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ACCELERATING AGRIBUSINESS AND AGRO-INDUSTRIES DEVELOPMENT IN AFRICA:

Resource paper for UNIDO/FAO Expert Group Meeting*

UNIDO/FAO Expert Group Meeting on
Agribusiness and Agro-industries Development in Africa

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Abstract

This resource paper serves as a basis for discussing a policy agenda and programme initiatives for accelerating Africa's agribusiness and agro-industries during the Expert Group Meeting held in Vienna, Austria April 27-29, 2009. The Expert Group Meeting is an important first step that UNIDO and FAO, in conjunction with the African Union and African Development Bank, have put in place to ensure strong ownership within Africa for the High Level Conference to be hosted by the Government of Nigeria in November 2009.

The central goal of this resource paper is to develop an agenda for policy and programmatic initiatives that will facilitate the transformation of Africa's agribusiness and agro-industries in a manner that accelerates economic growth and reduces poverty.

This goal is supported by three specific objectives:

1. To provide public goods that are essential to enhancing the competitiveness of agribusiness and agro-industries and to strengthen the capacity in public agencies to formulate and implement policies and regulations that facilitate efficient trade along agribusiness and agro-industry value chains

2. To create new and improve existing innovative institutions that strengthen SME linkages and small-holder access to national, regional, and global agribusiness and agro-industry supply chains

3. To provide investment capital and risk management instruments to agro-enterprises to enhance the competitiveness of agribusiness and agro-industries

The paper characterizes the policy and economic context related to African agribusiness and agro-industries, identifies prime forces shaping their growth and development, and lays out a detailed log-frame of interventions designed to accelerate agribusiness and agro-industries development in Africa.

CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
AGRA	Alliance for a Green Revolution in Africa
APR	annual percentage rate
CAADP	Comprehensive Africa Agriculture Development Programme
CFA	Comprehensive Framework for Action
CGIAR	Consultative Group on International Agricultural Research
FAO	Food and Agriculture Organization of the United Nations
FDI	foreign direct investment
GAIF	Global Agro-Industries Forum
GDP	gross domestic product
HLTF	High Level Task Force
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
NEPAD	New Partnership for Africa's Development
PIBID	Presidential Initiative on Banana Industrial Development
SMEs	small and medium-sized enterprises
SODP	Seeds of Development Programme
SSA	sub-Saharan Africa
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
WTO	World Trade Organization

GLOSSARY OF TERMS

Agribusiness and Agro-industry	"Agribusiness is a broad concept that covers input suppliers, agro-processors, traders, exporters and retailers. 'Agro-industry' also is a broad concept that refers to the establishment of enterprises and supply chains for developing, transforming and distributing specific inputs and products in the agricultural sector. For purposes of [this paper], both terms refer to commercialization and value addition in the agricultural sector with a focus on pre- and post-production enterprises and building linkages among enterprises." (FAO 2007)
Agro-enterprise	A unit of economic organization or activity, especially a private business that operates along the agro-industry value chain.
Business cluster	A geographic concentration of interconnected and related companies, specialized suppliers, service providers, firms in related industries, and associated institutions (e.g., universities, standards agencies, trade associations) in a particular field that compete but also cooperate.
Competition	The process of individuals or businesses striving to gain a greater share of the market to buy or sell goods and services.
Contract farming	An agreement between farmers and processing and/or marketing firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices.
Enabling environment	A set of interrelated conditions, external to firms, including the policy, legal and regulatory framework; external trade policy; governance and institutions; physical security; macroeconomic policies; access to financial and business services; and the availability of physical and social infrastructure that impact on the capacity of firms to engage in business in an effective manner.
Food security	When all people, at all times, have access to sufficient, safe and nutritious food to meet their dietary needs and lead an active, healthy life.
Incubator	A type of business development service that leases space to new business ventures and provides them with shared services, technical assistance, and access to local financial, educational, and business networks.
Infant industry	A domestic industry that is young in comparison to its foreign competitors. An infant industry is sometimes protected by its government so it can attain economies of scale reached by older competitors.
Market	The world of commercial activity where goods and services are bought and sold.
Public goods	A good that is both non-excludable and non-rival. A good is non-excludable if it is impossible to prevent anyone from consuming the good, and a good is non-rival if one person's consumption of that good does not reduce the quantity available for consumption by someone else.
SMEs	Small and medium enterprises are companies whose headcount or turnover falls below certain limits. Size thresholds and the legal definition of an SME can vary according to the sector of economic activity and country.

Transitional economies	A transition economy or transitional economy is an economy which is changing from a centrally planned economy to a free market. Transition economies undergo economic liberalization (letting market forces set prices and lowering trade barriers), macroeconomic stabilization where immediate high inflation is brought under control, and restructuring and privatization in order to create a financial sector and move from public to private ownership of resources.
Value added	The difference between the value of goods and services produced and the material costs of those goods and services.

ACCELERATING AGRIBUSINESS AND AGRO-INDUSTRIES DEVELOPMENT IN AFRICA

1. INTRODUCTION

1.1 Background and Justification

In April of 2008, the Food and Agriculture Organization of the United Nations (FAO), in partnership with the United Nations Industrial Development Organization (UNIDO), the International Fund for Agricultural Development (IFAD), and the government of India, organized a global forum to examine issues related to the development of competitive agro-industries. The Global Agro-Industries Forum (GAIF) brought together over 500 senior level policy makers from national and local governments, food industry leaders, UN technical agencies, civil society organizations and agro-industry specialists involved in fostering the development of competitive agro-industries to raise awareness, exchange information, consider strategies, and promote partnerships for future action.

The GAIF has helped to develop a shared vision on the issues critical to the future development of agro-industries and on key factors affecting competitiveness and potential action areas. It also allowed participants to learn from important lessons and success stories for developing competitive agro-industries in the developing world. Additionally, commitments were made toward stronger collaboration and joint activities among multilateral organizations working on agro-industrialization, including engagement of these organizations and financial institutions in launching initiatives at national and regional levels to foster the development of agro-industries. The forum provided a platform from which participating African leaders collectively expressed their call for an agro-industries summit to be held in Africa in 2009 that would advance continental deliberations of the relevant issues confronting African agro-industries.

1.2 High Level Conference on Agribusiness and Agro-Industries Development

As a follow up to the 2008 Global Agro-Industries Forum, UNIDO and FAO launched in late 2008 a strategic initiative to promote agribusiness and agro-industries development in Africa. The ultimate goal is to promote demand for and add value to primary agricultural production, thus creating employment and income along the processing-distribution chains and engendering socio-economic development. The cornerstone of this initiative is a High Level Conference on Agribusiness and Agro-industries Development, which the Government of Nigeria has kindly agreed to host in November 2009.

The High Level Conference is expected to help raise awareness in Africa about the pivotal role of agribusiness and agro-industries in the sustainable development of the continent. It is also expected that the Conference will lead to the recognition by African governments of the need to favour agribusiness and agro-industrial development strategies, and the need to depart from the traditional foci of past development efforts focused on incremental change and smallholder self-sufficiency and security to approaches that give due holistic consideration to agro-industries that are competitive, sustainable, and inclusive. At the same time it is expected that concrete mechanisms that allow the implementation of those development strategies would be discussed and proposals formulated, including plans for financing these development programmes.

1.3 Goals, Objectives, and Scope

To develop a strategy for promoting sustainable agribusiness and agro-industries in Africa, the policy agenda and programme initiatives to be considered at the High Level Conference require the input of experts, policy makers and agro-industry managers. UNIDO and FAO, in conjunction with the African Union and African Development Bank have put in place three complementary consultative steps to seek this input and ensure strong ownership within Africa for this initiative. The first step is this Expert Group Meeting (EGM). During July, the findings and recommendations of the EGM will be considered by senior officials in a meeting proposed as a side event organized in conjunction with the AU Summit, which will focus on the theme of increasing investment in African agriculture. As a complement to these events, a series of multistakeholder roundtables are being held on specific topics such as contract farming, rural infrastructure and mechanization.

This resource paper has been prepared to serve as a basis for discussion during the Expert Group Meeting on Agribusiness and Agro-industries Development. The paper is organized around three issues, which are presented sequentially, as follows:

1. Characterize the policy and economic context relating to agribusiness and agro-industries development in Africa
2. Identify the prime forces shaping agribusiness and agro-industries in Africa
3. Propose an agenda for policy and programmatic initiatives that will facilitate the transformation of Africa's agro-industries in a manner that accelerates economic growth and reduces poverty.

2. POLICY AND ECONOMIC DEVELOPMENT CONTEXT

The central role of agriculture in Africa's economic development is widely accepted; however, it is becoming increasingly crucial for policy makers to focus immediate attention on agro-industries—those off-farm markets that include commercial enterprises, economic institutions, and input and output marketing activity. Because agro-industries are uniquely situated between raw and natural sources of supply and the dynamics of food and fibre demand, promotion of agro-enterprise development can provide positive impacts on employment in both rural and urban areas, offer market access to smallholder agriculture, create business linkages to SMEs, and enhance food security by reducing post-harvest losses and extending the shelf-life of food and fibres for the rapidly increasing urban poor. The combined effects of employment gains and food security through improved agro-industry competitiveness can be an important strategy for reducing the overall poverty within African economies.

Urgent efforts to improve agro-industries in Africa are further justified by the potential negative impacts of the looming global economic crisis on African economies. The global financial crisis of late 2008 has led to a slowdown of world economic growth, reduction in trade, and recession in many countries. This economic crisis will have untold impacts on African agribusiness and the pace of agro-industrialization, but it is clear that the rising calls for de-globalization, protectionism, and resurgence of economic nationalism in some countries may alter the policy mix or response to this urgent need to act. While the prospects for improving Africa's integration into the global economy are likely to be enhanced when the world economy recovers, it is important at this juncture that the

implications of the global economic crisis be analyzed so that African agro-industries are better positioned to become competitive players in national, regional, and international markets.

2.1 Policy Context[1]

Several national governments, multi-lateral organizations, and private foundations have called for comprehensive plans to re-invigorate African agriculture. These initiatives serve as important points of departure for formulating the central themes and priorities of this strategic initiative.

Within their national plans, African leaders have embraced the idea that investments in agriculture go beyond improving on-farm productivity and that off-farm economic activity is central to economic growth, food security, and poverty reduction. As shown in Box 1, many Ministries of Agriculture explicitly acknowledge the key role of the agricultural value chains, commercial farming, and value addition in contributing to economic well-being.

Box 1: Commitment of African Governments to Agricultural Development

- **"Mission:** To promote sustainable agriculture and thriving agribusiness through research and technology development, effective extension and other support services to farmers, processors and traders for improved livelihood."
  —Ministry of Food and Agriculture, Ghana
- **"Vision:** To promote a competitive and efficient agriculture based on regional comparative advantage."
  —Ministry of Agriculture and Cooperatives, Zambia
- **"Mandate:** To promote and facilitate production of food and agricultural raw materials for food security and incomes; advance agro-based industries and agricultural exports; and enhance sustainable use of land resources as a basis for agricultural enterprises."
  —Ministry of Agriculture, Kenya
- **"Objectives:** To promote and accelerate broad-based, sustainable agricultural development policies to enhance economic growth and contribute to poverty reduction."
  —Ministry of Agriculture and Food Security, Malawi
- **"Mission:** To initiate, develop and manage suitable programs of transformation and modernization of agriculture and livestock to ensure food security and to contribute to the national economy."
  —Ministry of Agriculture and Animal Resources, Rwanda
- **"Mandate:** The scope of the DoA mandate covers the entire agriculture value chain of economic activities: from farming inputs, farming, value addition to retailing."
  —Department of Agriculture, South Africa
- **"Mission:** To deliver quality agricultural and cooperative services, provide conducive environment to stakeholders, build capacity of Local Government Authorities and facilitate the private sector to contribute effectively to sustainable agricultural production, productivity and cooperative development."
  —Ministry of Agriculture, Food Security and Cooperatives, Tanzania
- **"Mission:** To support national efforts to transform subsistence agriculture to commercial production in crops, fisheries and livestock, by ensuring that the agricultural sector institutions provide efficient and effective demand-driven services to the farming community. Whilst services are provided to the sector as a whole, the primary focus is on resource-poor farmers."
  —Ministry of Agriculture, Animal Industry and Fisheries, Uganda

Source: compiled from various ministries of agriculture websites as per discussion with FAO-AGSF

[1] This section draws from the HLCD-3A Concept Note, Annex 2.

