Modernizing Africa's Agro-Food Systems: *Analytical Framework and Implications for Operations*

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Abstract

Agribusiness or agro-enterprise activity accounts for approximately one-fifth of the GDP for Sub-Saharan Africa and just under half of the region's value-added in manufacturing and services. Based on the experience of many middle-income countries, it is expected that the share of agribusiness services and manufacturing in GDP will rise to between 30 and 45% in the majority of African countries.

The promotion of agro-enterprise development can provide a catalytic force in poverty reduction in Africa, both directly and indirectly by: (i) reducing food costs and supply uncertainties and improving the diets of the rural and urban poor; (ii) generating growth, increasing and diversifying incomes, and providing widespread employment and entrepreneurial opportunities in both rural and urban areas; and (iii) inducing productivity gains by smallholder farmers and better integrating them into local, national, and international markets.

This paper sets out a strategy for World Bank Group assistance for support for agro-enterprise development and the more general modernization of agro-food systems in Africa. The paper draws lessons from past interventions in this field, denotes the comparative advantage of the Bank Group for work in this field, and identifies priority themes and leverage points for activity.

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I. INTRODUCTION

> *This paper sets out a strategy for World Bank Group assistance for the modernization of agro-food systems in Africa. The objective of this strategy is to enhance the competitiveness of Africa's food, feed, and fiber systems and to do so in a manner in which the poor are key beneficiaries in their capacities as consumers, farmers, workers, and entrepreneurs. This is a major challenge, not only because of the long-standing constraints faced by Africa's farmers and agro-enterprises (i.e., weak infrastructure, anti-business policies, etc.) but also because significant changes in the global agro-food market are tilted toward those economic agents who have capital, superior organizational and marketing skills, and an acute understanding of consumer requirements. Those lacking such assets and capabilities risk being (further) marginalized.*

The focus of attention here is on those enterprises, activities, institutions, and relationships which occur *off the farm*--that is, those entities and functions which deliver material inputs to the farming sector and transform, distribute and otherwise add value to food and fiber products, yet are not directly engaged in primary production and natural resource management--the shorthand term is *agro-enterprise activity*. As already demonstrated in a number of countries (including China, Chile, Brazil, Thailand, Taiwan, and Mexico), agro-enterprise activity, or agribusiness[1], can be a powerful source of growth, diversification, and poverty alleviation. However, competitive agro-enterprise activity does not emerge spontaneously. It requires a resourceful, market-oriented private sector that is willing and able to bear commercial and other risks, and a facilitative enabling environment comprising policies, rules, and infrastructure. With consumer demand and agricultural markets undergoing continuous change, sustained agro-enterprise success requires flexibility and the capacities to refine one's approaches, products, and services.

Several recently prepared strategy documents provide a generic framework for our analysis of opportunities and challenges in African agribusiness and the role of the World Bank Group therein. For example, Africa's strategy for private sector development, *"Africa Can Compete!"* recognized that there has been substantial macroeconomic reform in Africa and positive output growth, although risks, such as civil strife and AIDS, make that growth fragile. It noted that the continent has a vibrant private sector (yet one which is dominated by very small and often informal businesses), a vast endowment of natural resources, and an opportunity to kick-start investment through new sources of growth, including agribusiness. The report noted that emphasis on macroeconomic reform must continue but attention must also be turned to institutional mechanisms to underpin policy reform, let markets work more efficiently and enhance enterprise learning, competitiveness and investment. This means reducing the costs of doing business; mitigating non-commercial risk; and improving service quality in infrastructure and the financial sector. Importantly, "*Africa Can Compete!*" identified "entry points" as tangible or concrete ways to address specific constraints and to move from the specific to the general, rather than the other way round. Agribusiness was identified as one strategic entry point for fostering growth and policy/regulatory reforms.

[1] Although widely used in policy, business, and academic circles, the term 'agribusiness' has acquired negative connotations among various stakeholders and analysts, frequently being used as a synonym for larger, multinational agro-related business. While agribusiness includes a wide spectrum of enterprises and activities, this paper employs the term agro-enterprise (activity) as it carries less socio-political baggage.

The recent "*Can Africa Claim the 21st Century?*" prepared under the guidance of the Bank with the participation of many African players, posits four core values as the framework that Africa will have to build if it is to break out of the cycle of poverty. These framework values include improving governance and resolving conflict; investing in people to accelerate poverty reduction; increasing competitiveness and diversifying into new sources of growth; and reducing aid dependence and strengthening partnerships. This ambitious agenda serves as a backdrop for all sectors. In line with this framework, efforts to develop agribusiness in Africa must be proactive and geared to realities on the ground. Box 1 outlines growth and poverty issues as they are evolving in the PRSP framework.

Box 1: Growth, Poverty Reduction and the Role of the Public and Private Sectors

As countries move forward with the preparation of poverty reduction strategies--a cornerstone of dialogue with the Bretton Woods Institutions--their governments will need to articulate strategies which produce growth and at the same time reduce poverty. The private sector has a leading role to play both in articulating and in implementing poverty reduction strategies. Without growth, it is hard to see how governments can reduce poverty in an environment of declining official aid flows. It is also clear that the quality and distribution of growth are important and agribusiness has a number of positive attributes in this sense (see Section III).

Most new and enhanced value-adding activities in developing countries are driven by the private sector and the way in which the private sector works will be critical for poverty alleviation. At the same time, the public sector has a key role to play. Rather than being a force for control, governments need to be a catalyst for change and create the environment and "rules of the game" which build consumer and investor confidence and thus encourage long-term investment. Secondly, with economic value created, the public sector can take the lead in redistribution, providing not only a safety net for households but also the potential for them to participate more fully in value creating activities by fortifying their asset base and social capital (access to infrastructure or vocational education, for example). More and more, this involves not only central government but also local government and there is growing recognition of the scope for private delivery of services (i.e., through NGOs, foundations, enterprises, etc.).

In 1997, the World Bank adopted a comprehensive rural development strategy called "*From Vision to Action*" (VtA). That strategy sets poverty reduction in rural areas and the elimination of hunger as the main objectives of the Bank's rural development activities. Broad-based growth was also depicted as an important goal for which private sector development is one of the key drivers. VtA confirms that production, input supply, processing and marketing are best carried out by the private sector. In many places, the document refers to the role of the private sector and of markets, yet it fails to specify actions to promote private sector development. A recent re-evaluation of VtA found that the Bank's rural development program focused insufficient attention to the central poverty alleviation objective and gave only casual attention to the non-agricultural aspects of rural development.[2]

The OED recommended that any up-dated strategy should explain and illustrate how each of the five strategic priorities --one of which is private sector and agribusiness development-- are linked to the overarching goal of poverty reduction. The current updating of the VtA provides such an opportunity. The Markets and Agribusiness Thematic Team has prepared a strategy note on this subject as a contribution to the Bank's Rural Development Corporate Strategy. The current paper--focused on Africa--served as an input into that generic strategy note on agribusiness development as well into the Africa Region's updated "*Vision to Action*".

[2] OED (2000) Rural Development: *From Vision to Action - Phase II*, Report No. 20628.

This paper demonstrates the linkage between agro-enterprise development and the reduction of rural poverty in Africa, and provides a framework for improved WB Group analysis, policy dialogue, and investment in this field. The framework points not only to opportunities for specific agribusiness-centered initiatives, but also to the need to bring a market systems perspective to much, if not all, of the work done by the Bank in rural and Private Sector Development (PSD) in Africa. During the past decade, the operating conditions in the international agro-food market have changed fundamentally, posing new challenges for African countries. The action-oriented framework proposed here could be an important element of how the WB Group supports its African clients to address these evolving challenges.

II. AGRO-FOOD SYSTEMS: CONCEPTS AND DEFINITIONS

The first basis for strategy must be an analysis of opportunities, constraints, conflicts, and feasible solutions. For purposes of strategy, it is important to adopt a *'systems'* perspective when assessing the opportunities and constraints for agro-enterprise development and for reducing poverty via such development. Systems analysis is required when the diverse activities are broadly distributed over an extended geography and when the timely interaction of separate value-adding steps is essential for efficiency. As a by-product of globalization, food supply systems are increasingly being driven by consumer preferences. Of necessity, they are becoming more "demand pull" as contrasted with their traditional "supply push" orientation. *Much of the so-called modernization that remains to be achieved in developing/transition country agribusiness involves the re-orientation from the long legacy of 'supply push' to systems that are more attuned to consumer preferences and requirements—so-called 'demand-pull' marketing systems.*

The *agro-food system* consists of interdependent sets of enterprises, institutions, activities, and relationships which collectively develop and deliver material inputs to the farming sector, produce primary commodities, and subsequently handle, process, transport, market and distribute food and other agro-based products to consumers. The agro-food system can be broken down into sub-sectors, generally by commodity or group of commodities (cereals sub-sector, dairy industry, fruit and vegetables, etc.). The transition from primarily subsistence farming to cash-cropping (and commercial livestock production) and marketing, entails the development of systems to coordinate the activities of input providers, producers and downstream agents, across both space and time. [3]

For a developing country, agro-food systems might account for 50% or more of national GDP. This is not a practical unit for empirical analysis except in circumstances of broad national economic assessment. The agro-food system cuts across various industries and at the same time constitutes the aggregation of many commodity sub-sectors (grain, dairy, oilseeds, coffee, fruit/vegetables, cotton/textiles, etc.). The agro-food system is in fact a bundle of those sub-sectors, with horizontal relations between them. Most agro-food system analysis takes place at the industry or commodity sub-sector levels, and is used to highlight more systemic constraints.

[3] Importantly, agro-food systems also have a strong political economy dimension as these systems apportion benefits, costs, and risks among participants (including consumers, workers, managers, farmers, etc.). In relatively low-income and non-diversified economies, the stakes associated with preserving (or changing) particular commodity systems are very large and have a substantial impact on the overall distribution of power and income. Structural adjustments in such commodity systems also have potentially large re-distributional effects. Political and other forms of opposition to reform should therefore be expected.

As noted above, our attention centers on *the off-farm components of the agro-food system*--that is, the set of business and management activities and functions that are upstream and downstream of agriculture itself. The building blocks of the off-farm part of the agro-food system--rules and regulations, agro-enterprises, markets, and meso organizations--are outlined below. These can be combined and aligned in different ways to achieve different results. As discussed in Section VIII, each of these is possible points of leverage for improving competitiveness and for adjusting the distribution of opportunities and benefits.

Institutions

The most basic and fundamental sets of agro-food system building blocks are its **rules and regulations**. These are the 'institutions' in the parlance of the so-called new institutional economics. They perform a variety of functions including: defining, allocating, and enforcing property rights, defining and enforcing functional roles, defining the terms and conditions of product exchange, and reducing transaction costs by clarifying the outcome of contingencies. Some institutions are specific to agro-food systems and many of them prove specific to a given subsector. Private supply chain integrators mandate their observance as a condition of participation. Government bodies mandate other rules, either at the seller or buyer end of transactions. Examples include food product standards, food sanitation regulations, pesticide registration laws, and provisions of commerce mandated by specific commodity markets. Still others are generic, yet have substantial influence on the functioning of agro-food systems. Some examples include laws of contract, customs regulations, and rules applicable to warehouse receipt systems. Rules and regulations can be set collectively, mutually, or by fiat.

Enterprises/Entrepreneurs

A second set of agro-food system building blocks consists of **agro-enterprises.** They provide value-adding goods and services and take title to inputs and/or outputs within the agro-food system.[4] They make and sell inputs to farms, process crop and livestock products, wholesale and retail fresh and processed products to consumers, and/or process and sell raw materials to other industries. These enterprises can be located in rural or urban areas. They can be large or small, domestic or foreign, public or private, or a mix. They can be corporations, cooperatives, family-based entities or single proprietorship--hence they are governed by varied sets of rules. Their technologies and specialties will vary. Although frequently equated with 'big business' most agribusiness firms are small individual intermediaries (i.e., traders, transporters) and micro-enterprises, often from the informal sector.

Markets

Certain rules and regulations govern the functioning of **markets**, a third building block of agro-food systems. These are arenas where agro-enterprises transact with one another and with farmers and consumers. Markets provide a venue for price discovery, for matching buyers and sellers, for consolidating small lots into larger lots and for separating and distinctly valuing goods according to product specifications. For markets to function properly there must be enforceable rules that confirm the authentication of traders and assure committed delivery and payments. There must also be the necessary infrastructure, be it physical facilities or a network of information technology to facilitate virtual markets. Markets can be made more equitable by allowing and enabling a broad set of actors to participate, and made more efficient by creating

[4] Examples include fertilizer, seed, and pesticide suppliers, food manufacturers/processors, packaging manufacturers and suppliers, agro-machinery manufacturers/suppliers/repairers, agro-product transport companies, food distribution companies, cotton ginners, sawmill companies, etc.

institutions and organizations to assure smooth transactions and by improving their physical and/or informational infrastructure.

Collective and other meso organizations are yet another important agro-food system building block. These provide technical, informational, and/or other services, yet do not take title to goods. These include farmer organizations, trusts/foundations, development councils, and commodity, locational, or professional associations. These typically provide ‘community goods’ and sometimes operate in the crevices between the public and private sectors. Meso organizations can operate at both national and local levels.

