

Taking Action for the World's Poor and Hungry People

关注贫困，行动起来

Beijing, China • October 17–19, 2007

SPEAKER SUMMARY NOTE

- Session:** **Asia: New Strategies, Actions, and Ways Forward to End Extreme Poverty and Hunger in Main Developing Regions**
- Speaker:** ***Ashok Gulati*, Director in Asia, International Food Policy Research Institute (IFPRI), India; *Thomas Reardon*, Professor, Michigan State University, USA**
- Title:** Connecting Small Producers to Food Industry Companies in Asia: Promoting "Competitiveness with Inclusiveness"

Introduction

Asian food markets are transforming profoundly and extremely rapidly. Key elements of that transformation of the food industry touch all four of its segments: (1) wholesale; (2) processing (first and second stage); (3) retail; and (4) food service/restaurants. This transformation, the modernization of the segments of the food industry, give rise to a number of new (or at least now more numerous and important, and growing so every day) actors—medium-/large-scale food industry companies—large and specialized wholesale companies, large first-stage food processors and second-stage food processors (food manufacturers), large retailers (which can be chains of convenience stores, regular supermarkets, or hypermarkets) for which we use the shorthand "supermarkets", and large chains of fast-food outlets.

This brief focuses on approaches to connect small farmers and SMEs to the rapidly emerging food industry companies in Asia in order to promote "competitiveness with inclusiveness" for the poor engaged in activities in the agrifood system. The brief proceeds as follows. Section 2 lays out why emerging modern food companies in Asia should be a trend of interest to those interest in alleviating rural poverty, especially in the domain of high-value products (non-staples such as fruits, vegetables, fish, meat, dairy, and value-added grains). Section 3 provides a brief background sketch of the transformations afoot in the Asian food industry and in the high-value products sectors. Section 4 provides first a conceptual framework and then illustrates and discusses approaches to connect small producers of high-value-products to modern food companies in Asia. Section 5 concludes with policy and program implications.

Why Emerging Modern Food Companies in Asia are relevant to Rural Poverty Alleviation

We argue that these rapidly emerging modern companies should be of great interest to those interested in helping poor farmers and food SME's. That interest has two sides.

On the one hand, these modern food companies are rapidly taking over the food markets of urban areas across Asia (with of course wide variation over countries in that speed). They tend to dominate quickly the upper and middle income consumer segments—the consumers who have the purchasing power to pay for higher quality high-value products (processed foods, meat, fish, fruit, vegetables, dairy and eggs). The modern food companies also eventually penetrate the food markets of the urban working lower-middle and working poor, who are also consuming rising volumes of high-value products. Increasingly, then, the modern food companies are the "gate-keepers" to the quality-differentiated urban high-value-foods market—a crucial market for raising incomes of small farmers and SMEs across Asia. Diversifying production into high-value products means poverty alleviation for small farmers and SMEs and more wage employment for the landless laborers, relative to a situation where they produce grains for rural markets.

On the other hand, the modern food companies, compared to traditional markets, tend to be more demanding in terms of product volumes, quality, costs hence productivity, and increasingly, safety and traceability. They source widely so increase competition among suppliers. These requirements translate into production technologies, post-harvest, processing, and commercial practices investments beyond the traditional. However, it is common for the public or collective support services for farmers—extension, credit, physical infrastructure, insurance, and associations—to be absent or inadequate.

The above two sides then present a dilemma—opportunity and challenge, benefit and constraint. That dilemma takes on importance when the goal is “competitiveness with inclusiveness” (Gulati and Reardon 2007). We take it as a given, for the purposes of this brief, that governments should find ways to increase the public support services (of the generic types noted above) to farmers to increase their “structural competitiveness” (Reardon and Flores 2006) to enter quality-differentiated high-value-product markets in Asian urban areas.

However, just because one can reach a consensus for the need to build structural competitiveness for small farmers and SMEs to enter high-value-product markets, does not necessarily imply a further step—which is to help small farmers and SMEs actually connect directly with modern food companies. In fact that extension is currently quite debated, and has tended to take two extremes. First, on one side, many feel that because the great majority of procurement by modern food companies still takes place via traditional brokers and wholesale markets in Asia, that it is a waste of time and money to help small farmers get around these traditional channels, and instead all effort should focus on improving the traditional channels, bringing more efficiency and equity to the masses of suppliers. Second, on the other side, many feel that the traditional channels cannot provide any help to small farmers (beyond the traditional tied output-credit markets), and farmer profits are low and the great bulk of the value added is carried away by traditional merchants, while directly connecting farmers and companies would usher in a new era of brokerless commerce and big companies helping poor farmers.