Two important African regional initiatives also recognized agro-industries as important economic engines in reducing poverty: NEPAD's Comprehensive Africa Agriculture Development Programme (CAADP), and the Alliance for a Green Revolution in Africa (AGRA).

NEPAD's Comprehensive Africa Agriculture Development Programme (CAADP), a plan designed to sensitize African leaders to the need for action on selected fronts, is directed at Africa's policy makers in NEPAD's own institutions, national policy makers in both public and private sectors, nongovernmental institutions, academic institutions and think tanks concerned with Africa's development, and officials in the development co-operation agencies of donor and multilateral bodies. The CAADP is structured around the following four pillars:

1. Extending the area under sustainable land management
2. Increasing market access through improved infrastructure and trade-related interventions
3. Increasing food supply and reducing hunger by increasing smallholder productivity and improving responses to food emergencies
4. Increasing agricultural research and systems to disseminate appropriate new technologies, and increasing the support given to help farmers to adopt them.

CAADP's Pillar 2, in particular, is directly related to a policy agenda and program initiatives for accelerating Africa's agribusiness and agro-industries. Improving infrastructure and gaining market access to local, regional, and extra-regional supply chains are essential to agribusiness and agro-industry development, and in turn, are key to this sector's contribution to economic growth and poverty reduction goals.

The Alliance for a Green Revolution in Africa (AGRA) was established by the Rockefeller Foundation and the Bill and Melinda Gates Foundation in 2006 as a comprehensive approach to raising the productivity and incomes of African smallholder farmers. While its programme initiatives focus on smallholders, through its work on seed systems, soil nutrients, water, the Alliance also has broader interests in off-farm programmatic activities that include improving access to input and output markets and encouraging government policies that support small-scale farmers.

In June and December 2006, respectively, the African Union championed two major events aimed at building consensus around the key issues in increasing fertilizer use and promoting food security in Africa. Both events were organized in close partnership with the federal government of Nigeria.

In April 2008 the United Nations (UN), World Bank, and International Monetary Fund established a High Level Task Force (HLTF) chaired by the UN Secretary General on the Global Food Crisis to develop a Comprehensive Framework for Action (CFA). The CFA released in July 2008 proposed a number of actions both short term and medium to long term. A key action area is to sustainably increase food production by small holder farmers especially in Africa by addressing the underlying factors. In this respect, agribusiness and agro-industries will play a critical role in addressing six of the eight factors identified by the HLTF for increasing small holder food production namely: stimulate private/public investment in agriculture; improve rural infrastructure; ensure sustained access to competitive, transparent and private sector-led markets for food produce and quality inputs; support development of producer organizations; and strengthen access of smallholders and other food chain actors to financial and risk management instruments.

The World Bank has also been responsive to an agenda that accelerates African agribusiness and agro-industries. With the release of its report, *Modernizing Africa's Agro-Food Systems: Analytical Framework and Implications for Operations*, a strategy for World Bank Group assistance for support of agro-enterprise development and the more general modernization of agro-food systems in Africa was developed. An important contribution of this work was the identification of "priority themes and leverage points for activity" (Jaffee et al. 2003). This report identifies five priority themes – food security, food safety, competitiveness, small-holder and SME market integration, and risk management – that contribute to their stated goal of fostering the competitiveness of African client agro-food systems in the manner that both accelerates growth and reduces poverty.

2.2 Economic Development Context

Meeting the challenges posed by high levels of poverty, unemployment, and food insecurity in Africa remains a major challenge to African governments, as well as to the regional and international development communities. While various strategies and programs to reverse the poor economic and social indicators are being implemented across the continent, success has been limited to date and alternative approaches to foster economic growth and social development are needed.

Globalization and the increasing interdependence of the world economy have created opportunities to both expand and diversify Africa's economic base, which in many countries hinges on the agricultural sector. More than ever before, African countries have opportunities to participate in world trade, benefit from investments, and use modern technologies. Despite these opportunities, and despite the growing international demand for higher-value processed agro-industry products, Africa is yet to make significant progress locally toward adding value to its primary agricultural commodities. Indeed, African countries contribute less than 10% to the global value addition and Africa's international trade is dominated by primary commodity exports, which represent almost 60% of total export value, and fuels alone account for 40%. Among the nonfuel primary commodity exports, agricultural products account for more than 25% of trade revenues.

Agribusiness and agro-industries can be a major driver of development, but this role will be fulfilled only if there is a fundamental break from the history of agricultural development policies that focus only on the needs of subsistence and the poorest of the smallholder farmers, in detriment of agribusiness, including commercial farming and service providers, and agro-industries. Two specific aspects of the economic development context are particularly important in forging the growing policy commitment to agribusiness and agro-industries development in Africa:

1. The potential role of agribusiness and agro-industries in accelerating economic growth and the overall contribution of the agricultural sector to economic development
2. Unsatisfactory performance in international trade and markets but growing opportunities in domestic markets and regional trade.

2.2.1 Structural Attractiveness of Agribusiness and Agro-industries—Economic Growth

During recent decades, the productivity of African agriculture has become stagnant. Table 1 shows average growth figures at economy and sector level over a six-year period 2000 to 2005; analyzing trends for a single year may be misleading because agricultural economies are highly susceptible to

natural and economic shocks that can portray either highly positive or highly negative results in a short period of time. While overall economic growth was good, performance of the agriculture sector was poor. Over the period 2000 to 2005, only five out of the fourteen economies recorded higher than average GDP growths in agriculture than the Africa average. Further, over the same period, agriculture was the slowest growing sector in nine out of the fourteen economies; it was the fastest growing sector in only two countries.

Table 1: Average Economic Growth (Percentage) for Selected Countries for the Period 2000–2005

Country	Economy	Sector[a]		
		Agriculture	Fastest growing sector	Slowest growing sector
Cameroon	3.8	2.7	7.9 (Services)	1.5 (Industry)
Ethiopia	6.5	3.5	5.2 (Industry)	2.6 (Manufacturing)
Ghana	5.1	4.8	5.3 (Manufacturing)	4.8 (Agriculture & Services)
Kenya	2.9	1.7	3.1 (Services)	1.7 (Agriculture)
Malawi	1.6	2.1	2.1 (Agriculture)	-1.5 (Manufacturing)
Mali	6.3	2.6	8.0 (Industry)	2.6 (Agriculture)
Mozambique	7.7	5.4	16.8 (Manufacturing)	5.4 Agriculture)
Namibia	4.4	1.8	6.4 (Industry)	1.8 (Agriculture)
Nigeria	5.6	4.3	7.7 (Manufacturing)	4.3 (Agriculture)
Rwanda	5.2	5.6	5.6 (Agriculture)	3.9 (Manufacturing)
Tanzania	6.5	4.8	8.6 (Industry)	4.8 (Agriculture)
Uganda	5.4	3.6	6.7 (Industry)	3.6 (Agriculture)
Zambia	4.6	1.3	8.0 (Industry)	1.3 (Agriculture)
Zimbabwe	5.9	-5.6	-4.5 (Services)	-11.7 (Manufacturing)
Africa	**4.6**	**3.8**	**5.2 (Industry)**	**3.8 (Agriculture)**

Sources: GDP data from IMF; sector data from AfDB (for the period 2000–2005)

[a] *Industry* comprises mining, quarrying, manufacturing, construction, electricity, gas and water; *manufacturing* is a subset of industry, though it is shown separately.

While production agriculture contributions to the GDP of national economies are slowly declining, the economic activities supporting farming continue to contribute a critical component to African economies. A broader definition of the agro-processing sector, including not only agro-related industries but also distribution services and trading activities, would account for roughly 20% to 25% of gross domestic product in sub-Saharan African countries. The entire food system, including the production of primary goods and commodities, marketing, and retailing, would account for at least 50% of the GDP for all countries except South Africa and Zimbabwe (Jaffee et al. 2003).

The size and economic importance of agribusiness and agro-industries within African economies make investments in this sector central to economic growth and poverty reduction goals (Table 2). Jaffee et al.'s (2003) data compilation of the ratio of agribusiness share over the agriculture share of GDP for a representative sample of sub-Saharan countries captures the degree of productive and commercial development of agro-related activities, the sophistication of agro-industrial backward and forward linkages, and the capacity level of value-adding, market creation, and the importance of

distributing and retailing (Wilkinson 2008). This ratio may capture the level of structural transformation currently faced by African countries, where productivity growth corresponds to a shifting sector composition of economic activity, a fall in the share of agriculture, and increasing transfers of capital and labour from agriculture toward expanding agribusiness and agro-industries and related service sectors.

Table 2: Share and Size of Agriculture Value Added in National GDP, Selected Countries

	Agriculture value added[a]	
Country	% GDP 2003-05[b]	$ millions 2003-05[b]
Algeria	9.7	7,572
Cameroon	20.9	2,966
Cote d'Ivoire	22.7	3,415
Ethiopia	43.9	3,893
Ghana	37.3	3,389
Kenya	28.2	4,166
Morocco	15.6	7,515
Nigeria	22.1	16,463
South Africa	3.1	5,565
Tanzania	45.8	4,797
Uganda	32.4	2,167
Zimbabwe	17.6	744
For comparison		
Argentina	10.3	14,700
Brazil	6.6	39,213
Chile	5.7	4,934
Indonesia	14.9	38,429
Mexico	3.9	24,339
Thailand	10.1	16,164
United States	1.3	133,850

Source: World Development Report 2008

[a]Agriculture corresponds to the International Standard Industrial Classification (ISIC), revision 3, divisions 1–5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fixed assets or depletion and degradation of natural resources.

[b]Data refer to the average for the period shown or for an earlier period depending on data availability.

2.2.2 Regional and Domestic Market Opportunities

For nearly three decades African agricultural exports have declined in relative terms. Africa's share of agricultural imports surpassed exports in 1980 (Figure 1). The 1990s witnessed modest gains in the African share of world agricultural exports, but since 1970, market share has fallen by slightly

over 6%. While exports were falling over this period, African imports have risen from 4% of world imports in 1970 to over 6% in the early 1980s before receding again to about 5% by 2006.

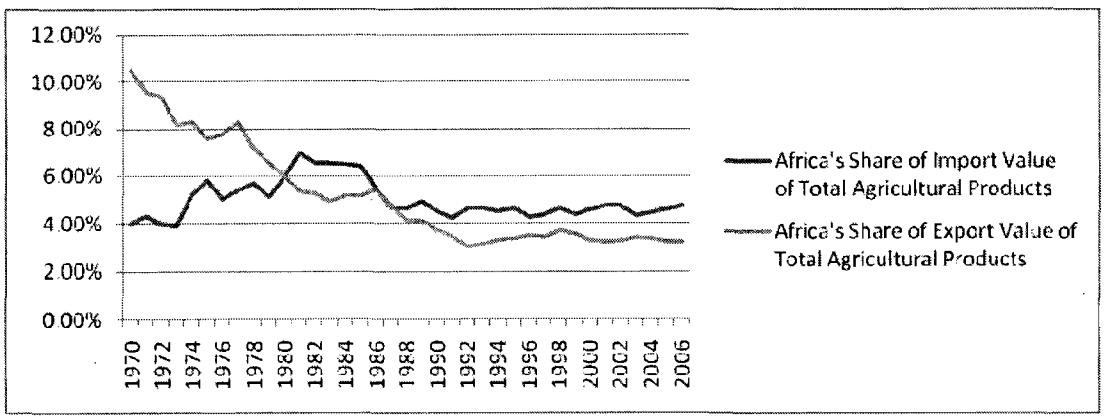

Figure 1: Africa's Share of World Agricultural Imports and Exports
Source: FAOSTAT, TradeSTAT 2008

African countries remain dependent on the traditional export crops—cocoa, coffee, cotton, sugar, tea, and tobacco. Low world prices and relatively inelastic demand have made it less possible for expansion of production to translate to higher farm incomes. Also, competition from Asia and Latin America—where productivity, product range, and quality have improved—is making it difficult for African producers to maintain their share of the global market.

During the past decade, the nontraditional export sector—vegetables, cut flowers, and fish—offered opportunities for growth. Ghana, Cote d'Ivoire, Kenya, and Zambia have achieved some success in the global market via nontraditional exports. However, there are limits to the growth of most non-traditional exports and, in any event, the numbers of people and enterprises that can directly participate in and benefit from the value chains for niche products are small relative to needs for income and employment generation.