The ways in which these building blocks are organized and the effectiveness with which they operate together as systems materially affect their competitiveness[5]. Increasing competitiveness in dynamic and fast changing global food markets must of necessity begin with an objective assessment of relative competitive advantage and initial starting conditions. Particular analytical tools are available to assess the current status, existing constraints, and opportunities for improvements for each of the agro-food systems components contained in a developing economy. For example, studies can focus on the content of specific agricultural market laws, rules and regulations, on the supporting implementation apparatus, and on the relationship between existing laws/regulations and those of other countries (or in relationship to WTO, CODEX, UPOV, or other international standard-setting bodies). Competitiveness benchmarking analyses, normative trade facilitation assessments, and market access surveys or case studies of institutional re-engineering, are useful tools for the assessment of agro-enterprise, market, and supply chain performance, constraints, and opportunities.[6]

III. AGRIBUSINESS DEVELOPMENT, THE POOR, AND ECONOMIC GROWTH[7]

Both on the demand and supply sides of agro-food systems, the poor are major stakeholders. On the demand side, the efficiency of post-harvest and agricultural marketing operations is a major determinant of the prices paid by the urban and rural poor for food, and thus an important factor in household food security.[8] In Sub-Saharan Africa, expenditures on food account for an average of 42% of total household expenditures, with this proportion being 60% or more for the poorest countries and the poorest population groups within each country.[9] The costs associated with marketing, handling, distribution and physical losses probably account for half or more of this expenditure. Links in agribusiness supply chains in Africa are frequently extremely

[5] Supply chains represent an additional (or alternative) organizational form (to markets) for facilitating transactions and coordinating the activities of agro-food system participants. They arise in agribusiness systems as actors respond in different ways to the opportunities and constraints that they face. Alternative organizational models (supply chains) frequently compete within a given subsector. These competing organizational models result from differing initial asset endowments of key participants, different levels of asset specificity and flexibility in response to key system shocks, information asymmetries, differences in access to financial and political capital. Within individual supply chains products and their affiliated ownership rights move from producers to consumers, payments and working capital move from consumers to producers, technology is disseminated, and information on current and future demand is passed back from retailers to primary producers. Supply chains are vertically structured and are typically led or managed by a particular company--normally a producer, wholesaler, or retailer. Rules must be established and enforced among supply chain partners, which provide both incentives for coordinated action and sanctions for performance failure or the effective management of risks.

[6] See the Guide to Developing Agricultural Markets and Agro-enterprises for guidelines and examples of many of these analytical tools: http://wbln0018.worldbank.org/essd/essd.nsf/Agroenterprise/agro-guide

[7] This section draws upon insights provided in a background paper provided by Tom Reardon.

[8] This applies whether the food is locally grown or imported.

[9] See Jaffee and Morton (1995).

weak. Efficiency gains in staple food marketing are perhaps the only measure that can directly affect the real incomes of virtually the entire poor population within a country.

Improvements in the performance of the agro-processing and distribution industries also contribute to the quality, variety, and safety of the diets of the poor. The quality of food products, as well as their availability, nutritional content, diversity, and freshness, materially affect the health and well being of the poor. Urbanization implies the greatly increased dependence of large portions of Africa's total population on increasingly complex and long distance agro-food supply and distribution systems. Efficient supply chains for staple foods are important in ensuring food availability and accessibility, two key parameters to improve food security.

On the supply side, there are several direct and indirect relationships between poverty alleviation and agribusiness. Most importantly, agro-enterprise activity employs the poor, either through self- or wage-employment. Our rough estimate based on household income field surveys is that 25% of total rural incomes come from these non-farm (yet agribusiness) activities, with this share being even higher in some parts of Africa. The poor are employed in farm machinery repair, farm product processing, food product trade, and other agribusiness functions, and such employment tends to rise as countries move from low-income to middle-income status. With the re-allocation of resources to better comply with the comparative advantage among different agricultural regions within Africa, and with the consequent increase in trade between and among regions, an increased share of rural employment is expected to be involved in handling, packaging, processing, and transporting food products compared with producing crops or raising animals on the farm.

Agro-enterprise development creates additional employment through large multipliers in rural areas. One finds in zones where there has been progress in commercial agriculture-cum-agro-industrial development, rapid growth co-exists for other services and manufactured goods that are not directly related to the agro-food system, but are stimulated by the income growth (and/or investable surplus) from the 'boom'. Examples abound, including the cotton zone of Mali and Benin, the tea, coffee, and horticultural zones of Kenya, and the major cocoa, rubber and oil palm producing zones of Côte d'Ivoire and Ghana. The poor are highly dependent upon these collateral service-sectors. Low-entry barrier jobs are relatively plentiful in these areas and the incidence of poverty is normally much lower in areas of multi-sectoral booms than in areas that are more narrowly reliant on agriculture alone. Moreover, these diversified economies are more resilient in the face of shocks, such as commodity price movements or droughts.

Importantly, agro-enterprise activity furnishes crucial inputs and services to the farming sector, thus improving the latter's cost competitiveness and the quality and safety of its products. These help poor farmers integrate their activities with consumers. In contrast, constraints in the provision of agro-enterprise goods and services can cripple farming. Expensive farm inputs, exclusive availability of inputs to larger farmers, or inefficient processing and distribution of farm output can strangle the competitiveness of the local farming sector, edging it out of profitable urban and export markets in favor of cheaper imports. Smaller, poor farming households tend to be disproportionately hurt by these constraints, given the higher transaction costs faced by agro-enterprises in dealing with smaller (and/or more remote) farmers. Improving agro-enterprise efficiency can lower operating and transaction costs and allow benefits to reach a broader group of farmers.

Agro-enterprises and agro-market institutions can also help farmers manage price, agro-climatic, storage and handling, and other risks. More competitive components in the agro-food system translate into income diversification options for farmers--and hence risk management and shock-coping insurance--and by broadening and deepening the markets, more agro-food activity increases the size of the market and tends to make farm prices less volatile and unit processing costs lower. Market liberalization without strengthening the off-farm components can simply make farm prices more variable and farming riskier.

In summary, the promotion of agro-enterprise and other agro-food system developments can provide a catalytic force in poverty reduction, directly and indirectly, in Africa by:

1. **Reducing food costs and supply uncertainties and improving the diets of the rural and urban poor;**
2. **Generating growth, increasing and diversifying incomes, and, providing widespread employment and entrepreneurial opportunities in both rural and urban areas; and**
3. **Productivity gains by smallholder farmers to increase their opportunity for wealth creation and better integrating them into local, national, and international markets.**

In addition to its relevance to the challenge of poverty reduction in Africa, agribusiness investment and activity will also remain a central determinant of overall economic growth in most Sub-Saharan African (SSA) countries, simply due to its importance in GDP. As illustrated in Table 1 below, agribusiness activity constitutes between 15 and 30 percent of the GDP for most SSA countries. The unweighted average for twenty-five countries for which data were compiled is 21%. Given the importance of small-scale informal sector activity in the food system--and the fact that such activity is not generally reflected in national accounts data--it is likely that agribusiness activity accounts for roughly the same proportion of GDP as agriculture in many of these countries. From available information, we can estimate that, excluding South Africa, agro-industry accounts for some 49% of manufacturing value added in SSA, while some 43% of the region's services value-added is food/agro-related (i.e., food transport and distribution).

Based on the experience of many middle income countries, it is expected that the share of agribusiness services and manufacturing in GDP will rise over time in Africa, to between 30 and 45%. The exceptions to this pattern will be countries with large mining or energy sectors or countries which lack any comparative advantage in agriculture and which have been able to develop a diversified manufacturing base (i.e., South Africa). Even for those countries, however, there is an enormous challenge for agro-food systems. By 2025, some 50-60% of SSA's population will live in cities. This provides a tremendous burden and challenge for the region's food processing and distribution/food services industries.

For the SSA region as a whole, we estimate that the agribusiness GDP is just under $70 billion.[10] *Although significant in the African context, this figure is marginal in an international context. Africa's share of global agribusiness GDP is certainly less than 2% and most likely less than 1%. The estimated agribusiness GDP of Thailand matches that of the entire SSA region, while that for Brazil is nearly four times the African total.*

The performance and competitiveness of African agribusiness will have a profound effect on the overall rate of economic growth for the majority of SSA countries over the coming five to ten years. Agribusiness is likely to account for between one-third and one-half of GDP growth in such countries. Part of this will be the direct output and employment growth in this sub-sector. Another major part will be whether agribusiness will serve as an engine or as a brake on agricultural productivity and commercialization.

[10] That is, 21% of SSA's aggregate GDP of some $325 billion.

Table 1: Share and Size of Agribusiness in National GDP, Selected Countries

Country	Agriculture's Share of GDP	Agribusiness' Share of GDP*	Combined Agriculture and Agribusiness Share of GDP	Agribusiness GDP ($ Billion)**
South Africa	4	16	20	14.9
Nigeria	42	16	58	5.7
Côte d'Ivoire	28	26	54	3.1
Ethiopia	56	30	86	2.9
Uganda	41	23	64	2.7
Kenya	26	23	49	2.4
Zimbabwe	18	21	39	1.9
Cameroon	40	17	57	1.7
Ghana	44	19	63	1.4
Tanzania	44	19	63	0.9
All SSA	32	21	53	67.0
For Comparison				
United States	1	13	14	1007
Brazil	8	30	38	236
Argentina	11	29	40	94
Mexico	9	27	36	91
Indonesia	20	33	53	71
Thailand	11	43	54	68
Chile	9	34	43	25

* Combines the value added for agro-related industries and that of agricultural trade and distribution services. Based on WB, FAO, and UNIDO databases.
** Agribusiness only. Does not include the GDP of primary agriculture.
Sources: Jaffee (1999a); Pryor and Holt (1998)

IV. MAJOR TRENDS IN AGRIBUSINESS MARKET GLOBALIZATION

Historical Perspective

The agribusiness systems that operate in most African countries today are built upon the institutional foundations, plant cropping systems, and marketing protocols that predate independence. During the first quarter century after independence, agribusiness developed in a statist environment. Major investments were made directly by government in agro-industrial enterprises, which stored and milled grains, pressed vegetable oils, canned tomatoes, refined sugar, etc. In some countries, privately owned food processing companies were nationalized. At the same time, state commodity and input distribution companies were formed or strengthened and a system of official producer and sales prices imposed.

Untested development theory at the time suggested that the state could create economies of scale in production, fill gaps in entrepreneurship, shield farmers from market risks, and provide an array of supporting services to farmers. Government agencies became conduits for financial transfers either in the form of farm product taxes (for investment in industrialization) or direct subsidies for strategic activities or technologies. Accompanying this investment was heavy political and financial support for cooperatives that managed the interface between farmers and state enterprises and kept a watchful eye on the peasantry.

By the mid-1980s, this one-channel, state-controlled marketing revealed fatal cracks--essentially its non-sustainability--due in no small measure to political interference and a bureaucratic interference in management. Mounting pressures for change came from the financial burden of parastatal deficits, of unfunded liabilities by the state for farm products purchased at above market prices (or in remote regions) and accumulating arrears with producer cooperatives. These developments paralleled changes in development thinking about the appropriate roles of the state and the importance of private sector investment and activity in the development process. This era marked the dawn of 'adjustment' in macroeconomic and sectoral policies. In Africa, agricultural sector reforms and the restructuring (usually read "privatization") of agricultural products and input marketing systems, played (and continue to play) a prominent role in this adjustment process.

One response to this situation was a substantial effort to rehabilitate, restructure and recapitalize, the management and operations of such organizations. In parallel to these efforts were measures to reform government pricing policies to raise the incentives and incomes of primary producers. Where domestic marketing channels were highly restrictive, some countries adopted measures to give greater space to so-called parallel markets or to open up opportunities for licensed buying agents.

In the 1990s, market liberalization and parastatal restructuring gave way to a more concerted effort to roll back the direct involvement of the state in agribusiness via the privatization of agro-processing (and state farm) enterprises, the contraction of the roles and assets of parastatal marketing companies, the termination of policies to set official commodity and input prices, and a range of other measures to "level the playing field" and more generally 'unleash' the private sector. Recognizing the importance of local organizations, both to economize on transaction costs and to enable some countervailing power on the part of small producers, there has also been some effort to revisit the issue of cooperatives, associations, and other types of collective entities as ways of strengthening the "property rights" of small individual producers.

Despite a decade or more of "adjustment", agricultural marketing (and agribusiness) systems remain in a state of transition throughout Sub-Saharan Africa because firms were privatized into weak regulatory environments and little thought was given to corollary impacts resulting from the privatization. Thus, for example, many firms found it difficult to obtain (debt and equity) financing to maintain or expand their operations. The withdrawal of the state from food processing and from commodity and inputs trade, was not followed rapidly and automatically by a well equipped and well organized private sector; and many of the collateral services provided by the state in the one-channel monopsony systems have not spontaneously emerged from the new set of actors. The set of modern laws, regulations and other institutions that are needed to support and facilitate efficient market activity remain under construction, even in countries where the policy reform and privatization process is most advanced. **Hence, most African countries still face an enormous challenge of institutional restructuring and re-engineering within their agro-food systems**.

How to Make These Changes Benefit the Poor

For the poor, there is much at stake in this process of institutional restructuring and re-engineering. For client governments and for the Bank, this question is therefore critical in the perspective of the Poverty Reduction Strategies. As consumers, the poor can benefit of reduced food prices through the improved functioning of input and product markets and, potentially, by having a greater choice and variety of services, products, and market outlets available to them. Weighed against this possibility are several factors, however. First, the poor normally have a muffled or silent voice in processes that re-write the 'rules of the game'. The interests of the more powerful commodity system actors may or may not be consistent with those of small farmers or small enterprises. Second, the poor could be disadvantaged in accessing services provided on the basis of profitability. Given their small-scale (and often remote location) of operations, larger entities up and down the supply chain have potentially higher transaction costs to deal with them. Third, as the state withdraws certain functions, what had previously been bureaucratic risks (i.e., late payments by a marketing board) will be replaced by the more direct transmission of market (i.e., commodity price) risks.

Hence, the movement toward market-based institutions has not and will certainly not guarantee a net gain for the poorer and smaller participants in agro-food systems. This points to the need to find ways, in the framework of poverty reduction strategies, of (i) ensuring competition among the large producers, so small contract producers enjoy options and fair pricing, (ii) assisting large firms to specify their requirements clearly and assisting small firms to meet them, (iii) providing specific infrastructure (sorting sheds, assembly points) necessary for small holders to meet quality requirements of the large buyers, (iv) negotiating on behalf of the poor and the fragmented ways in which they can participate as suppliers to the large firms, and (v) harnessing the power of these small entities by consolidating them into groupings with more market power and strengthened property rights. Therefore the institutional restructuring process matters a great deal.

