Cross, USAID and several organizations have successfully used the system. More than 300,000 women and 100 schools in Kenya are using the technology. While the average age of a Kenya farmer is close to 60, the average age of farmers growing with the Amiran Kit is 34. All of this comes with an aggressive agribusiness approach aimed at showing the youth a stable financial future that can be achieved through modern farming practices. Though the kit has a lifespan of over 15 years, the repayment period for this investment is 1 year and whereas open field yields about 5tons of tomatoes for acre in most SSA countries, the AFK which is a 30th of an acre yields 3-4tons per year.

Environmentally, the Kit uses minimum amount of water and is suitable for urban and peri-urban production, arid regions and areas where water is scarce. The system has won several National and United Nations awards in environmental friendliness, innovation, food security and economic impact.

KEY SUCCESS FACTORS

The key success factors behind the AFK are;

i. The holistic approach to the system
ii. The huge economic returns per farmer/kit
iii. The training programme offered by Amiran
iv. How modern the technology is, in attracting youth and women
v. The ease of using the technology
vi. Demand for produce that come out of the system

Tourism and Inclusive Market Development

Tourism is one of the key sectors that can drive inclusive market development and spur agribusinesses for smallholder farmers and other people excluded from mainstream value chain activities and formal markets. The Agribusiness in Sustainable Natural African Plant Products (ASNAPP), USAID and Sun International Hotel initiated an inclusive market development project in Livingstone-Zambia, for the production of high quality vegetables.

Before the project, the Sun International Hotel was importing over 90% of its fresh vegetables from South Africa amidst high transportation cost, border charges and loss of quality of produce. At the same time, the community surrounding Livingstone was populated by people with disability (visually impaired) who had resorted to begging for alms on the streets and at the entrance of Sun International Hotel. Many children were not enrolled in school and few farmers were producing and supplying fresh vegetables to the open domestic market.

HOW THE MODEL WORKS

Sun International Hotel, USAID and ASNAPP entered a public private partnership to address the challenges faced by the hotel by creating opportunities for the community to supply fresh vegetables. Sun International Hotel used part of its corporate social responsibility funds to purchase modified greenhouses for the community. The Government of Zambia on its part provided pumping machines and irrigation pipes to the community to support open-field production of vegetables. USAID provided funding to ASNAPP to support the technical and managerial functions of the project. It included salaries, administrative support, vehicles and logistics. ASNAPP provided services including farmer mobilization, production planning, plant production and protection, market linkages, linkages to input suppliers, business management, project monitoring and management. A management committee was set between ASNAPP, Sun International and the Farmer Groups to manage and revolve funds to ensure sustainability of the project.

ASNAPP established modified greenhouses and trained farmers to produce vegetables using this modern technology. Over time, ASNAPP identified Lead Farmers and built their capacities to become extension agents and take up some responsibilities from ASNAPP. The lead farmers aggregated some smallholder farmers around them and explored further market opportunities with Protea Hotel, Spar and Pick n Pay supermarkets in Livingstone.

INCENTIVES FOR SUSTAINING THE MODEL

- High profitability and ready market for the smallholder producers
- Producers receiving weekly income from sales
- Sun International Hotel receiving high quality vegetables and being relieved of the troubles of importing vegetables from South Africa
- Support service readily available to address farmers' technical and market concerns

IMPACT

From the humble beginnings of 14 farmers, an output of 6MT valued at $6,800 in 2005, ASNAPP currently manages a network of 400 producers, supplying over 1,500MT of fresh vegetables valued at $2,000,000 per annum.

ASNAPP has provided vital and timely solutions to the perennial problem of poor quality vegetable supply faced by leading vegetable buyers in Southern Africa. For example, ASNAPP–supported farmers currently supplying over 80% of the vegetable requirements of Sun International Hotel that hitherto was importing 92% of the same from South Africa. Today, almost all the lodges, hotels and supermarkets within Livingstone purchase their vegetables locally and the producers have extended production of mushrooms into their supply menu. Most of the children are now enrolled into schools, farmers have built or renovated their houses; and people who hitherto were begging for alms now own cell phones through income from the project.

KEY SUCCESS FACTORS

Market Intelligence and Market Linkages: ASNAPP adopts market-first approach in developing interventions that build the capacity of agribusiness enterprises. It first interacted with Sun International Hotel, Shoprite, Spar Supermarket and Protea Hotel to understand what their needs and challenges were. Rapid market assessments were conducted to identify products, demand, supply, prices, seasonality and value chain interventions and opportunities for small-scale farmers. The results of the analysis of the market assessment served as the input for project design, interventions, etc.

World Class Science and Technology Transfer: ASNAPP employed world class science in agronomy, product analysis and evaluations to develop produce that met buyers' requirements in cultivars, taste, consistency and other quality parameters.

Sustainable enterprise development models: These models were based on the development of skills and mindset that builds the capacity of farmers to grow in the areas of volume, quality and productivity. Smallholder farmers were linked-up with lead farmers to aggregate produce for buyers. Farmers were trained on financial management, record keeping, data collection, and other business management skills. The lead farmers served as extension agents for the smallholders, negotiated with buyers and aggregated volumes for onward supply to the supermarkets. They also served as trainer of trainers, conducted quality checks and increased the volume of supply.

Community-based Project Monitoring and Technical Backstopping Model: One of the cardinal successes of the project was the presence of technical officers located at the community level to deliver on-the-spot technical backstopping and management. Public private partnership and diversified project funding schemes.

Chapter 7

Specific Investment Opportunities for Regional Markets

Discussions with agro-food industry players has revealed clear and concise investment opportunities which speak directly to potential domestic and foreign investors seeking appropriate and "shovel ready" investment options in SSA. These investment opportunities are purely market-led projects. Key among them are:

Establishment of Fruit Juice Concentrate Processing Facility in Nigeria

More than 90% of the fruit juice produced in Nigeria by global and multinational companies is based on concentrates imported from South Africa, European Union and South America. This situation is not different from other West Africa countries. The fruit juice market is projected to be more than $2billion/annum. Fruit concentrates, pre-mix and syrup concentrate has risen from 1.5mkg in 2002 to 60mkg in 2011.

Entry: Interested investor could discuss with Chi-Nigeria, Coca Cola-Nigeria and Coca Cola-Ghana to investigate their quality specification, volumes and potential prices – AFIM could facilitate this process. The project will trigger downstream product expansion and attract the youth and women to engage in fruit plantation establishment. The design of the project should however take into consideration cluster production to reduce the effect of infrastructural challenges especially cold chain facilities and road networks.

Cassava value chain investment

The starch market for Nigeria and other countries cannot be over-emphasized for textile and food processing companies. Local textile industry and other agro-food companies' import over 90% of their starch requirements. Whiles Nigeria remains world producer of cassava, the economic importance of the commodity in the ethanol, bio-fuel, processed foods, industrial starch and pharmaceutical applications have not been realized. One weakness along the cassava value chain is the absence of in-country large-scale cassava processing facilities, which could turn cassava from subsistence use into industrial use. Investment in the sector will transform most cassava producers from subsistence farming to business farming; provide immediate market and reduce post harvest losses. The cassava processing facility will fit into government policies including blending gasoline with 10% ethanol; replacement of 35% of wheat flour for bread and other policies for sugar replacement and dried chips. Nigeria self-sufficiency of cassava demand in 2015 is estimated at 350,000 for starch; 340,000 tons for flour; 900,000 tons for chips and 1.5million tons for ethanol (Source: Presidential Brief, Agricultural Transformation Agenda; September 2011).

Entry: Critical to successful investment will be a well-planned and integrated approach to cassava processing. A clear understanding of end-user market requirements will be pre-requisite. Cluster production/ processing will eliminate over 80% of transportation cost, reduce 60% post harvest losses and provide a direct linkage between processors and producers. A balance between industrial cassava cultivation and cassava for staple food production should be established. This will ensure income to farmers and food security respectively. Evidence-based cost analysis should guide establishment of processing facilities and price sensitivity analysis should be performed. Lessons must be learnt from the President's Special Initiative (PSI) on cassava in Ghana and Senegal.

Private Public Partnership approach will accelerate commercial processing investment. Public sector will not only provide public goods but could support whole chain of preferred varieties, support technology transfer and extension service provision. Hard infrastructure will be the bedrock to attract investment.

Commercial Cultivation of Soya bean and other Oil Seed Plants

Soya bean has become a strategic commodity for Sub-Saharan African countries. Its importance in food, feed and edible oil sectors have grown over the years. SSA produced about 860,000 tons in 2010 and contributes only 0.2% of world output. Presently demand for soya cake and soya oil in the region is estimated at 8million tons (TechnoServe Country Analysis, February 2011). BIDCO a multinational company with operations in Kenya, Uganda and Tanzania could process additional 30,000 tons using its existing processing capacity and could expand to other countries where supplies are significant. The demand for crude palm oil is even higher than that of soya bean.

Entry: Better understanding of production systems and technologies are necessary; soil maps, agro-climatic conditions, soil profiles and vegetative maps will enhance investor decision. Cluster production will reduce transportation cost and make actors more competitive.

Sorghum Production

In the past, sorghum has been known as a Sahelian commodity for subsistence farmers. However, in recent years, sorghum has gained popularity as both a household and industrial crop. East Africa Breweries, Nigeria Breweries and Ghana Breweries have resorted to the commercial and industrial use of sorghum for beverage production. East African Breweries (EABL) is currently scouting for farmers to produce the commodity on contract to reduce its reliance on the more costly barley. By 2015, demand in Nigeria for domestic and export to neighbouring Chad, Mali and Niger will reach over 980,000 tons. Private sector has opportunities to invest in production expansion and mechanization to increase supply volume.

Intensive Production Technologies for Fresh Vegetables

The use of intensive production technologies attracts youth and women into agriculture as an agribusiness entity but not as subsistence farming. The present increase in supermarket expansion in Africa, urbanization and increasing middle class require high quality vegetables which can be obtained using intensive production technologies. Market assessment conducted in Ghana, Gambia, Burkina, Senegal, Zambia, Kenya and other countries demonstrate an increasing demand for high quality fresh vegetables. The use of intensive production technologies has transformed the horticultural industry in Kenya. By adopting this system, Amiran has been able to attract youth, polytechnic schools and high schools into horticultural agribusiness. Over 3,000ha of greenhouses have been built in Kenya and more than 100 schools have greenhouses.

West Africa remains fertile for introduction and commercialisation of this intensive production system. This is more evident for countries such as Ghana, Burkina, Senegal, Gambia and Nigeria. The investment opportunity does not only reside in production but a strategic and integrated approach to market production equipment, transfer technologies and provide market linkages for producers. Financial institutions, agro-dealers and crop insurance companies have the opportunity to participate in this system of production. Successful models such as ASNAPP, Sun International Hotel, ShopRite, USAID and Out-growers in Livingstone, Zambia could be replicated. The Amiran Farmers Kit (AFK) programme such as Next Generation Farmers, provide another successful model for investment by development organizations involved in food security, employment creation, income generation, youth and women economic empowerment.

Production of Milk Concentrate (Milk Powder) in West Africa

West Africa Milk Company, WAMCO imports over 90% of its powder into West Africa. Milk powder import into the sub-region is estimated at over $2 billion per annum. The challenge is; dispersed and nomadic, instead of pastoral livestock production system. Milk yields are low, quality is poor and supply is inconsistent. A processing facility is required to process fresh milk into powder and provide the intermediate product (powder) imported by the multinationals for tin milk production. It has the tendency to offer at least 20,000 jobs for rural communities.

Aquaculture / In-Fish Production

Nigeria alone imports over $900 million worth of fish annually. Ghana and Senegal spend over $100,000 annually on fish import. Almost every country in West Africa is embarking on aquaculture and incentive packages have been designed to attract investment. Investors have immediate domestic and regional markets to supply. CHI Limited for example has embarked on a massive aquatic project in Ibadan but this could account for less than 2% of the Nigeria market alone.

Entry & Critical Points: Strategically, government could provide the necessary infrastructure to stimulate private sector investment. An integrated model including production of fingerlings, fish production, cold chain facilities and packaging should be considered for a project of this kind. Additionally, government should intensify its investment in public goods and industry specific infrastructure in a clustered manner to obtain critical mass, address value chain challenges and provide market centres for trader. Out-grower systems, leasehold and commercial production could benefit from such investments.