It seems to us that a better position can be argued between these two extremes—and that forms the premise on which we then build in this brief. Our “middle road”, which involves dual action of building the base of the mass of farmers while bringing a subset into direct connection with modern food companies, has several parts. First, we noted that there should be continued (not crowded out by spending on programs to help farmers connect directly to companies) investment in “structural competitiveness” as noted above, and that includes not just at the farm level, but along the agrifood system, in wholesale markets, logistics, and traditional retail. Second, there are widely differing potentials for connecting farmers directly to modern food companies: (a) Modern processors such as large dairy companies and fish processors have a higher propensity to seek direct sourcing from farmers to avoid the traditional wholesale link—a link that cannot easily be controlled to deliver quality and safety consistently and cannot provide traceability; (b) While the great majority of fresh vegetables for domestic markets still pass through wholesale markets and the propensity of retailers to seek direct sourcing is still very small, the fruit market is more quality-differentiated and there is a greater propensity to link to fruit coops; (c) While much attention is on what retailers and processors do, there is insufficient attention to the wholesaler; yet wholesalers in Asia are already differentiating into large and specialized wholesalers (sometimes dedicated to modern downstream segments) (such as in Indonesia, see Natawidjaja et al. 2007) who seek direct relations with groups of small farmers; these are also potential sources of more direct connection of farmers to modern food companies, among which are these new wholesalers; (d) Even in fresh vegetables—the last bastion of the nearly fully traditional market in Asia—there is emerging differentiation as retailers seek food safety and traceability. The upshot of (a)–(d) is that a middle position includes a carefully differentiated approach by country and commodity, not a blanket pendulum swing between the two extreme positions.

But the reader might say “even so, the modern segment is in most cases in Asia still a minority, so even if modern food companies in many cases have a propensity to seek direct sourcing, and thus provide an opportunity for programs to assist this link, why spend scarce resources on something that at present is the minority situation?” There are several reasons to help even a minority make these connections. First, in some cases, such as in exports and in processing (of dairy and meats), and in some product lines in fresh produce or fish retail, the minority could grow to a majority of farmers as companies (for their own profitability and reduction of risk) seek these connections in order to reduce costs and improve quality and safety and traceability of the product). Second, while policymakers do well to attend to the needs of the mass of farmers and SMEs, they also need to fan the sparks of innovation and leadership among small farmers and SMEs, note which institutional and organizational approaches are most successful, and seek then to broaden the participation in these.

Thus, in the rest of this brief we focus on modalities to undertake the “middle path”—in particular, on how to fruitfully connect small farmers and MSEs to modern food companies (wholesalers, processors, and retailers). These connections require programs—public, private, and public-private—that foster “customized competitiveness.” (ibid). These can help to address the constraints and challenges so that farmers can market to modern food channels. The brief proceeds as follows. Section 2 briefly (just the key points from our other work) outlines the background of the transformation of the food industry and the development of the high-value-products sector, to provide substance to the introductory points on this subject above. Section 3 then presents a conceptual framework to think about the “connections” and provides some brief illustrations from China, India, Indonesia, and Philippines. Section 4 concludes with policy implications—including controversy about how best to promote these new connections.

Background on the Double-Transformation of Food Markets Facing Small Farmers: High-Value-Products and Food Industry Transformation

The Rapid Development of the Market for High-Value-Products (Non-staples)

There are three key points.

First, following the Bennett's Law, the share of non-staples rose quickly in diets across developing-Asia. During 1991–2005, the consumption patterns in 8 major countries of South and Southeast Asia (Bangladesh, India and Pakistan from south Asia, and China, Indonesia, Philippines, Thailand and Vietnam from southeast) showed that average annual consumption of meat went up by 3.9 percent, vegetables by 3.7 percent, eggs by 3.1 percent, milk by 2.7 percent, fish by 2.4 percent, and fruits by 1.9 percent, while the consumption of grains went down by –0.4%. The biggest changes were in China, which experienced the fastest rate of overall per capita GDP growth in the region during this period.