How the poor fare in any structural transition will depend, in part, on their involvement in the process and on whether proposed structural designs are effective in increasing opportunity and improving food security at the same time that they improve competitiveness and allow inherent comparative advantages to be fully realized. The adjustment process should allow the poor to organize effectively in order to exercise 'voice.' In general, it should improve their access to markets for the provision both of inputs and the sale of their produce. Moreover, structural transitions should also relieve poor farm producers of the full force and weight of agricultural production risk. It should offer new risk management instruments as well as new institutions for risk distribution through the entire agro-food processing system with the result that both poor producers and consumers are assisted. Addressing these issues requires a systematic rather than a piece meal approach and a sharp focus on poverty reduction consequences. Hence, the above objectives should be at the center of PRSPs.

Democratic Change, Industrialization, and Globalization

In addition to the challenges associated with the structural adjustment from statist to more market- and privately-based institutional arrangements, there are other challenges arising from the array of demographic, social, technological, organizational, and economic trends that are affecting agro-food systems worldwide. *These require another adjustment process. This is one where Africa's agro-food systems are transformed so that their primary drive and orientation is consumer requirements and demand. In many cases, this involves a shift equally or more radical than that required for the shift from state-centered to privately centered institutional arrangements. The implications for poverty-alleviating strategies and World Bank Group support for those strategies are also significant.*

Some of these global trends impacting on agro-food systems include the following:

- *Demographic changes*, including urbanization, population growth in non-farming segments, and household income growth will all yield new opportunities (especially related to higher value food products and food service industry development), but will also place greater demands on the management of urban food distribution systems, increase the level and types of food safety risks, etc.

- *Increasing consumer sovereignty* within OECD countries and developing countries, with greater attention to variety, "healthiness", "sustainability", animal welfare and other concerns and attributes. In this context, a brand image with "poverty alleviation" as a theme could be a significant competitive advantage, much as the "greening" of the hotel industry has been a marketing success in tourism. For those with a good understanding of market demand and with ample marketing skills and alliances, there is wide scope for profiting from consumer 'wants'. Satisfying those wants will require changes in production and supply arrangements and the associated tracking and accountability systems.

- *Emerging technologies*, especially in information technology, biotechnology, food safety (i.e., irradiation), and measurement technologies (i.e., color and price scanning). Those able to adopt and manage these technologies are potentially able to improve product quality, achieve coordination and other cost efficiencies and reduce a variety of business and food safety risks. These, however, are capital-intensive technologies.

- *Multilateral trade liberalization*, which is lowering tariff and quantitative barriers to trade, even though agriculture remains one of the most protected tradable sectors in the world. This trade liberalization is a double-edged sword for developing countries, opening up new market opportunities yet further exposing their own domestic markets (and firms and farms) to competitive products from abroad. Competitiveness is now a serious challenge in the agro-food industry.

- *Growing concentration in the food and agricultural technology industries,* in part due to continued merger and acquisition activity by leading companies.[11] This pattern exacerbates the asymmetry of market power in the agro-food system, potentially further raising barriers to smaller players who need to meet the requirements of the fewer and larger "gatekeepers" on the path to remunerative consumer outlets. Short of "bulking up" to meet power with power, suppliers in developing country will need to consider and pursue strategic relations (horizontal and vertical) for technology transfer and marketing.

- The *internationalization and privatization of standards* that accompany several of the other forces of globalization outlined above. Grades and (product and process) standards are taking on greater meaning with the reduction of tariff and similar trade barriers and in light of consumers' (and retail gatekeepers') demands for quality, safety, authenticity, and sustainability. This phenomenon could represent major barriers to entry or continued market access in the form of compliance requirements and costs on the part of emerging market suppliers.

- Last but not least among the current economic environment conditions for agri-food systems are the *subsidies granted by OECD countries* to their agricultural and agribusiness sectors, This creates severe market distortions, resulting in artificially depressed world prices and loss of market opportunities for SSA countries.

[11] An associated pattern in the increasing "industrialization of agriculture". In developing countries, this is most prominently occurring in the livestock sector with the emergence of factory-like operations for pork and poultry production. This process not only threatens the welfare of small-scale producers but also has potentially large adverse environmental and health effects.

Challenges for African Countries

These trends, both individually and collectively, pose major challenges to the competitiveness of Africa's agro-food systems and to the enterprises and farmers that populate them. Competitive pressures will intensify as will the stringency of consumer and "gate-keeper" requirements for product and service quality and for compliance with emerging process standards. This competition will not be limited to OECD markets and will not stop at the porous borders of African countries. Competition for 'stomach share' will intensify in Africa's cities and the effects of the various globalizing factors will be felt, increasingly, in the rural hinterlands.

Those who compete best in this agro-food system will be those who understand consumer needs and wants, those who can employ skills and technologies to gain efficiencies, those who can deliver goods in the quantities and timing schedules required by the "gatekeepers", and those who forge reliable and mutually-supportive relationships up and down the supply chain. Hence, the winners will be those who have the skills, who are well informed, and who are well organized. This, at first blush, is not a common description of small-scale farmers and of many small agro-entrepreneurs in Africa. The threat of exclusion or further marginalization of such economic actors is thus very real. The "market solution" could well mean the exclusion of large numbers of poorer producers and business persons; and indeed, many of the medium and larger agro-food enterprises in Africa--which employ large numbers of people--may also face such exclusion due to the difficulties they face in complying with quality and service standards being set elsewhere.

Implications for the World Bank Group

Taking these challenges into consideration, there are several important policy and program implications for the World Bank Group. First, there are clearly no magic bullets to address the complex challenges facing agro-enterprises and the poor in agricultural market development. Systemic and multi-dimensional perspectives are needed, as are a mixture of policy and project-centered activities. While macro policy reforms are necessary, they are not sufficient to stimulate agro-enterprise activity. Sector and rural location-specific action is also needed as market failures and the lack of public and private assets have made the transitions from public to private and in the early stages of globalization extremely precarious for the poor and for small farmers and businesses. *Private firms in Africa are generally not well positioned to respond rapidly and efficiently to market-based incentives. This may necessitate the realignment of rules and regulations within commodity sub-sectors as well as across sectors, the clear definition of agribusiness investment opportunities, and institutional strengthening, particularly of meso-level organizations.*

Second, there is a strong need to move beyond the polarized discussion about public vs. private sector functions in order to better understand the complementarity between public and private actions and in order to more effectively consider and facilitate the gamut of quasi-public and quasi-private assets and institutions which can deliver community goods and services. Strategies based predominantly on "rolling back the state" will inevitably fail.

Third, the sustainability of many poverty alleviation programs--including those geared toward strengthening grassroots organizations and/or supporting micro-enterprises--will significantly depend upon the extent to which such activities are cognizant of and oriented toward meeting (consumer) market demand. The so-called "income-generating activities" cannot be sustainable unless the participants are effectively linked to growing markets for goods and services.

Fourth, the tyrannies of space and time continue to adversely affect the creation of competitive advantage among agro-enterprises in Africa.[12] Transaction costs--including transport cost, loss of product, insurance, informal payments, government-imposed administrative costs, storage, and handling--are extremely high both within Africa and between African producers and overseas consumers. Developing markets and market institutions must begin with the radical reduction of transaction costs. Otherwise, obtaining and retaining competitive advantage will prove elusive.

Fifth, efficient supply chains and agribusiness clusters do not spontaneously emerge. When they do emerge, they often evolve in ways that exclude the poor and the economically impotent. Enabling the poor to participate in new ways will often require some sort of collective or public enabling intervention The development of modern supply chains requires determined and focused tactical efforts in building up the institutional underpinnings and the core technical, strategic, and organizational capabilities. Supporting this process requires direct engagement (and/or investment) and involvement in the specific challenges of individual sub-sectors and clusters of economic agents.

Sixth, there is an important role to be played by the Bank, the IMF, the UNCTAD, FAO and other agencies in assisting African countries to build a strong case, present it to the WTO and join forces with other countries adversely affected by subsidies granted by OECD countries to their agricultural producers. Together, they could exert pressure for reducing subsidies granted in high and medium income countries which affect competitiveness and market opportunities for SSA countries in the global agrofood markets.

Importantly, the Bank must recognize that many of the driving forces in agro-food systems originate outside of rural areas and some of the measures to reduce rural poverty in an agro-food system context may be focused outside of the rural space. This raises questions regarding the World Bank Group's internal organization.

V. RECENT DEVELOPMENTS IN AFRICAN AGRIBUSINESS

The African experience with agro-market and agribusiness development over the past five years is ambiguous both with respect to its poverty alleviating consequences and its effect on African competitiveness. Probably the most certain and obvious generalization is that recent agricultural market reforms have caused a shift of financial and political power from governments to the private sector. Based on a limited review of the literature[13], combined with our own observations, we can highlight some 'stylized facts' that represent recent developments in the sector.[14]

Trends in Sectoral and Trade Reform

"Agricultural policy reform" in Africa has come to mean the wholesale disengagement of government agencies from direct intervention in agricultural markets and the further disengagement of parastatal agribusinesses from the direct provision of agro-processing services. Nowhere in Africa has policy reform come to mean the realignment of agricultural and

[12] Various studies suggest that African transport and logistics costs are two to four times higher than costs for comparable services in OECD countries.
[13] Including Townsend (1999), Jaffee (1999b), IFPRI (2000), Akiyama et al (2000), Coulter (2000), Common Fund for Commodities (2000).
[14] Most of the broad surveys consulted, even those published in 2000 (or under press), refer to developments and impacts only up until the mid-1990s. More recent material remains anecdotal.

commercial policies and their mutual reinforcement to improve the competitiveness of agro-processing industries (i.e., removal of red tape, reduction in government overhead compliance costs, realignment of trade policy, legal reform, improved tax incentives to encourage direct investment, transport market developments to reduce farm to market shipment costs, etc.) The extent and pace of liberalization varies significantly among countries. However, in few countries have institutions based in the private sector emerged to take over the work of setting rules and providing community goods that governments have given up in the reform process. *The result is a lack of clear rules, an increase in the incidence of production risk absorbed by the rural poor, and a chronic under investment in community goods within agro-food systems.*

The liberalization and restructuring of staple food markets has been a mixed experience. Grain market liberalization has been quite successful in Mali, while being a drawn out and expensive process in such countries as Kenya and Zimbabwe. In the latter (and some other) countries, diverse political pressures have resulted in *ad hoc* interventions of various types, including public sector food imports, discretionary controls over trade, retention of large and costly food reserves, and a range of costly interventions under the heading of "buyer" or "seller" "of last resort". This mixed food liberalization experience extends beyond grain markets. In the case of sugar, there has been some progress in the privatization of state-owned mills and estates, yet sugar market policy remains unreformed in most countries, with controlled prices and distribution channels.[15]

Structural Changes

While there has been little systematic analysis, there appears to be significant structural changes occurring in the food processing industries of many African countries. Such industries had been highly protected, in part to offset inefficiencies within the industry itself and in complementary industries (especially packaging and transport). Oligopolistic structures were common, especially in the grain milling and oil processing sectors where access to raw materials was often through marketing boards. For these and other products, institutional customers (i.e., the military, hospitals, parastatal companies) needed volume rather than high quality supplies. In the aftermath of market reforms there seems to be much greater differentiation within the food processing industry with small-scale grain, oilseed, bakery, and other operations taking market share from the formerly dominant players and the latter having to innovate their product lines and forward and backward linkages to survive, let alone prosper.[16] The details and lasting implications of this industrial restructuring require further analysis.

Perhaps the most profound restructuring of agribusiness investment and operational patterns is occurring in South Africa in response to economic policy and political changes. South Africa is testing and refining new solutions for each link in the food supply chain. New retail food formats, new fast food outlets, new modes of processed food, new processing industries, pan African brands and extension of distribution channels in beer, canned food products, and other items, are some of the changes which are occurring. The restructuring is affecting large conglomerate firms, the cooperative sector, and even smaller companies that are establishing new alliances and market outlets. In recent years there has been a host of cross-border and other regional investments by South African firms in production, processing, and retailing. The advent of majority rule and the ensuing demise of sanctions was a key change making this export of South African business models possible.

[15] This is not only because of domestic/urban food price concerns but also so that countries continue to take advantage of special market access agreements for sugar in OECD countries.
[16] The Zimbabwe grain-milling market is an interesting example of this pattern.

Structural changes are taking place in food retailing in many African countries, especially in major urban areas, with the emergence of supermarkets and supermarket chains being the most conspicuous illustration. As in OECD and other countries, supermarkets in Africa are beginning to influence consumption patterns as well as the organization of supply chains. Still, the clientele of such retail outlets remains primarily middle and upper income consumers. The large majority of consumers still rely upon open-air markets. Urban food distribution systems are coming under increasing stress with population growth. Inventory losses are typically large, the multiple handling of products is costly, packaging and protection of food products is often inadequate to assure safe delivery, and poor drainage and sanitation conditions are common in and around major markets. Opportunities for increased private sector involvement in the urban market distribution format have not been fully explored. In most countries, urban markets remain primarily a "landlord" function of local governments.

Following market reforms, there has been an expectation that various types of associations and producer organizations would play a more active role, both in the formation of sectoral/sub-sectoral policies and strategies and in the delivery of marketing services. We are not aware of any comprehensive analysis of these developments, yet there is some evidence of progress in this area.[17] Producer organizations are providing a greater array of services for smallholder farmers in Malawi, Zambia, Mozambique, and parts of West Africa, while industry-based associations have taken a more prominent role in the coffee and horticultural industries of several countries. Clearly, however, the development of producer organization and association-based services in Africa has yet to fill the large vacuum created by the withdrawal or scaling back of public services in rural areas and in agro-food markets.