Central Pool of Equipment Leasing

One of the greatest challenges to production expansion is lack of equipment for producers. Farmers are challenged whenever they want to adopt improved production technologies. In most instances equipment leasing (hiring) especially tractor services have been public sector-led. It is common to see equipment breakdown, poor maintenance, lack of fuel and operator attitude affecting efficiency and effectiveness of the system.

A typical and recommended approach by most private sectors is to allow private sector investment into centralised equipment hiring model. Government is expected to create the enabling environment including duty free on equipment and spare parts, provide affordable financing system to allow private sector invest in equipment purchases and management. Such operations led by the private sector are expected to ensure sustainability, efficiency and free government funds for infrastructure development. Private sector agribusiness men in Nigeria are keen on investing into such a model.

Market Centre Infrastructure Investment

Whereas multinationals and large-scale operators have the requisite logistics for their operation, majority of agro-food actors who are small and medium enterprise, lack organized logistics and infrastructure. Local markets are characterized by poor infrastructure especially warehouses, cold store facilities, parking places, loading machines, sanitary places, appropriate sheds and inefficient utility facilities. As a result, there are frequent fire outbreaks, high post-harvest losses, food safety concerns, and traders are confronted with disposing off fresh produce irrespective of prices. A well-thought plan and provision of appropriate policies will attract private investment in modernizing local market centres. The model will however require a champion to facilitate partnership building among interested stakeholders and help in managing the system until it has become sustainable. Public sector, especially Municipal Assemblies could provide land/space, needed utilities and basic infrastructure whiles private sector invests in soft infrastructure and systems.

Chapter 8

Recommendations

The discussions with over 55 agro-food companies, industry experts, national and regional institutions, lessons learnt from successful African inclusive market development models, earlier studies and conclusions from SWOT analysis informs the recommendations made in this report. The recommendations have been presented along the following sub-themes:

1. Strategic commodities for regional interventions
2. Cross-border and Regional Value Chain Programmes
3. UNDP-AFIM's role to deepen inclusive market development models in regional and national agricultural and food security investment plans
4. Supporting value chain capacity building institutions for inclusive market development
5. Facilitating and scaling up innovative inclusive financing mechanism
6. Facilitating the establishment of aggregation and market centres for enhanced competitiveness
7. Developing country level agro-economic databases
8. Investing in low hanging fruits
9. Institutional mechanism for project implementation

Future African strategic commodities to be championed by the private sector

The strategic commodities recommended below are based on several parameters including the interest of the private sector. They are also consistent with the Abuja Declaration on Food Security and other regional value chain commodities. Key among the commodities are: Soy bean, Sorghum, Oil palm, Rice, Maize, Sugar cane, Horticulture, Cassava, Livestock and Aqua-culture.

Cross-Border and Regional Value Chain Programmes

Three (3) major cross-border and regional value chain programmes are recommended for AFIM's interventions. These are:

i. Grains Development Programme: Development of Agribusiness Centres through Backward Integration of Agro-processing Firms
ii. Horticultural Development Programme: Cross-Border Horticultural Production for Urban Markets in Southern and West Africa
iii. Establishment of Aggregation Centres

Grain Development Programme: Development of Agribusiness Centres through Backward Integration of Agro-Processing Firms

Food processing companies drive the agro-food industry in Africa. Considering the high incidence of post-harvest losses in Africa, agro-processing companies have a vital role in turning primary agricultural products into consumable commodities. They range from cottage-level small-scale processors to state-of-the-art multinational companies. Agro-processing is the subsector within the agro-food industry that creates the highest agribusiness opportunities for investment and sustainable livelihoods for most rural communities. Figure 19 below provides a summary of the performance of three (3) leading grains (Maize, Rice and Soya) in Africa.

Successful Model for Replication and Scaling–out

Agro-processing companies play the most critical role in the agro-food value chain. They have adopted a backward integration approach by working with "Aggregators[14]" to extend critical services to farmers to increase production and productivity. The model is being used by multinational and national companies such as Nestle, Unilever, Premier Foods (South Africa), Premium Food (Ghana) and BIDCO (Kenya) and tends to be one of the most successful approaches to resolve the challenges confronting smallholder farmers.

Programme Design and Implementation

Based on the successful model above, it is recommended that UNDP-AFIM should focus on the three (3) important grains (Maize, Soya bean and Rice) which have a regional demand. Again private sector companies have made significant investments in these commodities and are willing to partner with the public sector to increase productivity of value chain actors and ensure supply of large volumes of the produce supplied at competitive prices. The backward integration model is recognized as one of the most successful Africa Inclusive Market Development models.

Objective

Aggregators play the central role in the backward integration model of agro-processing firms as shown in figure 21. In Ghana for example, Premium Food Limited[15] has resourced an Aggregator to work with over 4,000 farmers. The company has provided the Aggregator with warehouses, trucks, input credit, market, extension and micro-credit. Multinational companies such as Unilever, Nestle and Premier Foods are employing a similar approach to source their raw materials. Agro-processing companies yearn to increase the number of aggregators with the view to boost productivity of suppliers and volume of produce. UNDP-AFIM's role in the grain sector should therefore focus on scaling-out the backward integration model by increasing the number of Aggregators and building their capacities to become Agribusiness Centres.

Partners

Nestle, Unilever, Premium Food Limited (Ghana), Premier Foods (South Africa), BIDCO Kenya East Africa Grain Council and Ghana Grain Council.

Implementation Mechanisms and Specific Role of UNDP-AFIM

UNDP-AFIM could play five (5) specific roles:

i. UNDP-AFIM should work with the East Africa Grain Council, Ghana Grain Council and other national Grain Councils to select and design appropriate programmes that will help increase capacities and number of Aggregators. AFIM could channel direct resources through the Grain Councils for implementation of the programme. Nestle, Unilever, BIDCO, Premium Foods Company Limited, Premier Foods and any other interested grain processing company would provide matching funds to enable them benefit from the model. AFIM can dialogue with these companies to explore further interest, input and readiness for design and implementation of the programme.

ii. Engaging and Securing Investment from African Development Bank: AFIM should use its leverage to secure additional interest, buy-in and resources from Africa Development Bank to increase community and village level warehouses, silos, dryers, shellers and market infrastructure. These facilities will support the Warehouse Receipt System which has become one of the successful models in the grain sector. Specifically it will reduce the investment requirement of Agro-processors/Aggregators, enhance their activities and reduce critical challenges within the grain sector.

iii. Establishing Partnership and Alliance with the Bill and Melinda Gates Foundation: Bill and Melinda Gates Foundation has expressed interest in providing interventions within the grains value chain, specifically rice. AFIM should partner with the Foundation to provide additional resources targeted at building the technical capacities of producers, providing input guarantee funds with the aim of increasing farmers' access to improved seeds and agro-input.

---

14 Aggregators are private companies who serve as interface between the agro-processor and farmers.

15 Premium Food is one of the leading Maize Processing company in West Africa

Figure 19: Current Status of Grains in Africa

Africa Imported > $60billion of Maize, Rice and Soya products between 2001-2009

Maize

- Accounts for:
  - 27% of cereal area
  - 34% of cereal production
  - 8% of value of all primary crop production
- Between 2001-2009: Imported $18billion
- 2010: Imported $4billion and lost $4billion in post harvest

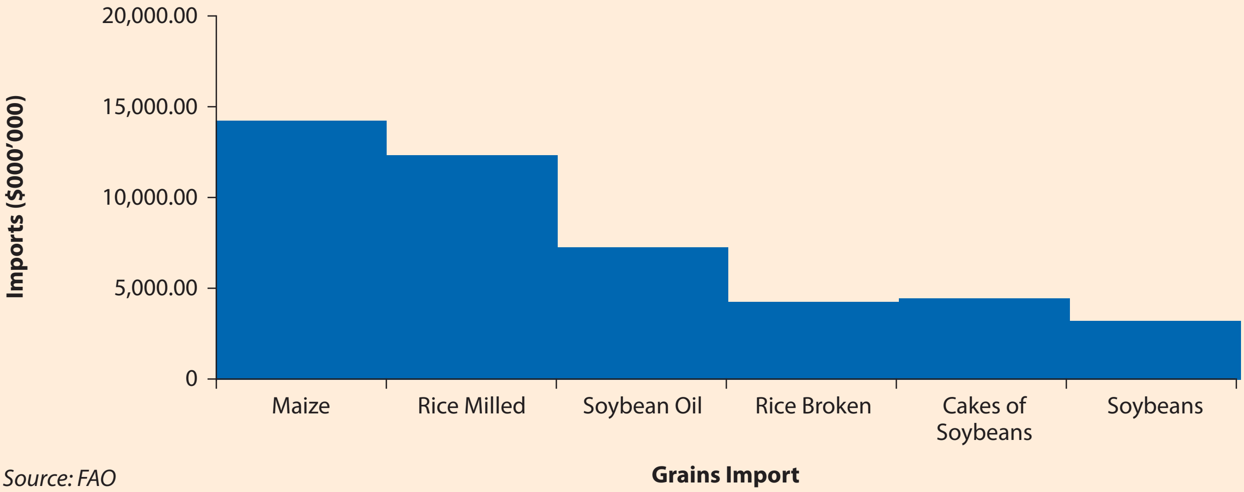
Rice

- Africa accounts for 34% of global import
- Imported $21billion between 2001-2009
- Strategic commodity to fight hunger

Soya bean

- Imported $19billion between 2001-2009
- Strategic commodity for food, feed and fuel

Figure 20: Import of Grains in Africa (2001-2009)



Source: FAO

Figure 21: Key Challenges Facing the Grain Sector

Low Yields
(50% lower than world average and 75% lower than USA)

Low Production Volumes
Imports > $2.5billion per annum of maize since 2007

30-50% Post Harvest Losses
Maize loss amounted to $4billion in 2010

Price Volatility
Price increases 100% within a season

Underlying Causes

- Access to inputs and improved seeds
- Poor tractor services and inadequate production equipment
- Lack of on-farm primary processing equipment such as shellers and dryers,)
- Inadequate post-harvest infrastructure including warehouses, silos and market structures
- Lack of hard infrastructure including irrigation, rural roads and electricity
- Poor technical know-how of smallholder producers

iv. Establishment of Regional Grain Councils: East Africa Grain Council has provided leadership in grain development in COMESA countries. They are involved in harmonization of quality systems, development of regional grain policies and creating platforms for private sector to engage public sector among others. AFIM should work with ECOWAS EXPECT Project, ECCAS, CMA/WCA and PANAAC to help establish West and Central Africa Grain Councils fashioned along the lines of East Africa Grain Council.
v. Facilitating the Establishment of Regional Tractor Supply and Services Centres with John Deer and Other Tractor Companies: Mechanization is critical to increasing production and productivity of the grain sector. In most grain producing countries, tractor services and implements such as plough discs, planters, shellers and harvestors are lacking. AFIM can liaise with selected tractor manufacturing companies such as John Deer to collaborate with Grain Development Council and national governments to design and establish regional tractor supply centres. Tax incentives, guarantee funds, long-term financing systems, service centres with spare parts and training programmes should be embodied in the design of the programme.

Expected Impact

The programme is expected to provide employment, increase yields and the volume of grains in Africa, reduce post harvest losses, reduce import and increase productivity within the value chain. Five (5) Grain Processing Companies would be selected, and each company will work with two (2) Aggregators.

Specific outputs expected from the programme are listed below:

i. 10 Aggregators working with 1,000 each (making a total of 10,000 farmers)
ii. 1ha farm established by each farmer making a total of 10,000ha
iii. Project expected to generate over $10million per annum
iv. Post harvest losses expected to reduce from 30-50% to 10-15%

Cross-Border Horticultural Production for Urban Markets in Southern and West Africa

Among the low hanging fruits identified in the report, intensive production technologies for vegetables presents perhaps the strongest opportunities for inclusive market development. The Cross-border Horticultural Project clusters low hanging fruits identified which included the Amiran Farmers Kit in Kenya, Tourism and Lead Farmer Model of ASNAPP, Illovo Sugar, ShopRite, and Burkina Paprika. It builds on initial investments made by USAID in Southern Africa, Millennium Challenge Corporation in Burkina and EU horticultural project in Gambia. The opportunities identified are summarized below.

