Agribusiness for development

A dynamic private agribusiness sector linking farmers and consumers can be a major driver of growth in the agricultural and the rural nonfarm sectors. But growing agribusiness concentration may reduce its efficiency and poverty reduction impacts. A better investment climate for small and medium enterprises can improve competitiveness. Targeted public-private sector partnerships and corporate social responsibility initiatives are instruments to promote smallholder participation.

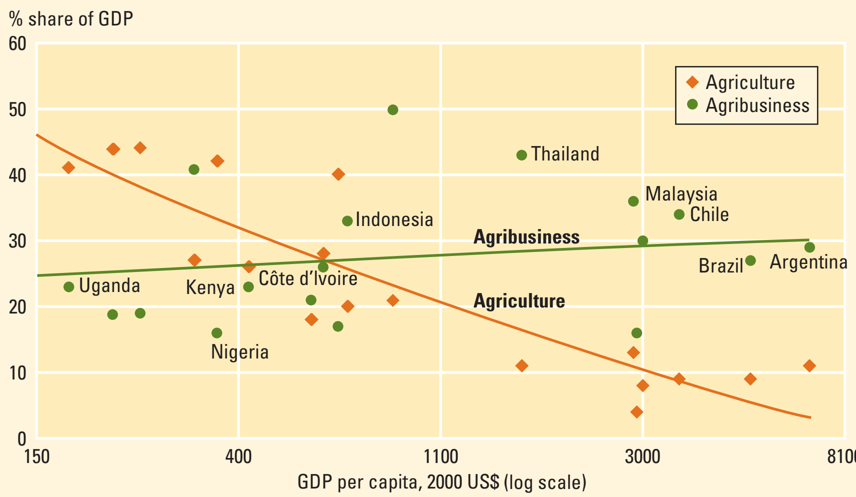
Agribusiness is the off-farm link in agrofood value chains. It provides inputs to the farm sector, and it links the farm sector to consumers through the handling, processing, transportation, marketing, and distribution of food and other agricultural products.[1] Thus, there are strong synergies between agribusiness and the performance of agriculture for development. Dynamic and efficient agribusiness spurs agricultural growth. And a strong link between agribusiness and smallholders can reduce rural poverty.

Agribusiness has a large and rising share of gross domestic product (GDP) across developing countries (figure D.1). Though agriculture declines from 40 percent of GDP to less than 10 percent as GDP per capita rises, agribusiness (including agricultural trade and distribution services) typically rises from under 20 percent of GDP to more than 30 percent before declining as economies become industrial (13 percent in the United States).[2]

Agribusiness comprises diverse private agroenterprises, a majority of which are small, mostly in rural market towns, and operated by households that often have wage labor and farming as other sources of income.[3] Medium and large agroenterprises are mainly urban based because of the requirements for economies of scale and infrastructure. The large enterprises are often dominated by multinational corporations that have consolidated through vertical and horizontal integration.[4]

In recent years, influenced by changes in consumer demand and rapid technological and institutional innovations, the structure of agribusiness has changed dramatically and its performance has been highly dynamic. Two major challenges need to be addressed in considering the role of agribusiness for development: Market forces do not guarantee competitiveness, nor do they guarantee smallholder participation, both essential to link agricultural growth to development. For these reasons, promoting competitiveness and enhancing smallholder participation are two priorities of the agriculture-for-development agenda (chapter 10). The two complement each other as competitive small and medium agroenterprises in rural areas can link smallholders to value chains and urban demand.

Figure D.1 The relative shares of agriculture and agribusiness in GDP change as incomes rise



Sources: WDR 2008 team. Data from Jaffee (1999) as cited in World Bank (2003f); and from Pryor and Holt (1999).
Note: Agribusiness includes the value added for agro-related industries and for agricultural trade and distribution services. Data are for Argentina, Brazil, Cameroon, Chile, Côte d'Ivoire, Ghana, India, Indonesia, Kenya, Malaysia, Mexico, Nigeria, Republic of Korea, South Africa, Tanzania, Thailand, Uganda, and Zimbabwe.

The agribusiness revolution: Are there tradeoffs?

