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Promoting Agro-Enterprise and Agro-Food Systems Development in Developing and Transition Countries

Towards an Operational Strategy for the World Bank Group

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Acronyms and Abbreviations

ADB	African Development Bank
ADC	Agribusiness Development Center
AEF	African Enterprise Fund
CAS	Country Assistance Strategy
CGAP	Consultative Group to Assist the Poorest
CIDA	Canadian International Development Agency
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
CODEX	Codex Alimentarius
DEC	Development Economics
EAP	East Asia and Pacific
ECA	Europe & Central Asia
ESW	Economic and Sector Work
FAO	Food and Agricultural Organization
FIAS	Foreign Investment Advisory Service
GDP	Gross Domestic Product
IADB	Agricultural and Industrial Development Bank
IBRD	International Bank for Reconstruction & Development
IDA	International Development Association
IDB	Industrial Development Bank
IFAD	International Fund Agricultural Development
IFC	International Finance Corporation
IFPRI	International Food Policy Research Institute
LAC	Latin America and the Caribbean
MATG	Markets and Agribusiness Thematic Group
MENA	Middle East and North Africa
MIGA	Multilateral Investment Guarantee Agency
OED	Operations Evaluation Department
OECD	Organization for Economic Cooperation and Development
OIE	International Office of Epizootics
PRSP	Poverty Reduction Strategy Program
PSD	Private Sector Development Department
RD	Rural Development
SEF	Small Enterprise Fund
SME	Small and Medium Enterprises
SSA	Sub-Sahara Africa
SWOT	Strength, Weakness, Opportunities, Threats
TTLs	Task team leaders
UNIDO	United Nations Industrial Development Organization
UNCTAD	United Nations Committee/Conference on Trade and Development
UPOV	The International Union for the Protection of New Varieties of Plants
USAID	U.S. Agency for International Development
USDA	US Department of Agriculture
VA	Vision to Action
WB	World Bank
WBG	World Bank Group
WBI	World Bank Institute
WHO	World Health Organization
WRTC	Weather Risk Transfer Company
WTO	World Trade Organization

Executive Summary

This paper sets out a strategic framework for World Bank Group (WBG) assistance for the modernization of agro-food systems in client countries. This represents a major opportunity to improve farm and off-farm income and otherwise benefit the poor in developing and transition countries. However, the competitive and technological forces underpinning the integration and globalization of agro-food markets do not intrinsically favor the poor who frequently lack the access and assets to compete. Hence, while the private sector will lead the agro-food system modernization process, special and sustained public interventions are needed to ensure the remunerative participation of the poor and to ensure that markets remain competitive. The WBG is well positioned to play a significant role in this area, yet its effectiveness requires the adoption of a market-systems perspective in country and regional assistance strategies and the strengthening of internal (cross-network) and external partnerships.

Agro-food systems comprise the interdependent set 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 off-farm components of the agro-food system can be referred to as agro-enterprise activity.¹ Much of this activity takes place in rural areas or in small or secondary cities.²

As already demonstrated in a number of countries (including China, Chile, Thailand, Taiwan, Brazil, Mexico, and Kenya), agro-enterprise activity—sometimes also referred to as agribusiness³—can be a powerful source of growth, diversification and poverty alleviation. Agro-food systems, and the off-farm components thereof, are major contributors to GDP, employment, and incomes in most developing and industrialized countries. Over the course of development, their role increases while that of primary agriculture diminishes. Empirical analysis of national economic structures points to a general pattern in which the value-added in agro-enterprise activity accounts for some 15-25% of the GDP of low income countries, with this share typically increasing to 30-40% for middle-income countries.

Modernizing agro-food systems typically stimulates and accompanies broader economic development. Rising demand—especially for fruits and vegetables, livestock products, and other goods with relatively high income elasticity—stimulate product and process innovations and the development of stronger backward and forward linkages within the agro-food system and the local economy. Investments are made to improve productivity and quality, reduce product losses, and utilize by-products as inputs into agriculture or other industries. Domestic and export systems become mutually supportive and each stimulate the development of a range of ancillary services which further improve competitiveness. Employment expands throughout the agro-food system and eventually overtakes that directly engaged in

¹ Tangible forms of such activity include: fertilizer, seed, and pesticide distribution; agro-machinery manufacturing/repair/distribution; agro-food transport; food and agricultural raw material processing; food wholesaling and retailing, etc.

² It is undertaken by formally registered firms and on an informal basis; by private companies (of varied sizes), cooperatives, associations, and other types of entities.

³ Although widely used in policy, business, and academic circles, the term ‘agribusiness’ has assumed negative connotations among various stakeholders and analysts, frequently being used as a synonym for large, multinational agro-related business. In fact, agribusiness includes a wide spectrum of enterprises.

agriculture. As illustrated by the experiences of Israel in the 1960s, Taiwan (China) in the 1970s, and Thailand and Brazil in the 1980s, agro-processing and other forms of agro-enterprise activity can provide a venue for the accumulation of skills, knowledge, and practices which have been important stepping stones to other forms of industrialization.

Hence, the modernization of agro-food systems can be a strong engine for growth and poverty reduction, directly and indirectly, in developing and transition economies. This can be achieved 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 employment and entrepreneurial opportunities in both rural and urban areas; and (iii) inducing productivity gains by (smallholder) farmers to increase their opportunity for wealth creation and better integrating them into local, national, and international markets.

However, the modernization of agro-food systems does not take place automatically and spontaneously. Structural changes are conditioned by demographics, geography, business culture, the overall economic environment, and history. Institutional and technological innovations may be fostered or constrained by the above factors. The pace of structural change therefore varies from country to country and even among individual sub-sectors as they are exposed to differing levels of competition in domestic and international markets. Deliberate and strategic interventions on the part of governments have frequently played important roles in the fostering of technological and institutional change in agro-food systems. These roles have related to the determination and enforcement of ‘rules of the game’ for market competition and cooperation, compensating for market failures, and fostering investment in physical infrastructure and knowledge capital.

Even where the modernization of agro-food systems takes place, there is no automatic process which renders these changes (primarily) beneficial to the poor, especially in developing and transition countries. In fact, the trends toward greater concentration in agricultural input and food distribution markets, the increasing role of information technologies and various (labor-saving) process and logistical technologies, and the growing competitive importance of understanding consumers and employing astute marketing skills have major implications on the evolution of food supply chains. First, they have shifted power from the producer end of the chain to the distribution sector, which has become the true driver of the whole chain. Second, they tend to favor well coordinated supply chains, through contracts and integration, at the expense of the traditional spot markets for commodities. These trends are driven by technology and consumer values and probably irreversible. Altogether, this could cumulatively contribute to the further marginalization of smallholder farmers and small business proprietors. The competition for ‘stomach share’ will not be limited to OECD markets and will not stop at the porous borders of many developing countries. The rural hinterlands of these countries are increasingly being integrated into a global agro-food system. This opens up considerable opportunities but also considerable challenges to the poor.

Hence, the competitive and efficient evolution of agro-food systems cannot be left to the market alone. As experience has amply shown, the gainers in these fast-evolving dynamic systems are those with assets and access to finance, skills, technologies and growing markets. In many places, the poor (rural and urban) have neither the assets nor the access needed to meet increasingly exacting requirements of consumers, agro-food manufacturers and distributors, and/or national standards or regulations. Special and sustained public intervention is needed to bring the rural (and urban) poor up to speed, to level the playing field so as to broaden access to these markets, and to make them competitive (as opposed to fragmented, oligopolistic or monopolistic). The competitive functioning of these markets in a way that benefits the poor as consumers, producers, wage earners, and entrepreneurs is in itself a major public good. It is a major area of responsibility for government, the WBG and other development agencies.

But, fundamental changes in approach are needed. Amongst the Bank’s clients, few governments have developed a coherent vision for agro-food system and agro-enterprise development. Administratively,

agribusiness has continued to be nobody's business, falling between the cracks of Ministries of Agriculture, Commerce, Trade, and Transportation. Previous command and control orientations have subsided, yet facilitation strategies have not generally emerged in their wake. Within the World Bank Group, support to agro-food systems has been piecemeal, representing either an add-on to the largely production/agro-productivity orientation of the Rural Family, a passive target for generic approaches to private sector development, or a locus for company-specific transactions and investments by the IFC.

A multi-sectoral approach is needed which cuts across the Bank Group's operational silos. Recent experience has amply demonstrated that there are no magic bullets to address the complex set of challenges facing agro-enterprises and the poor in agricultural market development. Systemic and multi-dimensional perspectives are needed as are a mixture of policy, capacity-building and project-centered activities. While macro policy reforms are necessary, they are not sufficient to promote the development of 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.

To implement an invigorated program of agro-food system and agro-enterprise support by the WBG, it is important that a market-systems approach for poverty reduction be adopted as part of the development of Country Assistance Programs (CASs), Poverty Reduction Strategy Programs (PRSPs), and country rural development and private sector development strategies. If not already undertaken, the starting point for this effort would be country-specific analysis of the importance of and constraints facing agro-food systems (or selected major or non-traditional commodity sub-sectors therein) and the identification of those aspects of this multi-faceted system that require most attention to properly exploit their potential for sustainable poverty-reducing growth. This analysis should involve broad stakeholder participation. This would be followed by the development of overall strategies to promote these systems, well integrated into the PRSP and the CAS (and, in some cases, sub-regional integration programs), and involving a multi-year plan, with client and WBG ownership. This would involve the determination of country-specific packages of instruments: in particular, programmatic, multi-sector instruments, combining changing "the rules of the game", investing in market hardware and software, and human/social capital development. The instruments employed should promote both efficiency and equity; both short-term pay-offs and longer-term structural change.