While the prospects for competitiveness in international trade remain uncertain, there is widespread policy consensus that domestic markets and regional trade offer potential, but underutilized, opportunities for expanding incomes and reducing poverty in Africa. IFPRI estimates that domestic food staples, roughly a US$50 billion industry, will double by 2015. The rapid rate of urbanization is a key factor in shaping this growth. Urban populations tend to consume more protein and demand more value added food products.

Urbanization is also a major factor influencing the rise of supermarkets. In Sub-Saharan Africa, the supermarkets trend is in the early stages but is growing rapidly with South Africa and Kenya leading the field and expanding in their respective regions of the continent. In developing countries a rapid rise of supermarket chains has transformed the market structure, participant conduct and economic performance of agrifood systems in Africa, Asia (excluding Japan) and Latin America (Reardon, Timmer and Berdegue 2004). Intense competition in home markets, coupled with much higher profit margins in developing countries, spurred the flow of FDI from US and European supermarket chains (Gutman 2002). The liberalization of the retail sector in most transition economies in the 1990s also

created new opportunities for investments. To close the gap between their supplies and their needs, supermarket chains in developing countries have been shifting over the past few years away from the old wholesale procurement model toward a new model, one the integrates the entire supply chain under the control of the retailer. This emerging strategy has important distributional consequences for small-holders and small to medium enterprises in Africa.

To accelerate growth in domestic and regional demand, incomes in the nonagricultural sector along with regional trade policies and infrastructure need to be strengthened. See Table 3 for information on the constraints on doing regional trade in Africa relative to other regions of the world.

Table 3: The Most Distant and Divided Regions—Trading and Transport Are Expensive

REGION	Trading time across borders for exports (days)[a]	Average transport costs (US$ per container to Baltimore)[b]	Population in landlocked countries (%)[b]	Ratio of number countries to surface area[b]	Road density (km of road per surface area) (1999)[b]	Estimated number of civil conflicts, (1940–2000)[c]
East Asia & Pacific	24	3,900	0.42	1.44	0.72	8
Europe & Central Asia	29	--	23.00	1.17	--	13
Latin America & Caribbean	22	4,600	2.77	1.52	0.12	15
Middle East & North Africa	27	2,100	0	1.60	0.33	17
South Asia	34	3,900	3.78	1.67	0.85	24
Sub-Saharan Africa	40	7,600	40.20	2.00	0.13	34

Sources: a. World Bank 2006; b. Ndulu et al. 2007; c. Fearon and Laitin 2003

3. FORCES SHAPING AGRIBUSINESS AND AGRO-INDUSTRIES IN AFRICA

If the strategic initiative to support agribusiness and agro-industries development in Africa is to make meaningful contributions, the major forces shaping development of this sector must be identified and assessed. Examining the forces influencing agribusiness and agro-industries can help to provide insight into the policies and innovative strategies needed to ensure that this sector better contributes to economic growth and poverty reduction goals. Table 4 provides an overview of many of the key forces that influence the structure and performance of agribusiness and agro-industries in Africa. As a basis for further discussion, a PEST – policy, economic, social, technology – analytical format is used to identify the main opportunities and threats shaping African agribusiness and agro-industries.

3.1 Political and Legal Forces

3.1.1 Political Stability

Political stability is a critical factor in shaping investments in agribusiness and agro-industries as well as implementing effective public policies that facilitate economic growth. In Table 3 (page 10) the

number of sub-Saharan civil conflicts between 1940 and 2000 were the highest of any region in the world. That said, many African nations have experienced a relatively stable environment, conducive for sustaining economic growth and development, but may fall short in other factors (for example, infrastructure, business climate, and access to markets).

Table 4: Main Forces Influencing Agribusiness and Agro-industries

Factor	Opportunities	Threats
Political Legal	• Political stability in most countries • Regional harmonization of policies • Preferential trade agreements/trade policy	• Political conflicts in some countries • Corrupt government regimes • Limited enforcement of property rights • Poor business climate • Limited law enforcement
Economic	• Economic liberalization well underway • High economic growth rates in recent years • Increasing foreign direct investments • Central role of agriculture in most economies	• Global recession • Global financial crisis • Poor transport infrastructure • Legal barriers to trade • High interest rates • High levels of inflation and unemployment • No macro-economic stability
Social Cultural Human Demographic	• Growing population – increasing market • Rapid urbanization • Improved access to education and health • Gender – increasing role of men into farming, women's rights	• HIV/ AIDS • Limited adoption of new technology • Cultural preferences for specific staples
Technological	• Improved access to information (mobile phone and internet) • Advances in bio-technology • Technology leapfrogging • Investment in public research (NAROs and CGIAR)	• Diverse agro-ecologic conditions limit technology diffusion • Weak national scientific and research institutions and universities • Limited enforcement of Intellectual Property Rights

3.1.2 Regional Integration

The World Development Report 2009 suggests that the thickness of a country's borders is a self imposed obstacle to development. In the cases where domestic markets of smaller countries are not large enough to jump start or accelerate agribusiness and agro-industry development, regional integration becomes an important policy objective that has three types of instruments: 1) institutional cooperation addresses the coordination problems between and among countries; 2) regional infrastructure links countries to each other's markets as well as global opportunities; and 3) coordinated incentives—through national governments and donors—promotes factor mobility (for example, capital, technology, management) between leading and lagging countries in a region.

3.1.3 Institutional Capacity

Governments in most transitional economies have played a key role in shaping the process and outcomes of economic reform, but, in reality, they have varying degrees of "capacity" that limit their ability to influence the environment in which private enterprise operates. Despite the premise of "rolling back state involvement" as the basis for agricultural reform, we recognize the essential role of the state in advancing essential enablers, important enablers, and useful enablers that target agribusiness and agro-industries.

3.1.4 Business Climates

Countries that most need entrepreneurs to create jobs and to promote growth—poor countries—put the most regulatory obstacles in their way. Within each African country, agro-industry participants face a different set of often costly regulations. Some of the laws, regulations, administrative and technical procedures imposed at the national level are restrictive and impede trade amongst countries. Initiatives for African agribusiness and agro-industries must be evaluated in the context of the prevailing politicolegal, economic, sociodemographic and technological environments in which companies and organizations operate. See the Ease of Doing Business rankings in Appendix B.

3.2 Economic Forces

The economic forces influencing agro-industry markets include domestic demand, basic conditions, and market structure. The structure of most agribusiness and agro-industries operating within African economies is becoming increasingly more concentrated.

3.2.1 Poor Rural Infrastructure

Since the mid-1980s, evidence about the impact of infrastructure on economic development has surfaced in numerous empirical studies. The impact on international competitiveness is quite direct. Inadequate infrastructure cripples the ability of countries and industries to engage in international trade. Increased globalization has resulted not only from economic forces such as trade policy and the integration of financial markets, but from major advances in communication, information technologies, and transportation. Those infrastructure investments are linked to productivity and to aggregate sales (Peters 1992).

Taylor's assessment of the status of Africa's infrastructure reveals that "by almost every measure, Sub-Saharan Africa's rural infrastructure lags far behind other regions of the world. It is a serious impediment to economic growth and poverty reduction" (Taylor 2007).

- *Roads*—Only about 34% of sub-Saharan Africa's rural population lives within 2 kilometres of a paved road, compared with 65% in the world's next poorest region, South Asia; and the poor state of road maintenance plays a key role in road traffic injuries, which can cost a country as much as 1% of GDP. The poor condition of Africa's roads makes overland transport "so difficult and costly that Africa's diverse regions remain largely isolated from

one another," severely curtailing internal trade. According to the World Bank, an initial investment of $20 billion coupled with $1 billion annually for maintenance would expand overland trade by about $250 billion over 15 years "with major direct and indirect benefits for the rural poor."

- *Water and Sanitation*—Only 54% of sub-Saharan Africa's rural population has access to an "improved" water source and 28% has access to "improved" sanitation; this compares with 68% and 40%, respectively, for South Asia. Some countries do much better than others in providing rural citizens access to improved water sources, with Botswana and Burundi achieving 90% and 78% coverage, respectively, and Ethiopia and the Democratic Republic of the Congo achieving 11% and 17%. Sub-Saharan Africa's overall supply of fresh water is comparable with other regions, but it is distributed unevenly, and most countries lack the storage and irrigation infrastructure to make productive use of the available water. Only 3.6% of sub-Saharan Africa's cropland is irrigated compared with 40% in South Asia and 18% globally. Partly as a result of low irrigation rates, sub-Saharan Africa's per capita use of water in agriculture is less than one-quarter of that in South Asia and one-third of the global average.

- *Electricity*—Overall per capita consumption of electricity in sub-Saharan Africa is about one-fifth of the global average. Only 8% of rural households in sub-Saharan Africa report having access to electricity, compared with 54% of urban households. Frequent service interruptions impose significant costs on businesses, which commonly invest in back-up generators. Poor reliability of electrical service is cited by half of the firms responding to a survey as a "major or severe" obstacle to business operation and growth.

3.3.2 Financial Sector

The organization of the financial sector in sub-Saharan Africa remains polarized with relatively large-scale commercial banks (subsidiaries of international banks and locally owned entities) at one end of the spectrum, and microfinance institutions at the other. As a consequence, small-to-medium agroenterprises with a potentially sustainable rate of return on investments are at a serious disadvantage when seeking capital from the commercial banking sector. Typically, equity finance is available only from the entrepreneurs themselves or from money lenders with interest rates ranging from 12 to 30% APR depending on the country, collateral, and assessed risk of investment. Though several investment companies have been created in the past to fill this gap, only a small proportion of their portfolio is agro-industry based.

3.3.3 Foreign Direct Investment

Foreign direct investment (FDI) can make up for domestic capital shortfalls while at the same time generating employment and attracting technology, management, and marketing skills. Also, FDI is credited with boosting competitiveness and facilitating access to global markets. Nevertheless, until recently, policy debate on the financing Africa's development paid relatively little attention to international private capital flows, with most of the attention focused on official aid and development assistance.

Since the 1990s, FDI flows to Africa have been on an upward trend. As Figure 2 reveals, however, Africa did not partake in the boom as much as other developing regions did. After starting from approximately the same level in the early 1980s, the gap between Africa and other developing regions has widened. From 1985 to 1990, FDI to Africa grew by 14% compared to 56% for Latin America and the Caribbean and 368% in South, East, and South-East Asia. Though flows doubled over the period 1990–1999 and again from 2000 to 2006, this growth was still insufficient to close the gap resulting from previous periods and to equal the additional growth experienced by other regions. The share of Africa FDI flows averaged 7% for the 1990–2006 period. Relative to global flows, Africa's share is lower, only 2.7% in 2006. This share compares with an average of 15% for South, East, and South-East Asia. When global FDI flows reached their all time high of more than US$1.4 trillion in 2000, Africa's share was a meagre 0.69% (Mhlanga 2008). Since FDI flows to African agribusiness and agro-industries have been relatively small, technology transfer that is usually associated with foreign investment has also been minimal.

It is clear that investment levels will need to increase in order to accelerate agribusiness and agro-industries development in Africa. What is less clear is the balance in supply of the needed capital and expertise between foreign direct investment, financing provided through developmental assistance and concessionary financing, and investment capital mobilized through the commercial financial sector in the region. If the financial sector in Africa is to play a major role then conditions will have to be established to ensure commercial viability of both the agribusiness clients and financial service providers.

