

Preliminary Investigations into the Local Impacts of East Asian Agri-Food Restructuring

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ABSTRACT

Globalization is a concept that focuses attention on the economic, political and socio-cultural organization of human activity on a global scale. In positing a universal process, the concept of globalization nevertheless has many diverse empirical manifestations at various levels: regional, national and sub-national. Although globalization is instituted politically, via multilateral and regional agreements, and authored by nation-states, it can be usefully studied at the local level as an expression of national/regional processes of restructuring.

This paper attempts to isolate some of the local impacts of global restructuring in East Asia, which has become a dynamic regional hub of economic, political and cultural change within the global order. In the agri-food sector, a transformation of agricultural production and food distribution and consumption is taking place, primarily under the control of firms indigenous to the region. The resulting changes are having profound impacts on the people and communities of Asia that grow, process, market and consume the foods that are being produced within this regionalized food system.

Preliminary insights into the dynamics and impacts of the regionalization of the East Asian agri-food system, within the context of globalization, are developed. Rural areas that specialize in agricultural production for regional trade have undergone a rapid transformation in what commodities are produced and how they are grown. We present data obtained during field research in Shandong Province, China, and in South Korea in the spring of 1999 that documents how the restructuring of agriculture has taken place over the past decade, and what some of the impacts of that process have been. Among other findings, our research indicates that 1) networks, rather than individual firms, are key organizational actors in this restructuring; 2) increased export activity increases producer vulnerability within the agri-food system; 3) local markets are increasingly becoming residual markets for the agri-food export sector, and 4) producers and the day laborers are becoming increasingly vulnerable to the vagaries of the global market.

Introduction

The ongoing process of economic, social and political restructuring that is affecting people the world over is as pronounced in the food and agriculture sector as it is in other areas of the global economy. Global food commodity chains that are constructed and managed by private, multinational enterprises are expanding everywhere [McMichael, 1994]. This restructuring of globalizing agriculture capsules three interwoven ideas: increasingly the historical forces organizing agriculture are global forces; increasingly the main organizations bringing about significant changes in agriculture are organized globally; and increasingly the historical form of agriculture in this era involves the organization of integrated, often global, agro-production systems [LeHeron, 1993].

Yet, while the concept of globalization refers to the global restructuring of production systems, it is equally important to remember that processes associated with globalization are expressed in local social and ecological relations [Whatmore, 1994]. By this we mean that global and local mutually constitute, such that local decision-making is a key part of the process of global restructuring. Thus, the analysis of globalization's effects at the micro-level, as they affect people's daily lives in specific places, provides important information regarding locally informed decision-making and how that in turn shapes the complex of global relationships. In other words, globalization is a transformative process with a variety of local faces and inputs.

The goal of our project has been simply to understand how the process of globalization is unfolding in specific rural areas in a part of the world where the impact of the global restructuring of food and agriculture has not been extensively studied -- East Asia (but see [Jussaume, 1991] [Jussaume,

1998] [McMichael, 1993] [McMichael, 1994] [Rosset, 1999] [Burmeister, 2000]. There are many unique aspects to the process of agri-food globalization in East Asia that make it an useful case study for investigating how globalization is unfolding in specific places. These include a) the presence of indigenous multinational agribusinesses, including Japanese trading companies, b) the existence of a dynamic fruit and vegetable trade within East Asia, that is focused in part on the trade of culturally distinct foods, and c) a rapid period of transformation, particularly in certain parts of China, where the shift from a state-centered to a market-centered economy had taken place largely over the past twenty years.

The data presented in this paper were collected during the spring of 1999. In March of that year, our team visited three villages in Shandong Province, in Northeastern China. The following May, team members visited villages in Chollabuk Province in South Korea. Secondary data on Provincial Structure were collected, and interviews were conducted with farm household members, and agribusiness firm representatives in both of the regions. This data is used to help describe the current condition of local life in two areas that have become major sites for vegetable production for export, particularly to Japan, over the past ten years.

Project Objectives

A great deal of effort has been spent in recent years in defining and describing the global processes associated with globalization. Progress has been made in conceptualizing globalization as an all-encompassing process, as well as the role of state and capital in promoting this process. However, it is not our intent in this paper to review those definitions or insights. The specifics of how globalization is represented at the global level are not of major concern to us in this research. We simply begin by recognizing that more and more production systems, including agri-food systems, are being re-organized on regional and global levels by large-scale, private capital.