On a Bank-wide basis, additional features of the strategy to strengthen agro-food systems in client countries would include the following:

- ❑ *Quest for innovation.* The testing and replication of new assistance products, especially those which feature public-private collaboration, the strengthening of smallholder and small business market linkages, the deployment of market-based mechanisms for risk management, and/or the strengthening of public and private capacities to address food safety, environmental safety and other aspects of agro-food system development which involve externalities. The experiences and lessons learned from these innovative approaches will be widely disseminated.
- ❑ *Geographical focus.* Concentrate Bank assistance in selected regions where there is considerable client demand, evident adjustment challenges, and a high opportunity cost of not providing support. This would primarily apply to sub-Saharan Africa, the central and eastern tier of countries within the ECA region, and China and Vietnam. In other regions, the scope of IDA/IBRD involvement would be more limited. IFC will also introduce a 2-tier approach to its interventions, with focused promotion in selected countries.
- ❑ *Breakdown operational silos.* Internal partnerships will be developed among work units presently focused on agriculture, private sector development, financial systems development, environmental management, community action programs, nutrition, transport, and urban development. The effort to

build cross-network partnerships needs to start at the top. The Rural Sector Board should include selected country directors and urban and private sector managers, not just managers in the ‘rural’ family.

- *Build bridges across organizations.* The appropriate division of labor between the World Bank and the IFC should be clarified. At the same time joint and collaborative efforts will be pursued with regard to (i) industry/subs-sector competitiveness assessments, (ii) the design and support for schemes that allow the integration of smallholder growers into commercial supply chains, and (iii) the development of market-based financing and risk management instruments (e.g., warehouse receipt systems for grain or export commodities) in selected countries.
- *Upgrade the staff skills mix.* Efforts will be made to implement a core training course in agro-food system development and instruments for rural development and PSD staff. Supplemental recruitment of specialists would be undertaken and/or further use would be made of the Staff Exchange Program to gain the secondment of a few agribusiness management/marketing specialists, especially from the food industry. Both within the SSA and ECA regions there is a need to create a critical mass of staff working on agro-food system issues and constituting regional thematic teams.
- *Improve knowledge management.* Generate and disseminate relevant information on major trends occurring in the global agro-food system, providing tools for competitiveness benchmarking, and alerting Bank staff to ‘good practices’ in policy, facilitation and capacity-building efforts.
- *Strengthen external partnerships,* both with other development assistance agencies and with an array of business associations and other entities. Employ these partnerships to implement strategies to promote broad-based agro-food systems development and use the WBG’s convening power to achieve these objectives.

At the international and national levels, agro-food systems are undergoing rapid and substantial change as a result of several demographic, technological, and economic factors. These changes open up new opportunities yet also pose new challenges and threats to the Bank’s client countries and to the poor within these countries. To remain a leader in the development field, the Bank Group needs to better assist its clients to improve the competitiveness of their agro-food systems and to find more effective and sustainable ways to enable the poor to participate and benefit from this process. The main challenge is strategic and operational rather than conceptual. For the WBG, missing the opportunity to foster poverty-reducing benefits of agro-food system modernization would increase the risk of further marginalizing the Group’s rural development agenda itself. Seizing this opportunity promises to be a win-win approach for reducing both rural and urban poverty and hence achieving the overarching objective of the updated *Vision to Action*.

1. Introduction

1. This paper sets out a strategic framework for WBG assistance for the modernization of agro-food systems in client countries. The objective of this strategy is to enhance the competitiveness of food, feed, and fiber systems—as a powerful source of growth and income generation—and to do so in a manner in which the poor are major 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 developing country farmers and agro-enterprises (i.e., weak infrastructure, anti-business policies, etc.) but also because major 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.

2. The focus of attention here is on those enterprises, activities, institutions, and relationships that occur off the farm—in other words, those entities and functions that 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 for this sphere of activity and institutions is agro-enterprise activity. As already demonstrated in a number of countries (including China, Chile, Thailand, Taiwan, Brazil, Mexico and Kenya), agro-enterprise activity—sometimes also referred to as agribusiness⁴—can be a powerful source of growth, income diversification and poverty alleviation. However, competitive agro-enterprise activity does not emerge spontaneously. It requires a resourceful, market-oriented private sector which 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.

3. In 1997, the World Bank adopted a comprehensive rural development strategy called *Rural Development: From Vision to Action* (VtA). That strategy set 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 with private sector development as one of the key drivers. VtA confirmed that production, input supply, processing and marketing are best carried out by the private sector and referred abundantly to the role of markets, yet it failed to specify actions to promote private sector development, particularly as far as generating income in rural areas is concerned. A recent OED re-evaluation of VtA found that the Bank's rural development program (i) focused insufficiently on the central poverty alleviation objective and (ii) gave only casual attention to the non-agricultural aspects of rural development. (OED, 2000)

4. The OED recommended that any updated strategy should explain and illustrate how each of the five strategic principles--one of which is private sector and agro-enterprise development-- are linked to the overarching goal of poverty reduction. The current updating of the VtA provides such an opportunity. This paper aims at bringing both theoretical and empirical evidence of the linkage between agro-

⁴ Although widely used in policy, business, and academic circles, the term 'agribusiness' has assumed negative connotations among various stakeholders and analysts, frequently being used as a synonym for large, 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.

enterprise development and the reduction of rural poverty. It also provides a framework for improved WBG analysis, policy dialogue, and investment in this field. That framework points not only to opportunities for specific agribusiness-centered initiatives, but also for the need to bring a market systems perspective to much if not all of the work done in the Bank's Rural and PSD Families. During the past decade, operating conditions in international agro-food markets have been undergoing fundamental changes, which poses new challenges for developing countries. The action-oriented framework proposed here can be an important element of how the WBG helps its clients address the evolving challenges of the global agro-food markets.

5. This paper is structured as follows. Section II defines the primary unit of analysis—agro-food systems—together with the enterprises, institutions, markets and supply chains which comprise these systems. Reference is given to effective approaches to analyzing such systems. In today's economy, it is agro-food systems and particular supply chains—rather than individual agro-enterprises—which compete for global market share. Competitive analysis, therefore, is the first basis of the agro-enterprise strategy. Section III then draws the linkages between agro-enterprise development, poverty alleviation, and economic growth, thus explicitly embedding agro-food system development into the WB Group's mandate.

6. Section four highlights the most important international and local trends that are shaping the environment for agro-enterprises in developing and transition countries, drawing implications both for the poor and for the WBG. Section V summarizes recent support efforts of development assistance in this field and highlights selected policy and operational lessons from this experience. Section VI identifies priority areas for future development assistance in agro-enterprise development, together with the range of available intervention tools. Section VII presents a strategy for WBG support in this field, denoting its comparative advantage, proposing primary operational objectives, and discussing possible lending instruments, internal organizational/ staffing matters, and needed internal and external partnerships.

2. Agro-Food Systems: Concepts and Definitions

7. Analysis must form the foundation of any strategy. This includes analysis of opportunities, constraints, conflicts, and feasible solutions. For purposes of strategic planning, 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 are 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. The broad unit of analysis for work in this field can be referred to as the agro-food system. This 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 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.⁵

8. 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.

9. For a developing country, agro-food systems might typically comprise 50 percent or more of national GDP (see Section III). 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, with these being used to highlight more systemic constraints.

10. As noted above, paper focuses on centers on the off-farm components of the agro-food system. The building blocks of the off-farm part of the agro-food system—rules and regulations, agro-enterprises, markets, supply chains, and meso organizations—are outlined below. These can be combined and aligned in different ways to achieve different results. As discussed in Section seven, each of these are possible points of leverage for improving competitiveness and for adjusting the distribution of opportunities and benefits stemming from the modernization of agro-food systems.

⁵ 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.

2.1. 'INSTITUTIONS'

11. The fundamental building blocks of an agro-food system are rules and regulations. These are the 'institutions' in the parlance of the 'new institutional economics'. These 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. 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. Other institutions are generic, but they have substantial influence on the functioning of agro-food systems. Some examples include contract law, customs regulations, and rules applicable to warehouse receipt systems. Rules and regulations can be set collectively, mutually, or by fiat.

2.2. ENTERPRISES AND ENTREPRENEURS

12. A second set of building block consists of agro-enterprises. They provide value-adding goods and services and take title to inputs and/or outputs within the agro-food system.⁶ 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 proprietorships. As this variety indicates, they are governed by varied sets of rules. Their technologies and specialties will vary. Although sometimes equated with 'big business', most agribusiness enterprises are small individual intermediaries (e.g., traders, transporters) and micro-enterprises, often from the informal sector.

2.3. ORGANIZATIONS AND ORGANIZATIONAL FORMS

13. 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 also must be the necessary infrastructure, whether this is 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 institutions and organizations to better smooth and assure transactions and by improving their physical and/or informational infrastructure.

14. Supply chains represent an additional (or alternative) organizational form (to markets) for facilitating transactions and coordinating the activities of agro-food system participants. 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

⁶ 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.

current and future demand is passed back from retailers through to primary producers. Supply chains are vertically structured and are typically led or managed by a particular company, such as 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 failure to manage collective risks effectively.

15. 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.