OPPORTUNITIES

Priority sector for food and nutrition security, poverty reduction, employment generation, export diversification	West Africa accounts for 60% of total vegetable consumption in Sub-Saharan Africa Nigeria alone accounts for 35% of total vegetable consumption in Sub-Saharan Africa, and 62% of the consumption in West Africa	Supermarkets have become an increasingly attractive market for producers who can meet their quality requirements

High Income 7 Employment Generation
Initial market order > $3m/annum
Potential Employment > 5,000

Shot Gestation Period
(6-12 weeks)

CROSS-BORDER HORTICULTURE PROJECT
Southern Africa: Zambia, Namibia, Botswana, Zimbabwe and Democratic Republic of Congo
West Africa: Ghana, Burkina, Mali, Senegal and Gambia

High Interest of Partners
ShopRite, Zenith Bank, ASNAPP, Illovo Sugar, NBF, CETZAM, Burkina paprika, UNDP Offices and other urban supermarkets

Cross-border Market Opportunity
(ShopRite alone required > 120 tons/week under this partnership

Key Challenges
• Inability of farmers to produce commercial volumes • Poor produce quality • Inconsistent supply schedules • Limited product range than demanded by buyers; • Limited product availability ON A year round basis; • Limited shelf life and cold storage facilities • High freight charges of shipping produce coupled with frustrating custom procedures which impact negatively on product quality
Project Objectives
• Improve economic livelihood options for small holders in peri-urban settlements through sustainable production and marketing of high value horticultural crops using protected cultivation systems; to supply supermarkets and regional market
Intervention Areas
• Provide the neccesary equipment and infrastructure for stallholder farmers to produce to meet buyers requirements • Train producers to produce to meet quality specifications • Establish markets between the supermarkets and smallholder producers • Build capacities of other stakeholders to ensure sustainability.
Expected output
• Increase the productivity of the farmers • Increase the gross margin and profitability of the producers • Increase the quality of the produce to access supermarkets • Ensure all year productin and income • Reduce the amount of water currently used for production • Provide economic income and employment
Partners
ShopRite, Illovo, Zenith Bank – Ghana, Koala Supermarket – Ghana, CETZAM Financial Services Limited – Zambia, Development Bank of Zambia, NEPAD Business FOundation, ASNAPP, and Paprika Burkina (Pty) are the key partners that have shown inrterest in scaling up this model in COMESA and West African countries
Impact
• >$3million generated per annum • >5,000 farmers involved • About 6 countries benefiting • Low use of water • Food and Nutrition Security assured for over 3,000 families

ROLES, COMMITTMENT AND INCENTIVES OF PARTNERS

SHOPRITE

ShopRite through Freshmark, the company supplying vegetables to ShopRite, has indicated its willingness and readiness to purchase produce from organized farmers using intensive production technologies in all countries where they operate. The commitment is based on earlier successes and partnership established between Freshmark and ASNAPP in Zambia.

Role/Commitment

Already, ShopRite has donated 4 cooling containers to ASNAPP to use them to support vegetable producers within the catchment areas of Botswana, Namibia, Zimbabwe and Democratic Republic of Congo. It has also provided the list of produce it will require, quality specifications, volumes, indicative prices, seasons and delivery points to ASNAPP to plan production with suppliers. ShopRite will want to use this model in several countries to reduce its huge import cost, cross-border challenges, product loss and transaction cost.

Incentives

The incentive for ShopRite to engage in inclusive market development model hinges on:

i. Ability of producers to supply high quality produce at competitive price
ii. Supply year round vegetables with consistency in product quality
iii. Supply wide range of vegetables
iv. Reduction in transaction and operational cost
v. Meeting its Corporate Social Responsibilities

ILLOVO SUGAR

Illovo Sugar is the largest sugar company in Africa operating in South Africa, Malawi, Tanzania, Mozambique, Swaziland, Zambia and currently entering Mali. Illovo works with over 10,000 out-growers of sugarcane. It provides credit to the smallholder farmers which is paid back over years. Illovo has realized that most of the producers default in early stages of loan repayment due to lack of income generating activities. The interest of Illovo therefore is to provide alternate income generating activities to its out-growers and the communities within which they operate.

Role/Commitment

Illovo is committed to use part of its Elim Trust Funds to support the provision of alternate livelihood projects to its out-growers. It will also use its existing infrastructure including pack houses, transport and storage facilities to support the project/initiative.

Incentives

i. Additional income for their out-growers
ii. Ability of producers to repay their loans
iii. Ensuring food and nutrition security for its farmers and communities
iv. Meeting its Corporate Social Responsibilities

Zenith Bank-Ghana, CETZAM-Zambia, Zambia National Development Bank

Zenith Bank is one of the leading banks in West Africa that supports small and medium scale enterprises. Over the years, agribusiness has not been a priority area of the bank but has recently shown keen interest in agribusiness financing especially using intensive production technologies as an entry point.

Role/Commitment

Zenith Bank is committed to using part of its Corporate Social Responsibility funds to support the project. CETZAM is committed to invest about $2m as micro-finance for value chain actors and the Development of Zambia has indicated to finance a central cold chain facility in Livingstone for the project.

Incentives

Key incentives for the Bank include using the project to understand agribusiness operations, opportunities, risk and be able to device innovative financing mechanism.

ASNAPP

ASNAPP has developed markets for selected high-value horticultural and specialty vegetables, herbs and fresh fruits in the West and Southern African regions, particularly to supermarket chains and hotels. Working with community groups in Zambia and South Africa, ASNAPP has implemented successful vegetable projects under protected cultivation systems in these countries using market linkages forged with supermarket chains, hotels and lodges and has helped increase farmers' income from $66,000 to $2million per annum in years.

Role/Commitment

ASNAPP will work directly with out-growers, assist them to form producer associations, establish links with input suppliers, train farmers on quality systems, undertake market linkages for smallholder farmers and build capacities of stakeholders. The project will build on earlier investments made by USAID.

ASNAPP will play the CENTRAL IMPLEMENTATION/ MANAGEMENT ROLE by mobilizing the partners and coordinating the project.

Incentives

i. Opportunity to replicate and scale-up successful models to benefit a larger population
ii. Resources to extend services
iii. Making impact in income generation

ROLE OF UNDP-AFIM

1) UNDP-AFIM will provide catalytic funding to support provision of services to smallholder farmers to produce and access cross-border market opportunities. Among the services will be; transfer of technologies to improve product quality and productivity; supporting acquisition of production equipment, project management and monitoring and control. The funding can be provided through an existing service providing institution which has sufficient record of accomplishment of successfully managing a similar project/ or being part of the partners outlined above.
2) AFIM will provide strategic linkages with ShopRite and other strategic partners to secure their further buy-in and attract additional resources into the project.
3) Provide oversight responsibilities in project coordination and evaluation and ensure project success.
4) Create a platform where the partners will interact and document successful models for replication in other regions.

ROLE OF AFRICA DEVELOPMENT BANK (ADB)

Cold chain facilities were identified as one of the major challenges affecting the horticultural industry in Africa. About 30% of fruits and vegetables produced are lost through post harvest losses. Considering the contribution of the sector to income generation, job creation for women and food security, it is important to deepen investment in technology and infrastructure. AfDB should support public sector to invest in small-scale cooling systems at the community level to help reduce post-harvest losses. Through public-private partnership, it can also support construction of pack-houses at horticultural hubs in selected countries.

Facilitating the Establishment of Aggregation and Market Centres for Enhanced Competitiveness

Based on the interviews and interactions with the various sectors within the agro-food industry, it became apparent that product mobilization was one of the biggest bottlenecks for producers and large buyers. With increasing fuel prices, poor rural road networks, dispersed nature of smallholder producers coupled with small supply volumes, establishment of efficient food mobilization system is paramount.

The Challenge

It is generally known that small and mid-sized family farmers are at a distinct disadvantage when selling to larger markets. They are often excluded from mainstream market channels because conventional distributors and retailers look to achieve lower, more competitively priced products through high volume purchases and to avoid the transaction costs associated with purchasing from many different small suppliers. Smaller farmers may also be financially unable to maintain infrastructure like packing sheds and cold storage facilities, which are necessary for larger volume sales (USDA Rural Development Feasibility Study July 2011).

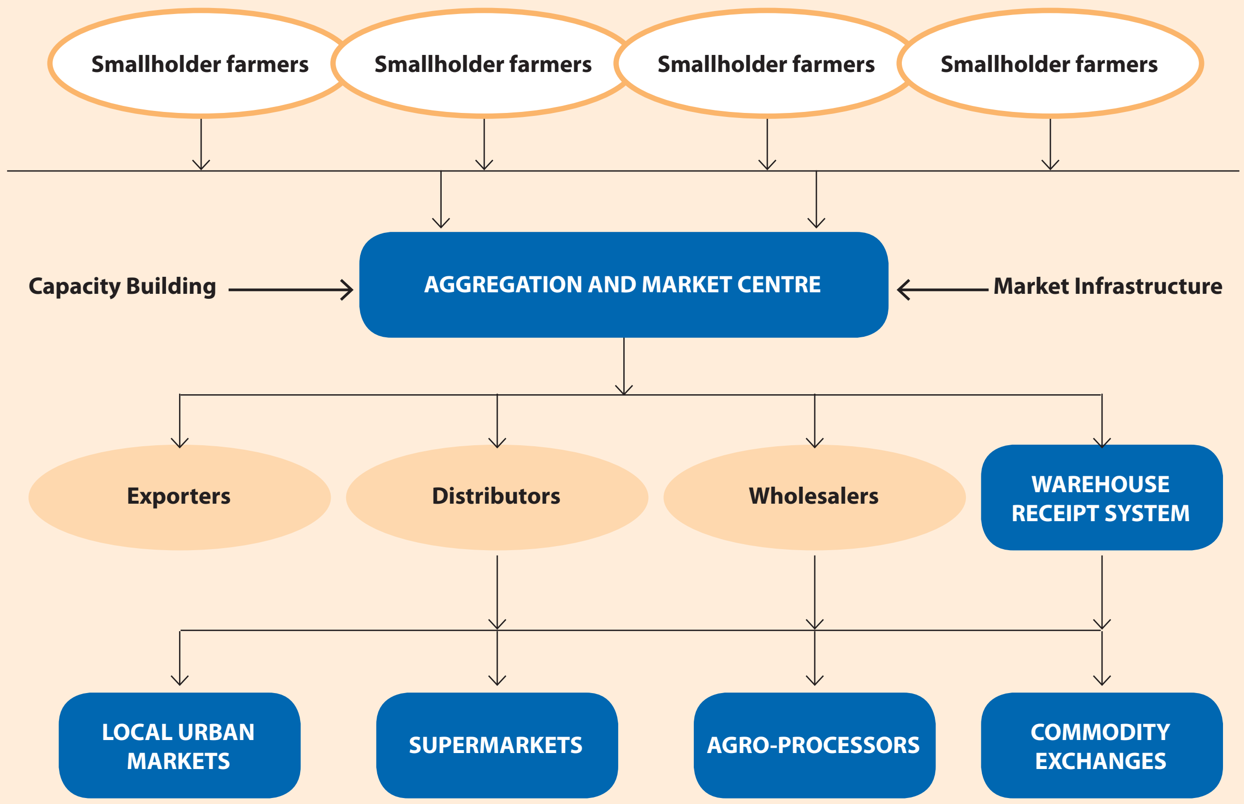
Evidently, mobilizing and bringing significant quantities of product from small and mid-size family farms to larger local markets remains a structural challenge to institutions and companies such as East Africa Grain Council, Kenya Federation of Agricultural Producers (made up of over 2million farmers), BIDCO (Agro-processing company), ShopRite (Zambia), Friesland (WAMCO) Nigeria, Premium Food (Ghana) and several others. The same bottleneck was identified by the Agribusiness Trade Promotion, a West African regional programme funded by the USAID and ROPPA (West Africa Federation of Farmer Organizations) as critical in reducing post-harvest losses, transaction cost and increase profitability. The lack of efficient aggregation market centres also contributes to the incidence of high post harvest losses, food safety issues, erosion of farmers' margins and has been recognized as a major disincentive for farmers to increase production.