Growing concentration in the agribusiness sector

Driven by gains from economies of scale and globalization of the food chain, multinational agroenterprises increasingly dominate the agribusiness sector along the value chain. They provide inputs such as pesticides, seeds, and crop genetic technologies that have consolidated horizontally and vertically into a small number of multinational firms (table D.1). On the marketing side, a few multinational enterprises are broadly diversified from seeds, feeds, and fertilizers to product handling and processing of sweeteners and biofuels. Food processing firms are integrating backward to primary product handling and forward to retail distribution. Retailing has been transformed by the "supermarket revolution" (chapter 5). National, regional, and global supply chains are being radically altered, bypassing traditional markets where smallholders sell to local markets and traders. Supermarkets control 60 to 70 percent of food sales in Argentina and Brazil, and are expanding rapidly in China, India, and urban Africa. Though these trends in agribusiness consolidation have been going on for years in industrial countries, they are now becoming common in developing countries as well.[5]

In 2004 the market share for the four largest agrochemical[6] and seed companies (the concentration ratio of the top four, or CR4) reached 60 percent for agrochemicals[7] and 33 percent for seeds, up from 47 percent and 23 percent in 1997, respectively.[8] The CR4 in biotechnology patents was 38 percent in 2004 (table D.1). In some subsectors, global concentration is much higher—in 2004 one company had 91 percent of the worldwide transgenic soybean area.[9] It is generally believed that when an industry's CR4 exceeds 40 percent, market

Table D.1 Major suppliers of agricultural inputs and growing concentration

Company	Agrochemicals		Seeds		Biotechnology	
	2004 sales ($ million)	Market share (%)	2004 sales ($ million)	Market share (%)	Number of U.S. patents[a]	Patent share (%)
Monsanto	3,180	10	3,118	12	605	14
Dupont/Pioneer	2,249	7	2,624	10	562	13
Syngenta	6,030	18	1,239	5	302	7
Bayer Crop Sciences	6,155	19	387	2	173	4
BASF	4,165	13	—	—	—	—
Dow Agrosciences	3,368	10	—	—	130	3
Limagrain	—	—	1,239	5	—	—
Others/Private	7,519	23	16,593	66	1,425	34
Public Sector	—	—	—	—	1,037	24
Market concentration[b]						
CR4 (2004)	60		33		38	
CR4 (1997)[c]	47		23			

Sources: UNCTAD 2006b; International Seed Federation at http://www.worldseed.org.
a. Number of U.S. agricultural biotechnology patents issued during the 1982–2001 period.
b. Market concentration is measured by the concentration ratio CR4, which indicates the market share of the four largest firms participating in the market.
c. Fulton and Giannakas 2001.
— = not available.

competitiveness begins to decline,[10] leading to higher spreads between what consumers pay and what producers receive for their produce.[11]

The high concentration in multinational agribusiness is evident in coffee, tea, and cocoa. Coffee is produced by an estimated 25 million farmers and farm workers, yet international traders have a CR4 of 40 percent, and coffee roasters have a CR4 of 45 percent. There are an estimated 500 million consumers.

The share of the retail price retained by coffee-producing countries—Brazil, Colombia, Indonesia, and Vietnam account for 64 percent of global production—declined from a third in the early 1990s to 10 percent in 2002 while the value of retail sales doubled. Similar concentrations are observed in the tea value chain where three companies control more than 80 percent of the world market. Cocoa has a CR4 of 40 percent for international traders, 51 percent for cocoa grinders, and 50 percent for confectionary manufacturers. Developing countries' claim on value added declined from around 60 percent in 1970–72 to around 28 percent in 1998–2000.[12]

Concentration widens the spread between world and domestic prices in commodity markets for wheat, rice, and sugar, which more than doubled from 1974 to 1994. A major reason for the wider spreads is the market power of international trading companies.[13]

Balancing private investment and competitiveness

Designing and implementing policies to induce competition in the agribusiness sector is not easy, and there are tradeoffs. Controls and administrative requirements will increase transaction costs, commercial and political risks, and opportunities for rent seeking. Interventions protecting weak market players may do more harm than good—consumers, small farms, and small enterprises may lose out if private enterprises vote with their feet or pass on increased transaction costs to them. But support to agroenterprise development can increase competitiveness by favoring entry of small and medium enterprises (SMEs) and facilitating the inclusion of smallholders.