16. The ways in which these building blocks are organized and the effectiveness with which they operate together as systems materially effect their competitiveness. 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 system 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.⁷

2.4. AGRO-FOOD SYSTEMS, THE POOR, AND ECONOMIC GROWTH⁸

17. 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. In Sub-Saharan Africa, for example, expenditures on food account for an average of 42 percent of total household expenditures, with this proportion being 60 percent or more for the poorest countries and the poorest population groups within each country. The costs associated with marketing, handling, distribution and physical losses probably account for half or more of this expenditure. 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. Well functioning markets is a key condition of food security.

18. Improvements in the performance of the marketing, 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 developing country populations on increasingly complex and long distance agro-food supply and distribution systems.

⁷ 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

⁸ This section draws upon insights provided by Tom Reardon, together with FAO (1997) and Jaffee (1993).

19. 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. A rough estimate based on household income field surveys is that 25 percent of total rural incomes come from these non-farm (yet agribusiness) activities. 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. For a cross-section sample of developing countries, agro-processing accounts for 20 to 35 percent of wage employment in the manufacturing sector. With the re-allocation of resources to better comply with the comparative advantage among different agricultural regions and with the consequent increase in trade between and among regions, an increased level 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. Spin-off employment will also generally take place in related activities such as transport and other services.

20. Importantly, agro-enterprise activity furnishes crucial inputs and services to the farm sector, thus improving the latter's cost competitiveness and the quality and safety of its products. It also provides inputs and services to manufacturing and downstream activities (processing and commerce), both of which influence the profitability of farming itself. These help poor farmers and help these farmers integrate their activities with consumers. By 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 farm 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.

21. 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. Liberalization without strengthening the off-farm components can simply make farm prices more variable and farming riskier.

22. In summary, agro-enterprise and agro-food system developments and consequent improvements in competitiveness provide a strong catalytic force to poverty reduction, directly and indirectly, in developing and transition economies. This can be achieved by:

- ❑ reducing food costs and supply uncertainties and improving the diets of the rural and urban poor,
- ❑ generating growth, increasing and diversifying incomes, and, providing widespread employment and entrepreneurial opportunities in both rural and urban areas; and
- ❑ inducing productivity gains by smallholder farmers to increase their opportunity for wealth creation and better integrating them into local, national, and international markets.

23. In addition to its relevance to the challenge of poverty reduction, agro-enterprise investment and activity represents an important potential contributor, if not the only one, to overall economic growth in many low- and middle-income countries. Empirical analysis of national economic structures points to a

general pattern in which the value added in agribusiness accounts for some 15-25 percent of the GDP of low-income countries,⁹ with this share typically increasing to 30-40 percent for middle-income countries. For many developing countries, agribusiness development could account for between one-third and one-half of the GDP growth in the coming five to ten years. Currently in sub-Saharan Africa, agribusiness represents approximately 21 percent of GDP, including 49 percent of the region's manufacturing value added and 43 percent of the region's services value-added. Countries such as Thailand, Mexico, and Chile are well advanced in a transformation process during which the share of agriculture in GDP contracts while that of agribusiness increases as value is added to primary commodities and as food and other agro-related markets become more sophisticated. As illustrated by the experiences of Israel in the 1960s, Taiwan in the 1970s, and Thailand and Brazil in the 1980s, agro-processing can provide a venue for the accumulation of skills, knowledge, and practices which have been important stepping-stones to other forms of industrialization.

The Agro-enterprise or Agribusiness Transformation

24. Hence, the role of agribusiness as a sector of the economy has multiple aspects and these aspects change in the course of development. For very low income countries, the industrial-scale processing of agricultural raw materials tends to be limited to a few export crops, while most agricultural produce is consumed with minimal processing, either on the farm itself, among local cottage industry operators or in the few formal-sector industrial firms. Many of the latter firms would fail if not for protection from imports and contracts to supply national institutions (e.g., hospitals, the army). The core of domestic food markets is for cereals and other low-cost staples. The range of agricultural technology options available to farmers is typically narrow. Even in these circumstances of limited backward and forward linkages, agricultural trade and processing activity provides an important source of employment for seasonal labor. Where cottage industries are successful, this can provide an important source of capital accumulation in rural areas.

25. The modernization of agribusiness systems typically stimulates and accompanies broader economic development. Rising demand, especially for fruits and vegetables, livestock products, and other goods with relatively high income elasticity, stimulate product and process innovations and the development of stronger backward and forward linkages within the agro-food system. Investments are made to improve productivity, reduce product losses, and utilize, where possible, by-products or waste products as inputs into agriculture or other industries. Domestic and export systems become mutually supportive and each stimulate the development of a range of ancillary services which (potentially) further improve competitiveness. Patterns of segmentation will reflect the broader pattern of income and land distribution, urbanization patterns, and other factors. Employment expands throughout the agro-food system and eventually overtakes that directly involved in agriculture.

26. Considering the evolution of agro-food systems, there is no single recipe for external support that will help countries initiate and implement a successful transition. The interventions will vary by country circumstances, including demographics, geography, per capita income, business environment, and history. However, recent experience teaches that reorganization of the institutional building blocks discussed above is often necessary to make an effective transition from subsistence farming and protected agro-food processing to a competitive system that is effectively integrated with global food markets. At the same time, it teaches that fundamental structural change in the agro-food systems does not take place spontaneously without deliberate and strategic intervention.

⁹ These percentages are probably gross underestimates since they essentially concern only formal sector activities. Much small-scale agro-processing and trading activity is informal and unrecorded in national statistics.

Table 1 Share and size of agribusiness in national GDP, selected countries

<i>Country</i>	<i>Agriculture's Share of GDP</i>	<i>Agribusiness' Share of GDP*</i>	<i>Combined Agriculture and Agribusiness Share of GDP</i>	<i>Agribusiness GDP (\$ billion)**</i>
South Africa	4	16	20	15
Nigeria	42	16	58	6
Uganda	41	23	64	3
Kenya	26	23	49	2
Zimbabwe	18	21	39	2
Ghana	44	19	63	1
All SSA	32	21	53	67.0
<i>For Comparison</i>				
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 (1999); Pryor and Holt (1998)

3. Most Important Trends Impacting Agro-Food Systems

3.1. MARKET LIBERALIZATION AND AGRO-ENTERPRISE PRIVATIZATION

27. For many WBG clients, the institutional arrangements for food marketing and agro-processing have featured intensive interventions by the State, whether in the form of direct investment and management of enterprises and/or through attempted controls on input and product prices or entry into domestic or international markets. In many cases, these controls proved administratively ineffective with small-scale and informal private trading and processing activity operating if not thriving in parallel with poorly performing parastatal activity. This was the pattern in the domestic food markets of many developing economies. In other instances, especially with regard to export supply systems, the statist interventions frequently proved to be very costly and commonly failed to achieve their (economic or political) objectives.

28. In the latter cases, unsustainable financial burdens created mounting pressures for change. Part of the response was the deregulation of markets and the restructuring of parastatal enterprises.¹⁰ By the 1990s, this 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.

29. Despite a decade or more of adjustment activity, agro-food systems remain in a state of transition in many developing countries because firms were privatized into weak regulatory environments, key public assets were not in place to enable a broad array of firms to take advantage of new markets, 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.¹¹ 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 developing and transition countries still face an enormous challenge of institutional restructuring and re-engineering within their agro-food systems.

¹⁰ In circumstances where the State was very weak, the deregulation of staple food markets was really *pro forma* as the regulations were largely ineffective in the first place.

¹¹ In country after country in Africa, the liberalization of agricultural inputs markets has given rise to a reduction in fertilizer use as fertilizer companies have focused their sales and distribution channels in the most accessible areas and on highly commercialized farmers (small and large). The collapse of state-run and typically subsidized agricultural credit programs has been another contributing factor.

Will it benefit to the Poor?

30. For the poor, there is much at stake in the process of institutional restructuring and re-engineering. They could benefit 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 little or no voice in processes that affect or 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 are likely to 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 from certain functions, what had previously been bureaucratic risks (e.g., 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 does not automatically guarantee a net gain for the poorer and smaller participants in agro-food systems. This points to the need to find ways of harnessing the power of these small entities by consolidating them into groupings with more market power and strengthened property rights. The institutional restructuring process matters a great deal.

31. How the poor fare in any structural transition will depend, in part, on their involvement in the process and on whether structural designs that emerge from the process are effective in increasing opportunities for them at the same time that these changes 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 throughout the entire agro-food processing system with the result that both poor producers and consumers benefit from it. Addressing these issues requires a systematic rather than a piecemeal approach and a sharp focus on poverty-reduction consequences.

3.2. OTHER MEGA-TRENDS: DEMOGRAPHIC CHANGE, INDUSTRIALIZATION AND GLOBALIZATION

32. In WBG client countries, making the transition from state-ruled to market-based economy is only a small part of the challenge for achieving poverty reduction through agribusiness development. In addition to the challenges associated with the adjustment from state-ruled to more market and privately-based institutional arrangements, there are structural challenges arising from the array of demographic, social, technological, organizational, and economic trends that are affecting agro-food systems worldwide. These require a second adjustment process—one where agro-food systems are transformed so that their primary drive and orientation is consumer requirements and demand. In many cases, this involves a shift equal to or more radical than that required for the shift from state-centered to privately centered institutional arrangements. The implications for poverty-alleviating strategies and WBG support for those strategies are also significant.