The Business Model and Objectives

Aggregation and Market Centre Business Model strategically fits into inclusive and systemic business models of AFIM. It engages the private sector and the smallholder farmer to transact business in a more formal and convenient environment and is strategically created or established within reasonable distance from main producing centres. Market infrastructure such as warehouses, sheds, cold stores among others are provided in a central location within defined communities.

These aggregation points could serve as staging points where products could be assembled for local distribution and aggregated for pick-up for sale in urban markets. This model could provide an effective and sustainable mechanism to increase the availability of local products.

AGGREGATION AND MARKET CENTRE INCLUSIVE BUSINESS MODEL



Proposed Approach
A project of this nature requires public private partnership. With support of government and development partners, initial infrastructure could be built. The centre could initially be managed by a development organization through public private partnership but eventually be managed by the private sector. A careful feasibility study focusing on realistic participation and sustainability of the centre should be conducted. Buyers and producers should provide technical input and have a stake in the design and establishment of the centre. Evidence-based recommendations should be used for project design and implementation. Guarantee Funds and crop insurance facilities could be provided for the establishment and running of the centre. Aside providing a centre for trade, the system can be used to train farmers and develop community entrepreneurs into business entities. The model could partner with AGRA, East Africa Grain Council, KENFAP, ROPPA, National Trade Associations and FBO's, major agro-processing companies and supermarkets.

Resources required
Studies conducted by USDA recommend the following initial resources:

Start-up capital to prepare facilities for aggregation and storage; Provision of additional services such as farm pick up and pack-houses; Working capital for business management systems and operations manager to coordinate supply chain logistics (e.g., grower-buyer transactions, aggregation, distribution, and marketing); Enterprise development training and technical assistance to increase grower capacity to meet wholesale buyer requirements (volume, quality, packaging, food safety).

Business Model Expected Impact
The establishment of these aggregation and market centres through strategic partnerships with existing programmes can benefit at least 10million smallholder farmers. Cost of supply and post harvest losses will be reduced and access to market will increase. The model will feed into Warehouse Receipt Systems and Commodity Exchanges.

Role of AFIM
AFIM should facilitate and dialogue with Government, African Development Bank (AfDB), IFAD and other development partners to invest in the Aggregation and Market Centre Business Model. AFIM will play a further role in providing additional support to guide the development and design of pilot projects. It should work closely with recognized bodies and use its networks to create a platform for agribusiness firms and key stakeholders to dialogue and secure buy-ins. Major actors could also be encouraged to direct part of their corporate social responsibility funds into this investment.

Critical Success Factors
- Active involvement and participation of private sector in project design and implementation;
- Incentivize private sector to take significant stake in the design, establishment and management of these centres;
- A clearly-defined path and modality for complete privatization of especially the management of the centre, at an agreed time-frame by all major stakeholders, should be incorporated in the project design upfront;
- Buy-in of a critical mass of smallholders should be secured, preferably through sensitization, consultations backed by enforceable contracts in the early stages of project implementation;
- Financing mechanisms to enable prompt payments when due, should be instituted and be readily available when needed;
- Where commodity exchanges and warehouse receipt systems are available, there should be a conscious effort to link these aggregation centres to feed into the systems.

The Role of UNDP-AFIM in Inclusive Market Development of National and Regional Agricultural Investment Plans

According to the ECOWAS Commission Report 2009, twelve (12) selected West African countries will require $4.58 billion investment to develop value chains and market promotion of their national investment plans. However, beyond and above the preparations of the investment plans under the principles of inclusiveness, comprehensiveness, coherence, complementarity and mutual accountability, the private sector is expected to exploit opportunities and deepen investment in identified value chains of the National Agricultural Investment Plans (NAIPs). It is imperative therefore to identify and provide incentives required by the private sector to crystallize opportunities and deepen investment in value chains that are inclusive of smallholder farmers; the skill set and capacities required for the implementation of NAIPs.

Based on the discussions held during Private Sector and Inclusive Market Development Training and the UNDP

Community of Practices programme at the agribusiness forum in Johannesburg, the following roles were identified for UNDP:

i. UNDP-AFIM could ensure Inclusive Market Development of NAIPs and Regional Agricultural Investment Plans (RAIPs) and develop Institutional mechanism and platforms to champion and mobilize private sector for effective engagement;
ii. Develop tools and resources to support effective functioning of national and regional agribusiness platforms and deepen investment in Agribusiness;
iii. Establish contacts with focal point persons and institutions to understand intervention gaps;
iv. Facilitate dissemination of investment opportunities;
v. Build capacities of Regional Economic Communities (RECs) and country level/business support service institutions;
vi. Scale up successful inclusive market development models within the investment plans;
vii. Assist and facilitate Economic Community of Central African States (ECCAS) to develop their NAIPs and RAIPs;
viii. Facilitate Public Private Partnerships (PPP) to support corridor and value chain investment.

The justification for the recommendations above were based on some key strengths of the institution including its wide network of country offices; existing global and regional programmes; access and relation to government; cross-cutting development expertise and inclusive market development framework; ability to mobilize private sector, civil society and trade associations; and provide catalytic funding.

Entry Points

As part of strategies to contribute to CAADP process and investment plans, it is recommended for UNDP to develop relationships with the RECs, AU, NEPAD and other regional bodies such as CMA, ECOWAS EXPECT Project, East Africa Grain Council, COMESA, East Africa Council (EAC), SADC and CAADP focal point persons, Trade Hubs, Agribusiness Platforms, NEPAD Business Foundation and PanAAC. It will need to secure commitment of its senior management in promoting inclusive market development and value chains, secure additional funding and build in- house capacities.

16 CAADP Pillar 2 Institution

17 Mango, Passion Fruit, Irish Potato, Sweet Potato, Beef, Fish, Poultry and Dairy Products

18 Onion, Maize, Livestock, Rice and Cassava

19 Foster linkages between agro-processing companies and suppliers; facilitating PPP on market infrastructure development

UNDP Supporting Value Chains Capacity Building Institutions for Inclusive Market Development

Value chain development has become one of the best strategies public sector employ to engage and attract private investment in the agribusiness sector. ABSA Bank for example considers the level of value chain development as one of the critical considerations for agribusiness financing. Similarly, Johannesburg Stock Exchange highly recommends value chain capacity of public sector, important knowledge to enhance sustainability of Commodity Exchanges. The recommendations were also not different from large-scale agro-processing firms such as BIDCO, Nestle, Coca-cola, ETALON and DanGote. The importance of value chain development is reflected in the backward integration currently adopted by commercial agro-processors and supermarkets.

Presently, CAADP Pillar 2 has value chain development as one of its key thematic areas and in the past two years, CMA[16] has collaborated with GIZ to build capacities of public sector institutions at the regional levels. GIZ-Kenya for example, is currently collaborating with the Ministry of Agriculture to scale up best practices of eight (8) value chain commodities[17]; Agribusiness Trade Promotion (ATP) of USAID is also developing five (5) value chains commodities[18] in West Africa. COMESA is also developing its agro-food strategic around value chains.

The role of value chain champions and facilitating institutions is critical to knit value chain activities and attract private investment in the agro-food industry. Agribusiness Trade Promotion[19] (USAID/West Africa), PanAAC, NEPAD Business Foundation and CMA are key regional value chain facilitation institutions which have received support and accreditation from NEPAD/AUC and CAADP. These Agribusiness Platforms have played significant role by creating a common platform for agribusiness enterprises to crystallize on opportunities and contribute to policy development to increase private sector investment and make them more competitive. They have been involved in building national and regional capacities in value chain development for inclusive market.

Entry Point 1: Interventions therefore in value chain capacity building is vital for public institutions, smallholder farmers, trade associations, logistics suppliers and various actors in the "food system". UNDP-AFIM could provide additional resources and expertise to deepen and strengthen the collaborative work between CMA and GIZ; expand and extend their activities to national level, focusing on training of trainers and supporting the trainers to impact on priority value chain commodities. It will be required of AFIM to engage the two institutions to discuss and design long-term and sustainable value chain capacity building programmes.

Entry Point 2: UNDP-AFIM could resource value chain facilitating institutions to deepen their support services, scale-up successful models to smoothen supply chain constraints. The Borderless Alliance Project[20] requests initial support for its secretariat; Farms to Market Synergies (FMS) Nigeria require support to establish Agribusiness platforms. By providing support to these institutions, their activities will have indirect benefit to smallholder farmers and improve regional trade regimes.

Entry Point 3: UNDP-AFIM could provide minimum resources to PanAAC to strengthen its organizational capacity as a regional agribusiness platform. Support could also be given to the Borderless Alliance Project under the West Africa Trade Hub (WATH) to establish a functional secretariat for its smooth operations.

Facilitating and Scaling up Innovative Inclusive Financing Mechanism

Agribusiness financing remains a major challenge for actors within the agro-food industry due to weak de-risking measures including dependency on rainfall, drought, flooding, and price volatility, lack of sector information to financial institutions, persistent credit default rate and financial institutions' weak understanding and lack of expertise to evaluate agribusiness. Emerging trends and successful models, specifically commodity exchange, crop insurance, warehouse receipt systems and guarantee funds have however reduced some of the financing challenges within the sector and further investment to scale up these models will benefit large populations especially the smallholder farmer. The models respond to risk concerns of financial institutions and attract them to provide funding.

Commodity Exchange of Johannesburg Stock Exchange (JSE) provides platform for suppliers and buyers to trade, unlocks private capital for additional development, builds market integrity and confidence and ensures price transparency to benefit smallholder farmers.

Agriculture Insurance is gaining momentum with the support of International Finance Co-operation (IFC). By August 2011, Global Index Insurance Facility (GIIF) under IFC had conferred almost $10million grant to six (6) African countries to expand access to insurance to farmers in Kenya, Rwanda, Mozambique and Francophone West Africa. Under the index-based insurance scheme, losses resulting from weather and catastrophic events are assigned values on pre-defined basis and policyholders qualify for payouts as soon as statistical indexes are triggered.

Warehouse Receipt System offers the farmer immediate market to produce, benefit from future price increase whiles receiving immediate payment from produce. Most agro-dealers in Ghana and other West African countries have increased their supply to farmers due to Guarantee Funds from Melinda Gates Foundation.

Credit Reference Bureau for Smallholder Farmers and Small Scale Agri-enterprises: Majority of smallholder farmers and enterprises are unable to access credit due to minimum credit history. Development organizations, micro-finance institutions tend to have high repayment default rate and beneficiaries take advantage of absence of formal documented credit report to misappropriate schemes designed to provide credit to farmers. Credit Bureau in most African countries tends to focus on urban areas and do not capture development funds. Credit bureau (using ICT and fingerprints) will increase stallholder access to credit, reduce the general over-indebtedness in the economy and support the idea of civil responsibility of the debtors, increase credit activity of the financial institutions and reduce the barriers of the small and medium businesses to get a loan. The consultant highly recommends UNDP-AFIM programme to commission feasibility into the potential benefit of credit reference bureau in increasing smallholder access to finance.

Entry Point 1: The present challenge of warehouse receipt system is to develop regional and national policy guidelines that will allow and encourage public-private investment in the system. UNDP-AFIM should engage East Africa Grain Council, COMESA, CMA and ATP/ ECOWAS to develop regional policy framework to guide investment, sustainability and equity benefit of the system to investors and smallholder farmers. Similar approach could be adopted to scale up establishment of Commodity Exchanges at national and regional levels.

20 The Borderless Project is presently supported by the West Africa Trade Hub. It is a private sector group initiated to dialogue with government to implement cross-border recommendation with the view to reduce cross-cost and harassment, enhance trade and make private sector more competitive

Entry Point 2: AFIM could pilot credit reference bureau in a selected country, assess its impact in enhancing smallholder and micro-enterprise's access to finance and scale up in other countries.

Development of Country Agro-economic Databases

Agro-economic database is one of the pre-requisites for agribusiness investment. Specifically, private sector is interested in soil maps, soil types, topography maps, labour cost in the agricultural sector, vegetation and crop production distribution and any other data to guide the decision of an investor to select countries for investment. Whiles these information may be available, they are always dispersed among Ministries and Departments and more often, it is difficult to obtain the information online. BIDCO, for example, has a challenge of deciding where to place a 20,000ha Oil Palm Production and Processing Facility in West Africa because of lack of this critical information.

Recommendation: UNDP-AFIM could work closely with its Country Offices to pilot test this activity to generate an online information database to provide easy access to agro-economic data.