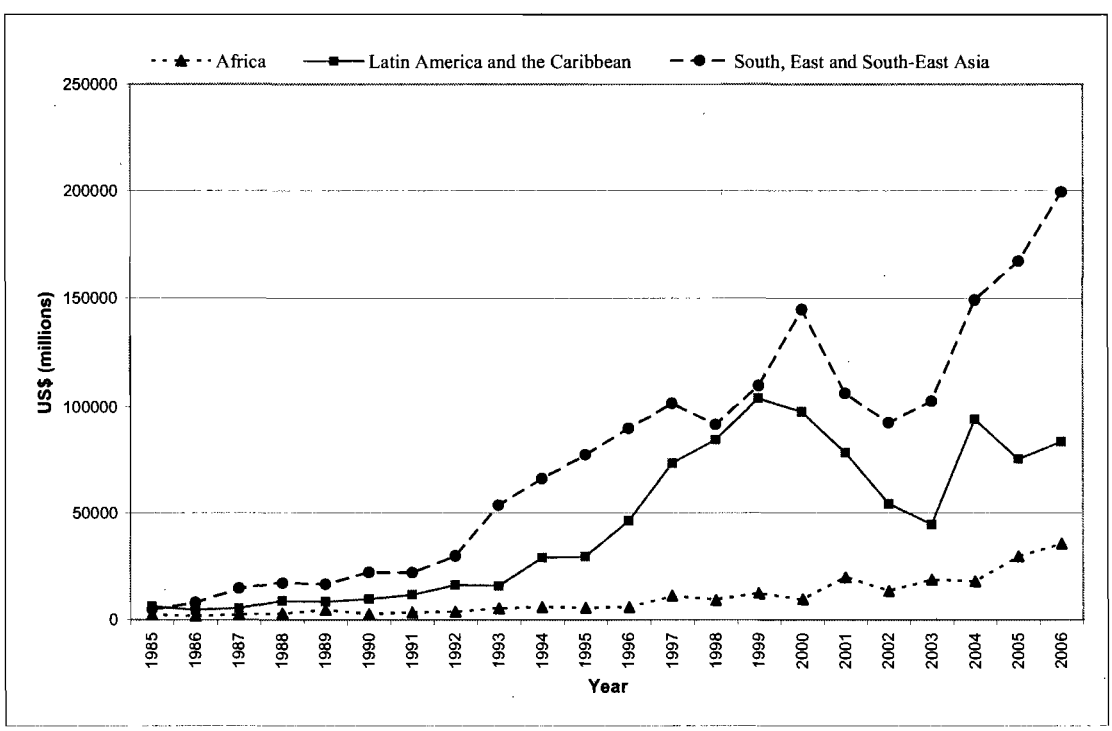

Figure 2: Foreign Direct Investment in Africa and Select Regions
Source: UNCTAD FDI-Online Database

3.2.4 Global Financial Crisis

The global financial and economic crisis has had far-reaching implications for all African countries. GDP growth in 2009 is expected to be lower than recorded in 2008. Implications of this global economic crisis for African economies can be identified in the following areas:

- Remittances will likely be reduced dramatically.
- Commodity prices (agricultural and mineral) have fallen since January 2008 by 30 percent in U.S. dollar terms, having serious impact on farmers' income and the balance of payments.
- Foreign direct investments have increased in the past decade, but will likely decline.
- Imports and oil-based agricultural inputs such as fertilizer will likely be affected by weakening exchange rates.
- Banking and financial institutions in Africa were not engaged in risky products (derivatives and options) and will not be adversely impacted, but international partner banks will not be in a position to invest in local expansion.

3.3 Social Forces

3.3.1 Rapid Urbanization

Rates of urbanization in Africa are the highest in the world. As seen in Figure 3, the urban population of Africa is growing at a much higher rate than the rural population. According to UNFPA's *State of the World Population 2007*, Africa's urban population is expected to increase from 294 million to 742 million between 2000 and 2030. Urban growth is a benefit to agribusiness and agro-industries because it offers producers and processors access to urban markets and demand for agro-products. Simultaneously, however, urban settlements and their accompanying manufacturing and service industries compete with agribusinesses and agro-industries for land and resources (UNFPA 2007).

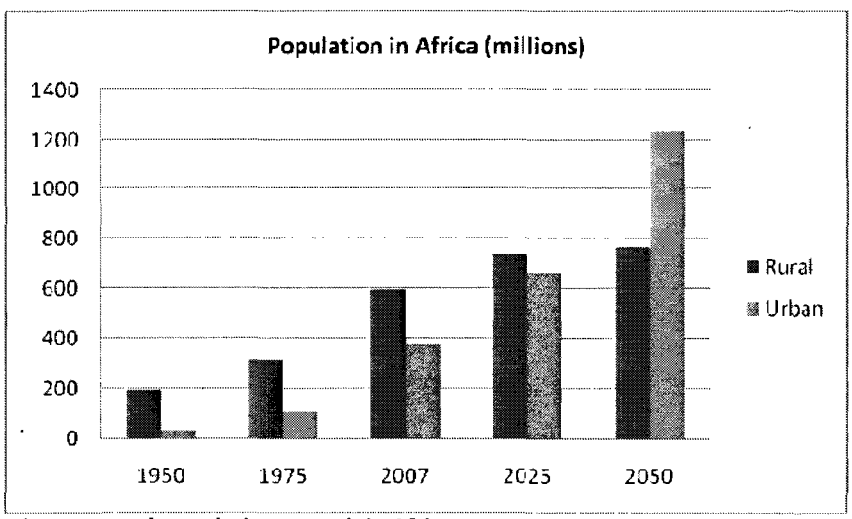

Figure 3: Urban vs. rural population growth in Africa
Source: UN Department of Economic and Social Affairs 2008.

3.3.2 Importance of Informal Sector

African countries continue to have large "informal" sectors across most industries. The informal sector, also referred to as the "shadow economy", comprises "economic activities and the income derived from them that circumvent or otherwise avoid government regulation, taxation or observation" (Del'Anno and Schneider 2004). According to a recent study that estimates the sizes of shadow economies for 145 countries, the average size of the shadow economy (as a percentage of "official" GDP) in 2004/05 in 96 developing countries is 36.7%, in 25 transitional countries 38.8%, and in 21 OECD countries 14.8% (Schneider 2007). The unweighted average for 37 African economies in the year 2004/5 is 42.8% (see Appendix A for five-year estimates of 37 African countries).

The importance of informal agribusiness and agro-industry enterprises in Africa sector is no exception. While much of the discussion on global agribusiness and agro-industries focuses on formal sector enterprises and markets, in the case of Africa the dialogue and suggested interventions cannot ignore the informal sector. There are three key reasons why the informal sector merits inclusion in any strategic analysis of African agribusiness and agro-industries. First, the sheer size of the informal sector is almost equal to the formal sector. Second, the two sectors—formal and informal markets—are so inextricably linked and separated by a blurry line that one cannot accelerate growth in one sector while ignoring the other. Last, and perhaps most importantly, any growth in the informal sector has larger and more immediate impacts on poverty alleviation.

Strategies to accelerate agribusiness and agro-industries in Africa should not only acknowledge the existence of a large informal sector but make deliberate effort to reach out to participants of this sector who are often "invisible" to most policy interventions. They are often ignored in capacity building and business development services programmes. Access to investment finance and credit facilities is often limited to family, friends, and local lenders. Furthermore, because the informal sector is often disorganized, it lacks a voice that represents the interests of its members to policy makers. Parallel efforts should be made to incentivize the informal sector to formalize its businesses, or at least reduce the costs associated with operating in the formal sector.

3.4 Technological Forces

3.4.1 Technology Acquisition Capacity

Agricultural research has long been recognized as critical to increasing agricultural productivity and thereby reducing extreme poverty and hunger (Herdt 2008). Technologies for most nonagricultural industries may be transferred between countries—usually from developed to developing countries—with minimal or no adjustments, thereby allowing for the much-acclaimed "technology leapfrog" by developing countries. Conversely for agribusiness and agro-industries, culturally specific food consumption patterns, coupled with diverse agroecological conditions, limit the scope of technology transfer. This specificity underscores the importance of agricultural research in creating an enabling environment for agribusiness and agro-industries.

3.4.2 Information and Communications Technology

When it comes to information technology, Africa offers fundamentally new communication and transaction capabilities. Because African countries are relatively "late starters" in the implementation of technology, they are able to take advantage of the more advanced products and services now available, skipping some of the costly intermediate stages. Thus throughout Africa, digital and cell phone communication is being adopted at enormous speed (one of the fastest adoption rates in the world), avoiding the need to build fixed lines and providing much more reliable service in a context where regular maintenance is difficult to ensure. However, as a recent UN meeting in Ethiopia suggested, African governments are failing to take advantage of technological advances that can improve the delivery of services to their citizens despite the growth in mobile and information and communications technology across the continent (UNECA 2009). According to Opoku-Mensah, "for African governments to make the most of emerging technologies, countries need to invest heavily in infrastructure" (UNECA 2009).

4. INITIATIVES TO SUPPORT AGRIBUSINESS AND AGRO-INDUSTRIES

The policy options presented herein provide an important direction for programme activities supportive of agribusiness and agro-industries in Africa. The central goal of this background paper is to develop an agenda for policy and programmatic initiatives that will facilitate the transformation of Africa's agribusiness and agro-industries in a manner that accelerates economic growth and reduces poverty. The policy agenda and programme initiatives presented will need the input of experts, policy makers, and agroenterprise managers to build a strategy for creating sustainable agribusiness and agro-industries in Africa. Explicit attention is given to sustaining the competitiveness of agribusiness and agro-industries and specific policies and programmes are suggested to increase market access for the poor to national, regional, and global supply chains. In setting an agenda for program investments in Africa's agribusiness and agro-industries, it is useful to classify African countries into groups of countries with shared characteristics. Because there is wide variation across countries and sectors, a "one size fits all" strategy would be inappropriate to advance a reform agenda for the agribusiness and agro-industries of economies in transition. In Appendix E we propose a framework that classifies countries into four tiers using four key variables.

Illustrated in Figure 4, our theory of change presumes that the recommended programme initiatives targeting African agribusiness and agro-industries will improve the performance of the sector and bring about economic growth and poverty reduction. This model of intervention has become the hallmark of a new approach to promoting the development of agroenterprises in developing countries (Oldsman 2002).

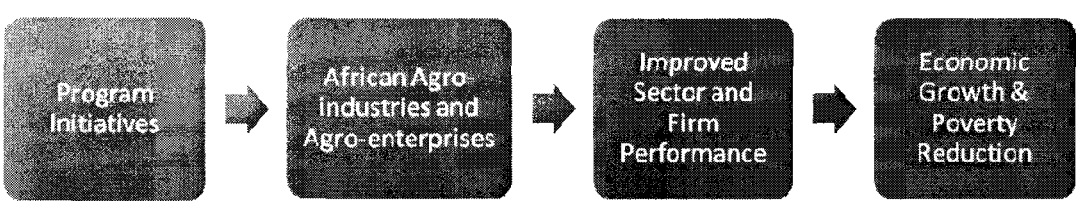

Figure 4: Theory of Change

The programme framework for accelerating agribusiness and agro-industries can be organized under three focus areas:

- Provision of public goods and implementation of facilitative policies
- Creation and support of innovative institutions
- Provision of capital financing and risk management facilities.

The suggested interventions range from public good provision to direct investments in the private sector. Each measure, however, requires a combination of public and private actions to accomplish the overall goal of accelerating agribusiness and agro-industries for economic growth and poverty reduction. A discussion of each policy option highlights the range of tools or levers for catalyzing change and enhancing the competitiveness of agribusiness and agro-industries.

4.1 Public Goods and Facilitative Policies

The objective of this intervention would be to provide public goods that are essential to enhancing the competitiveness of agribusiness and agro-industries and to strengthen the capacity in public agencies to formulate and implement policies and regulations that facilitate efficient trade along agro-industry value chains. Such public goods would include public research and development, infrastructure, and market information systems serving agribusiness and agro-industries. This programme initiative seeks also to strengthen the capacity in public agencies to formulate and implement policies and regulations that facilitate efficient trade along agro-industry value chains. Governments in most transitional economies have played a key role in shaping the process and outcomes of economic reform, but, in reality, they have varying degrees of "capacity" that limits their ability to influence the environment in which private enterprise operates.

In recent decades, agro-industry markets globally have experienced rapid change. This dynamic environment has raised the premium on traditional policy approaches to the sector, where "getting agriculture moving" is now being replaced with "making markets work" to sustain economic progress. Until recently, ministers of agriculture were mainly focused on increasing on-farm productivity without paying close attention to the enabling environment that addressed the competitiveness of the sector.

Creative public policy in today's dynamic global economy seeks to sustain efficient and equitable outcomes for the agribusiness and agro-industries sector that call for government to develop essential enablers to maintain and sustain competitiveness. It is recognized that while agriculture has unique basic conditions and economic behaviour, it too must exist in a wider national economy. Therefore the proposed list of specific policy measures that are essential to the agro-industry of developing countries must be coordinated within the wider national macroeconomic policy framework.