33. 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 range of 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’. Filling those wants will require changes in production and supply arrangements and the associated product tracking and accountability systems.
- ❑ *Emerging technologies*, especially in information technology, biotechnology, and measurement technologies for food quality and safety. Those agro-food system participants who are able to adopt and manage these technologies are potentially able to improve product quality, achieve coordination and other cost efficiencies and in some cases also reduce a variety of business and food safety risks. These, however, are often capital-intensive technologies.
- ❑ *Multilateral trade liberalization* is lowering tariff and quantitative barriers to trade even though agriculture remains one of the most protected tradable sectors in the world. This is a double-edged sword for developing countries, because it opens new market opportunities but also exposes their own domestic markets to competitive products from abroad. Trade liberalization, in tandem with advances in international communications and logistics, serves as a powerful device of de-production of agriculture and agribusiness and introduces the possibility for a massive re-allocation of global agricultural production. Competitiveness is now a serious challenge in the agro-food industry.
- ❑ *Growing concentration in the food retailing and agricultural technology industries*, in part due to continued merger and acquisition activity on the part of leading companies.¹² 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, developing country suppliers will need to consider and pursue strategic relations (horizontal and vertical) for technology transfer and marketing.
- ❑ *The internationalization and privatization of standards* which is accompanying 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.

3.3. CHALLENGES FOR DEVELOPING AND TRANSITION ECONOMIES

34. These trends, both individually and in combination, pose major challenges to the competitiveness of WBG client 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

¹² An associated pattern is the increasing ‘industrialization of agriculture’. In developing countries, this has been most prominently occurring in the livestock sector with the installation of factory-like operations for pork and poultry production. In many communities there are concerns about the environmental and public health effects of such intensification of livestock operations.

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 many developing countries. Competition for ‘stomach share’ will intensify in developing country cities and the effects of the various globalizing factors will be felt, increasingly, in the rural hinterlands.

35. Those who will compete best in this evolving agro-food system will be those who (i) understand consumer needs and wants, (ii) can employ skills and technologies to gain efficiencies, (iii) have access to infrastructure, (iv) can deliver goods in the quantities and timing schedules required by the ‘gatekeepers’, and (v) 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, who are well organized. This, at first blush, is not a common description of small-scale farmers and many small agro-entrepreneurs in WBG client countries. The threat of exclusion or further marginalization of such economic actors is thus very real. The ‘market solution’ could well mean exclusion of large numbers of poorer producers and business persons; and indeed many of the medium and larger agro-food enterprises in WBG countries—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.

3.4. IMPLICATIONS FOR THE WORLD BANK GROUP

36. Taking these challenges into consideration, there are several important policy and program implications for the World Bank Group.

- 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 mixes of policy and project-centered activities. While macro policy reforms are necessary, they are not sufficient to promote the development of 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 many client countries are 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, clearly defining and offering agro-business investment opportunities, and strengthening organizations, particularly at the meso-level.
- It is necessary 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 that can deliver community goods and services. Experience has shown that strategies based predominantly on ‘rolling back the state’ will almost inevitably fail;
- 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. So-called ‘income-generating activities’ cannot be sustainable unless the participants are effectively linked to growing markets for goods and services;

- ❑ The tyrannies of space and time continue to adversely affect the creation of comparative advantage among agro-enterprises in many countries.¹³ Transaction costs—including transport cost, loss of product, insurance, informal payments, government-imposed administrative costs, storage, and handling—are extremely high both within client countries and between their 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.
- ❑ Supply chains and agro-enterprise clusters do not spontaneously emerge in the aftermath of privatization/liberalization. Their development 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 in the specific challenges of individual sub-sectors and clusters of economic agents.

37. Importantly, the Bank must recognize that many of the driving forces in agro-food systems originate outside of rural areas and therefore some of the measures to reduce rural poverty in an agro-food system context may be focused elsewhere.

Box 1 Roles of government in agro-food system and agro-enterprise development

Set and Ensure Enforcement of Transparent and Consistent ‘Rules of the Game’

1. Establish and enforce rules which define and allocate property rights (e.g., property and bankruptcy laws; intellectual property rights; zoning regulations)
2. Establish and enforce rules which define permissible and non-permissible forms of cooperation and competition (e.g., licensing laws, laws of contract and liability, company and cooperative laws; anti-trust laws)
3. Establish and ensure compliance with bio-safety, food safety, worker safety, and sanitation regulations
4. Negotiate favorable terms for access to international markets and ensure fair practices on the part of international trading partners

Compensate for Market Failures and Asymmetric Power Relationships

1. Ensure that the country is protected from the harmful introduction/spread of plant pests and animal diseases
2. Ensure the availability of (production, price, industry) information and statistics to facilitate market activity and to monitor market progress
3. Invest in or facilitate risk management instruments for agri-food system participants
4. Facilitate the financing of agro-food system investment and activity, directly or indirectly
5. Compensate for asymmetric power relationships within the agro-food system by monitoring potential abuses of market power, by providing training and information, and/or by supporting organizational development among weak participants
6. Compensate losers in structural reform processes through safety nets and other transitional targeted programs

Build Physical and Knowledge Capital

1. Invest in social overhead infrastructure, especially that related to telecommunications, transport, and energy
2. Invest in knowledge-building to accelerate the agribusiness learning process and better enable the emergent private sector to participate/compete (e.g., R&D; academic/technical training)

¹³ Various studies suggest that African transport and logistics costs are two to four times higher than costs for comparable services in OECD countries.

Box 1 Roles of government in agro-food system and agro-enterprise development

3. Facilitate and potentially finance selective agricultural marketing facilities (e.g., marketplaces; wholesale markets)

4. Lessons Learned: Recent Agro-Enterprise Development Assistance

38. To date, no systemic analysis of development assistance in the agribusiness/agro-food system field has been conducted by the World Bank Group, nor by any of the other development agencies. The multifaceted nature of the field has inhibited a clear classification of interventions, let alone a quantification of the impacts and overall cost-effectiveness of different approaches and instruments. The Bank has supported relatively few agribusiness-specific projects in recent years. Instead, most support in this field has been through policy-based adjustment credits or through particular components within broader rural development or private sector development projects. The Bank's management information system does not currently provide an adequate basis for deciphering and especially quantifying the full extent of this work, let alone the performance and impacts of the agribusiness-related components. This should certainly be rectified in the future. Nevertheless, it is still possible to highlight major features of the Bank's recent work in this area and to draw several insights and lessons from this experience (and that of other development agencies).

4.1. MAJOR FEATURES OF RECENT BANK SUPPORT

39. In mid-1999, an attempt was made to develop a list of on-going projects which include measures to support the non-farm dimensions of agro-food systems. This list was drawn only from the database of agriculture/rural development projects. It therefore did not include a number of relevant projects managed within the FPSI Family nor a number of macroeconomic adjustment credits that have included important policy conditions related to agricultural market reforms. The representation of the Bank's work on agricultural market reform and agribusiness support in Africa is most affected by these omissions, although a parallel portfolio review effort in that region fills some of this gap (see below).

40. The incomplete master list included seventy-two projects. Only for nineteen of these projects was agricultural marketing listed as the major sectoral focus. The others were agricultural services, rural infrastructure, rural finance, area development, or food security projects, which included components or sub-components that supported agro-enterprise development and/or agricultural market reform processes. While an accurate estimate of the total volume of Bank lending for agribusiness projects and project components cannot be obtained from the database, it is certainly the case that a very large proportion (perhaps 75 percent or more) of the volume of IDA/IBRD agribusiness-related lending in recent years has been provided to China.

41. In the late 1990s there were up to ten projects under implementation in China which included a small or large agribusiness component. Three different types of projects were pursued—rural credit, sub-sectoral development (e.g., animal feeds; seeds, etc.), and provincial agricultural development—each containing fairly distinctive Chinese characteristics with regard to institutional arrangements. When supporting particular subsectors, the approach was pragmatic, seeking to improve the management, efficiency, autonomy, and market linkages of particular enterprises, rather than being pre-occupied with ownership restructuring issues or conditioning support on major rural or market development policy reforms. Intensive competition in Chinese agro-food sectors, combined with effective support from local governments and attention to infrastructure and human capital development, has provided a sufficiently

strong environment for agro-industrial development, albeit largely among majority state-owned enterprises.

42. In recent years there has been a growing level and diversity of agribusiness-related work in sub-Saharan Africa, cutting across PSD and rural development operations. A survey of this work was undertaken in 1999. A review of projects and project components since the mid-1990s found that roughly 50-60 percent of effort and resources were devoted to the themes of privatization and market liberalization. Some 20-25 percent of effort centered on strengthening private sector capacities (at the level of enterprises, supply chains, or associations). The remaining one-fourth of effort split between: (a) promoting specific legal and regulatory reforms and strengthening specific public capacities (e.g., in food safety, agricultural inputs regulation), and (b) promoting stakeholder dialogue and sectoral and subsector strategy development. In part due to the focus of the efforts thus far, more progress has been achieved with regard to regulatory/market reform than in strengthening capacity for improved competitiveness of agro-food systems. Particular weaknesses are perceived in the availability of non-financial support services and in the consumer and market awareness of emerging private companies.

43. Agricultural market reform and agro-industry restructuring has been a prominent yet variably performing component of the Bank's rural development support in Eastern Europe and the Former Soviet Union. The privatization of agro-industrial complexes has been a major challenge in this region. With a few notable exceptions (e.g., Hungary and to a lesser extent in Poland and the Czech Republic), this process has been turbulent and given rise to enterprises with weak management and corporate governance, weakly competitive markets, and a breakdown in supply chains and associated services. In some cases—such as the grain subsectors of Hungary and Romania—the Bank has provided support for the development of meso organizations to perform standardization, certification, and other public good functions formerly undertaken by the state. Elsewhere, primary attention is being given to improving the policy environment for agribusiness trade and investment.