Second, the Bennett's Law effect noted above is not only to reinforce and expand along the same diet-composition lines of the traditional Asian diet—but instead to shift that composition “westward” into non-traditional products that together spell a “westernization” of the Asian middle class diet toward wheat, temperate fruits and vegetables, and high protein foods like dairy and meat (Pingali 2007). A stunning example of this is the spectacular increase in the production of milk in China (a very non-traditional food there) from 1.14 million tons in 1980 to 27.5 million tons in 2005, a 24-fold increase over 25 years; urban milk consumption leapt from 8 kgs/capita in 1996 to 25 in 2005—nearing the 35 kg/capita of India, a traditional consumer of dairy products (Hu, Fuller, and Reardon 2007).

Third, while quantity and food price still reign supreme for the average Asian consumer, there is a trend toward emerging quality and food safety differentiation in the high-value-products market. We expect this to grow significantly in the coming decades. Income growth and greater vertical coordination in supply chains have created demand as well as capacity and reward for quality differentiation, especially to the middle class consumer segment and via supermarkets and HORECA (hotel, restaurant and catering). Moreover, there have been various crises of food adulteration (such as fish in Indonesia), avian flu, SARS and other food-borne illnesses, and pesticide poisonings, that have pushed urban consumers toward beginning to be food-safety conscious.

Food Industry Transformation: Wholesale, Processing, Supermarkets

The growth of wholesale markets and the growth and consolidation of the food processing industry have been very important trends in Asian food markets in the 1980s and into the 1990s (see for example Bhavani et al. 2006 for the Indian food processing case, and Natawidjaja et al. 2007 for evidence of transformation of the produce wholesale sector in Indonesia).

The most striking recent market structure change that has occurred in Southeast Asia in the early/mid-1990s, China in the mid/late-1990s, has been the emergence of a “supermarket revolution” (Reardon and Timmer 2007), which is currently emerging in South Asia, notably India.

The spread of supermarkets has and is taking place in three established waves, and a fourth emerging wave. The “first wave” countries experienced supermarket-sector “takeoff” in the early to mid-1990s. These include much of East Asia outside China (and Japan). In these countries, the average share of supermarkets in food retail went from roughly only 10–20 percent circa 1990 to 50–60 percent on average by the early 2000s (Reardon and Timmer 2007). Compare that to the roughly 75–80 percent share that supermarkets have in food retail by 2005 in the U.S. and Western Europe, and one sees a process of convergence. These first-wave countries saw supermarket diffusion in a single decade that took some five decades in the U.S. and the U.K. The second-wave countries include much of Southeast Asia. In these areas, the share went from circa 5–10 percent in 1990 to 30–50 percent by the early 2000s, with the take-off occurring in the mid to late 1990s. The third-wave countries include countries where the supermarket revolution take-off started only in the late 1990s or early 2000s, reaching about 1–15 percent of national food retail by today. These areas include “transition East Asia” (China and Vietnam) and India.

During 2000–2006, top ten grocery retailers in six selected countries of South and Southeast Asia registered average annual growth rates ranging from 65.5 percent in Vietnam to 28 percent in Indonesia.

Supermarkets focus first on upper income consumer segments (national and expatriate), and then move into the middle class, and finally into the markets of the urban poor. Product penetration spreads from processed

foods (canned, dry, and packaged items such as rice, noodles, and edible oils) to semi-processed foods (with extensive or minimal processing such as dairy products) and minimal processing/packing (chicken, pork, beef, fish, and fruit) to fresh fruits and vegetables.

Procurement system modernization, especially in processed and semi-processed products, including dry goods, oils, meat, fish, dairy (together 85 percent of what supermarkets sell), have driven down costs and thus prices and helped supermarket diffusion. Supermarkets and large processors tend to source from a combination of wholesale markets, specialized/dedicated wholesalers, and direct from processors (common) and sometimes from farmers (still quite minor but emerging). The impacts on farmers are mainly through effects of supermarket sourcing on processors and processors in turn imposing cost and quality demands on farmers.

Several patterns are emerging empirically (in recent studies) with respect to the kinds of suppliers from which supermarkets source.