The availability of credit for agricultural financing seems to have declined post-liberalization. Generally no third party securitizers of farm inventory (e.g., bonded warehousemen, insurers, providers of warehouse receipts, etc.) have emerged to provide certain collateral and to share risks with financial institutions. In the lacuna left behind by liberalization, bank-to-farm credit/risk intermediation systems anchored in the private sector have not successfully evolved. Credit availability and security seem to be inversely related to product market competition. That is, better loan recovery rates are found in instances where there are zoning restrictions or area-based concessions to agro-processing firms, where there remain in place mandatory marketing stages (i.e., sale through an auction) or where contract farming is practiced, especially for a specialized crop or variety or in a relatively isolated location. Financing problems have been especially acute for domestically traded commodities and credit programs have frequently been unsustainable for cash crops where there is intensive competition between trading/processing companies.

Other Impacts

Consumers appear to be net gainers as a result of the market liberalization that has taken place to date due principally to reduced marketing costs and the greater availability of diverse and low cost products (i.e., less refined grain, unprocessed rice, second-hand clothes, etc.). In some, yet not all cases, the consumer surplus achieved through market liberalization has more than offset the negative effects of eliminating consumer subsidies and reducing public employment. However, in specific circumstances of high inflation, a public backlash against rising food costs has resulted in efforts by some governments to (re)impose price controls. There is also suggestive evidence that the seasonal price variability for staple food grains has increased in a

[17] See, for example the proceedings of the May 30 to June 2, 2000 workshop in Kampala, Uganda on "Producer Organizations and Access to Inputs". Sponsored by the World Bank and the Agricultural Council of Uganda.

number of countries, this being a result of limited farm liquidity and a lack of interest on the part of traders to undertake inter- and intra-seasonal storage of grains.

Producer prices as a share of FOB prices seem to have increased in major sub-sectors that underwent reforms, including those for coffee, cocoa, cotton, cashew nuts, and tobacco. Whether or not producer prices have increased (or decreased) in absolute terms has been more substantially influenced by developments in international commodity prices (i.e., world cocoa prices). With the end of pan-territorial pricing, farmers in more remote areas, or where infrastructure is relatively poor have received comparatively lower prices. This has applied to both export crops and domestic food staples.

The production supply response pattern has been very mixed and not fully correlated with reforms. It was not necessarily the purpose of reforms to promote the expanded production and/or trade of particular commodities, but to achieve more efficient and appropriate levels of investment and production. Hence, some reforms might have been expected to result in movements away from certain crops/commodities, especially for less efficient (or perhaps more remote) producers. In some cases (especially in relation to cereals), the reforms have exposed the weakness of Africa's comparative advantage given transport logistics and agro-climatic factors. Other reasons why we might not be witnessing a clear-cut support response include: the de-linking of input and output markets, the failure to make provisions for vital services (quality control, road maintenance), and the porous borders within Africa which has enabled widespread cross-border smuggling to confound industry production and sales statistics.

In recent years, and in the aftermath of market liberalization, there is some evidence that the private sector is seeking to re-position traditional export products and/or seek ways to add value on an efficient basis. Hence, we see selective efforts to sell roasted or specialty grade coffees, some value-adding in timber industries, further development of retail pre-packing of fresh fruits and vegetables and, with mixed degrees of success, efforts to sell intermediate cocoa-based products.[18]

There have been large budgetary savings achieved through the privatization of agro-industrial enterprises, in part due to the withdrawal of certain (loss-making) public services undertaken by such enterprises.[19] In cases where grain or agricultural input market liberalization has been carried through to conclusion, similar budgetary savings have occurred. However, there have also been cases where the budgetary drain has merely been transferred from the account of a marketing board to fall under another heading (i.e., an "input starter pack", a "food voucher program, etc.). There are few documented cases where privatization has resulted in industrial vitality, new investment, market expansion or strategic linkages with trading partners. Such evidence is also sparse where privatization has resulted in the transfer of technology or of cutting edge business management methods. However, numerous privatized going concerns have closed their doors to business and many are operating at or below breakeven levels.

Despite numerous political statements, progress in liberalizing official cross-border trade in agricultural commodities (including staple grains) has been very limited. For most countries, the bulk of cross-border trade occurs on an informal and intermittent level. Such trade has therefore had only limited impact on patterns of specialization in adjacent borderline regions. Nevertheless, we are witnessing the emergence of a number of cross-border "clusters", whereby production and

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[18] See, for example, "*Ghana: International Competitiveness--Opportunities and Challenges Facing Non-Traditional Exports*". World Bank, 2001.
[19] Examples can be found in agro-industry in Côte d'Ivoire, Mali, Gabon, Nigeria, Ghana, Senegal, Tanzania, and elsewhere.

marketing systems are linked through advisory services, joint logistics, and other efforts. Examples include the clusters for spices, cut flowers, and citrus fruit in Southern Africa, and that for oilseeds in West Africa.

VI. LESSONS LEARNED FROM DEVELOPMENT ASSISTANCE TO AFRICAN AGRIBUSINESS

There is firm evidence that the Bank is moving in the direction of supporting private agro-enterprise activity in Africa, although much remains to be done. As discussed below, a variety of agribusiness-related support measures have been included in many rural development or private sector development projects. The IFC currently has an agribusiness portfolio of some $55 million in Africa, with a further $40 million in loans or investments in agricultural production itself. A high proportion of enterprises supported by the Africa Project Development Facility and the Africa Enterprise Fund have been agro-enterprises.

Main Types of Intervention

The road to agribusiness has been long and tortuous. Essentially, it has involved a process of evolution, with direction and emphasis being changed in light of conditions on the ground and prevailing wisdom in the development community. In the 1960s/70s, the Bank's focus was on agricultural production and processing via parastatals. The era was that of import substitution and production of commodities for export. Governments controlled the sector tightly through ministries and marketing boards. The Bank's entire focus was on production, with little emphasis on diversification or on value-adding activities. By the late 1970s and through the 1980s, the focus shifted to market liberalization, narrowing the functions of marketing boards, and, selectively privatizing agro-industrial companies. Direct Bank support for agricultural marketing activities was curtailed and most agricultural projects centered on public sector agricultural production services. Macroeconomic factors and disruptions tended to overwhelm sectoral or commodity system interventions.

By the nineties, the Rural Development and Private Sector Development divisions began to focus more on market development, even though agricultural (production) services remained the mainstay of RD support. Until the last couple of years, RD teams continued to emphasize their traditional dialogue with ministries of agriculture and were focused largely on public services/interventions. Several projects or project sub-components in West and Southern Africa have been focused on agro-industry and trade. PSD teams have tended to have a crosscutting approach that has ignored specific sectors. Particular attention has been given to the enabling environment and business support services to SMEs and microenterprises, albeit with a focus on urban areas. Work on agribusiness has therefore remained piecemeal. Amongst the Bank's clients in Africa few governments have developed a coherent vision, let alone a facilitation strategy for agribusiness. Administratively, agribusiness has continued to be nobody's business.

A 1999 internal study, *"Agribusiness in Africa: Staff Perceptions and Product Assessment"*, looked at this state of affairs with a view to recommending ways forward for the Bank. It gauged staff perceptions (using a specially designed survey) and took stock of the project and program portfolio in the region that has some relation to agro-enterprise and agro-food system development.[20] Staff expressed a general satisfaction in the patterns of market

[20] Staff were polled on their perceptions of the current status of, and the future priority to be given to, several aspects of the institutional environment for agribusiness development. Specifically, staff were asked to comment on the state of: (i) privatization and liberalization and the degree of competition in markets; (ii) non-financial agribusiness services;

liberalization and privatization thus far. Some believed that the liberalization agenda is more or less complete, while others acknowledged the continued resistance in the public sector to full liberalization of food crop markets. Staff in Rural Development were generally less sanguine than staff in Private Sector Development about progress on the legal and regulatory front. More significantly, staff generally recognized that despite the "success" of privatization/market liberalization, agro-food systems were still not functioning well in many or most African countries as a result of weak institutions. Some staff remain convinced that "getting the prices right" will eventually deliver the results. Most, however, recognized the need to strengthening the underlying institutions and capabilities in agribusiness. Development of non-financial support services was picked as the most critical factor for agribusiness and there was a marked preference for delivery by the private sector. Finally, other factors remain important and the need at this point is for a systems approach: financial services; a revised government role; a responsive regulatory framework; and performing infrastructure.

A cross section of projects in the Rural Development (RD) and Private Sector Development (PSD) portfolio was reviewed. In the latter half of the 1990s there were only a handful of dedicated agribusiness projects within the region, most notably agricultural export promotion projects in several West African countries. Nevertheless, agro-food market reform has been the centerpiece of many adjustment credits, while agribusiness-related components have been included in a couple dozen projects, cutting across the RD and PSD families. They have been elements of privatization, agricultural services, rural infrastructure and irrigation projects and many others. A rough breakdown of these projects and project components found that since the mid-1990s, roughly 50-60% of effort and resources were devoted to the themes of privatization and market liberalization, some 20-25% of effort centered on strengthening private sector capacities (at the level of enterprises, supply chains, or associations), and the remaining one-fourth of effort split between: (a) promoting specific legal and regulatory reforms and strengthening specific public capacities (i.e., in food safety, agricultural inputs regulation), and (b) promoting stakeholder dialogue and sectoral/subs-sectoral strategy development. Most of the recent efforts have been devoted to fostering growth and more efficient resource allocation. Poverty reduction has not, at least explicitly, been a central focus of most of these components.

Hence, while work has begun on several aspects of agribusiness in Africa, it has not taken place within a comprehensive framework, not been anchored in our poverty reduction mandate, and not reached a critical mass. At this point, agribusiness support can be expected to be much more efficient and comprehensive if it is undertaken as a conscious effort within a strategic framework and following a multi-sectoral systemic approach. A renewed effort needs to factor in lessons from recent project and program experience as well as take into account the broader social, technological and other factors that are re-shaping agro-food systems worldwide.

Lessons Learned

Lessons learned from recent Bank/development agency support in this field can be clustered under three main categories: (i) privatization and agricultural policy reforms, (ii) institutional and organizational strengthening, and (iii) direct investment.

Privatization and Agricultural Policy Reform

A number of significant lessons can be drawn from recent experience in agricultural market liberalization and the privatization of agro-industries. First, **the privatization of**

(iii) credit and financial services; (iv) effectiveness of government strategy on agricultural markets and agro-industry; (v) quality of legal and regulatory framework and enforcement; and (vi) quality of market-support infrastructure.

agricultural industries is complex due to the typical inter-linkages of input supply, financing, and commodity markets. Political commitment has been weak on average, due to the importance of vested interests. Moreover, parastatals and state companies often provide a range of market-making functions and services (i.e., risk management, price discovery, quality control, market intelligence, production statistics; remote area collection services, farm extension). The transition from public to private ownership requires the re-engineering of the entire farm-factory-buyer supply chain and alternatives for previously performed public services. Also, commercial bank financing of such systems often breaks down when *de jure* or *de facto* exclusive commodity procurement and marketing rights of the state enterprise come to an end.

Privatization and deregulation may result in the needless collapse of enterprises and services if there is insufficient time for the private sector to anticipate and adjust. While a long drawn out phasing of reforms and privatization steps should be avoided, *experience suggests that a two to three year phasing or transitional period can simultaneously maintain the momentum of reform while avoiding the emergence of functional/service gaps*. Privatization in cases where there is no free entry and before deregulation has, in many cases, led to private monopolies with a strong interest in keeping markets closed.

Second, in the sphere of policy dialogue, the consultative process is frequently as important for success as the content of the dialogue itself. Where there are difficult and high-stakes **policy/structural reforms**, the Bank will need to prepare a series of quantitative technical notes, often on short notice. Such notes sharpen our understanding of the key issues and parameters, improve the quality of our arguments, provide a solid grounding for public debate, and often provide a public record to which the main stakeholders in the proposed reform need to respond. In such circumstances, one-off analysis is inadequate to stimulate (and maintain) reform. The broader stakeholder consultations process is critical for the momentum and sustainability of policy reforms. Reform processes that are a bilateral negotiation between the Bank and the Government are destined to fail. Recent illustrations of the above points come from policy discussions in the West African cocoa, Malawian tobacco, and Mozambican cashew nut industries. This suggests a need for multi-year funding for certain types of ESW and consultations work.

Third and related, probably the most important single success factor in the liberalization of agricultural markets is the **commitment of the government**. Policy reforms frequently result in the redistribution of income, economic opportunities and political power, and therefore, some form of opposition--from the losers in the process--is a certainty. Governments need to be willing to sell the reform to the major stakeholders and then chart and maintain a steady course of implementation. Equivocation and backsliding can doom a reform process, by undermining the confidence of those who invest under the new policy, and by strengthening the confidence of those who seek to revert to the previous interventionist system. This implies that: (i) governments need to be properly prepared in terms of analysis and strategy; (ii) an effective means for consensus building and the communication of policies/strategies are in place; and (iii) the reform process is carefully monitored and evaluated on an on-going basis. These considerations need to be factored into the design of policy reform processes.

A fourth lesson from the market liberalization (and privatization) process is the importance of **paying attention to the details of implementation**.. Focusing solely on the specific substantive content or regulations is not enough. Also critical are the rules of the regulatory process (including their transparency and reducing the scope for discretionary decision-making by regulators) and the judicial and other mechanisms for monitoring and enforcing regulations and contracts more broadly. The monitoring of regulatory reform implementation should be given more emphasis; in this regard the private sector and other non-governmental actors can provide strong input.

Institutional and Organizational Strengthening

A number of lessons can be drawn from recent efforts to strengthen particular types of enterprises/organizations or provide agribusiness support services. First, commodity-, location-, industry, and/or profession-based **associations** represent an increasingly important form of participatory development in developing countries.[21] An important lesson from experience is that association development is essentially a private sector activity. Governments (and development agencies) may facilitate association strengthening, yet these organizations are unlikely to gain legitimacy or be sustainable if they are initiated and defined by the public sector. For industrial and commodity associations, matching grant and similar arrangements have been found to be appropriate vehicles for providing technical assistance and training. For producer organizations, especially among smallholder farmers, longer-term technical support, provided by NGOs or others, is frequently required to foster the necessary technical and financial management capabilities for effective and sustainable service.