Growth Corridors and Inclusive Market Development

Growth corridors concept has become an important means to address and respond to inclusive market development. The trade corridor intervention allows easier flow of goods and services, opens markets, reduces border harassments, cost and stimulates emergence of additional agribusiness opportunities along the trade route. Most African cross border and national transport and trade corridors include: mining of minerals, energy exploration (coal, petroleum), and information and communications technology (ICT) investments, financial and capital markets interests as well as other investments from national and international organizations. Smallholder farmers benefit from trade corridor infrastructure not only through regional markets but also feed the staff and families living in the communities within the corridors. Corridors always bring in ICT infrastructure, a critical tool, for the modernization of the African agriculture sector. Transport and growth corridors lead small-scale farmers to producing and marketing in the formal sector in large numbers. Linking agriculture with other industrial sectors attracts the country's youth to live and work in rural areas, therefore, slowing the flight of young people to urban areas.

Challenges

Though trade corridors have significant impact on inclusive market development, corridor projects have generally been slow and cumbersome due to multiplicity of partners, interest groups, huge financial requirements, land ownership among others. Sometimes there are also weak design of the projects to attract the needed financial returns as well the benefits to commercial and smallholder farmers. In the SAGCOT initiative for example,

i. There are very limited investments in commercial Agriculture
ii. With several partners involved in the project, there is the tendency for uncoordinated Interventions
iii. Lack of Access to Affordable Finance
iv. Investment in New Commercial Agribusinesses
v. Challenging Business Environment

Potential Role of AFIM in Growth Corridors

i. Create a Project Facilitating Platform aimed at attracting private sector to dialogue with public sector to accelerate implementation of corridor projects
ii. Synthesize and package specific agribusiness investment opportunities within corridor projects and use its networks to attract private sector investment
iii. Review Growth Corridor projects and assess the level to which inclusive market development models have been incorporated and "Last Mile" Infrastructure challenges addressed
iv. Encourage its bilateral offices to investment in selected components of commodity value chains

Low Hanging Fruits

Over 55 companies and institutions were interviewed during the study and each outlined specific challenges, opportunities and intervention areas to enable it deepen its investment in the agro-food industry. Whiles recognizing the importance of all these enterprises and their request for support to address their key challenges, resources and time constraints will only allow selected projects to receive immediate support whiles further resources are secured to support additional programmes. A matrix of parameters has been used to select "shovel ready projects" and low hanging fruits for intervention. These factors are drawn from individual in-depth-interviews with value chain actors and lessons learnt from African successful agribusiness models. Two strategic intervention models are being proposed: Smallholder Integration into Agro-food Value Chain and Regional Agribusiness Platforms and Bodies.

Table 6: Project Selection Matrix

Project Selection Matrix	
Criteria	**Remarks**
Market Readiness/Demand	Availability of existing market and clear indication/commitment by private sector to buy produce and serve as champions.
Readiness of Private Sector to Engage in Inclusive Market Development	Willingness of the private sector to partner with UNDP to address needs or provide intervention and also make the requisite investments.
Value Addition	The degree to which interventions will add value to existing activities.
Level of Investment Required	The amount of time and money required to make a significant impact.
Regional Outlook and Outreach	Number of countries to benefit and potential for replication.
On-going Project with an Intervention Gap	Project requiring minimum intervention to make a significant transformation; existing support and buy-in by other partners & stakeholders.
The Degree of Inclusiveness	The degree to which interventions will benefit smallholders and the extent to which they will be integrated into the value chain.
Impact	Socio-economic impact on youth and gender towards poverty reduction and hunger eradication
Credible Partnership	Willingness of partners to invest time and resources
Sustainability	How sustainable the project is in leaving long-lasting formidable footprints and becoming self sustaining over a period of time

From the matrix above, the following projects are recommended:

- Cross-border Production Hubs (ASNAPP/ShopRite/NBF/Zenith Bank);
- Nestle-South Africa Grains Expansion Programme;
- Oil Seed Capacity Building Programme in East Africa (BIDCO);
- West Africa Paprika Production Initiative in Burkina and Niger (Burkina Paprika/MCA/CFC/INERA);
- Horticulture Capacity Building Programme in Nigeria: (DanGote, Coca-Cola, CHI Limited);
- Dairy Development Programme in Nigeria (Friesland, Government of Nigeria)

These low hanging fruits are presented below.

East and Central Africa Oil Seed Development Programme -BIDCO

Table 7: East and Central Africa Oil Seed Development Programme

East and Central Africa Oil Seed Development Programme -BIDCO	
Criteria	**Remarks**
Objective	Increase production volume of oil seed crops in Kenya, Tanzania and Uganda to meet demand gap. BIDCO as a leader in oil processing company in East and Central Africa has installed ultra modern processing facilities in Kenya, Tanzania and Uganda where it is investing over $103million in fully integrated edible oil business in Uganda. It is establishing the largest oil palm plantation in Africa, which will eventually cover over 40,000 ha of plantation. BIDCO is the leading marketer of edible oils, soaps and hygienic products in East and Central Africa and distributes its products to more than 14 countries in Africa. It is presently working with over 15,000 smallholder farmers.
Partners	BIDCO is implementing this project in partnership with Wilmar Group, Josovina and ADM. Wilmar Group of Malaysia is one of the largest operators of oil palm plantations in the world. Josovina based in Singapore is the primary exporter of crude oils to East Africa, and ADM based in USA is the largest oilseeds processing entity in the world.
Intervention	High level expertise in oil seed production; transfer of best practices from other countries, farmer mobilization and technology transfer for smallholder producers.
Impact	30,000 jobs to be created; $60million will be saved in Uganda alone as import substitution for crude edible oil.
Entry Point	BIDCO is ready to collaborate with development organizations to provide intervention. Special meeting with the CEO of BIDCO at AFIM's meeting or in Kenya will provide the starting point for discussions.
Contact	Vimal Shah CEO BIDCO; +254 733619444 vimal@BIDCO-oil.com

West Africa Paprika Project

Table 8: West Africa Paprika Project

West Africa Paprika Project	
Criteria	**Remarks**
Objective	The objective of the project is to produce and process paprika in West Africa for increasing demand in regional and overseas market. The project is purely smallholder production base to be implemented in Burkina, Niger and Mali. Initial market assessment conducted by Millennium Challenge Account–Burkina Faso (MCA-BF) has demonstrated the feasibility and competitiveness of the project for at least 5,000ha.
Partners	Burkina Paprika, MCA-BF, Common Fund for Commodities (CFC), INERA, TASHI D'MANGA (Niger). Burkina Paprika has invested over $1m and has already imported seeds and established nurseries for the initial 500ha establishment. MCA-BF has provided support to INERA to conduct further research and CFC has provided $2m to support and assist in farmer mobilization, input credit and land preparation. TASHI will process the pepper into powder for regional and overseas markets. Dynamic Intertrade (South Africa) has issued a letter of intent to buy.
Intervention	Burkina paprika is seeking support to build the capacity of smallholder farmers in production and post-harvest handling techniques, farmer mobilization and business training; provision of quality infrastructure development (drying materials, moisture meters, etc), and highly qualified experts to transfer technologies along the value chain.
Impact	5,000 jobs be created; capacities of 2,000 women producers to be built in production and post-harvest technologies, entrepreneurial and agribusiness skills; $15million income to be generated.
Entry Point	Initial meeting was held between AFIM Burkina, Burkina Paprika and the Consultant to discuss the possible role of AFIM. AFIM could engage a competent service provider, knowledgeable in the paprika production sector to provide technical support to the project.
Contact	Drissa Sirima: Director, Burkina Paprika +22670190000; dsirima@mcaburkina.org

Pineapple Plantation Establishment in Nigeria – DanGote

Table 9: Pineapple Plantation Establishment in Nigeria

Pineapple Plantation Establishment in Nigeria – DanGote	
Criteria	**Remarks**
Objective	Supporting smallholder farmers to increase production volume of pineapple and citrus in Nigeria. The project is expected to produce fruit juice concentrate for the entire West Africa sub-region.
Partners	DanGote, Coca-cola. Dangote is embarking on production of fruit juice concentrate to feed the large market in Nigeria which currently imports all its fruit juice concentrate to feed over 150million people. Coca-cola and CHI Limited have expressed keen interest in buying locally manufactured concentrate.
Intervention	High-level expertise in pineapple production; transfer of best practices from other countries; farmer mobilization and technology transfer for smallholder producers.
Impact	2,000 jobs will be created; fruit production technologies will be transferred to at least 2,000 farmers; there will be import savings and export earnings and upstream employment for over 1,000 people.
Entry Point	DanGote is ready to partner with UNDP-AFIM to provide interventions. Special meeting with the CEO of Dangote is recommended.
Contact	Abdulkarim L. Kaita: Group General Manager; +2348022904405; kaitaal@dansafoods.com

Support Pilot Testing of Including Smallholder to Access Multinational Market Nestle-South Africa

Table 10: Nestle Grain Development Project

Support Pilot Testing of Including Smallholder to Access Multinational Market Nestle-South Africa	
Criteria	**Remarks**
Objective	Support pilot testing of including smallholder to access multinational market. Nestle is constructing over $70million and will be requiring supply of maize, soya beans, Millet, Sorghum.

Partners	Nestle, Potential Support Service Institutions.
Intervention	Nestle is looking for collaborators to pilot test production system using smallholder farmers ahead of their full scale operation next year. It is also exploring the possibility of collaborating with other institutions to provide extension support, farmer mobilization and business training skills for their smallholder farmers. Demand for more product aggregators to play significant role in product mobilization.
Impact	2,000 jobs will be created; fruit production technologies will be transferred to at least 2,000 farmers; there will be import savings and export earnings and upstream employment for over 1,000 people.
Entry Point	UNDP-AFIM to meet with Nestle to discuss potential collaboration and design an intervention plan.
Contact	Motshidisi Mokwena, Stakeholder Relations Manager: +27624688752 motshidisi.mokwena@za.nestle.com

Support Dairy Development Programme of Smallholder to Access Multinational Friesland/WAMCO Nigeria

Table 11: Dairy Project in Nigeria

Support Dairy Development Programme of Smallholder to Access Multinational Friesland/WAMCO Nigeria	
Criteria	**Remarks**
Objective	Support small scale farmers to increase yields and improve quality of milk to access commercial markets
Partners	Friesland; Federal Ministry of Agriculture, Nigeria. Friesland is providing boreholes, cooling trucks, storage tanks and training to the farmers. In addition, it is offering immediate market to the farmers. The Federal Government is also providing additional technical skills to the participating farmers in the 36 states of Nigeria. The project is targeting about 36,000 farmers nationwide.
Intervention	Interventions are required to support farmers with hand-milking machines, milk enhancers, mobile cooling cans, haymaking machines, farmer mobilization and capacity building.
Impact	1,000 farmers are being piloted in all thirty-six (36) States providing initial job for 36,000 smallholder livestock farmers. Long-term import saving of over $1billion.
Entry Point	UNDP-AFIM to meet with Nestle to discuss potential collaboration and design an intervention plan.
Contact	Akinade Samson Adebayo, Dairy Development Programme Extension Services: +234 8024021616 adebayo.akinade@frieslandcampina.com

East Africa Sorghum Value Chain Development Project

Table 12: East Africa Sorghum Project

East Africa Sorghum Value Chain Development Project	
Criteria	**Remarks**
Objective	Improve the level of food security and living standards of sorghum farmers in Tanzania, Kenya and Uganda by a quantitative and qualitative increase in sorghum production. Sorghum is one the strategic commodities in East Africa and demand far outstrip supply. East Africa Grain Council has sorghum as one of the regional commodities for value chain development.
Partners	East African Breweries Ltd, East African Malting Ltd, Common Fund for Commodities CFC), Corporate Advisory Services (Tanzania), Africa Harvest (Kenya), Kenya Agricultural Research Institute (KARI), Critical Mass Growth, (Uganda), International Crops Research Institute for the Semi-Arid Tropics (ICRISAT).
Intervention	Introducing new sorghum varieties and cultivation practices; organizing and strengthening producer-groups, facilitating access to inputs and credit; introducing out-growers schemes by facilitating collaboration between medium and large commercial farmers and surrounding groups of smallholder farmers; and strengthening private sector input providers and intermediary long-distance traders through the facilitation of contractual arrangements, introduction of ware-house receipt credit and other credit provisions and business development training.
Impact	5,000 farmers generating about $10 million in cash income annually
Entry Point	UNDP-AFIM to meet, review proposal submitted, discuss potential collaboration and design an intervention plan.
Contact	Dr. Hendrik C. Knipscheer, Managing Director & Economist; Tel: +32 (0)2 649 0655 hknipscheer@eucord.org

Regional Market Development Using Intensive Production Technologies

Table 13: Intensive Development Technologies

Regional Market Development Using Intensive Production Technologies	
Criteria	**Remarks**
Objective	Support production and market development of indigenous and specialty vegetables for supermarkets; ensure food security, employment and income. Meet the market needs of buyers whiles providing income for farmers
Partners	ASNAPP/ShopRite/NBF/Pick n Pay/Government/Zenith Bank
Intervention	Provide intensive production technologies to smallholder farmers; establish linkages between producers and buyers using lead farmer approach, link producers to micro-finance institutions and input suppliers.
Impact	5,000 jobs be created; technology for intensive vegetable production transferred; sustainable business established.
Entry Point	UNDP-AFIM to meet with ASNAPP and other partners to review approach and design of the project
Contact	Elton Jefthas: ejefthas@sun.ac.za; Tel: +27823313979

Institutional Mechanism for AFIM's Operations

Several mechanisms can be used by AFIM to implement its programmes. However, the following five mechanisms are recommended for immediate adoption. In addition, AFIM's secretariat will continue to facilitate, coordinate, monitor programmes, mobilize resources, identify strategy partners and roll out initiatives in support of its objectives. It will however be imperative for the secretariat to have regional coordinators and project champions among their core team.