- (1) Supermarket chains tend to source from medium and large suppliers where they are available; this typically means a tendency toward sourcing from larger meat and dairy products and other processed food companies, as is shown for example in India and Indonesia.
- (2) Supermarket chains also tend to source, where possible, fresh products from medium/large farmers; however, this is rarely possible in most Asian countries, except for a few products (which vary by country) and other export sectors where large and medium farms have developed in produce.
- (3) Most of the time supermarket chains thus source only indirectly, through wholesalers and processors, from small farmers. The latter tend to be the upper stratum of small farmers in terms of capital assets (organization, equipment, and training), infrastructure access, and size (Reardon and Timmer 2007).
- (4) Where the small farmers are bereft of the needed assets, but the channel must still rely on them, sometimes the proximate intermediary or even the retailer assists with training, credit, and so on (for example as Carrefour and Metro are presently doing directly from producers in new programs in China).
- (5) As most fresh produce growers are small in Asia, small farmers are not excluded on the basis of size of their landholding or land tenure, except when these factors affect the farmers' capacity to implement certain technologies that in turn have an impact on quality, productivity, costs, or the ability to plant and/or harvest at the needed times during the year. Rather, other assets appear to play a much bigger role than does land. In particular, the included have more education, more access to transport and roads, have greater prior holdings of irrigation, and other physical assets, depending on the product, such as wells, cold chain, greenhouses, and good quality irrigation water (because of contaminants). Natawidjaja et al. (2007) shows this for tomatoes in Indonesia. In the very rare instances where small farmers sell direct to the supermarket, they have a very good rural producers' organization.

Connecting Small Producers to Modern Food Companies

Table 1 lays out a matrix classifying the various approaches to connecting small producers to modern food companies. The illustrations span all three food industry segments (wholesale, retail, and processing).

The columns show increasing degree of coordination of producers. (We omit the "spot market" which is the traditional wholesale market and broker-farmer relation in the rural areas.) The first column is the loosest coordination, the cluster, where there is no collective management but where firms may share information, subcontract, and form temporary collectives to fill larger orders. The second is the cooperative, with meta management and individual producers. The third is the "producer company" which resembles a coop but where the individual producers are shareholders. The fourth is the individual farm.

The rows show decreasing degree of institution (contracting) used by the buyer (the modern food company). (Again we omit spot relation.) The first row is the strongest institution, the direct contract by the final buyer (company). The second row is a weaker contract by the final buyer, with some commercial intermediary who communicates (at least to some degree) the final buyer's specifications to the producers. The third row involves a non-commercial intermediary, which for simplicity we call an NGO.

Note that a given row could be further divided "provision of inputs or services (credit, insurance, extension)" or "not". We left out this distinction because in practice, our perception (although we have not seen in the literature a systematic empirical analysis of this) is that the majority of connections with small producers include such provision (usually some combination of the final buyer, the commercial or NGO intermediary, and/or the government or donor); it is uncommon (although possible, such as the rare case where a commercial bank assists with loans) that a relationship of transactions between a modern food company and small producers

(individually or in groups) takes places wholly unassisted. That is because public support services are highly variable across countries but tend to be scarce for small producers—especially when in the domain for high-value products. For example, public extension programs in Asia are typically focused on basic grains and not on horticulture. Moreover, our perception is that the use of a relationship or a contract with a modern food company as a “collateral substitute” with a commercial bank, by small producers, is still rare. Finally, modern food companies have to compete with the “default option” of farmers selling to local brokers (commission agents) and wholesalers. While these intermediaries seldom supply technical assistance, they do often supply credit in a “tied output-credit market” arrangement. For modern food companies to compete with traditional intermediaries they tend to have to either get government or NGOs to support their suppliers, make three-way arrangement with commercial banks, or include credit in their deal with the farmers. This appears to be to date more practiced by processors in contract farming and less by retailers buying fresh. These credit and de facto insurance services are especially important as small farmers shift from (familiar) basic grains to more demanding and sometimes riskier non-staple products.