4.1.1 Research and Development

Given the prominence of public funding and public research institutions (mostly national agricultural research organizations and the Consultative Group of International Agricultural Research, CGIAR) in developing countries, emphasis should be placed on bridging the gap between research and

commercialization in order to enhance competitiveness of the entire agro-industry value chain. As currently structured, a distinct disconnect exists in agro-industry value chains for most developing countries, namely, the gap between product development (undertaken mostly by public research institutions) and commercialization (mostly by private agroenterprise firms). Numerous technologies have been developed through publicly funded national agricultural research organizations and CGIAR research centres such as International Maize and Wheat Improvement Centre, International Crops Research Institute for the Semi-Arid Tropics, International Institute of Tropical Agriculture, and International Potato Centre. Most of these technologies are still "sitting on the shelves" while the private sector is struggling to commercialize a limited range of outdated technologies.

If agricultural research is to enhance agro-industry competitiveness in developing countries, policy makers should focus on identifying ways to better coordinate the flow of agricultural technology from public discovery to private use. In accomplishing this objective some important questions should be addressed:

- What are the key barriers to technology transfer from public research institutions to private agro-enterprises?
- What are the sources of institutional innovation in promoting successful public–private partnerships?
- What is the role of policy and regulatory framework in impeding or accelerating technology development and transfer?

4.1.2 Infrastructure

Sustained investments in Africa's infrastructure are essential to achieving economic growth and poverty reduction goals for the continent. Because infrastructure bears characteristics of a public good, it is critical for government to take the lead in making investments in improving infrastructure. Infrastructure is defined to include the sectors of transportation, water and sanitation, electric power, communications, and irrigation. These sectors represent a large portfolio of expenditures in most countries and account for up to half of all public investments. Much of the formal research on the effects of infrastructure on economic growth has examined macroeconomic or industry-wide variables. Usually they find that infrastructure has a significant and positive effect on economic growth.

The positive impacts from infrastructure are derived not from investments in physical facilities, but rather from the services generated. Four conditions are necessary to realize these impacts on economic development:

- The basic macroeconomic climate should be conducive to an efficient allocation of resources.
- Infrastructure projects can raise the returns to other resources only when a sufficient complement of other resources exists; infrastructure investments cannot create economic potential, only develop it.
- Infrastructure activities that have the most significant and durable benefits in terms of production and consumption are those that provide the degree of reliability and quality of services desired by users.

- Infrastructure is more likely to be economically efficient, and to have favourable impacts on the environment, when it is subject to user charges.

4.1.3 Market Information Systems

Agricultural market information such as commodity prices, trade volumes, and weather conditions plays an important facilitating role in improving the performance of agribusiness and agro-industries. Based on many years of experience in working with agricultural market information systems (MIS) in Mali, Mozambique, and Zambia, Weber et al. (2005) identify six essential factors in the successful design and implementation of such systems:

1. An initial political commitment of country-level policy makers as well as private clients to a market information system, guided by a vision of how such a system can help both private- and public-sector actors
2. A persistent financial commitment over the medium term by local, national, and external funding agencies to help establish and demonstrate the payoff to such a system
3. The constant targeting and reassessment of the information needs of the users, which is essential to building long-term political and financial support of the system
4. The development of local capacity within the MIS to acquire and use a thorough knowledge of the actors and processes in the marketing systems of the country
5. The development of human capital for managing the system
6. The choice of the appropriate institutional "home" for managing the system. (Weber et al. 2005)

4.1.4 Grades and Standards

A diversity of perspectives provides a complex environment for agroenterprises. If all of the norms and standards were on a single continuum of relative restrictiveness, an agroenterprise could simply produce at a higher standard and sell products to all at that higher standard. But standards and norms may not fall on a single continuum of restrictiveness. Consider an agroenterprise firm that distributes nationally and exports to two different countries: One country prescribes a maximum residue level that the firm's product must satisfy. Another country demands that the agroenterprise firm guarantee that the product is produced in a manner deemed equitable, as determined by the grocery store purchasing the product. Finally, domestically, the agroenterprise firm must achieve a high quality standard because local consumers are considerably familiar with the product and are particular about its quality. The first problem is how to manage the different standards for the different customers. The achievement of one standard may be in conflict with the achievement of the others, at least in the short run. To sell the same product to all three markets may be costly, because a market may not be interested in the standards of the other markets. Above all, the cost of achieving all of the norms and standards of the three different markets may be prohibitive.

4.1.5 Food Safety

Food safety is important to food security, public health, and global competitiveness. As global trade in high-value food and agricultural products increases, food safety standards and their impacts on

agricultural exports from developing countries receive greater scrutiny (Henson and Jaffee 2008). In recent years, public awareness and concern about food safety has increased in developed countries due to several high-profile cases of product recalls (e.g., salmonella in USA meat and vegetable products, toxic baby formula in China). This has resulted in governments adopting new standards and/or more strictly enforcing existing food safety standards especially raw material traceability. Most developed countries have tightened border inspection of imported food products. In developing countries seeking to promote agricultural exports such increased stringency and the proliferation of foods safety standards are being viewed as nontariff barriers to protect lucrative markets in industrialized countries (Henson and Jaffee 2008).

On the other hand, food safety control systems in most African countries lag behind the rest of the world. Very few African countries have regulations and enforcement mechanisms in place that meet the international requirements of Codex Standards (established by FAO/WHO Food Standards Programme in 1963, the Codex Alimentarius Commission has the mandate to protect the health of consumers and to facilitate the trade of food by setting international standards on foods). Comprehensive food legislation, risk assessment, food inspection services, and appropriate laboratory support for the industry are lacking in most Africa countries.

The growth and competitiveness of African agribusiness and agro-industries hinge on countries developing and enforcing food standards that are responsive to domestic needs as well as acceptable internationally. To advance this cause, the FAO and WHO organized the Regional Conference on Food Safety for Africa in Harare, Zimbabwe, in October 2005. The conference unanimously adopted a resolution recommending the nine-point Five-year Strategic Plan for Food Safety in Africa, which forms an excellent roadmap for resolving food safety issues for the continent, for adoption by UN food and health agencies and the African Union. The key elements of the plan include the following:

- Food safety policies and programmes
- Legislative and institutional aspects
- Standards and regulations
- Food inspection programmes and techniques
- Food analysis and food safety testing laboratories
- Monitoring food-borne diseases and the safety of foods on the market
- Participation in Codex
- Communication and stakeholder involvement (including industry officials and consumers)
- National, regional, and international cooperation.

The plan's recommendations should be implemented in all countries to protect consumers and the international competitiveness of African agribusiness and agro-industries.

4.1.6 Business Climate

To improve economic and social outcomes, one of the functions of governments is to regulate economic activities to reduce inefficiencies arising from market failures. Regulations, however, have to be made in less costly and burdensome ways to facilitate doing business and to attract

investments that promote economic development and ultimately reduce poverty. Governments around the world have implemented macroeconomic reforms to attract foreign capital through the domestic and international private sectors thereby making domestic industries more competitive. Since 2004, those government reforms have been considerably influenced by the World Bank's Doing Business project, because countries want to improve their rank in the ease of doing business index so as to provide signals to investors interested in FDI. In spite of the implementation of those reforms, vibrant private-sector engagement in specific economies remains limited, poverty rates are high, and growth continues to be stagnant in a number of countries.

4.1.7 Property Rights

Establishing the "rules of the game" in the form of property rights, especially in the case of deeds for physical and intellectual property, is a critical aspect of an enabling environment for agribusiness and agro-industries. Contract enforcement is included as an essential enabler. Given the rise of contract farming, vertical coordination, and supply chain management of large agribusiness companies, efficiency and equity in the sector are undermined without strong laws to ensure the transaction implied within contracts in agriculture. The disadvantaged small farmer engaged in contract farming can become an efficient player in a market with strong laws that enforce contracts made with large agribusiness and agro-industries, and likewise companies that offer contracts can be assured of delivery of goods and services. Enforcement of contracts used by agribusiness and agro-industries is, however, part and parcel of "the rule of law" established by any nation. Therefore ministries of agriculture must aggressively and urgently expand such legal remedies to a wider set of institutions in rural areas.

Property rights are an essential part of institutional arrangements. Property as a social institution implies a system of relations between individuals. It involves rights, duties, powers, privileges, forbearance, etc., of certain kinds. Thus property rights define the use, control, and transfer of assets including land, which are lawfully viewed as exclusive, and who has these exclusive rights. Property rights also include enforcement mechanisms to resolve disputes and defend rights. Quality of law enforcement is more important than mere existence of laws. Property rights may also have both temporal and spatial dimensions.

Land tenure is especially important to agribusiness and agro-industries as it affects investment in agriculture. Systems of ownership rights in land have effects on incentives to use land efficiently and to invest in land conservation and improvement, which increases the value of land. Establishment and enforcement of these systems, however, are not costless. Legal procedures that define property rights and enforcement mechanisms may be highly complex and require various types of documents and affidavits, which increase transaction costs. These transaction costs may offset the benefits from enhanced property rights when land is abundant. When land becomes scarce or technological changes create new investment opportunities, the provision of ownership rights and enforcement mechanisms has the ability to enhance land productivity.

4.1.8 Trade Policy

Trade and domestic support policies related to the import of competing products is an area of contention for many countries, as seen in the World Trade Organization (WTO). Many WTO member

states argue in favour of some reductions in trade restrictions and domestic support, but there is little consensus on the rate of reduction, commodities to be affected, and special and differential treatment. The distortions caused by these policies potentially hamper the ability of agroenterprises in emerging markets to be as productive and as profitable as possible.

One concern about global competition in light of agricultural policies is that the competition is unfair. Since some countries, especially developed countries, are using trade and domestic policies to protect and/or promote their products, developing countries should do the same. The policies of developed countries may limit the opportunities of emerging economies. Retaliatory trade or domestic support policies, however, are not an ideal response to policies of other countries. Given the budgets of many large developed countries, the outcome of policy competition is that smaller developing countries will be unable to compete.

The infant industry argument suggests that countries could be competitive in a particular industry if only the country were able to provide appropriate protection through trade and domestic support policies so that the infant industry can mature. The problem with the infant industry idea is that once policies are in place they are hard to remove. An industry is rarely considered to have matured enough that protections can be removed. Like a child who is never allowed to mature by an overly protective parent, the infant industry struggles to become efficient and competitive in global markets because the protection of the government prevents maturation. Infant industry policies often promote and foster inefficiencies. If the infant industry produces an input for a domestic agroenterprise, the inefficiencies, often seen as increased costs, transfer to the agro-industry.

4.2 Innovative Institutions

The broad objective under this programme initiative calls for the creation of new and improvement of existing innovative institutions that strengthen SME linkages and smallholder access to national, regional, and global agro-industry supply chains. African governments and donor agencies are beginning to recognize the importance of stimulating small and medium-sized agroenterprises to develop robust agribusiness and agro-industries across the continent. Although many activities are still in the planning or infancy stages, these institutional innovations are anticipated to have significant impact on the creation of successful agroentrepreneurs and -enterprises. Several methods of supporting agroenterprises that have been used elsewhere in world, in both Western countries and other developing countries, are now being adapted to fit the context of Africa. Business development services, incubators, agribusiness parks, clusters, networks, warehouse receipts, and contract farming are being utilized to assist in agroenterprise creation and growth.

4.2.1 Business Development Services

Successful investments in small and medium-sized enterprises must be paired with appropriate management assistance and access to value-added business networks in emerging markets. Business development services draw upon formal qualification in areas such as finance, accounting, marketing management, economics, and law. Aside from an academic grounding in one or more of these disciplines, however, possibly a more essential prerequisite, and one to which the industry refers, is experiential knowledge. How one obtains such knowledge, e.g., through structured mentoring

and/or informal consultation with more seasoned professionals, is especially important since many services do not require prior formal qualification in a "closed" profession such as accounting, engineering, law, or architecture. Finally, provision of these services will often draw, but only selectively and for limited periods, on particular domain expertise and knowledge. For example, vetting of a proposed investment in an agroenterprise will require expert "technical knowledge" (food processing, engineering, packaging, and mechanization) of the product in question.

Professional qualifications are often, but not always, a necessary condition for undertaking a particular service. More important, especially for undertaking critical services within the investment cycle, is experiential knowledge, often confused with domain expertise. The latter refers to expert knowledge, which, as noted earlier, may be needed to provide various services associated with the investment cycle. One such example is technical knowledge of processes for producing high-quality food products. Clearly, domain expertise is needed to evaluate proposed investment in a plant producing such a product. What proved equally significant in terms of appraising the investment is the supervisors' and managers' accumulated experience, through past jobs, in operating and maintaining the equipment in question, as well as other processing-related activities (FAO 2008).