Working through Existing Regional Institutions

There are regional institutions already operating in the agro-food industry. Whiles UNPD may have its own capacity-building experts and structures, collaboration and partnership with these institutions will leverage resources and make better impact. GIZ, CMA, are some of the regional institutions involved in value chain capacity building programmes. ROPPA and SACAU are regional FBOs in Western and Southern Africa respectively. AFIM could also work with NGOs having regional presence and dealing directly with farmers.

Appointing Implementing Institutions

For projects-based activities, AFIM could appoint and directly resource an implementing institution to deliver specific services within the value chain. Such institutions should have proven track record and minimum overhead cost. This approach could be used for implementation of the low hanging fruits as well as scaling up the successful models recommended above. AFIM will play a monitoring and oversight role and use its clout to leverage strategic partnerships, buy-ins of other development organizations and large scale operators to participate in the programme.

Using In-house structures and Systems

In most of the activities that require facilitation, advocacy and partnership building, AFIM could use its in-house structures for implementation. Trade corridor facilitation, implementation of regional agricultural programmes and pilot testing projects are some of the activities recommended under this implementing mechanism.

Outsourcing Experts/Consultants

This approach should be adopted for implementation of one-off or specific activities. These experts can be engaged to play supervisory, monitoring and coordinating roles between implementing institutions and AFIM. The consultants would be expected to provide expert advice to the implementing partners.

Using Agribusiness Platform and Project Facilitating Platform

These platforms normally comprise of private sector companies who identify common constraints and opportunities. These platforms could be used to play advocacy role in trade, policy and public investment in agribusiness.

Chapter 9
ANNEXES

ANNEX 1: Profiles of African Successful Inclusive Market Development Models

BOX 4

Smallholder Inclusive Backward Integration Model

SHOPRITE AND WALMART SUPERMARKETS

The fresh vegetables trade is now very much a "buyer-driven" global commodity chain. In such chains, retailers play the key role in governing the chain of activities that link widely dispersed producers to consumers. The trend is increasing towards contract farming for specific retail outlets. The supermarkets are effectively "raising the game", in terms of buying conditions related to quality, packaging, volumes, frequency of supply and payment methods.

The emergence of ShopRite and Wal-Mart has provided ready and lucrative market for farm produce at premium price and profit thereby improving the incomes for smallholder farmers and farmer based organizations. ShopRite, Wal-Mart and other supermarkets are identifying and ameliorating technical gaps enabling producers and input suppliers to become and remain competitive. Not only do Wal-Mart and ShopRite improve product sourcing and flows but it develops the capacity to define, communicate, and enforce product quality standards. Similarly, producers gain from selling their produce directly to Wal-Mart and Shoprite and have developed the capacity to use their knowledge of good agricultural practices to adapt to new requirements and demands and share information with other growers.

The Business Model
Shoprite which is represented by Freshmark in the vegetable procurement process is driven by quality control needs. In order to ensure this, Freshmark is sometimes compelled to supply farmers with free vegetable seedlings that are desired by Shoprite. Such farmers are therefore obliged to sell the produce to the supermarket chain, thus creating some sort of an out-grower arrangement.

Through this model, ShopRite is working with 400 farmers to produce on 405 ha of land. The programme enables small-scale farmers in Boane, 30 km south of Maputo Mozambique to cultivate cabbages, potatoes, tomatoes and other cash crops in the rehabilitated irrigation schemes which have increased income by 5%. Shoprite is now purchasing 25% or produce locally.

Wal-Mart Inclusive Business Model
Wal-Mart employs the lead farmer approach which entails identifying farmers in a community that are immediately willing and able to implement technical recommendations and production techniques and persuade and assist neighbouring farmers in upgrading their production systems. Wal-Mart relies on other service providers to partner in such model.

As lead farmers adopt good agricultural practices, they improve yields and sales. In this case, lead farmers are also connected to a new buyer of their produce. Trainings are organized on a case-by-case basis depending on the needs of individuals and groups of producers. To ensure optimum technical support, technicians generally maintain continuous contact with lead and beneficiary farmers via phone and in-person farm visits. Lead farmers also assist in providing technical assistance to beneficiary farmers.

Presently, Wal-mart has indicated that it will allocate over $1billion of its purchases to supplies from smallholder farmers.

BACKWARD INTEGRATION

COCA-COLA EAST AFRICA PASSION FRUIT AND MANGO PROCESSING

Introduction
As global and local demand for fruit juice grows, there is a critical need to increase production. Small farmers can benefit from this increased demand by supplying fruit that meets the needs of local buyers such as Coca-Cola. Through this partnership, farmers are able to access market of multinational companies. This partnership will also serve as a model for Coca-Cola as it grows its juice business in other markets for replication.

Motivation for the partnership
The partnership aims at fostering economic empowerment across the globe by investing in farmers to reduce poverty and build sustainable communities. It intends to; Empower small farmers to increase productivity, improve crop quality and access reliable markets to address hunger and poverty; Provide farmers with the tools and resources that can help revitalize African agriculture and increase opportunities for small farmers to better their livelihood. For Coca-Cola, it is designed to meet its raw material needs and reduce its operational cost. It allows the company to contribute to governments' export diversification, poverty reduction and employment creation strategies.

Roles of Partners

Bill Gates Foundation: Provided grant of $7million to TechnoServe to provide technical support to about 50,000 farmers in Kenya and Uganda.

TechnoServe: TechnoServe will train participating farmers in improving quality, increasing production, getting organized into farmer groups, and will facilitate access to credit.

Coca-Cola and Sabco: Provided $3million and $1million respectively; provided assured market for farmers and opportunity to access credit.

Farmers: Provide land, labour and raw materials.

Governments: Provided the needed policy incentives and support farmers to increase production.

Unilever: Buaben Oil Palm Out-Growers Scheme In Ghana
Unilever Ghana was challenged with coordinating many suppliers, weak supply chain capacity to engage directly with the producers, poor quality products, low supply quantity, quality certification. Oil palm producers were also saddled with land ownership c, securing capital to meet upfront expenses, getting good technical and market information, balancing cash and food crops and coping with market risk.

Motivation: The farmers were assured of access to market, credit, increased profitability whiles Unilever received consistent raw material supply, meeting corporate social responsibility and its Sustainable Development Strategy, and responding to current increasing demand for crude palm oil. The Government of Ghana and development partners were motivated by job and employment creation, income generation, rural economic development.

Role of Stakeholders: Agence de France Developpment (AFD provided €6.624m (66%) to invest in plantation development, infrastructure development (roads, electricity), support to farmer organization and capacity development and also applied research.

National Investment Bank (NIB) facilitated the credit to the farmers under the guarantee of Unilever and AFD. The Government of Ghana invested approximately 7.3% in the plantation development and also 39% in road infrastructure development.

The chief and people of Buaben released a 3,000 acre block land for the project.

Unilever Ghana invested 11.1% of the total project finance towards extension service and 6% of the infrastructure development. It also provided sustainable market opportunity, fair and stable pricing to the farmers and sustainable extension services to maintain the plantation.

The farmers invested through lands and labour making a contribution €445,000. Overall, the total investment of farmers was 4.4% of the €10.155 million project.

ANNEX 2: Summary of Field Programmes

KENYA FEDERATION OF AGRICULTURAL PRODUCERS (KENFAP)

KENFAP is a farmers' organization representing 1.8 million farm families out of the 8 million farmers in Kenya. It has 50 area branches, employs over 50 District Coordinators and has 35 Commodity Farmers Association. KENFAP works with the Kenya Commodity Exchange, the Ministry of Agriculture and has partnership with UNDP-Kenya. Their operations are on strategic plans and they are currently on a strategic plan called; "Enriching the Farmer's Voice". KENFAP's programmes mainly focus on the Agric value chains; training farmers on the value chain and linking farmers to value chain actors.

Projects
- Biogas Project supported by the Ministry of Foreign Affairs in Netherlands.
- Implementing a project called 'Farmer Empowerment'
- Promoting and support potato and mango value chains
- Reaching out to farmers through radio via the universities with extension programmes
- Formation of commodities associations and linking smallholder farmers to buyers
- Experimenting a collection centre/connection centre in maize value chain
- Supplying farm inputs-fertilizer, seeds, white sorghum and standard packaging materials

Roles
- Provide technical support services to various farmer groups
- Implementing various programme including World Bank supported programme in Biogas
- Train farmers on value chain and link them to various actors
- Coordinate Potato value chain committee on the Potato Council
- Link smallholder farmers to buyers

Incentives
- There is an immediate need for the establishment of Collection Centres for selected commodities. The Collection Centres will serve as a point of aggregation where smaller volumes of produce can be mobilized and consolidated; feed into the Warehouse Receipt System.
- Key intervention areas for additional partnership include inputs supply, facilitating market linkages and establishing collection centres for storage

Opportunities
- Scaling up potato seed production project
- Supporting the establishment of collection centres for maize bulking
- KENFAP is establishing cereal banks in maize growing areas to address issues of aflatoxins
- The 'UZAMAZAO': Smart Phone base support for market linkages

Areas for intervention
- Providing infrastructure for collection centres and organising farmers
- Establishing cereal banks

LA CONFÉDÉRATION PAYSANNE DU FASO (CPF) – BURKINA

CPF-Burkina is an association of 9 federations with about 9million members. The federations are independent but can consult CPF on matters that require intervention. Their mission is to promote the interest of its members and influence government policies including land reforms and fertilizer subsidies.

Challenges
- High interest rates on bank loans and short repayment period
- Burkina depends largely on rainfall and so climatic conditions affect the production of farmers

Interventions areas

Sale of fertilizers should be centralised so there are checks and balances on the prices

FRESH PRODUCE EXPORTERS ASSOCIATION OF KENYA (FPEAK)

FPEAK is an association of growers and exporters working with 150,000 farmers of which 50,000 are registered for Kenya GAP training. FPEAK links their members to exporters and assists members to develop and implement quality assurance systems to exporter's demands.

Key activities

Group Formation, Quality Management Systems, training on KenyaGap implementation, Marketing Support, Market survey, Business-to-Business Alliances for exporters – FPEAK assists members to improve their market share and maintain market access. FPEAK has a code of conduct which encourages farmers to maintain good agricultural standards for sustainability of production. This code of conduct is in line with Global GAP and KenyaGap. FPEAK also organises mass trainings and these trainings are targeted at HORTIFAIR an event where all stakeholders come together for massive trainings and seminars on good agricultural practices. FPEAK has been contracted by NAKUMAT to undertake an analysis of their food safety system in NAKUMAT.