The final buyer and producers agree to the “approach” (the relevant block of the matrix) for their connection. That choice can be influenced by government or NGO assistance, the latter choice being the focus of this brief. It is beyond the scope of this brief to delve into why modern food companies choose one or another approach, so instead we focus on laying out the options and in the policy section discuss how governments and donors could think through which options to pursue. Below, we work through the blocks of the matrix providing illustrations, focusing in particular on the cases of Mother Dairy (cooperatives, processor, and retailer), Mahagrapes (grape producers farmer company), and Namdhari (seed company and retailer with contract farming scheme for local and export markets) in India, Bimandiri (specialized wholesaler) and Carrefour (retailer) in Indonesia, and Celebrate Life Agriventures (Farmer Company) in the Philippines.

- (1) **Mother Dairy:** Mother dairy in India, which started as a part of the Operation Flood during 1974, is a good example of linking the front end retail chain with small holders at the back end. Mother dairy has more than 700 milk shops (booths) and more than 350 fruit and vegetable outlets in Delhi (National Capital Region). It procures and distributes more than 2.2 million liters of milk every day. Milk is procured from farmers’ milk cooperatives in surrounding states. Similarly, fruits and vegetables are procured from farmers’ associations. Roughly 300 tons of fruits and vegetables per annum is being distributed through its own retail network.
- (2) **Mahagrapes:** Mahagrapes in Maharashtra state of India is a marketing company of grapes promoted by grape growers. It came into existence in 1991 and has its base in 16 grape growers’ cooperatives having a membership of more than 20,000 farmers in the state for its procurement. Several small holders are members of these cooperatives. The company exports grapes to many countries including U.K., Germany, Netherlands, etc.
- (3) **Namdhari Fresh and Namdhari Seeds with small farmer contract farming for domestic and export markets:** Namdhari Fresh. This is a small retailer (17 stores in Bangalore, 3 in Delhi, all recent). But it is also a huge exporter of seeds and fresh vegetables, with operations in 5 countries, with 1,200 contract farmers in India (with some 2,000 acres of land) and 2,000 acres of own-farmed land (half of which is their own, half of which is leased). They sell vegetables and fruit from their contract farmers into their retail outlets, and export large amounts. They sell seeds (such as tomato seeds) throughout India. The contract farmers are under dual contracts, partly for (very profitable) seed production, and partly for (small premium) produce for the domestic market. The seed-production contract, plus long-term loans for capital infrastructure on farm and input credit, are ways that Namdhari provides incentives to farmers to not sell to commission agents.
- (4) **Metro (retailer/cash&carry) buying fresh produce, meat and fish direct from producer groups in China:** While supermarket chains often buy directly from companies producing processed products (such as edible oils and flour and biscuits) or semi-processed products (such as dairy products), it is uncommon for retail chains to have programs to help upgrade those companies. Rather, retailers simply lay out the private standards and other transaction requirements to the processors.

By contrast, it is still relatively uncommon for supermarket chains in developing countries to buy fresh produce directly from farmers—and when they do it is either from a medium/large agribusiness or from cooperatives of small or medium farmers (and only extremely seldom from individual small farmers). However, it is usually the cooperatives of small produce growers who are in most need of help in upgrading in skills and equipment to meet the demanding standards of modern markets. While not yet common, there are emerging cases of retailers setting up direct sourcing programs from coops of small

farmers which include upgrading activities—in many cases supported by governments, donors, or NGOs. Below we provide an illustration of such a program just being started by Metro in China.

In 2007 Metro Cash & Carry/China, initiated a project in collaboration with the Chinese government—the latter at several levels. The project combines direct sourcing from farmers around Hefei in Anhui Province (located a day's drive from Shanghai, and an area that supplies various agricultural products to Shanghai) and marketing the products via the Metro Cash & Carry stores (to consumers and food service and small food retailers) and via the distribution platform Metro is planning to develop in a wholesale market in Shanghai. These initiatives of Metro are linked to the Chinese Ministry of Finance and Commerce (MOFCOM) "Double Hundred Markets Upgrading Program" launched in 2006. The latter seeks to upgrade wholesale markets by, inter alia, associating 100 dynamic anchor firms (food retailers, logistic firms, cooperatives, and so on) with 100 wholesale markets in order to upgrade operations and sow the seeds of best practices through business linkages and example. The Double-Hundred program also seeks to better link farmers to dynamic urban markets by improving their access to wholesale markets. At the same time, the goal of MOFCOM and of Metro is to increase farmer capacity to implement good practices for quality and food safety, and to increase urban consumer access to safe food that is traceable and labeled with origin.