4.2.2 Incubators and Technology Parks

In general, the term incubator refers to a multi-occupant building that leases space to start-up businesses, usually on flexible terms, and provides shared services and business advice. The benefits of incubators include reduced start-up costs, training in business practices, and connection with a network of other entrepreneurs. The idea of creating agribusiness-specific incubators is beginning to take hold in some African countries. The Institute of Agricultural Research of Mozambique, for example, is working with the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) to establish a farm business incubator. "When the Farm Business Incubator becomes a reality it will be among the earliest of its kind in Africa and would have the primary objective [of developing] agro-enterprise that will benefit Mozambique's agriculture, animal husbandry and food processing" (ICRISAT). Mali is another country that is taking steps toward establishing an agribusiness incubator. With help through funding from USAID, the agricultural research and rural development agencies in Mali are collaborating to create the Agribusiness Entrepreneurial Incubator Centre, which "is dedicated to providing biotechnologies research-based packages for strengthening food and water quality to develop agribusiness in Mali" (Montana State University 2009).

While there are many examples of technology business parks in operation throughout Africa, parks specifically dedicated to agribusiness are less common. Agribusiness parks offer similar services to incubators but may also include use of food processing equipment and access to university scientists for assistance in product development and testing. One example is the Presidential Initiative on Banana Industrial Development in Uganda. Its "underlying theory of change is that rural farmers with access to science led-processing [sic] and value addition enterprises . . . will be able to rapidly access profitable market chains that supply local, regional, and international markets resulting in increased household income" (PIBID 2009). The park encourages the transfer and diffusion of banana processing technology along with the entrepreneurial skills necessary for agribusiness.

4.2.3 Business Clusters and Networks

According to Porter (2000), "clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (e.g., universities, standards agencies, trade associations) in a particular field that compete but also cooperate." The Global Agro-Industries Forum held in India in 2008 included a roundtable discussion on agro-industrial clusters. Such clusters can spur innovation, quicken the transfer of new technologies, and build access to needed skills and services. With funding from USAID and UNIDO, Ethiopia has spurred the development of competitive clusters, including one centred on hides, skins, and leather. The leather cluster is being led by a working group of members from the private, public, and academic spheres and is tasked with developing and implementing initiatives for quality improvements, marketing efforts, and capacity building in high-value leather products (Economic Competitiveness Group 2008).

Networks, on the other hand, are similar, already established businesses that have joined together for the purpose of capacity building through business development services and knowledge sharing. Agroenterprises that are part of networks do not have to be located in the same geographic area, and enterprises can benefit from being connected to counterparts in other countries and regions of Africa. One example of an agribusiness network is the Seeds of Development Programme (www.sodp.org), which was created in 2003 to offer specialized business development services to small and medium-sized seed companies in East and Southern Africa.

4.2.4 Warehouse Receipts

Despite the widespread agricultural reforms of the 1980s, agricultural commodity markets in Africa have remained inefficient and underdeveloped. While most governments have relinquished their previously firm control on agricultural markets, in most countries the private sector has not stepped up to fill the void left by agricultural marketing parastatals. High transaction costs especially in assembling agricultural products from smallholder farmers scattered in rural areas, plus imperfect information mostly due to lack of grades and standards, have been blamed as key barriers to trade and limited the participation of smallholder farmers in formal commodity markets.

Regulated warehouse receipts are now widely hailed as an important intermediate step in the transition from regulated markets to complete privatization. By definition, warehouse receipts are "documents issued by warehouse operators as evidence that specified commodities of stated quantity and quality have been deposited at particular locations by named depositors" (Coulter and Onumah 2002). Two variants of warehouse receipt schemes exist, one-part receipts being preferred in common law countries and two-part receipts in civil law countries. Despite the variation in *modus operandi* and legal frameworks, warehouse receipt systems serve many purposes in agricultural markets including the following:

- Mobilization of credit by creating collateral for farmers, processors, and traders
- Reducing the seasonality of prices by arbitraging between supply peaks and lows through storage

- Increasing income to smallholder farmers by allowing them to sell their products when market conditions are most favourable
- Facilitating the development of efficient and accessible rural financial systems
- Serving as cost-effective management of public food reserves needed to meet food security goals
- Lowering transaction costs for commodity trade by guaranteeing quality and quantity
- Reducing postharvest losses due to improved storage conditions
- Mitigating price risks by facilitating a futures market for producers, lenders, and traders (Giovannucci et al 2001; Coulter and Onumah 2002).

Ghana and Zambia have widely acclaimed examples of successful warehouse receipt schemes in which farmers' incomes have nearly doubled due to this institutional innovation. According to Coulter and Onumah (2002) "the most significant challenge in establishing warehouse receipt systems in Africa remains the disabling elements in the policy environment, particularly ad hoc interventions occasioned by short-term reactions to symptoms of market inefficiency." By setting up the proper legal frameworks and policy environment, African governments in partnership with local banks and agroenterprises can harness the power of warehouse receipts to accelerate the growth of agribusiness and agro-industries.

4.2.5 Contract Farming and Out-grower Schemes—Collective Action/Producer Associations

Linkages for large agribusinesses in supply chains are both horizontal (i.e., between enterprises that are on the same level of the supply chain) and vertical (i.e., between enterprises that are on different levels of the supply chain). Most horizontal linkages pertain to large and small agribusiness and agro-industries, while vertical linkages pertain to large agribusiness and agro-industries and farmer groups. Of the two, horizontal linkages are less common due to the lack of incentives for large agribusiness and agro-industries to pursue such business relationships. Large industries may subcontract to their smaller counterparts in order to satisfy a market opportunity. Such arrangements may not have indirect spillover effects like the transfer of technology and information. Alternatively, large agribusiness and agro-industries may jointly bid for contracts with smaller firms and, in so doing, increase their access to markets.

On the other hand, vertical linkages are more beneficial to both parties (large agribusinesses and farmer groups), because in most cases they entail long-term direct and indirect benefits. Large agribusiness and agro-industries pursue linkages with farmers or farmer groups in order to access a steady supply of raw materials. The extent of these linkages may vary from a one-time engagement to a long-term contractual relationship. In the latter case, the large firm may invest in training farmers in the production of quality farm output, and it may provide capital for the purchase of farm inputs. The goal of such a relationship is to ensure a steady supply of a quality product for the large firm. Farmers, in turn, derive benefit from this relationship. First and foremost, they now have a steady market for their farm output, and therefore a steady income stream. In addition, they have acquired farm management skills that enable them to produce a quality product. This is to farmers' advantage—should the business relationship with the large firm cease, farmers are competitive enough to pursue relationships with other firms. Further, farmers now have access to technologies

in the form of improved inputs like seeds and fertilizers that should improve their productivity and profitability.

Vertical linkages should be encouraged by public policy makers because they have the potential to eradicate poverty at the smallholder farm level through income generation. Specifically, policy support should be directed toward the formation of farmer groups so as to reduce the risk of insufficient supply. In addition farmer groups are better equipped than individual farmers to negotiate favourable contract terms with large agribusinesses. The business relationship is economically attractive only if farmers realize higher profits compared with alternative markets.

4.3 Financial Capital and Risk Mitigation

The broad objective of this programme initiative is to provide investment capital and risk management instruments to agroenterprises to enhance the competitiveness of agribusiness and agro-industries.

4.3.1 Investment Fund for African Agroenterprises

A serious need exists for new sources of capital to finance small and medium-sized companies. Figure 5 illustrates the "missing middle" in African agribusiness and agro-industries financing. Though sources of capital are available for microenterprises and very large entities, very few sources of formal financing exist for SMEs. Establishing investment funds specifically targeted toward African agribusiness and agro-industries can help spur needed growth in agro-enterprises.

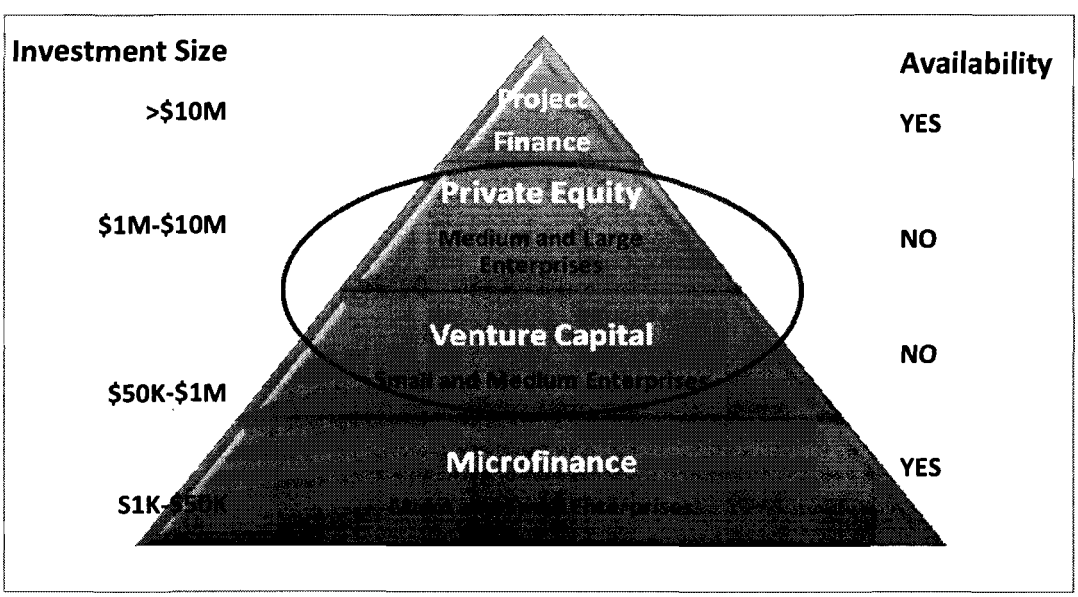

Figure 5: The "Missing Middle" in African Agribusiness and Agro-industries Financing

4.3.2 Guarantees to Commercial Lending

The intangible nature of financial services requires a strong regulatory environment in order for the financial markets to develop and function effectively. Thus in the short term, governments need to take the lead in building confidence, trust, and stability among participants in these markets. One way of doing so is to act as guarantee for loans to the agro-industry. In the long term, well-defined property rights particularly in farming are crucial to enable use of real estate as collateral in accessing traditional financial markets. It may be necessary to build a farm credit system following the USA model. Overall, the evolution of financial markets for agriculture has been observed to parallel general developments in finance; hence a necessary condition for the former is functionality of the latter.

4.3.3 Foreign Direct Investment

African countries, like most developing countries, are actively seeking foreign direct investment to enhance their economic growth and to promote their integration into the world economy. FDI has received significant attention from policy makers because it has the potential to generate employment opportunities and transfer management know-how and technology, while enhancing domestic competition and entrepreneurship. Beyond significant improvements in the overall investment climate, investment promotion has a big role to play in informing investors about investment opportunities. Governments should exercise caution, however, so that investment promotion does not turn into a bidding war that may be detrimental to regional cooperation and integration. Investment promotion can also serve as a means to diversify foreign investment.

4.3.4 Risk Mitigation and Monitoring

A key distinguishing feature of the agriculture sector, compared with other sectors of the economy, is the high prevalence of risk and uncertainty that result from both natural and human-made causes. Since agribusiness and agro-industries are a high-risk but relatively low-margin segment of the economy, their success will require innovative and flexible ways of hedging against risk. One means of reducing price risk is the use of commodity futures exchange markets. Proper functioning of a futures market depends on enforceability of contracts and a dependable information system. Crop insurance on the other hand would be instrumental in mitigating production risks due to natural catastrophes.

In creating an enabling environment for agro-industry finance, special attention needs to be accorded to small to medium-sized agroenterprise entities considered too small to access traditional capital markets but too large to depend entirely on personal or family savings. Agroenterprise entities in this size category are increasingly becoming important to developing country governments ever mindful of the need to ensure food security for their populations.

5. PROGRAM FRAMEWORK

The preceding section identifies and characterizes several initiatives that could accelerate agribusiness and agro-industries development in Africa, thereby helping to achieve economic growth and poverty reduction. Potential outcomes and outputs for these initiatives are presented in a log frame format in Appendix C. The first table summarizes the broad program initiative, primary objectives and the key activities that might be undertaken. The next three tables expand on each the

three program initiatives with details on the expected output and outcomes. Outputs are defined as the direct results of the program intervention and activities. Outcomes on the other hand, capture or quantify the level of performance or achievements against the desired goal of economic growth and poverty reduction.