Challenges

- Training resources are limited
- There is difficulty in mobilizing groups and moving to new areas where farmers have little or no know-how

EASTERN AFRICA GRAIN COUNCIL (EAGC)

EAGC operates in 9 countries namely; Kenya, Tanzania, Uganda, Rwanda, Burundi, DR Congo, Sudan, Mali, Zambia, Ethiopia with a focus mainly on grains although they deal with staples on a few occasions.

They have a whole spectrum of the value chain in their membership including producers, farmers and millers

Activities

- EAGC's key role is developing products, branding and targeting difficult markets.
- Reduce the cost of transaction at the trade level
- Work with partner institutions in order to reach farmers and are currently reaching out to rice, sorghum and wheat farmers.
- EAGC addresses issues on capacity building on subjects such as standards, post harvest handling, aggregation and good governance.
- Develop and work with partners to have structured trading in grains.
- Develop standards for East African grain markets
- Ensure access to the warehouse receipt system.

Challenges

- There is a low supply of raw materials; insufficient grains and agro-inputs; unfavourable trade regimes, export bans and import duties.
- Sanitary and Phyto-sanitary issues
- Financing Cycles – Most of production in Kenya is one season because the country is big and has different ecological zones
- There are no standards in the agro-food industry

Interventions required

- Aggregation centres should be properly organised
- Legislation should be put in place for the warehouse receipt system outside grains (e.g. coffee, cotton)
- There is the need for rural infrastructure and market information systems to provide support

ROPPA

ROPPA established in 2000 is an Organization of farmers with members in 14 countries. Their vision is to promote farmers' agriculture in West Africa.

Activities

- Information dissemination
- Policy Advocacy
- Farmer Mobilization

Interventions

Enforcing implementation of ECOWAS and other regional policies

NESTLE – SOUTH AFRICA

Nestle is the world's leading Nutrition, Health and Wellness company with a mission to provide consumers with the best tasting, most nutritious choices in a wide range of food and beverage categories and eating occasions, from morning to night. The Company is reinforcing its commitment to emerging markets by investing more than ZAR 390 million in the construction of two new factories in Gauteng, creating a total of 230 permanent jobs. It has invested a further ZAR 106 million in the recent acquisition of Specialized Protein Products, a soya processing company located in Potchefstroom, in the North West Province.

Roles

- Provides healthy food to consumers market for suppliers
- Provides infrastructure for their suppliers including processing equipment and electricity
- Supports smallholder farmers especially women
- Creates sustainable living for rural communities
- Advocates for government to provide road access and other public goods to rural communities
- Nestlé helps farmers and smallholders to improve crop quality

Incentives

- Population growth providing additional demand for products
- Increasing income levels of consumers
- Increasing demand for healthy food
- Demand for ready to eat food and expansion of convenient stores
- Well-organized farmers and suppliers to ensure supply

of critical mass of produce, reducing transaction cost and fostering transfer of technologies

Opportunities for collaboration

- Nestle is looking for collaborators to pilot production system ahead of their full scale operation
- It is exploring the possibility of collaborating with other institutions to provide extension support, farmer mobilization and business training skills for their smallholder farmers.
- They require large volumes of maize, soya beans, millet and sorghum.
- Nestle requires private investment in warehouses at production centres and demand more product aggregators to play significant role in product mobilization

Interventions

- There are weak extension support services and this puts pressure on Nestle to provide its own extension support
- The capacities of smallholder farmers need to be built to understand market requirements including TRACEABILITY and enhance their productivity using appropriate technologies to respond to emerging developments.
- Nestle is unable to obtain needed volumes
- There is the need for government to provide set of public goods to stimulate private investment and ensure that food can be produced and sold
- Support harmonization of SPS and other export/import requirements

JOHANNESBURG STOCK EXCHANGE

Provide platform for suppliers and buyers to trade with a focus on maize, wheat and other cereals. Unlocks private capital for additional development and builds market integrity and confidence. It ensures price transparency to benefit smallholder farmers.

Incentives

- Government to set the rules to enable smallholder farmer participation
- Government to provide trade related infrastructure including warehouses and irrigation
- Government to set rules on how Warehouse receipt systems could be accredited and lay the rules under which it should operate otherwise it will lose its integrity
- Government should have a stake but not be dominant

Opportunities

- Developing educational programmes for value chain actors and public sector institutions on how Commodity Exchange operates.
- Facilitating dialogue between operators of JSE and Government and guiding government on how it could play a regulatory role, enabling environment and infrastructure to support Commodity Exchange Programmes.
- Supporting and engaging private sector to invest in Warehouse Receipt Systems which have direct benefits to smallholder farmers.
- Replicating and adapting Commodity systems in other countries
- There is the need for private warehouses to operate warehouse receipt system which can feed into the Commodity Exchange providing direct benefit to the smallholder farmer
- There is also an emergence of Multi-Country Exchange Commodity (Indian Commodity Approach)

Challenges

- JSE is largely localized due to South Africa's foreign exchange control
- Government policies do not align with private sector interest (political vs economic horizons)
- The government is not educative enough on trends and functions of the JSE
- Farmers, millers, policy makers, the media and service providers have a weak understanding of how Commodity Exchange works and how smallholder suppliers can benefit from the Exchange
- There is government interference in the price system

BIDCO

BIDCO Oil Refineries Ltd. was originally established as a manufacturing organization, committed to using the most efficient modern technologies to produce a superior range of products. Over the years BIDCO successfully won over the market to become the largest and fastest growing manufacturer of vegetable oils, fats, margarine, soaps and protein concentrates in East and Central Africa. BIDCO markets the largest and widest range of quality edible oil and hygiene products in East and Central Africa.

Incentives

- To be able to change agriculture into agribusiness
- Develop strategies to de-risk agriculture
- Adopt market-first approach to design agribusiness programmes
- Employ the use of ICT to transfer information, audio visuals and video lectures for farmers

Challenges

- Country Readiness": Soil maps and agro-climatic data are not readily available to enable agribusiness entrepreneurs make immediate informed decisions. Long transaction time and high cost of transaction
- Extension services are the weakest in the value chain support services
- Scientific farming methods
- Getting right type of planting materials and increasing its availability

YARA – GHANA

YARA International ASA is a global chemical company that converts energy and nitrogen from the air into essential products for farmers and industrial customers. Their industrial product portfolio includes environmental protection agents with a range of applications. YARA is the world's leading producer and supplier of mineral fertilizers with direct presence in over 65 countries worldwide, employing over 7,500 people and having sales and marketing networks in more than 120 countries across 5 continents.

Activities

- YARA has crop nutrition programs for all major crops, combining fertilizer application and crop knowledge
- YARA has agronomists on field in 50 countries with trials around the globe coordinated by own research centre in Germany

Challenges

- The Illiteracy level of farmers is high (farmers need training on how to use fertilizers)
- Affordability of products
- Markets for farm produce: Farmers are reluctant to use agro-input if markets for produce is not assured
- Poor road networks

NANKOSEM

Imports and sells only vegetables seeds with Technisem as their supplier and provides training to their customers on how to handle and store the seeds. The principal objective is to provide good quality vegetable seeds to customers.

Challenges

- High cost of maintaining quality standards
- Farmers have low spending power and Nankosem therefore has to maintain a stable and affordable price of seeds on the market.
- Government policies and high duty/tax paid at customs when importing and exporting seeds.
- Unstable foreign exchange rates

Interventions

- Government should have policies that encourage the agricultural sector
- Tax on seeds and farm inputs should be low
- Government should provide subsidies on seeds, fertilizers, pesticides and reduce taxes paid by agro-industries

CHEMICO Ghana

Chemico is engaged in: Agricultural Products, General Animal Feed, Chemical Manufacturers & Suppliers, Fertilizers & Pesticides

Incentives

Strengthening of chain of distribution purely on commercial lines (e.g. providing credit)

WIENCO – GHANA

Wienco (Ghana) Limited established in 1979 is a joint venture Ghana-Dutch Company involved in businesses in the Agricultural sector. Wienco's focus is on maize, cotton and cocoa. Wienco markets maize for their farmers and also provides farmers with shellers. They are currently working with about 4,000 farmer groups in the Western Region, Ghana with an aim to push small farmers to go commercial. Wienco assists in the group formation.

Activities

- Importation and distribution of agricultural inputs.
- Providing fertilizer inputs, credit facility and training to farmers

INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT (IFAD)

IFAD'S mission is to enable poor rural people to overcome poverty. Working with rural poor people, governments, donors, non-governmental organizations and other partners; IFAD focuses on country-specific solutions which can involve increasing rural poor peoples' access to financial services, markets, technology, land and other natural resources.

Activities

- Collaborating with retailers to challenge banks to develop innovative financing packages to support farmers
- Reducing investment risk by providing Purchase Agreement with smallholder farmers

Challenge

- Developing technologies and programmes to reduce waste of produce (account for more than 30% of

production)
- Develop policies and innovative packages to mitigate the exposed risk of financial institutions

ALLIANCE FOR GREEN REVOLUTION IN AFRICA (AGRA, KENYA)

AGRA works to achieve a food secure and prosperous Africa through the promotion of rapid, sustainable agricultural growth based on smallholder farmers. AGRA is setting up an institution of Arbitrators to help farmers manage contracts.

Incentives

- AGRA seeks for more partners to scale up its implementation programme
- There is a need for harmonization and investment into warehouse receipt system
- Innovative funding is required for warehouse receipt system
- The capacities of farmers need to be built
- Support required to champion policy dialogue, regulation and appropriate national and regional guidelines for successful implementation of warehouse receipt system
- Establishing FOSCA, Farmer Organization Support Centre in Africa
- Private sector investment opportunities exist in processing infrastructure and irrigation
- Capacity building:- UNDP to collaborate with AGRA to supervise and provide advice so that expected outcomes are achieved.

Challenges

- Ensuring that cooperatives remain sustainable to be able to provide service to their members.
- Addressing issues related to weak infrastructure, poor leadership, government interference.
- Identifying alternate products to supply the feed industry
- Managing the warehouse receipt system

NEPAD BUSINESS FOUNDATION (NBF)

Established in 2006, NBF focuses on how the private sector can be engaged to support the NEPAD Agenda. NEPAD Business Foundation (NBF) brings together high level agribusiness firms and pulls resources to support downstream activities that accelerate the development of the value chain. The NBF focuses on infrastructure gap, capacity building, resource mobilization and technology transfer mainly in Southern and Eastern Africa corridors and has been endorsed by AUC/NEPAD to support CAADP process. It is presently working with ASNAPP and QC Fresh to expand the Fresh Vegetable project in Livingstone to include Botswana, Namibia and Zimbabwe; and ILLOVO on alternate energy project with rural communities.

Roles

- Removing barriers to transform rural agriculture with focus on smallholder farmers and agro-entrepreneurs.
- Linking smallholder and Agri-entrepreneurs to the entire value chain
- Developing private sector voice and dialogue along the value chain; setting up a dialogue platform
- Attracting investment into identified opportunities and setting up an innovation fund for small farmers to purchase relevant technologies and pay over time under the project
- Building Capacity; develop supply chain entrepreneurship programme with selected Universities

Opportunities

- Removing barriers/binding constraints/bottlenecks for the development of trade, agriculture and infrastructure
- Developing fresh produce hub and agro-processing centre.
- Exploit Last-Mile Power Solutions that would include alternative energy solutions
- Possible Collaboration/Stakeholders: ASNAPP, NBF, QC Fresh, AFIM

Intervention

- Expanding the concept and operations into other sub-regions
- Securing additional partnerships to be able to implement programmes at grassroots
- NBF needs capacity support with CEP Agri-Mozambique

TECHNOSERVE – KENYA

TechnoServe helps entrepreneurial men and women in poor areas of the developing world to build businesses that create income, opportunity and economic growth for their families, their communities and their countries.

Activities

TechnoServe has a customised programme called "African Alliance for Improved Food Processing". Their drive is the value added approach and their partner is General Mills Inc (GMI) and USAID. Five (5) countries in South West Africa are involved (Kenya, Zambia, Malawi, Ethiopia and Tanzania) and TechnoServe is looking at the value chain in each country.

THE AFRICA ENTERPRISE CHALLENGE FUND (AECF)

The core business of AECF is providing grants and loans to enterprises and projects. Agribusiness is the biggest part of their investment portfolio and 45 out of the 57 investments made in 17 African countries are agribusinesses. The focus of AECF is to improve Agribusiness Market System for the poor. It also organizes agribusiness consultants and works with technical teams to provide monitoring support to funded programmes.