Here we focus on the Metro program sourcing from farmers in Hefei. The program is designed to source fruits and vegetables, pork, poultry and eggs, and fish and other freshwater products. The supplying side is the area around Hefei in Anhui Province. Metro buys from a half dozen leading cooperatives and farming companies which are composed of many small producers. Several actors participate:

- (a) Metro itself has a cross-docking distribution center to receive product; that operation provides product safety and quality monitoring, training and communication, local interface with third party auditing and service providers (such as certified slaughterhouses), local government, producer associations, and university partners, and of course the logistics and processing activities of collection and on-distribution to Shanghai.
- (b) The local government (of Hefei) provides investment in logistics infrastructure as well as inspection and certification services (the latter through the food inspection division). This is supplemented by provincial and national government investments in local infrastructure.
- (c) Farmers associations or cooperatives bulk the product from member farmers and deliver to the cross-dock operation, and monitor members for good practices in production and handling.
- (d) The Hefei Agricultural University supplements normal extension services by providing specialized training and applied research for example in packing and processing methods.
- (e) Third party auditors monitor the operations for product quality and safety, and environment.

This innovative combination has several advantages from several viewpoints that create a "win-win" situation.

- (a) Metro gains and creates a quality-assured and traceable sourcing operation which cuts several components of cost by shortening the supply chain. Metro also benefits from government investment in logistics on the supply side, and from university extension to its own suppliers.
- (b) Governments at various levels enlist the action of a powerful marketing agent (Metro) to create incentives for food supply chain improvement programs that in any case form part of their longer term objectives, but need innovative measures to address certain issues such as traceability and food safety for which regulation and training alone are usually insufficient.
- (c) The Agricultural University gains (which means long-term capacity building in the province) because they have high-end (quality differentiated) practicum and research/extension opportunities.
- (d) The farmers gain because they can have fixed prices with stable client relations that diminish risk, and can increase their marketing of quality-differentiated product, which appears to be limited in traditional market situations. They also gain from increased extension and infrastructural investment which the university and the government provide.

The receiving side is in Shanghai, arguably the fastest growing urban food market in the world, and a city where a rapidly growing middle class seeks quality food (and apparently is willing to pay for quality) and the government and the consumers are increasingly concerned about food safety and so may be responsive to origin and safety labels. The Metro operation in Shanghai provides market information (prices, volumes, packaging, and product types) required, and receives the product in its distribution center there, as well as its planned platform at a wholesale market.

This program is new and thus its impacts have neither fully developed nor been evaluated. We thus cannot state what benefits or costs will come out of it. However, as an innovative program that combines a number of players in private-public partnerships, and also fits into larger development plans of the government, it appears to hold promise and should be observed by governments and private sectors in China and elsewhere who seek to promote market linkage opportunities for small farmers.

- (5) ***Bimandiri, specialized wholesaler, linking with small farmers melon Coop with help of Syngenta, for retailer Carrefour:*** Bimandiri (based in Lembang, near Bandung in West Java, Indonesia) took the first steps to a "preferred suppliers" system in 1998, contracting a farmer group (of 60 farmers) "Horticultura" in Garut (40 km from Lembang); the link was with the head of the group. A subgroup of 30 farmers exited from Horticultura in 2001 and formed "HPSMI." By 2001 HPSMI decided to make a deal with Syngenta, the seed/chemical supplier from Switzerland operating in Indonesia. HPSMI needed credit and technical assistance from the Syngenta Farmer Support Team (FST) (both of which it felt it could not get from the public system) and so in 2003 it changed its name to ASPIRASI (Asosiasi Petani Mitra Syngenta). It is one of 9 such farmer groups that Syngenta formed as small joint ventures at the farmer level in Java. There was thus in 2003 a "4-way" venture between Carrefour, Bimandiri, Aspirasi, and Syngenta.

In late 2001 Bimandiri went to Yogyakarta (about 8 hours distant) and contacted the farmer group "Mekar Buah" with about 100 farmers. Carrefour wanted a personal-size watermelon, and Mekar Buah was growing the large size. Bimandiri worked with the head of the group to experiment with and then start an outgrower scheme with the best 50 out of the 100 farmers (important point), and brought in Syngenta for technical assistance (for low-pesticide use practices) and input credit, and brought in a local investor to finance the operation—and the farmers got twice the per kg price for this product compared to the traditional product. Carrefour was buying the low-pesticide personal-watermelons ("baby black watermelon—*bimandiri*" is the label on the fruit). The goal had been to also export via the Carrefour system.