Small and medium agroenterprise development

Two complementary approaches can be followed to support agroenterprise development for competitiveness and participation. One is to improve the investment climate to induce the entry of private investors, particularly SMEs. Surveys of the rural investment climate in Indonesia, Nicaragua, Sri Lanka, and Tanzania indicate that the lack of rural finance, infrastructure, and business and public services is particularly binding.[14] The other approach targets bottlenecks in small and medium agroenterprise development, particularly in value chains.

Improving the investment climate

The investment climate's four main components can all contribute. First is to ensure a sound macro policy environment. Second is to provide public goods such as infrastructure. Third is to have a legal and regulatory framework that fosters competition, business integrity, and fair practices. Fourth is to have access to private financial services, risk-sharing institutions, and business development services.

Rules and regulations for intellectual property rights, employment conditions, contracting, and product standards also affect the profitability of agroenterprises and the distribution of benefits from agribusiness development. Barriers to entry in establishing businesses are particularly strong for small businesses, which suffer more from poor access to finance and weak business skills.[15]

Addressing bottlenecks

Instruments to address the bottlenecks to small and medium agroenterprise development include matching grants, challenge funds in public-private partnerships, preferential access to finance, partial loan guarantees, tax breaks, and assistance in the formation of agroindustrial networks. For developing smaller agroenterprise in rural areas, the focus has usually been on direct interventions rather than on improving the investment climate that could have wider and more sustained impacts. The reason is that ministries of agriculture have no mandate in generic issues of investment climate, whereas ministries mandated with economic policies have limited interest in agricultural value chains in rural areas.[16]

There is some debate over matching grants to promote agribusiness because they have been linked to market distortions and favoritism, and they do not always promote growth-oriented SMEs. But they have had some successes in increasing the capacity of smallholders to link to value chains (box D.1). Matching

BOX D.1 *Opening export markets to small-scale organic cocoa producers in the Dominican Republic*

The Department for International Development's (DFID) Business Linkages Challenge Funds (BLCF) provides cost-sharing grants to promote business linkages, market development, and pro-poor impact for smallholders. In the Dominican Republic, a 2002 BLCF grant, matched by the private sector, funded a two-year organic chocolate production project that improved the competitiveness of smallholder organic cocoa producers by obtaining higher and more stable prices for their product. It created stronger relationships up and down the value chain and forged new links between the Small Cocoa Growers Association and European cocoa buyers. The project also created a better quality product that opened new types of markets for gourmet cocoa producers. These investments paid a differential of $405 per ton to small-scale growers, generated a 25 percent increase in employment benefiting women, spread computer and Internet technology across communities, and increased the purchasing power of the broader community—all reducing poverty.

Source: www.businesslinkageschallengefund.org.

grants are best used for business opportunities that can be profitable in the long run but face high startup costs. Oversight from independent peer review boards is essential to ensure fairness and transparency.

Corporate social responsibility

Smallholder inclusion in agrofood value chains can also occur through agribusiness initiatives that are motivated by more than just profits. Global agroenterprises can use their resources and expertise to help develop agrofood value chains and promote smallholder participation. There is a growing tendency among large enterprises to pursue business ventures that not only appeal to corporate interests but also deliver a social return, often benefiting the poorest of the poor. These activities can take a variety of forms depending on their direct economic payoff, but are largely public-private or civil society-private partnerships, where the driver is the private sector.

At one end of the spectrum are programs delivering social benefits, but with no short-run profit-making value for the enterprise, even though they can boost market development for the industry the firm is engaged in. An example is the school milk feeding and dairy development programs sponsored by the TetraPak Food for Development Office, with the objective of improving the health and academic performance of children while creating demand for milk products and supporting smallholder participation.[17]

At the other end of the spectrum are programs delivering strong benefits to the poor while allowing enterprises to break even, with profits reinvested. An example is the yogurt-producing venture of Groupe Danone in cooperation with the Grameen Group in Bangladesh. It extends loans and technical assistance to smallholders to acquire dairy cows and invests in a processing plant for dairy products that meet local nutritional needs and create employment in processing and distribution.[18]

In between are public-private partnerships that can be advantageous for investors but may not initially yield a return. The Mars Corporation is taking the lead in Indonesia in coinvesting with the public sector and donors in a research and development program to promote cocoa quality and a sustainable supply while paying smallholders a premium for growing the higher quality product.[19]