44. In other regions, a significant part of recent attention to agribusiness has been through policy dialogue and sector/sub-sector analysis, with particularly interesting work done in Morocco, India, Bangladesh, and Sri Lanka. In the LAC region, examples of recent work in this field include project components on livestock marketing and product standards in Argentina and Brazil, several competitiveness (and enterprise support) projects in Central America, investments in wholesale market development in Mexico, and the facilitation of a Central American food safety conference.

45. At the end of 2000, the IFC had an agribusiness-related project portfolio of approximately \$1.1 billion, with an additional \$200 million invested in primary crop and animal production. Some two-thirds of this portfolio were loans with the balance being equity stakes in individual firms. Food manufacturing accounted for some 85 percent of the agribusiness portfolio, with the balance being for beverages, warehousing/storage, and leather and allied products.¹⁴ The dairy, oilseed, and poultry subsectors have been areas of particular focus within the portfolio. The agribusiness portfolio is concentrated in Latin America (63 percent) and Asia (20 percent), with Brazil and Argentina accounting for just under one-half of the entire portfolio. ECA, Africa, and MENA account for ten, five, and two percent of the IFC agribusiness portfolio, respectively. In the Africa region, additional support has been provided under the Africa Project Development Facility and the Africa Enterprise Fund (AEF), both of which focus on supporting small and medium-sized enterprises. Some 40 percent of AEF lending in the 1990s was food/agro-related, with especially significant support for cut flower and fish processing investments.

¹⁴ More than 85% of IFC's agribusiness portfolio is managed by the Agribusiness Division, with the remainder being managed by the regional divisions. This share is slightly lower if the loan portfolios of regional small and medium business support programs are also considered (i.e., the Africa Enterprise Fund).

46. While there is evidence that the Bank Group's support to agribusiness has expanded in recent years, this effort remains piecemeal. Amongst the Bank's clients few governments have developed a coherent vision, let alone a facilitation strategy for agro-enterprise support. Administratively, agribusiness has continued to be nobody's business. Hence, while the work program on agribusiness has somewhat expanded within the WBG in recent years, this has not taken place within a comprehensive framework, nor has it been well anchored in its poverty reduction mandate, and has 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. Leadership in this field must continue to be provided by the private sector, yet the Bank's support can be instrumental in bridging private initiative and incentives with public objectives, especially poverty alleviation.

4.2. LESSONS LEARNED

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

Privatization and Agricultural Policy Reform

48. 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 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 (e.g., 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 finding alternatives for previously performed public services. Also, commercial bank financing of such systems often breaks down when there comes an end to—*de jure* or *de facto*—exclusive commodity procurement and marketing rights of the state enterprise.

49. 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 to keep markets closed.

50. 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-stake policy/structural reforms, the Bank will need to prepare a series of quantitative technical notes, often on short notice. Such notes sharpen understanding of the key issues and parameters, improve the quality of Bank 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 consultation 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 consultation work.

51. Third and related, probably the most important single success factor in the liberalization of agricultural markets is the commitment of government. Policy reforms frequently result in the redistribution of income, economic opportunities and political power, and therefore, some form of opposition is certain, especially from the losers in the process. 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 back-sliding 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 governments: (i) need to be properly prepared in terms of analysis and strategy; (ii) that there be effective means for consensus building and the communication of policy/strategy; and (iii) that the reform process be carefully monitored and evaluated on an on-going basis. These considerations need to be factored into the design of policy reform processes.

52. 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

53. 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.¹⁵ 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 industry 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.

54. 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 mixed¹⁶ and points to the importance of: (i) clear definitions of objectives and of the

¹⁵ 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.

¹⁶ ADCs which have been effective in promoting agro-enterprise growth have included those in Uganda, Zambia, Senegal, and Cote d’Ivoire.

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.

55. 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 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.

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

57. 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.¹⁷ 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.

¹⁷ There are such facilities in the Caribbean and Central America, Africa, Poland, the South Pacific, the Mekong Delta countries and, more recently, the Balkans.

4.3. DIRECT INVESTMENT

58. 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 adequate quality of the investor and the management, and a robust financial plan tailored to the sector risks are absolutely pre-requisites.

59. 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.

60. 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 the experience of the Africa Enterprise Fund (AEF), for which nearly 40 percent of its 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 essentially on a commercial basis.

61. 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 clear role to play because there is no suitable intermediary or where IFC's financing can have a high demonstration impact.

62. 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. This theme is returned to in section seven.

5. Focal Areas and Instruments for Agro-Food Systems Support

63. The overarching objective of development assistance in this field should be to foster the competitiveness of client agro-food systems in a manner which 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 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.

64. 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 has considerable potential for market and/or distributional failures, which provides possible justification for public policy and/or investment. 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.

5.1. FOOD SECURITY

65. 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 that 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.¹⁸ 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 3 on warehouse receipts as an illustrative tool for work in this area.

66. Developing countries face major economic, social, and environmental challenges in feeding fast-growing urban areas, which often 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 achieve

¹⁸ 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.

management objectives (e.g., regulations, finance, education, policy dialogue), and (iii) the need to consider future demographic and other trends in planning today's policies and infrastructure investments.

5.2. FOOD SAFETY

67. 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.¹⁹

68. From an agribusiness perspective, part of the food safety challenge involves devising and implementing an appropriate set of rules, regulations, and standards. 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, (consumer and food system participant) awareness raising, 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 will likely be poor, both from a public-health and a trade perspective.

5.3. INDUSTRY AND SUBSECTOR COMPETITIVENESS

69. 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 of or increase in local or international market shares,
- successful entry into new markets, and
- successful product and service innovation.

70. These would 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. 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

¹⁹ As food systems evolve, targeted interventions at single-source hazards or important control points (e.g., 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 process and product standards will normally be imposed externally and investments and institutions will need to be put in place to ensure compliance.

investments (e.g., roads and port rehabilitation), measures to promote the adoption of productivity-raising technologies (e.g., certain agricultural inputs; information technology) and/or fostering new skills and organizational forms through training and technical assistance.

71. 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: (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.

5.4. SMALLHOLDER AND SME MARKET INTEGRATION

72. 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.

5.5. RISK MANAGEMENT

73. The objective 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.²⁰ 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 (e.g., 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 price.

74. 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

²⁰ Thanks to Panos Varangis for defining some of the key issues and opportunities in this area.

and funds and government-sponsored crop insurance were some of the typical responses found. However, the experience overall has shown that government involvement has been ineffective and costly; indeed, inept or corrupt government actions has increased commercial risk considerably. During the late 1980s and 1990s, solutions have 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 the appendix note), price risk management tools (e.g., forward, futures/options markets), guarantee schemes, packaging insurance with agricultural/small business credit, and providing insurance against non-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). See the following box dealing with weather-based insurance.

75. 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 need to be determined.

Box 2 Harnessing Markets to Cope with Weather Risks

Natural catastrophes claimed more than 105,000 lives across the globe in 1999, mostly in developing countries. Disaster assistance is becoming a major burden for many governments. Less catastrophic events, such as severe weather (drought, flood, high winds or low/high temperatures) can have a devastating impact, not only on populations at large but also on farmers, especially the poor. Traditional credit and crop insurance have proven costly and inefficient for managing these losses. Developing-country vulnerability to weather risks provokes inefficient investment that limits growth potential and prolongs rural poverty. In the absence of insurance for weather related crop losses, farmers organize their production to minimize losses should a severe weather event occur. The main strategy used is self-insurance which results in the adoption of low-yielding production technology to minimize losses and costs. It discourages adoption of new technologies, slows the pace of innovation and the modernization of agriculture.

Researchers are now exploring how these weather risks could be hedged through “weather-based index insurance”, an insurance technique based on the occurrence of a weather event, rather than on actual 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 therefore subject to manipulation of farm losses. Moreover, as contracts and indemnity payments are the same for all buyers per unit of insurance, the usual problems of “moral hazard” (the lack of incentive for the insured to prevent losses when the event happens) and “adverse selection” (only those with the highest risk exposure seek coverage) associated with traditional crop insurance are lessened. Such insurance would be simple to administer, since there would be no individual contracts to write, no on-farm inspections and no individual loss assessments. Finally, the product could be marketed through banks, farm cooperatives, input suppliers and micro-finance institutions. From the insured’s viewpoint, the result would be more affordable insurance, and its availability to a broader range of clients – not only low and middle income farmers but also the banks, rural finance institutions and input suppliers providing products/services to those farmers.

There will be important challenges before this type of insurance can become a reality: availability of reliable and verifiable data on weather patterns; tamper-proof weather stations. There is also the problem of the “systemic” or “covariate” nature of weather risks (as opposed to independent risk, such as car accidents, heart attacks, etc.). When a disaster occurs, all those covered by the policies have to be compensated at the same time, thus posing an intolerable risk for the local insurance provider. Until recently, the only viable way to insure against this was international reinsurance. Recent developments in world financial markets, such as weather derivatives and catastrophe bonds offer exciting new opportunities to pool large volumes of covariate risks on a global scale—

Box 2 Harnessing Markets to Cope with Weather Risks

there are already successful similar examples in Japan and the United States to spread the risks of earthquake insurance.

The International Finance Corporation (IFC) is in talks with a consortium of private insurance and re-insurance companies, brokers and weather derivative traders to set up a company in this field (Weather Risk Transfer Company, WRTC). 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. The World Bank (with the International Food Policy Research Institute; the Istituto di Studi Economici e Sociali (SICHELGAITA) Italy; the University of Rome “La Sapienza”, Italy; the University of Kentucky; and the Ohio State University) are actively pursuing research in this area.