Second, over the past decade a range of project-based "**agribusiness development centers**" (ADCs) have been established to provide advisory and analytical services to agro-enterprises or particular industries. Such centers have generally been created with donor and other public resources, although there are cases of partial financing by the private sector. The centers have played a variety of catalytic and facilitative roles, although generally centered on technical and market information. The experience of ADCs has been mixed[22] and points to the importance of: (i) clear definitions of objectives and of the target clientele; (ii) credibility and competence, which mostly derives from the experience and caliber of the recruited professional staff and the extent to which the ADC board is led by the private sector; (iii) a realistic strategy for financial sustainability (or a clear vision about anticipated phase out for a temporary body); and (iv) the separation of technical and financial services, although the ADC should have effective liaison with financial institutions.

Third, there is a growing recognition of the **importance of food safety**, both in improving domestic public health and in maintaining international competitiveness of exports. Experience demonstrates that priorities for public action will vary at different levels of food system development. At very low-income levels, priority food safety actions probably relate to sanitation and safe water supply. In more complex food systems, or in export supply systems, there is need for more direct food safety interventions and increasingly more stringent product and process standards. Experience shows that effective food safety involves cooperation between industry and Government, a combination of private actions and public regulation. Where, instead, food safety policy is built predominantly on official prescriptions and inspections, the results are likely to be poor, both from a public health and from a trade perspective. For the large majority of the Bank's clients, the most cost-effective development support in this area is likely to center on export-oriented supply systems, perhaps in tandem with other export promotion measures.

Fourth, by misunderstanding the strong dependence of small enterprises on public goods, governments (and donors) have inadvertently delayed the expansion of markets and relatively

[21] They can make a major contribution to agro-enterprise development by crystallizing and expressing the viewpoints of particular groups, delivering "community" services and setting commercial rules and standards.
[22] ADCs which have been effective in promoting agro-enterprise growth have included those in Uganda, Zambia, Senegal, and Côte d'Ivoire.

favored larger enterprises that can overcome transactional obstacles. For example, the availability of accurate price and other **market information** helps to reduce risks and transaction costs and better enable market participants to plan production and trading activities. However, the large majority of efforts to develop public sector market information systems have failed to meet their objectives of fostering more competitive markets and more equitable market relationships. Most of these systems have lacked commercial utility and have been unsustainable. Experience suggests that making improvements in this area may require private management of market information systems and at least partial private funding or incorporating some cost recovery mechanisms. Except in very exceptional circumstances, the Bank should not finance or otherwise support market information systems housed in a government ministry. On the other hand, the development of internet-based commodity exchanges, based in the private sector, hold out attractive opportunities.

Fifth, throughout the world, the failure rate for micro and small-scale **rural enterprises** is very high. While "shortages of capital" are often identified as a constraint, the most prominent causes of failure include the following: (i) inadequate understanding of the marketplace; (ii) the oversupply of goods/services being offered; (iii) high unit costs due to low productivity, low/seasonal capacity utilization, etc.; (iv) weak financial structure; and (v) weak management. If donor support in this area is to be sustainable, it needs to be premised on business rather than social development logic. Emphasis should be placed on human capital development and fostering market linkages. Business incubators and a variety of enterprise zone or industrial/food parks models have shown promise, as have programs under CGAP supported by the World Bank. The IFC's regional project development facilities have been more or less successful, helping SME entrepreneurs to develop ideas into bankable investment proposals and helping them mobilize financing for these proposals.[23] Yet, the facilities are expensive. The fees charged are unlikely to cover a major share of the costs and the facilities will have to continue to rely on donor funding.

Direct Investment

A number of lessons can be drawn from the IFC's recent experiences with direct investment in agro-enterprises and related companies. First, **the agribusiness sector is inherently risky as a target of direct investment**. Reasons abound, including output/input price volatility, exposure to climatic events, sensitivity to macroeconomic and policy shocks, and the fact that many of the small and medium scale companies operating in this field lack the financial strength to keep their ventures going under volatile conditions. The quality of the investor and the management, and a robust financial plan tailored to the sector risks are absolutely pre-requisites.

Second, the single most important determinant of investment success is **the quality and performance of the sponsors and their management**. The sponsor's ability to understand the market's demands, and change gear and direction when necessary is critical. Supply-driven approaches designed to "sell something that is produced" routinely fail in a competitive environment. This also explains the failure of companies exclusively built around a development objective, which do not pay sufficient attention to commercial viability. By the same token, public sector investment in private goods is likely to fail because it is generally guided by non-commercial objectives.

Third, **direct investment in SMEs in many regions is very costly to transact** and inherently more risky than investments in larger enterprises. This is one of the major lessons from

[23] There are such facilities in the Caribbean and Central America, Africa, Poland, the South Pacific, the Mekong Delta countries and, more recently, the Balkans.

the experience of the Africa Enterprise Fund (AEF), nearly 40% of whose loans were to agribusiness enterprises during the 1990s. This investment pattern has been more or less replicated by the Small Enterprise fund (SEF) for a number of "outreach" frontier countries. While the benefits of AEF are recognized to be substantial in terms of their development contribution, the program would not be sustainable without an element of subsidy from other IFC operations. The strategic challenge faced by IFC is how to direct its financing toward SMEs in order to achieve a broad and replicable development impact while operating on a purely commercial basis.

Fourth and related, IFC has realized that its efforts to assist SMEs are more effective when organized through **local financial intermediaries** than when carried out through direct investments. Financial intermediaries have a comparative advantage in that they are closer to the clients, can tailor their financing to the specific requirements of the client and will offer a range of complementary facilities (deposit accounts, overdraft, wire transfers, etc). IFC will therefore cut back its program of direct investment in SMEs and focus on intensive efforts to help local banks, equity funds, leasing companies and other financial intermediaries. Direct investments will be limited to cases where IFC has a very clear role to play because there is no suitable intermediary or where IFC's financing can have a high demonstration impact.

Despite the above lessons, the knowledge base on agro-enterprise development methodologies and "good practice" remains rather thin and not broadly distributed within the World Bank Group. If the organization is to provide more effective advice and assistance to its clients—let alone assume a leadership position within the development community on aspects of the agro-enterprise support agenda—then it needs to strengthen its knowledge base and develop more effective means of knowledge sharing, both internally and externally.

VII. FOCAL AREAS AND INSTRUMENTS FOR DEVELOPMENT AGENCY SUPPORT

The overarching objective of development assistance in this field should be to foster the competitiveness of African client agro-food systems in a manner that both accelerates growth and reduces poverty. Hence, explicit attention must be given not only to the modernization of food and agro-industrial systems and supply chains, but to how the poor participate and benefit from this process as consumers, farmers, entrepreneurs, and employees. While the private sector must be the driving force in this process, development assistance can be very significant in ensuring the availability of important public goods and in strengthening various types of collective action, which can foster growth and/or improve the distribution of opportunities and benefits.

Priority themes for development assistance in this field can be clustered under five headings, namely (i) food security; (ii) food safety; (iii) competitiveness; (iv) smallholder and SME market integration; and (v) risk management. From an agro-food system perspective, each of these themes requires a combination of public and private actions, and typically a blend of measures that modify the 'rules of the game', strengthen particular capacities, and otherwise alter the availability and distribution of assets. Each of these areas are ones where there is a considerable potential for market and/or distributional failures—providing possible justification for public policy and/or investment and, by extension, possible justification for involvement by the World Bank Group. The brief discussion on each of these thematic topics also highlights some of the instruments or tools for catalyzing or effecting change in these areas.

Food Security

The focus here is on improving household and national food security by reducing post-harvest losses, achieving other efficiencies in staple food market operations, facilitating international trade, and otherwise contributing to a process which reduces the costs of (staple) foods for the rural and urban poor and serves to flatten seasonal food price spikes. Many measures have been taken in pursuit of improved food security.[24] *From an agribusiness perspective*, the focus is on the functioning of food markets and the participation of the poor therein. The foci and tools of such work would include: policies and regulations on cross-border and international food trade; policies and institutional arrangements for financial or physical food reserves; R&D and extension support on improved post-harvest practices and storage; infrastructure and institutions for periodic and permanent markets in rural areas and small towns, supply chain initiatives for rural-to-urban grain logistics, infrastructure and planning tools for improved urban food distribution systems, etc. See Box 2 on warehouse receipts as an illustrative tool for work in this area.

African countries face major economic, social, and environmental challenges in feeding fast-growing urban areas that have high levels of poverty. Recent 'good practice' experiences in urban food system management highlight: (i) the importance of public-private consultation and collaboration (in planning, investment, and monitoring); (ii) the range of tools available to achieve management objectives (i.e., regulations, finance, education, policy dialogue); and (iii) the need to consider future demographic and other trends in planning today's policies and infrastructure investments.

Box 2: Warehouse Receipts: An Instrument that Facilitates Trade and Inventory Financing

Warehouse receipts, instruments that can be traded, sold, swapped, or used for collateral, can be an effective way of bringing flexible financing to agricultural production. Their use has been limited in developing countries because of the absence of an appropriate legal and institutional environment; low levels of awareness; and government policies that crowd out private sector incentives to store commodities. However, for countries in the process of agricultural market liberalization, warehouse receipts can support policy reform for export and inventory financing.

The benefits of warehouse receipts are numerous. Basically, they provide secure collateral for lending institutions thus potentially increasing the availability of local and foreign funds for agricultural lending and reducing the cost of lending. Not only do they provide secure collateral, but they can also be effective in managing price risk, by reducing uncertainty. Second, warehouse receipts can be the basis for a domestic spot market, and possibly for the creation of forward and futures markets. Third, warehouse receipts can reduce or eliminate the need for direct government intervention in crop commercialization -- the government can use warehouse receipts to manage strategic reserves without physically holding stocks and support prices without directly intervening in the market.

A performing warehouse receipt system does require a sound legal and institutional environment. In a sense, warehouse receipts must be recognized by all players as the equivalent to stored commodities. The rights, liabilities and duties of each party to a warehouse receipt contract (e.g., producer, bank, warehouseman) must be clearly defined and the warehouse receipt itself must be freely transferable by delivery and endorsement. The holder of a warehouse receipt must have priority to receive the stored goods, or their fungible equivalent, on liquidation or default of the warehouse. Other preconditions for creating a warehouse receipt system include: grading, certification, verification and physical controls over the commodity; availability of property and casualty insurance; and provision of performance guarantees by the warehouseman.

From: Panos Varangis

[24] Agribusiness-centered efforts would complement other strategies that promote food security, especially those focused on increasing farm-level productivity, promoting income-generating activities in rural areas, and providing consumption vouchers or other income supplements.

Food Safety

The focus here is on promoting and protecting the safety of fresh and processed food products, both in pursuit of improved public health domestically and to ensure continued international market access for food exports. With urbanization and the change in diets toward greater consumption of meat, fish, fresh produce, and other perishable products, food safety risks increase, especially in warm environments and where there is limited availability of refrigeration. In the very poorest countries, the most important food safety measures may be investments in safe water supply and sanitation. However, in other contexts, more direct measures could be taken in the food system itself.[25]

From an agribusiness perspective, part of the food safety challenge involves devising and implementing an appropriate set of rules, regulations, and standards (see Box 3). Another important element is strengthening the necessary capabilities within both the public and private sectors to achieve the intended results. Regulatory reform, training, technical assistance, awareness raising (consumer and food system participant), and investments in infrastructure (development or upgrading) could form elements of the support package. Improved policy-making could be informed by further research on the trade and socio-economic impacts of (product and process) standards, either those set officially or devised by the private sector. Effective food safety involves a mixture of private actions (throughout the supply chain) and public regulation. Cooperation between industry and Government is critical, with cooperation extending across risk assessment, risk management, and risk communications, and in prioritizing public actions. Where food safety policy is, instead, based predominantly on official prescriptions and inspections, the results are likely to be poor, both from a public health and from a trade perspective.

Box 3: The Proliferation, Globalization and Privatization of Food Standards: Towards an Operational Agenda

Awareness-Building of the legal, political, technical, economic, and environmental dimensions and implications for our clients of "international" and industrialized country standards. This awareness-building would be directed at policy-makers, private industry, farmer organizations, and consumer organizations. It would be through sub-sectoral, national, or even regional meetings, training fora, etc. It is important to ensure awareness of the various stakeholders in the rising concerns of consumers for 'sustainability' and for labor conditions, animal welfare and other 'ethical' matters.

Private Sector Capacity-Building, through training and demand-driven technical assistance. This could relate to HACCP, GAP/GMP, identity preservation, traceability methods, product and packaging standardization, industry codes of practice, etc.. Strengthening producer and industry associations could be one vehicle for this support. This support could be horizontal (across sub-sectors) or focused on one or a few commodity sub-sectors.

Public Sector Capacity-Building through training and investments in the design and enforcement of standards, including inspection services and laboratory facilities and testing.

[25] As food systems evolve, targeted interventions at single source hazards or important control points (i.e., imports; abattoirs) become more relevant and cost-effective. Employing more system-wide standards or controls at this stage could marginalize the important informal food delivery system and put special burdens on small food enterprises. More complex food systems should feature a range of product and process standards and monitoring and enforcement mechanisms to ensure compliance. For export-oriented industries, very strict processing and product standards will normally be imposed externally and investments and institutions will need to be put in place to ensure compliance.