Opportunities
AFIM can offer support in the form of technical assistance programmes to AECF beneficiaries

Challenges
- Investors perceive agribusiness as not attractive
- Agribusiness is not an area that attracts young African intellectuals
- Accessing land is difficult
- There is a lack of skilled and competent people
- Government policies are sometimes vague and inconsistent

ABSA (AGRIBUSINESS UNIT)
Provide financial support to value chain actors, financial guidance to investors and people seeking financial assistance and supports value chain development.

Incentives
- The need to develop value chains that stimulate demand
- Proper layout of risk reduction measures including irrigation, infrastructure and establishment of crop insurance
- Identified buyer with known price and proper pricing mechanism and good pricing strategies
- Interested in financing groups or value chains more than an individual farmer
- Investment in value chain infrastructure
- Supporting local processing factories

Opportunities
- Designing programmes to build the capacities of smallholder farmers to understand value chain
- Supporting smallholder farmers to participate in value chain
- Dialoguing with government to create market based on long-term planning
- Integrating secondary industry into primary industry
- Supporting government to design programmes aligning manufacturers and producers

Challenges
- Land reform and land tenure system in South Africa is not the best. Land donated by government can be left without it being cultivated
- Farmers' attitude of FREE support and supplies
- Political interference such as price controls and export bans
- Banks require time to build relationship and understand a particular value chain which is not convenient with the private sector
- There is a high production risk including dependency on rainfall (inadequate irrigation system and climatic condition
- Market Risk: Instability of prices

Input
- Support must be given to "Industry" for the industry to pull the smallholder along the value chain
- The more the value chain is developed, the better it is for financing
- Banks require to see and understand the links within the entire value chain before financing
- Public will is very important in value chain development
- Africa farmers do not practice economy of scale

SODEPAL – BURKINA (Small scale agro-processor)
Challenges
- Problem with climate
- There is a need for capacity building and development of appropriate technologies
- Small organizations find it difficult to secure micro-finance compared to the big organizations
- High interest rates (up to 16%) and lack of collateral
- Infrastructural problems

ETALON – BURKINA
ETALON is a milling company with a work force of 2062. It processes 190 tons of flour a day and intends to double this capacity by the end of 2012.

Challenges
- Government does not control prices officially however when there are problems there is the need for government to intervene
- Burkina has no harbours hence there is high transportation costs

PAN AFRICA AGRIBUSINESS & AGRO-INDUSTRIES CONSORTIUM (PANAAC)
PanAAC is a private sector driven platform bringing together agribusiness and agro industry value

chains and support services to enable them access information, knowledge, strategic partnerships and financial remediation. Their strategy is to mobilize and create a network comprising input suppliers, producer organizations, processors, packagers, logistic providers, wholesalers, and retailers, financiers, exporters, and business development providers.

Roles

- Provides platform for private sector agribusiness entrepreneurs to meet and strategise for investment
- Provide opportunity for public sector to engage private sector for development programmes and policy formulation

Opportunities

- Mobilize agribusiness SME's and link them with commercial processing companies
- Provide significant input and strategic direction, and foster public private dialogue
- Provide investment opportunities for its members

Challenge

- Initial secretariat set up and coordination

KENYA AGRICULTURE COMMODITY EXCHANGE LTD. KENYA (KACE)

It's a social enterprise which provides market support services to smallholder farmers. It presently operates in Nairobi and works with institutions such as KEYFAP, SAFARICOM, AIRTEL and ADITEL among others.

Roles

- Provides market information to smallholder farmers through various platforms including: market resource centres, mobile phone SMS platforms, interactive voice responses, radio and internet-based market information centres.
- It has established a market call centre dubbed: "Supermarkets on Air" and partners with SAFARICOM, Airtel and Aditel in delivering its services.

Incentives

- KACE has completed the pilot phase and would want to scale up the technology which is easily replicable and promote SMS and market call centres
- KACE is presently localized in Nairobi and will want to expand to other parts of the country to scale up operations to benefit wider part of the population

Challenges

- KACE requires resources to expand programmes to other parts of the country.
- Frequent government interference does not allow for a free market system. The interference affects private sector confidence in long-term investment in the agribusiness sector
- There are low volumes of produce to support Commodity Exchange Programme and Warehouse Receipt System
- There is also the lack of harmonization of SPS within the region

GIZ-KENYA

GIZ-Kenya works on agricultural value chains with public and private sector institutions. It supports service providers to implement value chain activities and is presently focusing on Mango, Passion Fruit, Irish and Sweet Potatoes, Beef, Fish, Poultry and Dairy products. It monitors service providers who have received support from GIZ and provide Guarantee Risk Fund as part of strategies to reduce risk, interest rates and processing fees.

Incentives

- Seeking for collaborators to invest in other parts of the value chain through public private partnership. Key among value chain intervention for private sector is infrastructure development.

Challenges

- Ability to identity reliable service providers
- Weak capacity of the service providers to deliver efficient and effective services
- Poor resources of the service providers
- Poor enabling environment

FRIESLAND-NIGERIA

Friesland has signed a memorandum of understanding with the Federal Ministry of Agriculture, Nigeria to increase the quality and yield of milk with smallholder cattle farmers. The project is expected to cover over 36,000 farmers in Nigeria and be replicated in other countries.

Activities

- Training on quality hygienic procedures, milk collection and handling
- Provide veterinary and extension services
- Mobilize farmers into groups and provide assured market for farmers
- Provide bore holes and milk cooling tanks

Challenges

- Availability of Milk collection cans, hay-making machines, milk replacers
- Support farmer mobilization and extension support
- Access to affordable feed

References

African Development Bank Group Ghana (November 2002), Agricultural Sector Rehabilitation Programme Performance Evaluation Report (PPER).

Arie Kuyvenhoven (2007) Development Economics, Wageningen University AFRICA, AGRICULTURE, AID.

Business Trends Magazine (August 2009). Africa Becoming Leading Foreign Investments for U.S.

CAADP NEPAD Secretariat (2009). Comprehensive African Agricultural Development Programme, Annual Report.

CAADP PILLAR 2 Frameworks (April 2009). Framework for Improving Rural Infrastructure and Trade Related Capacities For Market Access, FIMA.

CAADP Review Report (2009). Renewing the Commitment to African Agriculture. NEPAD Planning and Coordinating Agency.

D. Zhihua Zeng (2006). Knowledge, Technology and Cluster-based Growth in Africa Findings from Eleven Case studies of Enter¬prise Clusters in Africa, WBI Development Study.

Dan Acquaye, 2009. West Africa Regional Agricultural Investment Plan.

DDRN and FOI (2009). Report from the FOI Thematic Seminar on Agribusiness in Developing Countries.

Demo P. (2010). Effects of Different Seed Tuber Sizes on Potato Yield (Solanum Tuberosum L.) M.Sc. Thesis. University of Ibadan – Nigeria. 103pp

Demo P. et al (2006). The Potato Sub-sector and Strategies for Sustainable Seed Production in Angola. Report of a Three-week Rapid Potato Sub-sector Study Conducted from August 21–September 13 2006.

Diao et al (2008). Accelerating Africa's Food Production in Response to Rising Food Prices Inputs and Requisite Action.

East Africa Community (EAC) Report (June 2006). Private Sector Development Strategy (PSD).

ECA-FAO-UNIDO (March 2010). Working Lunch on Public Private Partnerships in Agribusiness and Agro-industry Development in Africa through Regional Value Commodities Chains.

ECDPM Discussion Paper (May 2010). Agricultural Trade Adjustments. Lessons from SADC Experiences

ECOWAS Agricultural Policy (ECOWAP)/Comprehensive African Agriculture Development Programme (CAADP).

EMRC Report (2009). EMRC Agribusiness Forum Report.

F. Bonaglia, and K. Fukasaku (2003). Export Diversification in Low-income Countries: An International Challenge after Doha, OECD Development Centre Technical Papers, 209, June 2003.

Fan et al, (2008). Investing in African Agriculture to Halve Poverty by 2015. IFPRI Discussion Paper 00751. International Food Policy Research Institute.

FAO (2003). International Rice Commission Newsletter.

FAO (2005) UNIDO Agro-industries for Development, Statistical Data.

FAO and UNIDO (2009). Agro-Industries for Development.

FAO- Fertilizers, Food Production and Poverty Eradication in Africa 20/10/2010

FAO MEDIA CENTER (2011)-Closing the Gender Gap in Agriculture

FASDEP II Ghana (October 2009). Support to the Successful Implementation of the Ghana Food and Agriculture Sector Development Policy.

FEED THE FUTURE (FTF) (2010): West African FY Implementation Plan

FEED THE FUTURE (FTF) (May 2011). Global Food Security Research Strategy

Gauteng Enterprise Propeller (March 2009). SA Market Summaries.

http://www.africanagricultureblog.com/2007/07/malawian-company-to-export-chillies-to.html

http://www.afriqueavenir.org/en/2011/03/15/expansion-of-sugar-production-in-africa

http://www.dfid.gov.uk/r4d/news.asp?ArticleID=50799 CIAT/IFPRI Sustainable Agriculture 26 August 2011

http://www.fastmoving.co.za/ 2011

http://www.trademarksa.org/news/regional-sugar-crisis-takes-bitter-turn-states-mull-369m-import-bill March 2011.

IFC business of Health in Africa Sec.3

Jaffee, S.(2003). From Challenge to Opportunity: The Transformation of the Fresh Vegetable Trade in the Context of Emerging Food Safety and Other Standards, World Bank PREM Trade Unit (draft): World Bank, Washington D.C.

Lions on the Move (June 2010). The Progress and Potential of African Economies

Maunder B. 2006. "SORGHUM: The Global Grain of the Future

N. Reinhardt (2000). Back to Basics in Malaysia and Thailand: The Role of Resource-based Exports in Their Export-led Growth, World Development Report.

NAIP 2011-2014. ECOWAP/CAADP Process National Agricultural Investment Plan (NAIP).

NEPAD (2005). Framework for the Improvement of Rural Infrastructure and Trade-related Capacities for Market Access (FIMA).

OCOD January (2000). African Development Bank, African Development Fund; Agriculture and Rural Development Sector Bank Group Policy.

OECD Development Centre (2007). Business for Development: Fostering the Private Sector, Paris.

Overview of Economic and Social Conditions in Africa (2009) Meeting of the Committee of Experts of the 3rd Joint Annual Meetings of the AU Conference of Ministers of Economic and Finance and ECA Conference of African Ministers.

Prof. André Louw (January 2011). Agribusiness linkages in the Southern African Region: Small Farmer Participation.

Regional Agricultural Policy for West Africa: ECOWAP. Making Agriculture Lever of Regional Integration.

Regional Partnership Compact for the Implementation of ECOWAP/CAADP.

Report by UNIDO Office (Nigeria 24th March 2011). 3ADI: Report on the Proceedings of 3ADI Implementation Consultative Meeting Abuja, Nigeria.

Richard Mkandawire. The Africa Agriculture Development Programme (CAADP): Window for the Restoration of Market Opportunities for African Agriculture.

SADC Regional Agricultural Policy (January 2011). Country Summary Agricultural Policy Review Reports.

SADC. Regional Indicative Strategic Development Plan.

UNDP Private Sector and Inclusive Market Development in Africa. Business Fighting Poverty.

UNIDO (May 2011). Agribusiness For Africa's Prosperity.

UNIDO Statistical Database 2005.

United Nations (April 2007). DESA, Industrial Development for the 21st Cen¬tury: Sustainable Development Perspectives.

USDA (July 2011). Rural Development Feasibility Study.

Washington DC et al (2006). The Role of Agriculture in Poverty Reduction: An Empirical Perspective. World Bank Policy Research Working Paper Series No. 4013.

WB Group Report (October 15, 2001) Promoting Agro-enterprise and Agro-food Systems Development in Developing and Transition Countries towards an Operational Strategy for the WB Group.

World Bank (2008) The World Development Report, Agriculture for Development. World Bank, Washington DC.

Empowered lives.
Resilient nations.

United Nations Development Programme

7 Naivasha Road
Private Bag X46
Sunninghill 2157
Johannesburg
South Africa

www.undp.org/africa/privatesector