Source: Based on material provided by Panayotis Varangis and Manuel Conthe

Some Additional Instruments for Subsectoral Interventions

76. 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 keeping a market-orientation and systems perspective. This has the advantage of being specific where 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.

77. Appendix 2 provides an illustrative and non-exhaustive listing of some further 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.

6. Towards a World Bank Strategy

78. This section proposes the core elements of a World Bank strategy for supporting agro-enterprise activity in low and middle income countries. It considers the Bank’s comparative advantage for work in this field, proposes core operational objectives and focal geographical areas, and outlines various institutional requirements, including for partnerships.

6.1. COMPARATIVE ADVANTAGE

79. 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 WBG will have to establish priorities that meet the needs of its member countries yet adhere to strict policy criteria. One 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. The table below provides a summary SWOT analysis for WBG work in this field. Subsequently, measures will be identified for addressing WBG weaknesses and better taking advantage of available opportunities.

80. The table 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 the Bank to take the lead in supporting policy reforms and facilitating subsectoral 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 WBG 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 subsectors and foster broad-based growth.

Table 2 Comparative Advantage of the WBG in Agribusiness Development: SWOT Analysis	
Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ 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 	<ul style="list-style-type: none"> ▪ 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
<ul style="list-style-type: none"> ▪ Link agribusiness investments with policy-based analysis and lending (e.g., improved 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 	<ul style="list-style-type: none"> ▪ Public suspicion that the Bank is ‘making the world safe for business rather than making business accessible to poor people. Hence, there is ‘reputational risk’ associated with collaborative programs with the private sector. ▪ Continued perception by some stakeholders that agribusiness = big business ▪ Mixed/uncertain management commitment to intensify work in this field

81. 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 WBG is comparatively weaker in relationship 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 in it. 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.

82. 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. The table below 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 Section six.

Table 3 Potential collaborating partners

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

Note: This is an illustrative list of partners only

6.2. OPERATIONAL OBJECTIVES

83. The Bank Group's support for 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, which are critical for the development of AFS in a poverty-reduction perspective and where the WBG has clear comparative advantage.

84. First, there is a need to further pursue the reform process toward liberalization of traditional commodity systems, as well as complete the unfinished 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).

85. Completing the unfinished agenda also entails the modernization of particular laws and regulations (e.g., 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.

86. The second set of objectives concerns improving the competitiveness of client agro-food systems, particularly for non-traditional products and exports, 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 capacities 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.

87. The third set of objectives relates to redistributing assets and opportunities so that the poor will 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 (e.g., farmers in very remote areas; displaced parastatal workers) will inevitably be adversely affected by policy and structural changes.

88. The table in appendix 2 provides an illustration of the types of ‘products and services’ that the WBG 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 three specific products for which joint and collaborative efforts between IDA/IBRD and IFC could be pursued 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;
- ❑ agro-processing ventures involving smallholder outgrowers with the IFC undertaking a direct investment in agro-processing firms and IDA/IBRD focusing on the enabling environment, support for producer organizations, and the other institutional software; and
- ❑ 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.

Innovative Approaches for Market Development, Risk Management, and SME Market Linkages

Box 3 Warehouse Receipts - An Instrument that Facilitates Trade and Inventory Financing

Warehouse receipts are widely used in industrialized countries as a secure collateral to obtain financing for commodities. As a negotiable instrument, warehouse receipts are used in a variety of commercial transactions. The overall efficiency of a market is greatly enhanced by a producer or a commercial entity’s ability to convert agricultural production into a fungible device such as a warehouse receipt that can be traded, sold, swapped, used for collateral or used for delivery against a derivative instrument such as a futures contract. However, the use of warehouse receipts is limited in developing countries and economies in transition, mainly because of the lack of an appropriate legal and institutional environment, and low levels of awareness. Another reason is government policies that crowd out private sector incentives to store commodities. For example, governments offering a fixed price during the crop year do not provide incentive to farmers to store and sell later. However warehouse receipts can provide a valuable instrument to policy makers in countries in the process of agricultural market liberalization, by addressing issues related to export and inventory financing.

The introduction of a warehouse receipt system in developing countries and economies in transition has several benefits. First, it provides secure collateral for lending institutions. By making agricultural loans more secure, warehouse receipts increase the availability of local and foreign funds for agricultural lending and reduce the cost of lending. Second, for countries in the process of market liberalization, warehouse receipts can be the basis for a domestic spot market, and possibly at some later stage for the creation of forward and futures markets. Third, during liberalization, warehouse receipts provide an alternative to government’s involvement in the physical markets and thus reduce the direct role of the government 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. Fourth, warehouse receipts can be combined with price risk management. By doing so, not only will the collateral be secure, but also the uncertainty regarding its value will be reduced. This ensures that the repayment of the loan will not depend on the future price of the commodity, allowing banks to discount the warehouse receipt less than they would otherwise, and possibly reducing the cost of lending, since credit is now more secure. The establishment of a warehouse receipt system has certain requirements. For them to represent secure collateral, there is a need for a performing legal and institutional

Box 3 Warehouse Receipts - An Instrument that Facilitates Trade and Inventory Financing

environment.

The key aspects of that legal environment can be summarized as follows: first, warehouse receipts must be functionally equivalent to stored commodities. Second, rights, liabilities and duties of each party to a warehouse receipt (e.g., producer, bank, warehouseman) must be clearly defined. Third, warehouse receipts must contain certain essential terms. Fourth, warehouse receipts must be freely transferable by delivery and endorsement. And fifth, 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: the existence of verification and physical controls; a system of warehouse certification; a system for grading; the existence of property and casualty insurance; and provision of performance guarantees by the warehouseman.

Source: Panos Varangis

6.3. FOCUSING THE STRATEGY

89. Given the limited pool of specialized expertise within the World Bank Group in this field, there is a strong need to raise the general awareness upon the Bank's rural development and PSD staff regarding the major concepts, opportunities, intervention tools, and sources of information on various aspects of this field. Even doing so, it would still be pragmatic for the WBG to focus its agro-enterprise support work in selected geographical areas and to concentrate its internal capacity-building and knowledge sharing efforts in those areas. After three to four years, the concerned Bank staff could re-assess this approach to see whether it would be warranted to broaden or re-direct WBG support. Based on considerations of client demand, importance in development support strategies, and the opportunity cost of not providing support (reflecting, in part, the on-going work of other development partners), the most concerned Bank staff recommend that a re-invigorated agro-enterprise support program focus primarily on:

- Sub-Saharan Africa, where progress in the modernization of agro-food systems will be critical for fostering growth and poverty reduction within much of the region. Important strategic challenges in the coming years relate to raising the competitiveness of traditional and non-traditional export systems, radically improving the efficiency of domestic food supply systems, and ensuring that the benefits from these developments are broadly shared. As much attention needs to be given to capacity building (of agro-enterprises, meso organizations, and government regulatory bodies) as to strengthening the enabling environment. There are more than a dozen SSA countries where agribusiness projects or project sub-components are being implemented or under preparation (either in the RD or PSD families) and so there is a strong need for regional oversight and cross-fertilization of experiences.²¹ There are agro-enterprise investment opportunities for IFC in a number of the larger African countries (e.g., Nigeria, South Africa) and where there is substantial yet underdeveloped agro-industrial potential (e.g., Mozambique, Tanzania).
- The Former Soviet Union and the neighboring tier of East European countries, where, in a number of countries, agro-food systems have badly regressed over the past decade, contributing to greatly increased poverty among the rural population, a decline in the quality of national diets, and a contraction of agro/food exports. While some of the East European countries will likely be assisted in their process of accession into the European Union, more substantial focus will be given to the modernization of food and agricultural export systems in countries of the Former Soviet Union and in

²¹ See *Promoting Agro-Enterprise and Agro-Food Systems Development in Sub-Saharan Africa* by Jaffee et al.

the relatively poorer countries of Eastern Europe. Over the next three to five years, priority attention needs to be given to improving the enabling environment for private investment, strengthening market-oriented agribusiness management skills, and fostering institutional arrangements for risk management, technology transfer, and improved market awareness. There are opportunities for IFC agro-enterprise investments in such countries as Turkey, Bulgaria, Romania and, perhaps in the future, Ukraine and Russia.

- China and Vietnam, which are transition countries with enormous agribusiness potential. Both countries are moving from quite centralized and controlled economies featuring a prominent role for state-owned agro-enterprises, to an incentive-driven private sector model of economic activity. This requires considerable adjustment. Assets need to be restructured, and, in some cases, sold and there is a huge need for private investment to upgrade and modernize agro-food facilities and supply chains. The improvement of food quality and safety standards and the management of the environmental dimensions of agro-industry are additional challenges. The governments of both countries have articulated policies in this direction and, with some diversions, are implementing such liberalizing policies. The Bank's advice and assistance could prove very valuable to these two East Asian countries. While agribusiness is not the core of EAP's rural reduction strategy, its support has important productivity and food security implications. There are agro-enterprise investment opportunities for IFC in both of these countries (as well as in Indonesia).

90. While it is recommended that these three areas form the core of the Bank's assistance to agribusiness, there could well be opportunities to pursue work in this area in other regions. For example, in Central America and other parts of LAC, there is scope for bringing a market orientation and market linkage instruments to selected community development and biodiversity protection initiatives and support can also be provided via existing competitiveness projects in selected countries. There is also scope for supporting new risk management and/or trade financing mechanisms, especially in Central America. IFC investments in LAC will likely focus on middle-income countries, such as Mexico, Brazil, and Colombia. There is also some demand for support on smallholder market integration challenges in parts of South Asia and perhaps some scope within MENA countries to facilitate marketing and supply chain assistance in the context of projects which are centered on irrigation and water management. Within MENA, Egypt probably provides the most ample opportunities for IFC direct investment.