Industry and Sub-Sector Competitiveness

The focus here is on improving the cost and quality competitiveness of local agro-enterprises and export-oriented export commodity systems and in so doing enable a growth in income and employment. Competitiveness will be indicated by the maintenance or increase in (local or international) market shares, by successful entry into new markets, and by successful product and service innovation--which bring additional benefits to companies, farmers and the country as a whole. *From an agribusiness perspective*, competitiveness initiatives might combine activities and processes. SWOT preparation would lead to the identification of critical elements and facilitate strategy development focused around key sub-sectors (see Box 4). Issues might include direct and indirect (import and export) taxation, labor laws, specific legal and regulatory reforms, capacity-building efforts directed at associations or clusters of firms, selected infrastructure investments (i.e., roads and port rehabilitation), measures to promote the adoption of productivity-raising technologies (i.e., certain agricultural inputs; information technology) and/or fostering new skills and organizational forms through training and technical assistance. Since opportunities for some larger players may represent threats for small suppliers, it is necessary to perform a SWOT for each of the key client groups, particularly the poor who are unable to do so themselves.

Box 4: Importance of Sub-Sector Analysis

Sub-sector specific focus on two or three key sub-sectors is recommended in each of the pilot countries that are selected for agribusiness strategic analysis. In effect, outside of Eastern Europe, where egregious flaws in the legal, financial and institutional environment hamper business activity across the board, most opportunities and constraints within agribusiness will vary across sub-sectors. Hence they will require sub-sector-specific diagnostics and interventions.

A sub-sector focus offers the following crucial operational advantages:

- a means of mobilizing interest among key stakeholders in ways that general, across-the-board studies rarely achieve. Facilitating agencies can orchestrate sub-sector reviews and pinpoint interventions – some requiring public and some requiring private action ;
- a sub-sector provides a meaningful unit of analysis, one which clearly specifies competitive and complementary relationships between large and small firms ;
- for poverty analyses, sub-sector maps offer a tool to clearly identify opportunities for small firms and poor people; which niches offer the greatest prospects for growth, and which large firm intermediaries will be key in making the transition to these viable niches ;
- for interventions, a sub-sector focus helps target public investment decisions on key bottlenecks or opportunities in specific leading economic activities ;
- it focuses policy discussion on very specific constraints and opportunities in key leading sub-sectors ;
- it provides a flexible tool for building coalitions in what is often a highly fractured institutional environment.

As pointed out in various papers, administratively, agribusiness continues to be an assignment for which no one person is responsible. This important observation is simply a fact of life. So the convening of sub-sector task forces, or the orchestrated action of key players offer one means of bridging this gap in institutional support .

From: Steven Haggblade and Torben Reopstorff.

Competitiveness initiatives have been applied in a growing number of cases in relation to individual firms, clusters, sub-sectors, or even countries. In a development context, successful competitiveness processes combine strategic improvements on the part of the private sector, policy, regulatory, and service reforms on the part of Government and an intensive and on-going dialogue between the two. Critical success factors include[26]: (i) leadership by local individuals or organizations who have convening power; (ii) complete ownership by the industry (cluster) of the process of strategic improvement; (iii) an initial drive for "early wins" in areas where both the private sector and Government are ready for change; (iv) building on existing mechanisms and momentum for cooperation rather than constructing parallel institutional frameworks; and (v) cost sharing with the focal industries/clusters to build sustainability and ensure ownership.

Smallholder and SME Market Integration

The focus here is on fostering more remunerative and reliable market linkages for smallholder farmers and small agro-enterprises and in so doing enabling them to benefit from the growing market opportunities in the agro-food system, domestically and internationally. Market forces alone will not ensure such integration because of the potentially high transaction costs faced by upstream and downstream economic entities when trying to deal with smaller and possibly remotely located entities. *From an agribusiness perspective*, the range of possible measures would include: the strengthening of producer and industry associations, facilitating rural infrastructure development, the provision of marketing extension, IT initiatives, and other means of disseminating market information, the development of and training on quality and process standards, R&D and technical support on post-harvest and storage technologies, and facilitating contract production and other means of vertical coordination. Such measures could also have regional implications for those markets transcending national frontiers.

Risk Management

The focus here is on improving the capabilities of farmers and agro-enterprises to manage risks and thereby be better able to invest in and conduct specialized production and market activities.[27] Risk is ubiquitous in all commercial endeavors within agro-food systems given agro-climatic factors, shifts in supply and demand, the perishability of products, the large geographical span of supply chains and the frequent politicization of agro-food markets which gives rise to *ad hoc* government interventions and uncertainty in government policy-making and practice. Farmers and firms have 'traditional' means of managing their risks (i.e., self-financing through savings, diversification, selective market relationships), but these may be sub-optimal in the sense that they induce low investment or missed opportunities. Additional financial risk management instruments could expand investment and trade and allow buyers and sellers to sell risks that they cannot effectively manage to third parties who are prepared to accept them for a reasonable price.

Until recently, solutions in developing countries focused on the government assuming the role of direct provider of risk management instruments that were not market-oriented. Price stabilization boards and funds and government-sponsored crop insurance were some of the typical responses found. However, overall experience has shown that government involvement has been ineffective and costly; indeed, inept or corrupt government actions have increased commercial risk considerably. During the late 1980s and 1990s, solutions shifted from the government to the private sector and from administrative to market-based approaches. Examples include systems of warehouse receipts (allow seasonal spacing of sales), weather risk insurance (see Box 5), price risk management tools (i.e., forward, future/options markets), guarantee schemes, packaging insurance with agricultural/small business credit, and providing insurance against non-

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[26] See K. Murphy, "*Agribusiness Sector Competitiveness: Implementing the Right Initiatives, The Guide to Developing Agricultural Markets & Agro-Enterprises*" , World Bank, 1998

[26] Thanks to Panos Varangis for defining some of the key issues and opportunities in this area.

commercial risks. Each of these measures requires an enabling legal/regulatory environment and a contract dispute mechanism (arbitration in the absence of a performing judicial environment).

While there is growing recognition of the potential value of market-based mechanisms, developing countries need to address several issues before coming up with specific solutions. The risks need to be clearly identified and quantified. Possible regulatory/legal/capacity bottlenecks to applying market-based instruments need to be identified. Appropriate instruments need to be designed and the respective roles of government and the private sector must be determined.

Box 5: Harnessing Markets to Cope with Weather Risks

Catastrophic events, such as drought, floods, high winds or low/high temperatures, can have a devastating impact on farmers, limit growth potential and prolong rural poverty. In the absence of effective commercial insurance for weather-related crop losses, farmers organize their production to minimize losses. The main strategy used is self-insurance, which results in the adoption of low-yielding production technology to contain costs and limit losses; slows the pace of innovation; and discourages agricultural modernization.

Help is on the way, as experts are exploring how weather risks could be hedged through "weather-based index insurance", an insurance technique focused on the occurrence of a weather event, rather than on crop losses. Thus, for instance, in the case of drought insurance, contracts would be written against severe rainfall shortfalls (say 30% below the norm), measured at a regional weather station. The insurance would be sold in standard units and all buyers would pay the same premium and would receive the same indemnity payment per unit of insurance, in the event of a claim.

From the insurer's point of view, the key advantage of this product is that the weather or "trigger" event can be independently verified, and claims are not subject to manipulation of farm losses. Moreover, as contracts and indemnity payments are the same for all buyers per unit of insurance, "moral hazard" (the absence of an incentive for the insured to prevent weather-related losses) and "adverse selection" (only those with the highest risk exposure seek coverage) are reduced. Such insurance would be simple to administer and could be marketed through banks, farm cooperatives, input suppliers and micro-finance institutions. From the insured farmer's viewpoint, insurance would be more affordable and available to a broader income range of clients.

There are still challenges before this type of insurance can become a reality: reliable and verifiable data on weather; the "covariate" nature of weather risks (as opposed to "independent" risk, such as car accidents, etc.); and the risk for the local insurance provider of compensating all insured parties at the same time. Until recently, the only way to insure against this was international reinsurance but recent innovations, such as weather derivatives and catastrophe bonds offer exciting new opportunities to pool large volumes of covariate risks on a global scale. There are now successful examples in Japan and the United States of spreading the risks of earthquake insurance, for example.

IFC is in talks with a consortium of private insurance companies, brokers and weather derivative traders to set up a company in this field (Weather Risk Transfer Company, WRTC) and the World Bank is also actively pursuing research in this area. IFC will pool its expertise and reinsurance capacity in tandem with World Bank policy and groundwork to overcome entry barriers into what is still a relatively small and difficult sector in emerging markets.

Source: Based on material provided by Panayotis Varangis

Some Additional Instruments for Sub-Sectoral Interventions

Many reform programs start with an umbrella framework, expected to cover all likely events; another approach is to reverse the process and consider limited, sub-sectoral or spatially targeted entry points, yet keep a market-orientation and systems perspective. This has the advantage of being specific; solutions can later be applied more generally in the economy. In practice, this would require the requisite analysis of major bottlenecks, opportunities, etc. and then developing assistance strategies building in the necessary package of policy/regulatory reform, capacity building, infrastructure, and other measures. The particular requirements will vary from case to case, so there is no single formula.

Annex 2 provides an illustrative and non-exhaustive listing of additional tools or types of interventions that are applicable under varying sub-sectoral contexts, including those of domestic staple food markets, input supply systems, traditional and non-traditional exports, etc. Clearly, there are no magic bullets to use to pursue any of the key themes or objectives. Multidisciplinary perspectives are needed to determine the most fundamental bottlenecks and opportunities for change. This has implications in terms of how the work in this area should be organized.

VIII. TOWARDS A WORLD BANK GROUP STRATEGY

This section proposes core elements of a WB Group strategy for supporting agro-enterprise activity in low and middle-income African countries. It reflects on the WB Group's comparative advantage for work in this field, proposes core operational objectives and focal geographical are

Comparative Advantage

The potential demand for assistance for agribusiness is large; in some countries, agribusiness is one of the few sectors that offers growth potential, and, in others, it is a potentially important source of real income growth, employment and export diversification. As a consequence, the World Bank Group will have to establish priorities that meet the needs of its member countries yet adhere to strict policy criteria. One very important consideration is the Bank's comparative advantage in this field. The Bank Group's current capacities in this area are constrained by its limited specialized staffing in this field, by the barriers faced in undertaking multi-sectoral and cross-departmental work, and by weak systems for knowledge sharing. Subsequently, we will identify measures for addressing our weaknesses and better taking advantage of available opportunities.

Table 2: Comparative Advantage of the World Bank Group in Agribusiness Development: SWOT Analysis

Strengths	*Weaknesses*
• Strong convening power and recent experience in facilitating stakeholder dialogue • Strong analytical capabilities on agricultural, trade, infrastructure, finance, and regulatory matters • Diverse lending instruments • Impartiality with regard to markets or sources of technology • Field presence in many countries	• Limited experience in collaborating with the private sector • Agricultural production bias rather than market orientation within rural development work • Limited internal staff with private sector experience or analytical specialization in this field • Relatively high costs in project/initiative formulation
Opportunities	*Threats*
• Link agribusiness investments with policy-based analysis and lending (i.e., Bank/IFC collaboration • Systematic interactions between resident mission staff and local agribusiness entities • Leverage resources and partners to facilitate cross-sectoral and multi-stakeholder efforts • Scope to out-source considerable technical support work in this field	• Public suspicion that the Bank is "making the world safe for business rather than making business accessible to poor people". Hence, there is "reputation risk" associated with collaborative programs with the private sector. • Continued perception by some stakeholders that agribusiness equals big business • Mixed/uncertain management commitment to intensify work in this field

Table 2 illustrates that the Bank Group has a number of notable strengths and opportunities for improving performance in this field. Perhaps the Bank's leading strength relates to its policy and regulatory analytical capacities and ability to promote reforms at the macroeconomic and microeconomic levels. This, together with the Bank's strong convening power, can enable us to take the lead in supporting policy reforms and facilitating sub-sectoral analysis and strategy development involving varied stakeholders. In particular fields, such efforts would greatly benefit from, and, indeed, require the specialized technical knowledge of other agencies (for example, that of FAO, USDA, and WHO on food safety regulations). The Bank Group has the potential--through combined IDA/IBRD/IFC efforts--to deliver a package, which combines policy reform and institutional strengthening assistance with direct investments in agro-enterprises. Such efforts could accelerate the restructuring of particular sub-sectors and foster broad based growth.

In recent years, the Bank has increased its level of support for competitiveness and supply chain analysis and capacity building. Still, this is an area where best practice is not well established and modalities are being continually refined. Partnering with other organizations for work in this sub-area would be advisable. The expertise of the Bank Group is comparatively weaker in relation to the theme of integrating smallholder farmers and SMEs into markets. This is an area requiring some experimentation and considerable reliance upon NGOs and other agencies with more experience. The same applies for the theme of risk management, with this being an area where the Bank is already working closely with a number of organizations.

Clearly, the Bank Group will need to work closely with a variety of other organizations to bring the best advice and service to its clients in this field. Table 3 provides an illustrative list of potential external partners, representing other multilateral agencies, bilateral agencies, NGOs, consulting firms, research institutions, and the local and international private sector. These are clustered under the five themes discussed in the previous Section.

Table 3: Potential Collaborating Partners (illustrative only)

Food Safety	*Food Security (i.e., Staple Food Marketing)*	*Competitiveness*	*Smallholder/SME Market Integration*	*Risk Management*
FAO	FAO	USAID	USAID	UNCTAD
WHO	IFPRI	Monitor Group .	FAO	USDA
USDA	Michigan State University	Agri Chain Competence Foundation	Various NGOS (e.g., Technoserve, ACDI/VOCA, CLUSA)	Chicago Board of Trade
Michigan State University	USAID	CIRAD	IFAD	Insurance Companies
OECD	World Union of Wholesale Markets		Agence Pour la Création d'Entreprises	
International Office of Epizooties (OIE)	Natural Resources Institute		Natural Resources Institute	Natural Resources Institute

Operational Objectives

The Bank Group's support for African agro-enterprise activity should be driven by the same overarching objective spelled out in Section VI for the development community as a whole, namely, *fostering the competitiveness of client agro-food systems in a manner which both accelerates growth and reduces poverty* This can be broken down into three sets of sub-objectives.