While similar attempts continue, these first two experiences were discontinued by the various parties. The essence of the problems encountered were two-fold: (1) in the case of the melons, a marketing issue/problem arose such that it was not possible to implement the quality program with the usually-sought exclusivity of the product; (2) in the case of the ASPIRASI, marketing coordination became uncertain, with all parties uncertain as to how much they could count on to be marketed, and thus risk undermined the relationship. The general assessment is that the incentive to develop such relationships continues, in order to overcome inadequacies in the enabling environment for farmers and marketers, but that continued work will be needed on the design and organizational side of new arrangements.

- (6) ***Celebrate Life Agriventures Philippines Inc., a Farmer Company exporting quality Bananas to Japanese wholesalers:*** This company was founded in 2004 and sells "highland sweet bananas" at premium price to Japan, for environmental, social, and quality characteristics. The core company undertakes management, marketing, and investment; the core company is under market contract with wholesalers in Japan who on-sell to supermarkets; the core company is in joint venture with (indigenous) farmers, who are formed into a cooperative who own the plantation, contract labor, hire equipment, manage the watershed, and undertake community improvements. This model supplanted in the same area, a transnational-domestic joint venture producing the same product but using farmers as contract scheme. The new joint venture with the coop notes that the share of profit captured by farmers is higher under the new model and produces a broader effect of community development and watershed protection.

References

- Bhavani, T. A., A. Gulati, and D. Roy. 2006. "Structure of the Indian Food Processing Industry: Have reforms made a difference?" in "Plate to Plough: Agricultural Diversification and its Implications for the Small holders in India", A report submitted to Ford Foundation, International Food Policy Research Institute, U.S.A.
- Burger, K., D. Kameo, and H. Sandee. 2001. "Clustering of Small Agro-processing Firms in Indonesia," *International Food and Agribusiness Management Review*, 2 (3/4): 289-299.
- Natawidjaja, R., T. Reardon., and S. Shetty, with T. I. Noor, T. Perdana, E. Rasmikayati, S. Bachri, and R. Hernandez. 2007. *Horticultural Producers and Supermarket Development in Indonesia*. UNPAD/MSU Report published by the World Bank/Indonesia, June
- Pingali, P. 2006. Westernization of Asian diets and Transformation of food systems: Implications for research and policy", *Food Policy*, 32 (2006) 281-298
- Reardon, T. and C. P. Timmer. 2007. "The Supermarket Revolution with Asian Characteristics," chapter in by A.M. Balisacan and N. Fuwa (editors) *Reasserting the Rural Development Agenda: Lessons Learned and Emerging Challenges in Asia*, Singapore: Institute of Southeast Asian Studies, and Southeast Asian Regional Center for Graduate Study and Research in Agriculture.
- Reardon, T. and J. A. Berdegué. 2007. The Retail-Led Transformation of Agrifood Systems and its Implications for Development Policies—A Background Paper Prepared for the World Bank's World Development Report 2008: Agriculture for Development. Rimisp and MSU: January.

Table 1—Classification of Approaches to Connect Small Producers to Modern Agrifood Companies

	2. Organization of the producers	Cluster (no collective management, just loose association)	Cooperative (meta management but individual producers)	Company of producers (members as shareholders)	Individual farms or small agrifood enterprises
1. Organization of the linkage itself					
a) Final buyer direct -contracts ¹ the producers		furniture clusters in rural Indonesia	Mother Dairy, India	Mahagrapes, India	Namdhari Fresh, India , contract scheme with individual farmers; Carrefour in China; Metro in China
b) Final buyer Indirectly -contracts (via specialized-wholesaler) the producers			Bimandiri, Indonesia for Carrefour contracts Mekar Buah (coop), melons	“Celebrate Life Agriventure, Philippines” bananas	
c) Ditto, via NGO					

¹ Here we use ‘contract’ in the Hueth et al. 1999 way, which is the broad definition (can be unwritten, informal, just preferred suppliers in a list, just anything where there is some tangible or intangible cost from withdrawing from the relationship, which can be tight or loose).