One of the main outcomes of the Expert Group Meeting will be to consider, revise and start to prioritize the initiatives that should be included in the programme framework that will be submitted to senior officials meeting proposed to take place as a side event of the AU summit in July. Recognizing that each country and sub-sector faces a unique set of macro and micro environmental challenges, it is important to point out that all recommendations presented herein, or even the findings of the Expert Group Meeting, are not meant to be applied uniformly across the continent. The purpose of the overarching programme framework is to provide guidance for follow up actions and to communicate clearly the scope of activities that might be eventually supported under this initiative. Eventually, country-level appraisals and consultative processes will be needed to identify priority areas and approximate the size and nature of specific investments required. Hence, at country level, the recommended interventions can be viewed as a toolkit for development practitioners.

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Appendix A: The Size of the Shadow Economy in Thirty-Seven African Countries

COUNTRY	SHADOW ECONOMY (IN % OF OFFICIAL GDP) USING THE DYMIMIC AND CURRENCY DEMAND METHOD				
	1999/00	2001/02	2002/03	2003/04	2004/05
Algeria	34.1	35.0	35.6	34.8	33.9
Angola	43.2	44.1	45.2	45.3	45.0
Benin	47.3	48.2	49.1	49.3	49.8
Botswana	33.4	33.9	34.6	34.2	33.8
Burkina Faso	41.4	42.6	43.3	43.8	43.1
Burundi	36.9	37.6	38.7	39.4	39.7
Cameroon	32.8	33.7	34.9	34.4	33.6
Central African Republic	44.3	45.4	46.1	46.3	46.9
Chad	46.2	47.1	48.0	48.4	47.8
Congo, Dem. Rep.	48.0	48.8	49.7	50.4	50.8
Republic of Congo	48.2	49.1	50.1	50.5	51.1
Cote d'Ivoire	43.2	44.3	45.2	45.4	44.7
Egypt, Arabian Republic	35.1	36.0	36.9	36.3	35.4
Ethiopia	40.3	41.4	42.1	42.7	42.0
Ghana	41.9	42.7	43.6	43.8	43.2
Guinea	39.6	40.8	41.3	41.7	41.0
Kenya	34.3	35.1	36.0	35.4	34.8
Lesotho	31.3	32.4	33.3	32.8	32.3
Madagascar	39.6	40.4	41.6	41.9	41.2
Malawi	40.3	41.2	42.1	42.7	41.9
Mali	42.3	43.9	44.7	44.0	43.2
Mauritania	36.1	37.2	38.0	37.4	36.8
Morocco	36.4	37.1	37.9	37.3	36.7
Mozambique	40.3	41.3	42.4	42.9	43.5
Namibia	31.4	32.6	33.4	33.0	32.4
Niger	41.9	42.6	43.8	44.1	44.2
Nigeria	57.9	58.6	59.4	59.6	59.5
Rwanda	40.3	41.4	42.2	42.4	41.6
Senegal	45.1	46.8	47.5	47.8	48.2
Sierra Leone	41.7	42.8	43.9	44.1	44.3
South Africa	28.4	29.1	29.5	29.0	28.2
Tanzania	58.3	59.4	60.2	59.1	58.2
Togo	35.1	39.2	40.4	40.6	39.4
Tunisia	38.4	39.1	39.9	39.4	38.3
Uganda	43.1	44.6	45.4	45.8	44.9
Zambia	48.9	49.7	50.8	50.2	49.3
Zimbabwe	59.4	61.0	63.2	63.9	64.6
UNWEIGHTED AVERAGE	41.3	42.3	43.2	43.2	42.8

Source: Schneider 2007.

Appendix B: Ease of Doing Business Rankings

Economy	Ease of Doing Business Rank	Starting a Business	Dealing with Construction Permits	Emplo Work
Mauritius	24	7	36	
South Africa	32	47	48	
Botswana	38	80	119	
Namibia	51	112	38	
Tunisia	73	37	101	
Kenya	82	109	9	
Ghana	87	137	142	
Zambia	100	71	146	
Seychelles	104	68	56	
Swaziland	108	153	21	
Uganda	111	129	81	
Egypt	114	41	165	
Ethiopia	116	118	59	
Nigeria	118	91	151	
Lesotho	123	125	150	
Tanzania	127	109	172	
Morocco	128	62	90	
Gambia, the	130	101	74	
Algeria	132	141	112	
Malawi	134	122	156	
Rwanda	139	60	90	
Mozambique	141	144	153	
Cape Verde	143	163	79	
Madagascar	144	58	102	
Sudan	147	107	135	
Burkina Faso	148	113	106	
Senegal	149	95	118	
Gabon	151	148	60	
Djibouti	153	173	99	

ying ers	Registering Property	Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Closing a Business
64	127	84	11	11	20	76	70
102	87	2	9	23	147	82	73
73	29	43	38	17	149	92	26
34	129	12	70	96	150	36	52
113	55	84	142	106	38	72	32
68	119	5	88	158	148	107	76
145	31	109	38	65	76	50	104
135	91	68	70	38	153	87	80
120	55	163	53	40	90	62	181
40	153	43	178	52	154	129	65
11	167	109	126	70	145	117	51
107	85	84	70	144	24	151	128
95	154	123	113	37	152	78	74
27	176	84	53	120	144	90	91
63	135	84	142	54	141	104	69
140	142	84	88	109	103	33	111
168	117	131	164	119	64	112	64
55	111	131	170	175	73	63	120
118	162	131	70	166	118	126	49
96	96	84	70	58	167	138	135
93	60	145	170	56	168	48	181
161	149	123	38	88	140	124	133
169	124	123	126	115	56	40	181
153	145	172	53	92	109	153	181
144	35	131	150	67	139	143	181
57	148	145	142	132	173	110	110
165	161	145	164	170	60	146	77
154	158	131	150	101	128	147	134
137	134	172	177	61	35	159	132

Economy	Ease of Doing Business Rank	Starting a Business	Dealing with Construction Permits	Employing Workers	Registering Property
Comoros	155	160	64	162	93
Sierra Leone	156	53	169	173	163
Liberia	157	88	177	105	172
Zimbabwe	158	164	174	127	85
Mauritania	160	143	142	123	61
Côte d'Ivoire	161	167	160	112	139
Togo	163	179	145	155	155
Cameroon	164	171	154	124	138
Mali	166	162	106	94	94
Equatorial Guinea	167	174	87	178	69
Angola	168	156	125	174	173
Benin	169	149	130	116	119
Guinea	171	177	162	114	157
Niger	172	159	157	166	75
Eritrea	173	178	181	65	165
Chad	175	180	70	139	132
São Tomé and Principe	176	136	113	179	151
Burundi	177	138	173	70	125
Congo, Rep.	178	157	68	170	171
Guinea-Bissau	179	181	109	176	170
Central African Republic	180	152	138	151	133
Congo, Dem. Rep.	181	154	141	175	152

Source: World Bank, *Doing Business 2009*

Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Closing a Business
163	126	55	129	150	181
145	53	160	132	141	145
131	142	59	115	165	146
84	113	157	162	77	154
145	142	174	158	84	148
145	150	148	155	124	68
145	142	147	84	151	94
131	113	171	137	172	95
145	150	156	166	158	114
131	142	161	133	69	181
84	53	130	172	179	142
145	150	165	129	175	130
163	170	168	110	131	109
145	150	120	169	134	138
172	104	105	163	51	181
145	126	130	159	166	181
163	150	151	88	171	181
163	150	114	170	170	181
131	150	179	176	155	117
145	126	117	111	139	181
131	126	178	175	169	181
163	150	153	160	173	150

Appendix C: Program Initiative to Accelerate Agribusiness and Agro-industries in Africa

Table A-1: Program Initiatives to Accelerate African Agribusiness and agro-industries

Program Initiative	Objective	Activities
A. Public Goods and Facilitative Policies	To provide public goods, and formulate and implement policies that facilitate efficient trade along agro-industry value chains.	1. Public investment in agricultural and food research and development 2. Public investment in infrastructure that serves agribusiness and agro-industries 3. Public investment in Market Information Systems for key agricultural commodities 4. Develop and enforce grades and standards for agricultural products 5. Enhance business climate to improve ease of doing business for agribusiness and agro-industries. 6. Develop and enforce legal framework for property rights. 7. Develop and implement trade policy that minimizes distortions and harmonize regional trade.
B. Innovative Institutions	Create new and improve existing innovative institutions that strengthen SME linkages and smallholder access to national, regional, and global agro-industry supply chains.	1. Develop Business Development Services that is targeted at farmers and ago-enterprises. 2. Promote business incubators for agro-enterprises. 3. Establish agro-industry research and technology parks. 4. Promote agribusiness clusters and networks. 5. Build warehouse receipts systems for agricultural commodities. 6. Promote collective action, contract farming and out-grower schemes that integrate farmers into the agricultural value chain. 7. Develop commodity exchanges for agricultural commodities 8. Create and support certification agencies for agricultural products.
C. Financial Capital and Risk Mitigation	*Provide investment capital and risk* management instruments to agro-enterprises to enhance their competitiveness.	1. Create an investment funds that exclusively targets African agribusiness and agro-industries. 2. Create guarantees for agro-enterprises that improve access to commercial lending. 3. Promote foreign direct investment by international agri-businesses. 4. Support MFIs and electronic banking for agro-enterprises 5. Leverage foreign remittances for investments in agro-enterprises. 6. Design and support mechanisms for assessing, mitigating and monitoring of risks facing agribusiness and agro-industries. 7. Promote structured finance instruments that target agribusiness and agro-industries

Table A-2: Program Initiative A—Public Goods and Facilitative Policies

OBJECTIVE: TO PROVIDE PUBLIC GOODS, AND FORMULATE AND IMPLEMENT POLICIES THAT FACILITATE EFFICIENT TRADE ALONG AGRO-INDUSTRY VALUE CHAINS.

Activities	Outputs (possible examples)	Outcomes
1. Public investment in agricultural and food research and development	• Increased released of locally adapted crop and tree varieties from public research institutions. • Increased access to food processing technologies from National Food Science Research Centres.	• Increased productivity of key crops and trees. • Increased productivity and reduced mortality of farm animals. • Appropriate solutions to agro-enterprises that maximize output and minimize costs of production.
2. Public investment in infrastructure that serves agribusiness and agro-industries	• Improved roads and railways services • Wider coverage and consistent supply of electricity to agribusiness and agro-industries • Enhanced water management and investments in public water systems	• Reduction in post harvest losses • More agribusiness and agro-industries located closer to source of raw materials (i.e., reduced urban bias for agribusiness and agro-industries). • Improved market efficiency
3. Public investment in Market Information Systems for key agricultural commodities	• Daily of weekly broadcast of agricultural commodity prices in various markets • Periodic assessment of local, regional and international markets.	• Improved market integration between local, regional and international markets. • Reduced seasonality in prices of agricultural products.
4. Develop and enforce grades and standards for agricultural products	• Consistent use of grades and standard across, geography, seasons and traders. • Comprehensive food safety policies and regulations. • Institutional capacity to test and enforce food safety standards.	• Effective communication of market information based on specific grates and standards. • Increased premium for high quality products. • Increased consumer confidence in value added foods. • Improved access to international food markets.
5. Enhance business climate to improve ease of doing business for agribusiness and agro-industries.	• Comprehensive strategy by governments to improve the ease of doing business. • Improved rankings on commonly used business climate indexes.	• Reduction in barriers to entry & exit. • Increased FDI flow to agribusiness and agro-industries. • More SMEs shifting from informal sector to formally registered private enterprises.
6. Develop and enforce legal framework for property rights.	• Comprehensive property rights. • Willingness and ability to enforce property rights.	• Increased investment in research and development by private agro-enterprises. • Increased FDI flows
7. Develop and implement trade policy that minimizes distortions and harmonize regional trade.	• Trade policy that is focused on achieving specific development goals such as the achievement of the MDGs. • Harmonization of trade policies within regional trading blocs.	• Increased specialization on commodities in which countries have a comparative advantage. • Improved balance of trade at national level.