First, there is a need to **further pursue the reform process towards the liberalization of agro-food (or commodity sub-sector) systems, as well as push the boundaries of the policy and regulatory reform agenda** as it relates to agricultural input, commodity, and product markets. Measures need to be taken to overcome the mutual lack of trust and confidence between the public and private sectors in many countries. There needs to be a greater convergence (if not consensus) of views on the appropriate and inappropriate roles of government in facilitating, fostering, and regulating agricultural input and product markets. Several major cash crop and food crop sectors remain heavily controlled and need to undergo a phased period of liberalization (and/or enterprise privatization).

Taking this agenda to the next level also entails the modernization of particular laws and regulations (i.e., on food safety, on seed commercialization, on warehousing, etc.) and ensuring that the institutional arrangements, whether in the public or private sectors, for implementing and enforcing those regulations are in place and effective. A final important dimension of the "unfinished reform process" is to re-engineer some of the critical service functions formerly provided by parastatal entities and now missing, which do have public good properties. Examples include quality control arrangements, industry statistics, and, perhaps, market intelligence.[28]

The second set of objectives concerns improving the **competitiveness of African agro-food systems** and the local capabilities to respond to national, regional, and international market opportunities. Part of this effort requires shifting the outlook and perceptions of farmers and agro-enterprises and better equipping them with insights into consumer needs, wants, and requirements. Another important dimension is strengthening local capacity and knowledge sources in agro-enterprise, supply chain and association management. The fostering of meso organizations generally can be an important means of enhancing agro-service provision and thus the productivity of farmers and agro-enterprises. Technical skills and organizational arrangements will need to be transferred and developed to better enable farmers and firms to comply with the growing range of official and private standards in relation to agro-food products and processes. Fostering competitiveness may require strategic investments in physical infrastructure or the rehabilitation of existing infrastructure. Finally, competitiveness may be enhanced through the stimulation of foreign or joint venture investments and/or strategic alliances, which can foster technology and organizational transfer and strengthen the downstream market positioning of client country products.

The third set of objectives relates to redistributing assets and opportunities so that the poor more directly benefit from growth and structural change. It is to **ensure the remunerative participation of the poor in agro-food markets** and to provide safety nets for those of the poor who are adversely affected by policy reforms and/or structural changes taking place in agro-food markets. This will require targeted measures to improve the capacities of small farmers and small rural businesses and, through investments in infrastructure, farmer organizations, etc., to reduce the transaction costs faced by other economic entities when trying to conduct on-going business with these small players. Still other measures are needed to enhance the ability of small farmers and small enterprises to manage risks, beyond their traditional approaches. However, these efforts will still have to be supplemented by various types of safety net or training programs since certain groups (i.e., farmers in very remote areas, displaced parastatal workers) will inevitably be adversely affected by policy and structural changes.

Table 4 below provides an illustration of the types of 'products and services' that the Bank Group can provide in pursuit of the above three sets of objectives and in relation to the core building blocks of agro-food systems (i.e., institutions, agro-enterprises, markets, and meso organizations). For some of the products, especially those related to policy, regulatory, and institutional reform and strengthening, the needed efforts would be taken by IDA/IBRD. For other efforts, including much of the enterprise-specific investments and other forms of support, the IFC would take the lead. There are at least four specific products for which joint and collaborative efforts between IDA/IBRD and IFC could be pursed immediately, namely:

- *Industry/sub-sector competitiveness studies* combining attention to policy reform and capacity building needs with assessments of investment opportunities by the IFC and others. These studies are most effective if they involve key stakeholders;
- *Design of agro-processing ventures involving smallholder outgrowers* with the IFC undertaking a direct investment in agro-processing firms and IDA/IBRD focusing on the

[28] Examples of subsectors where priority attention is needed to implement policy reforms and promote industry restructuring and the emergence of market institutions include those for cocoa in Ghana, cotton in several West African countries, and cashew nuts in Mozambique.

enabling environment, support for producer organizations, and the other institutional software;

- The development of a *warehouse receipt system for grain or export commodities with* the IFC investing directly in the warehousing companies, while the IDA/IBRD would support needed revisions in the legal, regulatory, and policy environment; and
- *Provision of infrastructure:* provision of key infrastructure may be necessary to enable the poor to participate in changing market channels.

Country Focus and Project Design

The first step in an intensified agribusiness support initiative by the World Bank Group would be the consultation process with country partners and donors under the Comprehensive Development Framework (CDF). That process should determine whether the country has the potential for agribusiness, whether other assistance is already available, and whether the World Bank Group can make specific contributions to ensure that agribusiness develops in a sustainable way. The Poverty Reduction Strategy Papers (PRSP) would identify the potential role of agribusiness and potential impacts on poverty alleviation. The Country Assistance Strategy (CAS) will refine the areas in which World Bank Group interventions are feasible and identify specific projects and non-lending activities.

Table 4: Objectives, Leverage Points, and Illustrative Products and Services				
	Leverage Points in Agro-Food Systems			
Objectives	*Rules and Regulations*	*Enterprises*	*Markets*	*Meso Organizations*
Further Liberalization & Restructuring	Policy dialogue and TA on cross-border trade regulations. Policy dialogue and TA to overhaul and modernize seed and fertilizer regulations. TA on competition and licensing policies. TA in the development of warehousing and leasing laws.	TA for privatization of state-owned marketing or agro-industrial enterprises. Post-privatization modernization/ rehabilitation investments. Demonstration projects to test and refine alternative business models. Shared grants for business start-ups and support services.	TA in the development of commodity exchanges and forward contracting systems Policy dialogue/TA on strategic reserve policies and operational procedures and on food agency reform. Equipment and TA for market analysis/monitoring capacity. Financing infrastructure for urban food distribution systems.	Legal TA to devolve rule making authority from the public sector to the private sector. Capacity building for trade associations, producer sector boards, etc. TA and capacity-building to contribute to public-private consultations and cooperation.
Agro-Food System Competitiveness	"Country cost" assessment: regulatory and administrative cost burden and impediments to doing business. Policy dialogue with government and private sector stakeholders on laws and regulations. TA and training on intellectual property rights/plant breeders' rights protection. Analysis and TA on product/process standards, food safety legislation, and phytosanitary regulations.	Competitiveness assessments of specific agro-business systems, SWOT analysis, benchmarking analysis, strategic planning. Public policy impact assessments for specific agro-food systems. TA in quality management (HAACP, ISO), environmental management, etc. Direct investment in agro-industrial enterprises; storage/warehousing. Strengthening financial intermediation and business support services for SMEs.	Investment in rehabilitation/ modernization of port/airport facilities. TA in futures/options market development. Financing of wholesale markets and design of management arrangements.	TA and training for commodity/ industry associations and for networking these with similarly constituted organizations in other countries. TA and financing for dry ports development. Technical guidance in establishing quality assurance systems which comply with overseas buyer specifications (i.e., organic food standards).
Remunerative Participation for the Poor	Develop tradable ownership rights and collaterizable claims to assets (i.e., registration of land, livestock) TA on warehousing laws and cap. building on licensing/supervision of warehouses. Transportation policy reforms which open transportation service markets to third party providers. TA on cooperative/producer organization legislation.	TA on design of smallholder outgrower schemes and farmer financing and risk management through such schemes. Strengthening financial intermediation and business support services for SMEs. Intermediation of risk management products (warehouses, financial institutions, futures/options markets). Co-financing infrastructure, R&D and extension for improved post-harvest/storage practices. TA for input stockists; community-based seed multiplication.	Analysis and TA in SME sub-contracting arrangements. Co-finance micro-infrastructure and supporting management arrangements for periodic/permanent markets in rural areas and small towns. Support demonstration project testing various SME business models, including franchising systems.	TA and training for farm community based marketing and purchasing organizations. TA to refocus chambers of agriculture to oversee the poverty reduction effectiveness of demonstration and other projects in this field. Support for community-based credit unions which pool savings and collectively manage risks.

Several projects already in the pipeline would appropriate vehicles for agribusiness support components (see Table 5 below). The WB, IFC and MIGA can jointly review the scope and opportunities for interventions identified in the CAS. They can explore the possibility of working jointly or separately and where there are overlapping mandates, such as for guarantees, decide which of the agencies is best suited to address the priority interventions. The WBG parties will also decide whether linked or freestanding action is required for the period foreseen in the CAS.

Where there is no information base to guide the formulation of policies and design and implementation of projects, sponsors would have to initiate economic and sector studies. Such a program of sector work (or project preparation via trust funds) would be essential to ensure sound decision-making and build stakeholder confidence. Such studies would analyze the role of agribusiness in the wider economy, its potential for growth and the constraints on its sustainability. In some countries the best approach may be to focus on both the analysis and subsequent operational interventions in one or a few major sub-sectors where there is willingness to adopt changes which will foster broad-based growth. The potential benefits of dissemination of these studies for the government, the private sector, the donor community and the World Bank Group itself are substantial. A list of possible priority topics for regional ESW in relation to agribusiness opportunities and impacts could be established. There may be scope for incorporating some of this analysis into on-going regional study programs including that of the Regional Program for Enterprise Development (RPED).

Many agribusiness activities could be implemented using traditional and more recent lending tools such as privatization projects, agricultural services projects, private sector development projects, community action projects, etc. Improved project design would derive from a market and agro-food system orientation. Table 5 below, listing current projects and projects in the pipeline, suggests that there is ample opportunity to pursue this approach in line with demand from our clients. Dedicated agribusiness support projects are possible, and could combine policy/regulatory reform, capacity building, infrastructure, and selected industry/sub-sector initiatives.

One could also envision key elements of the agribusiness's legal, policy, and regulatory environment being the focal point for particular country structural or sectoral adjustment credits. This would facilitate a more intensive monitoring and evaluation of the actual implementation and impact--both on growth and on poverty--of these reforms. Sector investment loans provide a comprehensive framework and should feature agribusiness more prominently. Some of the World Bank Group's newer instruments, such as multi-sectoral capacity-building programs and guarantees, could also be used as part of a heightened focus on agribusiness.

Table 5: Existing Project Pipeline of Immediate Relevance to Agribusiness Support

Country	*On-going Projects with Closing Date beyond 06/30/02*	*Pipeline Projects*
Benin	Private Sector Development Cotton Sector Reform Program	Agricultural Services and Producers Organizations Support program
Burkina Faso	Private Irrigation, Ag Services II, Competitiveness and Enterprise Development	PRSC III
Cameroon	Public/Private Partnership for Poverty Reduction Project	
Cape Verde	Privatization Project	
Cote d'Ivoire	Agricultural Export Promotion (PPDEA)	Poverty Reduction & Agricultural Income Support
Eritrea		Private Sector Recovery Credit
Ethiopia		National Fertilizer; Food Security
Gabon	Privatization and Regulatory Capacity-Building	
Ghana	Trade Gateway, Agricultural Sector Investment Program	
Guinea	Agricultural Export Promotion	Rural Infrastructure II
Guinea Bissau		Private Sector Capacity Building
Kenya		Privatization and Private Sector Revitalization
Madagascar		Rural Sector Support; Second Private Sector Development
Malawi		Private Sector Development; Agricultural Sector Adjustment
Mali	Private Irrigation, Agro-Processing and Trading, Agricultural Services and Farmers' Organizations Support, Cotton Sector Reform Program	Agricultural Competitiveness and Diversification,
Mauritania	Irrigated Agricultural Development (PEDIAM)	
Mozambique	Agricultural Sector Investment Program; Enterprise Development	
Niger	Agro-Pastoral Export Promotion, Private Irrigation II	
Nigeria		Privatization Support; Decentralized Tech Development
Rwanda		Trade and Private Sector Development
Senegal	Agricultural Export Promotion (PPEA)	Agricultural Marketing and Diversification Private Sector Development
Tanzania	Privatization and Private Sector Development; Rural and Micro Finance	Agricultural Services Management Project II; Soil Fertility Recapitalization
Uganda	Poverty Reduction Support Credits	Private Sector Competitiveness
Zambia	Agricultural Sector Investment Program	Agricultural Sector Investment Program II; Rural Investment Fund
Regional	Regional Agricultural Trade Facilitation Study	

In the near term, two or three countries should be identified to comprise the initial focus of joint IDA/IBRD-IFC work on agribusiness. These countries should be ones where there is either a Rural Development or Private Sector Development project under preparation and there is strong potential for future IFC agribusiness investment. Table 6 illustrates some of the choices available. Countries in the first column fall essentially within the domain of IDA support for agribusiness, as there is very little scope for IFC investment in the near term. Countries in the third column fall essentially within the potential IFC domain with there being little likelihood of IBRD support for agribusiness activity. For countries in the middle column there is scope for IDA support as well as relatively good prospects for future IFC investment in agribusiness. It is from this cluster of countries that the initial set of countries for joint product development should be selected.

Table 6: Candidate Countries for Joint IDA/IFC Support for Agribusiness

IDA Support Only	*Possible Joint IDA/IFC*	*IFC Only*
Mali	Ghana*	South Africa
Burkina Faso	Uganda*	Botswana
Malawi	Tanzania*	
Ethiopia	Mozambique*	
Senegal	Cameroon*	
Benin	Kenya	
Níger	Nigeria	
Zambia	Cote d'Ivoire*	
Guinea Bissau	Zimbabwe	
*More likely candidates.		

Organizational and Staffing Matters

To meet and foster the demand from clients for agribusiness support work, there is a need to get better organized and improve the WB human resources in this area. The walls of internal institutional barriers need to be scaled.

A number of organizational initiatives have already been taken and could be formalized :

- **Agribusiness Coordination Task Force** (ACTF) : A team of five to seven members would be formed as a *thematic center of excellence on agribusiness* within the Africa Region. The ACTF would be by essence multisectoral and would consist of selected technical and operational staff from RD, PSD, IFC, and perhaps DEC, together with an Operations Analyst/database person. Its function would be to provide leadership on agribusiness support in Africa. It would initiate, manage or otherwise participate in selected cross-country thematic studies or facilitation initiatives, assist project TTLs to initiate agribusiness project components and provide technical support throughout the project's life-cycle, work with WBI to develop in-house training programs, ensure that agribusiness perspectives and opportunities are reflected in PRSPs, CASs, and other country strategy documents, produce and/or stimulate the production of additional "good practice" notes and appropriate performance indicators, organize periodic meetings and workshops on major topics, liaise with external organizations, etc.. Ideally, it would require a regional budget, with equal or proportional shares to be provided by the ESSD and FIPSI families, and by the IFC.