91. For each of the three geographical focal areas, a medium-term strategy should be prepared and agreed to by Bank management. Such strategies would specify likely priority themes, countries, and sub-sectors, as well as a game plan for implementing the needed analysis and project management over a three-to four-year period.²² In the coming months, countries should be identified for 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 plus there is strong potential for IFC direct investment. A tentative short-list of such countries might include: Tanzania, Uganda, Mozambique, Nigeria, Turkey, Romania, Bulgaria, Mexico, China, and Vietnam.

6.4. COUNTRY FOCUS AND PROJECT DESIGN

92. Bringing these regional strategies down to the country level would occur through the conventional approach. The Poverty Reduction Strategy Papers (PRSP) will identify the potential role of agribusiness and potential impacts on poverty alleviation. The Country Assistance Strategy (CAS) will refine the areas

²² As preparation for this VtA update, a start has been made on such a process within the Africa region, building on earlier work for the region's private sector development strategy.

in which WBG interventions are feasible and identify specific projects and non-lending activities. Several projects already in the pipeline would be appropriate vehicles for agribusiness support components (see 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 the 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 the available information on agribusiness opportunities and constraints is insufficient to form even preliminary judgments on its level of priority, there will be needs for ESW, either on a stand alone basis or as part of wider economic analysis work.

93. Many agribusiness activities could be implemented as components within traditional and more recent lending tools such as privatization projects, agricultural service projects, private sector development projects, and community action projects, etc.. Improved project design would derive from a market and agro-food system orientation. The table below, providing an illustrative list of projects in the currently planned pipeline, suggests that there is ample opportunity to pursue this approach in line with demand from WBG clients. Dedicated agribusiness support projects are also possible, and could combine policy/regulatory reform, capacity-building, infrastructure, and selected industry/sub-sector initiatives.

94. One could also envision key elements of the agribusiness legal, policy, and regulatory environment being the focal point for particular country structural or sectoral adjustment credits. This would facilitate more intensive monitoring and evaluation of implementation of the reforms and of their impact on growth and on poverty. Sector investment loans provide a comprehensive framework and should feature agribusiness more prominently. Some of the WBG'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 4 Existing project pipeline with relevance to agribusiness support: selected regions

<i>Country</i>	<i>On-going Projects with Closing Date beyond December 31, 2001</i>	<i>Pipeline Projects</i>
<i>Africa</i>		
Benin	Private Sector Development	Cotton Sector Reform; Agricultural Services and Producers' Organization
Burkina Faso	Private Irrigation	Competitiveness and Enterprise Development
Ethiopia		National Fertilizer; Food Security
Ghana	Trade Gateway	
Guinea Bissau		Private Sector Cap Building
Madagascar		Rural Sector Support; Second Private Sector Dev.
Malawi		Private Sec. Dev.; Agricultural Sector Adjustment
Mali	Private Irrigation Agro-Processing	Agricultural Services and Farmers' Orgs. Support; Cotton Sector Reform; Private Sector Develop.
Mozambique	Agricultural SIP; Enterprise Develop.	
Niger	Private Irrigation	Agro-Pastoral Export Promotion Private Irrigation II
Senegal	Agro Export Promotion	Private Sector Development
Tanzania	Privatization and Private Sector Development; Rural and Micro Finance	ASMP II; Soil Fertility Recapitalization
Uganda		Poverty Reduction Support; Private Sector Compet.
Zambia	Agricultural Sector Investment Program	ASIP II; Rural Investment Fund
<i>Former Soviet Union and Neighbors</i>		
Albania	Agroprocessing Development	

Table 4 Existing project pipeline with relevance to agribusiness support: selected regions

<i>Country</i>	<i>On-going Projects with Closing Date beyond December 31, 2001</i>	<i>Pipeline Projects</i>
Bulgaria		Rural Development; ASAL II
Georgia	Agricultural Development	
Kazakhstan		Agriculture Support Services
Kyrgyz Republic		Agricultural Marketing and Inputs
Macedonia	Private Farmer Support	Community Based Development
Moldova		Rural Investment and Services
Romania		Rural Development
Turkey		Commodities Market Development
Uzbekistan	Cotton Subsector Improvement	Enterprise Restructuring
<i>Selected East Asia</i>		
China	Smallholder Cattle Development; Grain Distribution; Seeds Sector Commercialization; Heilongjiang ADP	Integrated Sheep Development Project; Aquaculture Development Project; Poor Rural Communities Development Project
East Timor		Agricultural Restoration and Rehabilitation
Vietnam		Agricultural Diversification Project

6.5. STAFFING, ORGANIZATIONAL ARRANGEMENTS, AND NETWORKS

95. The WBG has a limited number of staff with private agribusiness experience and/or analytical specialty in this area. The institution would greatly benefit from the recruitment of a few additional specialists in this field. Otherwise or in addition, the Bank should pursue, under the Staff Exchange Program, gaining the secondment of one or two agribusiness management/marketing professionals, especially from the food/fiber industry.

96. With or without supplemental human resources, the Bank needs to better organize to meet and foster the demand from clients for agribusiness support work. The Bank needs to scale the walls of internal institutional barriers plus ensure that a large proportion of Bank RD and PSD staff gains a functional understanding of the main dimensions, opportunities, challenges, and available instruments for agribusiness development.²³ Toward this end, the following institutional strategies are recommended:

- Core Agribusiness Support Teams: Both within the Africa and ECA regions there be formed thematic coordination groups. These would consist of five to seven technical/operational staff members, drawn from the regional RD and PSD divisions and perhaps also from DEC and IFC. The support team would have an operational assistant. Their functions would be to 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 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, and organize periodic meetings and workshops on major topics. These groups would provide much of the operations-related knowledge management material for the Bank-wide Markets and Agribusiness Thematic Team. These regional groups would require a regional budget, with equal

²³ See Appendix 1 on the different skills and perspectives which are needed from the Bank's rural and PSD staff.

or proportional shares to be provided by the Rural Family, the PSD Family, and IFC. That regional budget would facilitate the cross-fertilization of ideas, lessons, and knowledge within the region. The development of these Country Agribusiness Support Teams would ensure critical mass at the regional level and intensify WBG processes of learning in this field.

- Country Agribusiness Point Persons: For those countries where support to agribusiness is built into the CAS and project pipeline, at least one person should be informally designated as an agribusiness point person. Such people could be from HQ, or, preferably, based in resident missions. They would endeavor to amplify light on the importance of agribusiness in the development of country strategy documents, call attention to country teams of on-going positive or negative developments in agribusiness, and liaise with other development partners who are actively supporting agribusiness in particular countries. If the Country Agribusiness Point Persons are located in resident missions, it might prove useful for them, together with the Resident Representatives, to develop an informal ‘agribusiness liaison network’ and to hold annual or bi-annual meetings with representatives from local agribusiness companies (and NGOs) to discuss progress and emerging issues. A small budget (e.g., \$5000) would be required to facilitate such liaison work.
- Markets and Agribusiness Thematic Group (MATG): The MATG would continue its knowledge management work. Given the expectation that budgetary resources will be minimal, it would focus its attention on organizing seminars, disseminating relevant materials, and coordinating an external liaison network—an Agribusiness Practitioners Network. Two years ago, MATG arranged for a series of meetings involving Washington-based NGOs, development agencies, consulting firms, and industry associations. This would be revived. A broader network would be developed including selected personnel from FAO, UNIDO, the Common Fund for Commodities, IFPRI, the regional development banks, and others. It would also be sensible for the Bank to seek to forge a network of business organizations interested in the development of agribusiness in selected regions. For example, for Africa this might include organizations such as 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. Guidance would be obtained from the Business Partners for Development unit, recognizing the potential ‘reputational risk’ associated with some external collaborations.²⁴
- Internal Partnerships: There is a scope for and necessity for the WBG staff working in this area to work closely with other groups within whom there is an overlap of interests. Given the cross-cutting 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

²⁴ There are some on-going initiatives to develop external partnerships in the agribusiness arena. One example is the recent meeting between top Bank executives and the CEOs of international agricultural technology companies to explore options for possible collaboration to promote increased technology transfer to and strengthened local capacities in developing countries. Another example involves research work to be undertaken by DEC which will feature the development of a network of public and private stakeholders in Africa to address the theme of *international standards as a barrier to trade*.

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 improving rural financial services and developing the various risk management initiatives.

7. Conclusions

97. At the international and national levels, agro-food systems are undergoing rapid and substantial change as a result of several demographic, technological, and economic factors. These changes open up new opportunities yet also pose new challenges and threats to the World Bank's client countries 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 is 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.

98. The WBG cannot reach these objectives 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 privatization transaction oriented and is otherwise restricted to improving the overall enabling environment for investment. WBG support to agriculture and rural development needs to be approached from a market systems perspective, with policy-focused work supported, in some regions, by intensified micro-level interventions and institution building (enterprise, meso organization or supply chain development). The two must be done jointly by surmounting the institutional walls between RD and PSD divisions and between IDA/IBRD and the IFC.