Table A-3: Program Initiative B—Innovative Institutions

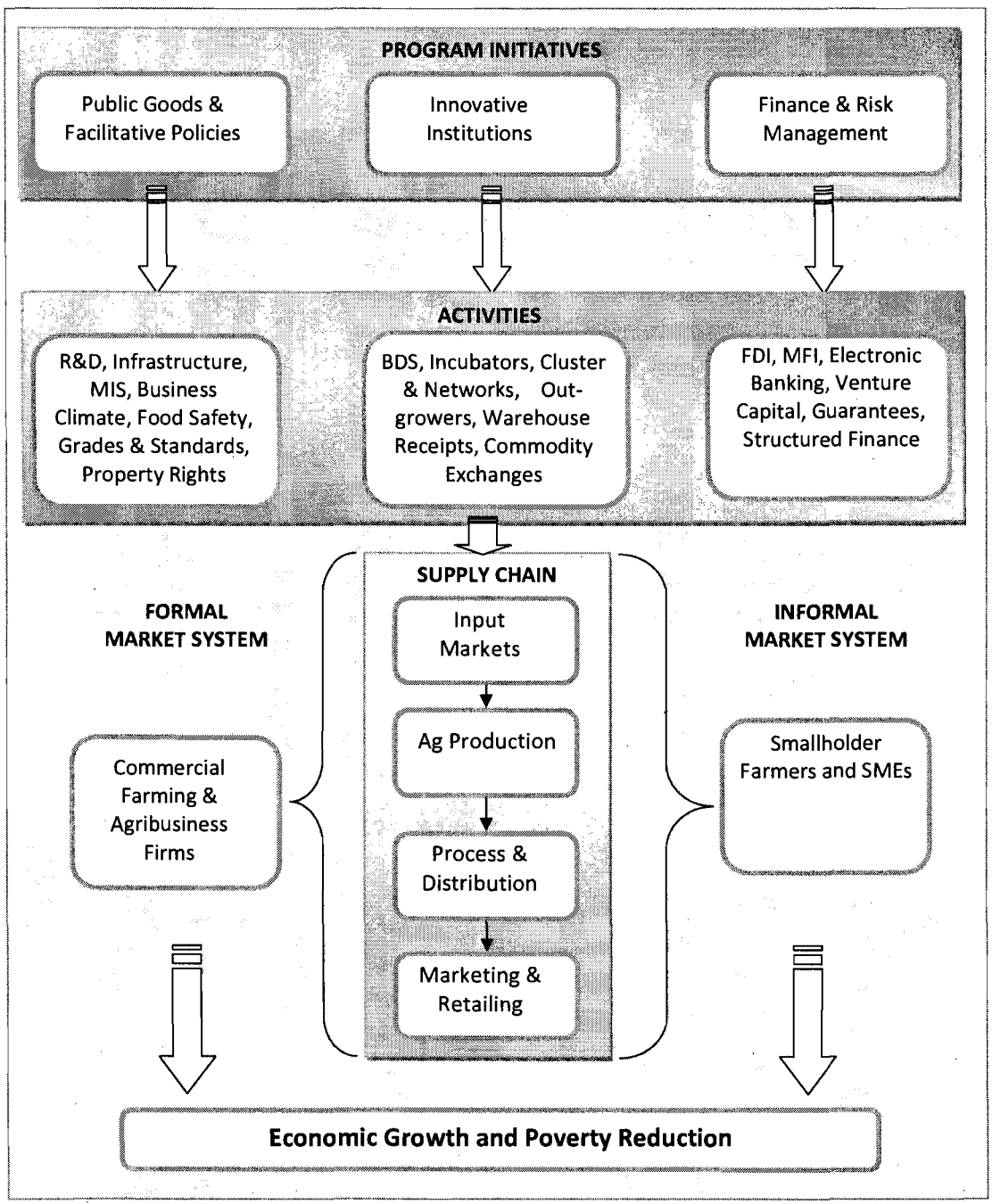
OBJECTIVE: CREATE NEW AND IMPROVE EXISTING INNOVATIVE INSTITUTIONS THAT STRENGTHEN SME LINKAGES AND SMALL-HOLDER ACCESS TO NATIONAL, REGIONAL, AND GLOBAL AGRO-INDUSTRY SUPPLY CHAINS.		
Activities	**Outputs (possible examples)**	**Outcomes**
1. Develop Business Development Services that is targeted at farmers and ago-enterprises.	• Management training workshops that are specific to the needs of agribusiness and agro-industries. • Modules, case studies and other training materials that are specific to the context of agribusiness and agro-industries.	• Improved performance of agro-enterprises as measure by: increased sales revenue, increased profitability, increased market share, wider range of products and services offered.
2. Promote business incubators for agro-enterprises.	• Programs designed to accelerate the successful development of start-up and early-stage agro-enterprises.	• Increased likelihood that a start-up agro-enterprises will stay in business for the long term:
3. Establish agro-industry research and technology parks.	• Investment in Research and Technology Parks that house established agro-enterprises and government or university labs.	• Increased production efficiency and improved technology transfer. • More agribusiness and agro-industries located closer to source of raw materials.
4. Promote agribusiness clusters and networks.	• Vertical linkages along value chains for specific commodities. • Horizontal linkages across agro-enterprises on the same level of the value chain but dealing in different commodities.	• Improved transfer of technology among members of the same network or cluster – (learning from peers). • Improved efficiency in agro-industry supply chains from farmer to consumer.
5. Build warehouse receipts systems for agricultural commodities.	• Facilities that guarantee the quantity and quality of a particular agricultural commodity being stored within an approved facility.	• High income for farmers fast they capitalize on higher off season prices. • Decrease in seasonality of agricultural prices.
6. Promote collective action, contract farming and out-grower schemes that integrate farmers into the agricultural value chain.	• Increased use of contract farming to coordinate linkages between farmers and agribusiness firms. • Agro-enterprises providing services to smallholder farmers, e.g., input credits, tillage, spraying and harvesting.	• Tighter coordination of supply chains. • Increased participation of smallholder farmers in formal markets. • Higher income for smallholder farmers.
7. Develop commodity exchanges for agricultural commodities	• Exchange where various agricultural commodities and derivatives products are traded. • Contracts can include spot prices, forwards, futures and options on futures.	• Efficient trade of agricultural commodities • Linkages between domestic, regional and international markets
8. Create and support certification agencies for agricultural products.	• Institutional mechanisms to ensure traceability and certification of agricultural products.	• Increased premiums for high quality products. • Increased consumer confidence in value added agricultural products.

Table A-4: Program Initiative C—Financial Capital and Risk Management

OBJECTIVE: PROVIDE INVESTMENT CAPITAL AND RISK MANAGEMENT INSTRUMENTS TO AGRO-ENTERPRISES TO ENHANCE THEIR COMPETITIVENESS.

Activities	Outputs (possible examples)	Outcomes
1. Create an investment funds that exclusively targets African agribusiness and agro-industries.	• Established African Agro-industry Investment Fund. • Private Equity finance for medium term leveraged finance for mature, cash positive companies. • Venture Capital finance for long-term equity investments in growth companies.	• Capitalization and growth of African agro-enterprises. • Increases production efficiency
2. Create guarantees for agro-enterprises that improve access to commercial lending.	• More agro-enterprises that are eligible for financing through commercial banks. • Increased willingness of banks for loan money to farms and agro-enterprises.	• Decreased cost of borrowing from commercial banks. • Increased investments in agribusiness and agro-industries.
3. Promote foreign direct investment by international agri-businesses.	• Increase in Foreign Direct Investments especially South-South FDI.	• Capitalization and growth of African agro-enterprises. • Technology transfer from multinational cooperation to domestic agro-enterprise firms.
4. Support MFIs and electronic banking for agro-enterprises	• Micro finance lending institutions for agro-enterprises. • Mobile banking facilities and other electronic funds transfer facilities.	• Higher yields from smallholder farmers due to increase use of purchases inputs. • Increased savings and capitalization of smallholder farmers.
5. Leverage foreign remittances for investments in agro-enterprises	• Facilities that encourage the use of foreign remittances for purchasing agricultural inputs (e.g., online purchasing of agro-inputs)	• Higher input use by smallholder farmers. • Shift from subsistence agriculture to small scale commercial farming. • Improved food security and poverty reduction.
6. Design and support mechanisms for assessing, mitigating and monitoring of risks facing agribusiness and agro-industries.	• Comprehensive risk management plans by African governments that include risk management tasks, responsibilities, activities and budget. • Irrigation facilities to reduce reliance of rain-fed agriculture.	• Improved response to weather, disease and price shocks by governments and agro-enterprises. • Increased investment in agribusiness and agro-industries. • Reduced vulnerability to severe and catastrophic weather events.
7. Promote structured finance instruments that target agribusiness and agro-industries	• Pooling of assets • *Tranching of liabilities that are backed by the asset pool* • De-linking of the credit risk of the collateral asset pool from the credit risk of the originator	• Portfolio diversification and attractive risk-return *profiles for investors.* • Increase capitalization of agribusiness and agro-industries

Appendix D: Toward Economic Growth and Poverty Reduction



Appendix E: Classification of African Countries

In setting an agenda for program investments in Africa's agribusiness and agro-industries, it is useful to classify African countries into groups of countries with shared characteristics. Herein we propose a framework that classifies countries into four tiers using the following four key variables:

1. Role of agriculture in national economic growth as measured by agriculture's contribution to GDP
2. Extent of government intervention in agricultural commodity markets
3. Formality of industry supply chain
4. Political stability of the country.

The resulting classification places countries into four tiers that roughly reflect the stage of growth of the agro-industry sector as follows: Tier 1—Latent Stage, Tier 2—Introduction Stage, Tier 3—Growth Stage, and Tier 4—Maturity Stage. Note that the variables used here are not meant to be exhaustive or mutually exclusive in characterizing agribusiness and agro-industries. Further, and the weights assigned to each variable may be altered resulting in a slightly different classification.

Tier 1—Latent Stage: The agro-industry sector in Tier 1 countries is latent or in the premarket stage. Countries in this category are either politically unstable (e.g., Burundi, Cote d'Ivoire, Democratic Republic of Congo, Eritrea, Sudan) or agriculture is not central to the economy (e.g., Botswana). Except for a few geographically isolated areas, we see limited scope for program investments in the agro-industry sector within these countries at present. We consider Tier 1 countries to have low priority for agro-industry-related program investments.

Tier 2—Introduction Stage: The agro-industry sector in Tier 2 countries is in the introduction stage. While agriculture plays a key role in the economies of these countries, the sector has not moved much from primary production (farming). The little value addition from agriculture is still dominated by government parastatals for key crops and the informal sector for all other agricultural commodities. Program investments in these countries are likely to yield high impact. Most agriculture-based economies in West and Central Africa fit into this tier e.g., Angola, Ethiopia, Mali, Rwanda. We consider these countries to have high priority for agro-industry-related program investments.

Tier 3—Growth Stage: The agro-industry sector in Tier 3 countries is in the growth stage. Countries in this category have a growing formal agro-industry sector that runs parallel to an informal agro-industry sector. The formal sector is transitioning from government monopolies to full privatization. The number of private enterprises and amount of investment in agribusiness and agro-industries is growing for the local market, regional trade, and international markets. Program investments in these countries are likely to yield high economic impacts. Currently, most agriculture-based economies in East and Southern Africa fit in this tier e.g., Kenya, Malawi, Tanzania, Uganda, Zambia, Zimbabwe. We consider these countries to have the highest priority for agro-industry-related program investments.

Tier 4—Maturity Stage: The agro-industry sector in Tier 4 countries is mature. Countries in this category have a well-developed formal agro-industry sector that is at par with developed countries. Private agro-industry is meeting the needs of the mostly commercial farmers. In sub-Saharan Africa,

only South Africa fits in this tier, while a few North African countries may also fit into this tier. Except for geographically isolated areas and niche crops, we see no scope for agro-industry-related program investments in Tier 4 countries.

This classification of sub-Saharan African countries according to the growth stage of the agro-industry sector is summarized in Table A3.

Table A3: Classification of Sub-Saharan African Countries

Characteristics		**Tier 1**	**Tier 2**	**Tier 3**	**Tier 4**
1. Role of agriculture to economic growth	Central to economy		X	X	
	Minor role in economy	X			X
2. Extent of government intervention in agricultural markets	Heavy government controls	X			
	Transitioning / liberalization		X	X	
	Limited government intervention				X
3. Formality of agro-industry supply chain and markets	Mostly informal system	X			
	Mixed system		X	X	
	Mostly formal system				X
4. Political Stability	Politically stable		X	X	X
	Unstable (conflict zones)	X			