- **Virtual Agribusiness Team (VAT)**: This consists of interested staff members from headquarters and field offices. While the majority of staff is working primarily in Africa, the virtual team also includes technical specialists working in the central VPs and in other regions. This includes therefore staff from PSD, Finance, Rural Development, PREM, Infrastructure, DEC, IFC, MIGA, and FIAS. TTLs of projects, which include agribusiness components, participate in the wider virtual team. The VAT operates both as a source of supply and a center of demand for knowledge and practical tools and experience in promoting broad-based agribusiness development.

- **Agribusiness Liaison Network (ALN):** The ACTF would coordinate a liaison network that would be a sounding board as well as an external font of knowledge to support the World Bank Group efforts in the agribusiness area. In the past, a series of meetings were held involving Washington-based NGOs, development agencies, consulting firms, and industry associations. The mailing list should be broadened for the VAT to include key personnel at other major organizations, including FAO, UNIDO, the Common Fund for Commodities, IFPRI, the Africa Development Bank, and others. The ACTF would also seek to forge a network of business organizations interested in the development of agribusiness in Africa. This might include organizations like the Corporate Council for Africa, the Enterprise Network Initiative (East, West, and Southern), and others. A specific networking strategy would be worked out and appropriately budgeted.

- **Internal Partnerships**: There is scope for and a necessity for Bank Group staff working in this area to work more closely with other groups with whom there is an overlap of interests. Given the crosscutting nature of agro-food systems, there are many potential alliances. Some examples include working with: (i) the environmental staff on market linkages for conservation-related products and on environmentally appropriate value-added technologies; (ii) the urban development staff on urban food supply and distribution issues; (iii) the joint IFC/Bank SME staff on the design and monitoring of business development services interventions; (iv) the Animal Resources and Food Policy thematic teams on food safety issues; (v) the Community Development thematic team on smallholder/SME market integration issues; and (vi) the Bank's rural finance specialists on the various risk management initiatives.

- **Subsector Task Forces**: They could be set up on an *ad hoc* basis to formalize and enhance joint work with stakeholders on specific subsectors of interest. These subsectors can be economically important ones, ones where the poor are most threatened, where they may have the best prospects for inclusion, or where transitional support for pro-poor institutional arrangements may yield the most powerful demonstration effect. Examples where opportunities for multi-country assessment and operational planning are possible include such sub-sectors as cotton/textile, sugar, horticulture and cereals, as well as opportunities for such work in a smaller clustering of countries (cocoa, tobacco).

- **Training**: it is of utmost importance to ensure that a large proportion of RD and PSD staff gains a functional understanding of the main dimensions, opportunities, challenges, and available instruments for agribusiness development.[29] To this effect, a core course on agribusiness assessment (entry points, concepts, analytical tools, operational design) should be developed to expose a broad section of AFR operational staff to agribusiness and agro-food systems in order to improve the quality of work in this area.

- **Staffing** : The Africa region (and the World Bank Group as a whole) has a limited number of staff with private agribusiness experience and/or analytical specialty in this area. It would benefit from the recruitment of one or two additional specialists in this field. Otherwise, this

[29] See Appendix 1 on the different skills and perspectives that are needed from the Bank's rural and PSD staff.

could be achieved through the secondment, under the *Staff Exchange Program,* of one or two agribusiness management/marketing professionals from the food/fiber industry.

IX. CONCLUSIONS & RECOMMENDATIONS

At the international and national levels, agro-food systems are under-going rapid and substantial change as a result of several demographic, technological, political and economic factors. These changes open up new opportunities yet also pose new challenges and threats to the World Bank's client countries in SSA and to the poor in these countries, acting in their capacities as consumers, wage employees, farmers, and entrepreneurs. The bottom line effects of these trends are to increase global competition and to empower consumers. To remain a leader in the development field, the World Bank Group needs to better assist its clients to improve the competitiveness of agro-food systems that are based within their countries and to find more effective and innovative ways to enable the poor to participate and benefit from this process.

These objectives cannot be reached through a piece-meal and disjointed approach, in which the Bank's support to agriculture remains primarily production-oriented, while its approach to private sector development maintains an urban bias, is oriented towards privatization and is otherwise restricted to improving the overall enabling environment for investment. We should approach agriculture and rural development needs from a market systems perspective, with policy-focused work supported by intensified micro-level interventions and institution building (enterprise, meso organization and/or supply chain development). This can only be done by surmounting the institutional walls between RD and PSD divisions and between IDA/IBRD and the IFC.

This paper has outlined an analytical framework and suggested some operational implications for pursuing agro-food systems development in SSA by identifying core objectives, operational themes, intervention tools, areas of potential geographical focus, and several institutional measures to improve our capacity to perform the needed services. Within the Rural Family, it is critical that market-oriented approaches and agro-food system perspectives are not pigeon-holed into a sub-sectoral box of agribusiness, while much of the remaining (and dominant) efforts are driven by agricultural production/productivity goals and the narrow visionary span of particular Government ministries. Such market and system perspectives need to be applied across a wide array of analyses and interventions in rural development. Otherwise, in today's dynamic agro-food system environment, the risk is to fail to assist our clients to take on the competitive challenges that they face.

Based on the analysis presented in this report, it is recommended that the World Bank Group engage further in refining and developing a fully operational strategy for agro-food systems promotion in SSA, in the framework of the recently updated Rural Development Strategy (Vision to Action).

In the short run , this agenda would entail the following proposed actions :

1. Disseminate within the Bank and to member countries and other partners its stance that agribusiness is a sector that can contribute positively and significantly to poverty alleviation and growth in SSA countries;

2. Initiate more extensive economic and sector work to underpin the sector's economic, financial and environmental sustainability and its importance in poverty-reducing strategies;
3. Build consensus and develop a common framework between donors and other partners interested in agribusiness/agro-food systems development (i.e., USAID, CIDA, FAO);
4. Integrate agribusiness in country analysis at the stage of the CDF, IF, PRSP and CAS in countries where agribusiness has the potential to alleviate poverty and stimulate economic growth;
5. Partner with governments, where warranted, to adopt policies for agribusiness and its related social and physical infrastructure that includes macro analysis, regulation and competition;
6. Recognize that agribusiness is predominantly a private sector activity that requires a supportive business environment, a catalytic public sector and the participation of stakeholders in decision-making, if it is to realize its potential;
7. Work with its partners to implement strategies for sustainable agribusiness and use the World Bank Group's convening power to achieve these objectives;
8. Build a stronger information base and create systems for knowledge management and operational leadership within the World Bank Group and within the Africa Region, in particular;
9. Formulate appropriate pilot projects in three or four selected countries on which the IFC, MIGA and the Bank would work with local and international partners;
10. Form a sub-sector task force to deal with specific reforms that are relevant to a group of countries (cotton, cocoa);
11. Design and refine innovative approaches to agribusiness support as components of RD and PSD projects in the current portfolio pipeline; and
12. Intensify efforts to monitor and evaluate the implementation of legal, policy, and regulatory reforms in agricultural and food markets, and the impacts of such reforms on growth, innovation, and poverty reduction. Build these indicators into on-going supervision work as well as in future regional or country Economic Sector Work.

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Annex 1: Complementary Skill Requirements to Implement the Strategy

Agricultural/Rural Development Staff

- Understanding of agricultural input and output market regulatory and policy issues
- Understanding of the scope, limitations, and means to support farmer and community organizations
- Understanding of the weaknesses of and means to support rural infrastructure and ancillary services
- Understanding of the technical challenges and opportunities at the primary production stages
- Understanding of the challenges and the available institutional models for fostering improved linkages between (smallholder) farmers and markets/agribusiness enterprises
- Understanding the linkages between production systems and agro-food systems
- Knowledge of good practices and contacts among NGOs and other institutions who are working to foster non-farm rural enterprise development

Private Sector Development and Finance Staff

- Understanding of regulations and policies to promote trade and investment
- Understanding of the scope and limitations of privatization, competition policy, etc. and the needed safeguard and transitional measures
- Understanding of good practice tools for providing demand-driven technical assistance and other support
- Understanding of the scope, limitations, and effective tools and safeguards for public-private partnerships
- Understanding of the principles of supply chain management and development and how these can be effectively applied in operational contexts
- Understanding of varied instruments for financial intermediation
- Understanding and upstream diagnostics of red tape and other barriers to investment

IFC, MIGA, and FIAS Staff

- Understanding of good practice for capacity-building in investment promotion
- Specialized knowledge of particular sub-sectors and private companies in client countries
- Understanding of varied possible instruments for agribusiness finance and risk management
- Understanding of good practices and tools for promoting small and medium enterprise development

Annex 2: Agro-Food Systems: Policy and Operational Spheres

	Illustrative Agri-Food System Entry Points			
Possible Actions	*Domestic Staple Food Markets*	*Domestic Higher Value Food Markets*	*Traditional Export Agro-Industry*	*Non-Traditional Agro Exports*
Reform of Rules/Laws/ Regulations/ Policies	Warehousing laws Grades/standards Urban and peri-urban zoning laws Strategic reserve policies and rules Laws of association Foreign investment laws/policies Phyto-sanitary/sanitary laws Trade policies and licensing Transport policies	Franchising laws Cooperative laws Food safety regulations Grades/standards/packaging laws Laws of association Foreign investment laws/policies Trade policies and licensing Transport policies	Warehousing laws Grades/standards and quality certification Competition and licensing policies Laws of association Foreign investment laws/ policies Trade policies and licensing Policies/taxes regarding value-added Transport policies Intellectual property rights regime	Grades/standards and quality certification Organic production certification Phyto-sanitary/sanitary laws Landing rights/other transport policies Laws of association Foreign investment laws/policies Trade policies and licensing Intellectual property rights regime
Public Sector Capacity-Building	Urban land use planning and management Import inspection services and customs facilitation Market information service Strategic reserve management Strengthening Market analysis/ monitoring capacity Government procurement systems	Systems for agro-processing facilities inspection	Inspection, phyto-sanitary, and customs facilitation services Strengthening industry monitoring capacity Trade promotion and dispute resolution	Trade negotiation skills Trade promotion and dispute resolution Inspection, phytosanitary certification, and customs facilitation services
Private Sector Capacity-Building	Market intelligence training Supply chain management training Strengthening farmer and commodity associations	Supply chain mgt. training Management systems for contract farming Franchising management Strengthening Farmer/Industry Associations.	Market intelligence training Supply chain management training Strengthening farmer and commodity associations HACCP and other quality control systems	Training in HACCP/QC systems Supply chain management training Small business incubators Traceability/identity preservation. training Management systems-contract farming Strengthening farmer/commodity associations
Infrastructure	Sale/lease of public storage facilitation. Marketplace rehab/management Rural roads rehab/maintenance	Marketplace rehab/ management Wholesale markets	Rural roads rehabilitation/ maintenance Port rehab and management Dry Port development	Port and Airport freight storage and handling facilities and management Dry Port development
Finance	Warehouse receipt guarantees	Direct investment (IFC) Medium-term investment credit	Warehouse receipt guarantees Direct investment (IFC)	Venture capital funds Medium-term investment funds Contract farming credit/guarantees Direct investment (IFC)
Other	Analysis and training on appropriate technologies for micro and small-scale processing	Financing private extension services	Marketing extension for farmers Financing private extension services	Post-harvest/applied product research Joint venture match-making services Financing private extension services

	Other Domains for Agribusiness Support Action			
Possible Actions	*Agricultural Input Supply Systems*	*Community and Sub-Regional Development*	*Regional Trade and Integration*	*Privatization of State-Owned Enterprises*
Reform of Rules/Laws/Regulations/ Policies	Intellectual property rights regime Seed import laws/phytosanitary regulations Seed testing/approval/certification laws Agro-chemical registration laws Environmental regulations for agro-chemical production/storage/distribution. Veterinary products laws/regulations Transport policies Fertilizer trade and marketing policies Foreign investment laws/policies	Zoning laws in secondary towns and enterprise zones Laws of association Transport policies	Trade policies Foreign investment laws/policies Harmonization of trade policies, transport policies, food safety laws, agro-input laws and regulations, etc.	Foreign investment laws/policies Competition policies and licensing laws Transport policies Grades/standards
Public Sector Capacity-Building	Inspection/customs facilitation services Seed inspection services Facility safety inspection services Biosafety management processes Intellectual property rights awareness/management	Market information systems	Inspection, phytosanitary, and customs facilitation services Trade promotion and information services	Industry monitoring and statistics
Private Sector Capacity-Building	Community-based seed multiplication Training for input stockists and enterprise representatives Seed enterprise development training Bio-safety management processes Intellectual property rights awareness	Farmer/commodity associations Management systems for contract farming Small business incubators	Regional industry/commodity associations	Farmer/industry/commodity associations Supply chain management training Quality control training Management systems for contract farming
Infrastructure	Port rehabilitation and management Rural roads and bridge rehabilitation and maintenance	Rural roads and bridges rehabilitation and maintenance Marketplace rehabilitation/management Rural and enterprise zone electrification	Rail and road corridors Port rehabilitation/management Regional telecommunications services Dry Port development	Road and marketing infrastructure rehabilitation/maintenance/financing
Finance	Working capital for input enterprises and stockists through regular banking and rural finance channels	Micro and small business credit and savings facilities	Regional trade financing and clearinghouse mechanisms Regional venture capital funds	Seasonal and medium-term credit
Other	Public-private partnerships in applied agri-biotechnology R&D	Analysis and training on appropriate technologies for micro and small-scale agro-processing	Regional centers of excellence in agribusiness analysis and/or training. Regional trade/investment fora and joint venture match-making	Marketing extension services

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