99. This paper has outlined a strategy for pursuing this work by identifying core objectives, operational themes, intervention tools, areas of potential geographical focus, and several institutional measures to improve WBG capacities to perform the needed services. Within the Rural Family, it is critical that market-oriented approaches and agro-food system perspectives not be pigeon-holed into a subsectoral box of agribusiness, while much of the remaining (and dominant) efforts be 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 Bank will fail to assist its clients to take on the competitive challenges that they face.

Box 4 Summary of Recommendations for an Enhanced WBG Role in Agribusiness

Based on the analysis presented in this report, it is recommended that the WBG:

1. disseminate within the Bank and to member countries and other partners that agribusiness is a sector that can contribute positively and significantly to poverty alleviation and growth in client 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 (e.g., USAID, CIDA, FAO);
4. integrate agribusiness in country analysis at the stage of the CDF, PRSP and CAS in countries where agribusiness has the potential to alleviate poverty and stimulate economic growth;
5. refine regional strategies for support in this area, especially in Africa, ECA, and East Asia;
6. partner with governments, where warranted, to adopt policies for agribusiness and its related social and physical infrastructure that includes macro analysis, regulation and competition;
7. 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;
8. work with its partners to implement strategies for sustainable agribusiness and use the WBG's convening power to achieve these objectives;
9. build a stronger information base and create systems for knowledge management and operational leadership within the WBG and in specific regions;
10. 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;
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 ESW work

Appendix 1 Do You Measure UP? Take the Test

A1.1 FOR 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

A1.2 FOR 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

A1.3 FOR 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

Appendix 2 Agro-Food Systems: Policy and Operational Spheres

<i>Possible Actions</i>	<i>Illustrative Agro-Food System Entry Points</i>			
	<i>Domestic Staple Food Markets</i>	<i>Domestic Higher Value Food Markets</i>	<i>Traditional Export Agro-industry</i>	<i>Non-traditional Agro-exports</i>
Reform of Rules/Laws/Regulations/Policies	<ul style="list-style-type: none"> ▪ Warehousing laws ▪ Grades/standards ▪ Urban and peri-urban zoning laws ▪ Strategic reserve policies and rules ▪ Laws of association ▪ Foreign investment laws/policies ▪ Phytosanitary/sanitary laws ▪ Trade policies and licensing ▪ Transport policies 	<ul style="list-style-type: none"> ▪ Franchising laws ▪ Cooperative laws ▪ Food safety regulations ▪ Grades/standards/packaging laws ▪ Laws of association ▪ Foreign investment laws/policies ▪ Trade policies and licensing ▪ Transport policies 	<ul style="list-style-type: none"> ▪ 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 	<ul style="list-style-type: none"> ▪ Grades/standards and quality certification ▪ Organic production certification ▪ Phytosanitary/sanitary laws ▪ Landing rights/other transport policies ▪ Laws of association ▪ Foreign investment laws/policies ▪ Trade policies and licensing ▪ Intellectual property rights regime
Private Sector Capacity-Building	<ul style="list-style-type: none"> ▪ Market intelligence training ▪ Supply chain management training ▪ Strengthening farmer and commodity association 	<ul style="list-style-type: none"> ▪ Supply chain mgt. training ▪ Management systems for contract farming ▪ Franchising management ▪ Strengthen. Farmer/industry association. 	<ul style="list-style-type: none"> ▪ Market intelligence training ▪ Supply chain management training ▪ Strengthening farmer and 	<ul style="list-style-type: none"> ▪ Training in HACCP/QC systems ▪ Supply chain management training ▪ Small business incubators ▪ Traceability/identity preserv.

<i>Possible Actions</i>	<i>Illustrative Agro-Food System Entry Points</i>			
	<i>Domestic Staple Food Markets</i>	<i>Domestic Higher Value Food Markets</i>	<i>Traditional Export Agro-industry</i>	<i>Non-traditional Agro-exports</i>
		association.	farmer and commodity associations <ul style="list-style-type: none"> ▪ HACCP & other quality control systems 	training <ul style="list-style-type: none"> ▪ Management systems-contract farming ▪ Streng. farmer/commodity associations ▪
Infrastructure	<ul style="list-style-type: none"> ▪ Sale/lease of public storage facil. ▪ Marketplace rehab/management ▪ Rural roads rehab/maintenance 	<ul style="list-style-type: none"> ▪ Marketplace rehab/management ▪ Wholesale markets 	<ul style="list-style-type: none"> ▪ Rural roads rehab/maintenance ▪ Port rehab and management ▪ Dry Port development 	<ul style="list-style-type: none"> ▪ Port and Airport freight storage and handling facilities and management ▪ Dry Port development
Finance	<ul style="list-style-type: none"> ▪ Warehouse receipt guarantees 	<ul style="list-style-type: none"> ▪ Direct investment (IFC) ▪ Medium-term investment credit 	<ul style="list-style-type: none"> ▪ Warehouse receipt guarantees ▪ Direct investment (IFC) 	<ul style="list-style-type: none"> ▪ Venture capital funds ▪ Medium-term investment funds ▪ Contract farming credit/guarantees ▪ Direct investment (IFC)
Other	<ul style="list-style-type: none"> ▪ Analysis and training on appropriate technologies for micro and small-scale processing 	<ul style="list-style-type: none"> ▪ Financing private extension services 	<ul style="list-style-type: none"> ▪ Marketing extension for farmers ▪ Financing private extension services 	<ul style="list-style-type: none"> ▪ Post-harvest/applied product research ▪ Joint venture match-making services ▪ Financing private extension services

<i>Possible Actions</i>	<i>Other Domains for Agribusiness Support Action</i>			
	<i>Agricultural Input Supply Systems</i>	<i>Community and Sub-regional Development</i>	<i>Regional Trade and Integration</i>	<i>Privatization of State-Owned Enterprises</i>
Reform of Rules/Laws/Regulations/Policies	<ul style="list-style-type: none"> ▪ Intellectual property rights regime ▪ Seed import laws/phytos. regulations ▪ Seed testing/approval/certificat. laws ▪ Agro-chemical registration laws ▪ Environmental regulations for agro-chemical production/storage/distrib. ▪ Veterinary products laws/regulations ▪ Transport policies ▪ Fertilizer trade and marketing policies ▪ Foreign investment laws/policies 	<ul style="list-style-type: none"> ▪ Zoning laws in secondary towns and enterprise zones ▪ Laws of association ▪ Transport policies 	<ul style="list-style-type: none"> ▪ Trade policies ▪ Foreign investment laws/policies ▪ Harmonization of trade policies, transport policies, food safety laws, agro-input laws and regulations, etc. 	<ul style="list-style-type: none"> Foreign investment laws/policies Competition policies and licensing laws Transport policies Grades/standards
Public Sector Capacity-building	<ul style="list-style-type: none"> ▪ Inspection/customs facilitat. services ▪ Seed inspection services ▪ Facility safety inspection services ▪ Biosafety management processes ▪ Intellectual property rights awareness/management 	<ul style="list-style-type: none"> ▪ Market information systems 	<ul style="list-style-type: none"> ▪ Inspection, phytosanitary, and customs facilitation services ▪ Trade promotion and information services 	<ul style="list-style-type: none"> Industry monitoring and statistics
Private Sector Capacity-building	<ul style="list-style-type: none"> ▪ Community-based seed multiplication ▪ Training for input stockists and enterprise representatives ▪ Seed enterprise development training ▪ Biosafety management processes ▪ Intellectual property rights awareness 	<ul style="list-style-type: none"> ▪ Farmer/commodity associations ▪ Management systems for contract farming ▪ Small business incubators 	<ul style="list-style-type: none"> ▪ Regional industry/commodity associations 	<ul style="list-style-type: none"> ▪ Farmer/industry/commodity associations ▪ Supply chain management training ▪ Quality control training ▪ Management systems for contract farming
Infrastructure	<ul style="list-style-type: none"> ▪ Port rehabilitation and management ▪ Rural roads and bridge rehabilitation and maintenance 	<ul style="list-style-type: none"> ▪ Rural roads and bridges rehabilitation and maintenance 	<ul style="list-style-type: none"> ▪ Rail and road corridors ▪ Port 	<ul style="list-style-type: none"> ▪ Road and marketing infrastructure rehab/maintenance/financing

<i>Possible Actions</i>	<i>Other Domains for Agribusiness Support Action</i>			
	<i>Agricultural Input Supply Systems</i>	<i>Community and Sub-regional Development</i>	<i>Regional Trade and Integration</i>	<i>Privatization of State-Owned Enterprises</i>
	and maintenance	maintenance <ul style="list-style-type: none"> ▪ Marketplace rehab/management ▪ Rural and enterprise zone electrification 	rehab/management <ul style="list-style-type: none"> ▪ Regional telecommunications services ▪ Dry Port development 	cing
Finance	<ul style="list-style-type: none"> ▪ Working capital for input enterprises and stockists through regular banking and rural finance channels 	<ul style="list-style-type: none"> ▪ Micro and small business credit and savings facilities 	<ul style="list-style-type: none"> ▪ Regional trade financing and clearinghouse mechanisms ▪ Regional venture capital funds 	<ul style="list-style-type: none"> ▪ Seasonal and medium-term credit
Other	<ul style="list-style-type: none"> ▪ Public-private partnerships in applied agro-biotechnology R&D 	<ul style="list-style-type: none"> ▪ Analysis and training on appropriate technologies for micro and small-scale agro-processing 	<ul style="list-style-type: none"> ▪ Regional centers of excellence in agribusiness analysis and/or training. ▪ Regional trade/investment fora and joint venture match-making 	<ul style="list-style-type: none"> ▪ Marketing extension services

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