Of more interest to us is what does globalization mean for people in specific local places during their everyday lives. As Symes [1992] argues, a major challenge for contemporary Rural Sociologists with an interest in globalization is to study the effects on, and contributions of, people involved in global processes. Ward and Almas argue that what is needed are "more nuanced and interactionist approaches dealing with the relations between global restructuring and local change, or between globalization and localization" ([Ward, 1997] p.619). While we view globalization as a locally expressed process, rather than as separate from the construction of locality [McMichael, 1996], nevertheless the methodological task of specifying such local expression is not straightforward. Cross-sectional comparison, of communities in or outside of global circuits [Dicken, 1992] does not necessarily reveal the impact of globalization on 'globalizing' communities because there are no 'control' cases that are unaffected by the restructuring of states and markets. In addition, there is an absence of accurate, reliable measures of the impacts of globalization [Okada, 1993]. Our own inclination is to focus on the process of involvement in agri-exporting in targeted communities, employing a comparative, cross-time perspective.

Despite the tremendous interest in understanding the local embeddedness of globalization, there are few studies that have been successful at developing empirical assessments of the positive and negative consequences of globalization at the local level. Pacinoe [1997] argues that globalization disadvantages people and places that are marginal to the process of capitalist development, but his argument is based more on reasoning than empirical evidence. One of the few examples, in rural sociological circles, of a case study of the impacts of globalization on rural people is that of Leach and Winson [1995]. Based on interviews conducted in a Canadian rural community, their "study supports the view that corporate restructuring has entailed a deterioration in the lives of working people. For most of our respondents, restructuring has meant a substantial drop in household income, even when reemployment occurred and, paradoxically, sometimes even when reemployment meant a job at a higher wage rate" ([Leach, 1995] p.361).

Recognizing the methodological and logistical challenges, our study seeks to contribute to an understanding of some of the local processes and consequences associated with globalization by

providing a preliminary empirical assessment of what the regional restructuring of agricultural production and food systems has meant for rural residents in East Asia. Specifically, we are interested first and foremost in whether shifts in local production strategies towards producing for export markets has improved the quality of life for people in specific regions of East Asia. In addition, we are also interested in the decisions and organizational shifts through which local producers enter into global circuits.

The field research consisted of two, one-week field trips to Northeastern China and South Korea. In China, three villages in Shangdong Province were selected as the location for the site visits. Shangdong Province is one of the main agricultural exporting regions in China, with an emphasis on horticultural crop exports to Japan. Seventeen households were visited in these three villages. Each household was subject to a two-hour interview. Questions were raised about the size of the household, its agricultural production practices, and in particular its relationship with firms that process vegetables for export to Japan. In addition, interviews were conducted at the two major vegetable processing firms that are located near those three villages.

In South Korea, the research team visited three different sites which produce vegetables for export to Japan: Sedomyun town in Chungchungnam-do Province for cherry tomatoes, Koyangkun county in Kyongki-do Province and Chollabuk-do Province for paprika, and Chollabuk-do province for eggplant. All three items are produced in greenhouses and are capital (for greenhouse construction and maintenance) and labor (especially for harvesting) intensive. Sedomyun is the largest cherry tomato production area in the country and has been aggressively exporting to the Japanese market in recent years, in part due to the encouragement of the central and local governments. During our team's research trip, in-depth interviews were made with 7 farmers and 4 persons who are in related businesses, such as a seed shop and a greenhouse constructor. Follow-up research was conducted in the winter of 1999 by a member of the Korean research team.

The production of paprika and eggplant is different from cherry tomatoes in the sense that they are produced in farms that are socially secluded from the community. In these two cases, one or two large farms of vinyl or glass houses are located in the rural area and they specialize in exports to Japan. Three paprika farms were visited and unstructured interviews with the owners and managers of the farms occurred. The Korean research team visited and interviewed the owner of one eggplant farm. In addition, several employees of agricultural cooperatives and trading companies were interviewed to construct a more comprehensive picture of Korean vegetable export farming for the Japanese market.

In addition to conducting interviews with farm households and firms in each of the two sites, team members also collected secondary data on the structure of agriculture in the area. Combined with the interview data, this information provides us with a preliminary view about how agricultural production activities have changed in the two regions in recent years, and what some of the impacts of those changes have been.

Evidence from China

The first site visited in China was A village. There are approximately 250 households in this village. Until 1992, most of the farm households in A village were primarily producing grain crops (wheat, corn and peanuts), with a limited amount of animal husbandry. The raising of animals was generally for meat products that were consumed by the producing households. Households began shifting to vegetable production in 1992, and now most households are producing vegetables on contract for the B food group, which is comprised of 4 associated agri-food firms, with 8 production facilities. The core firm of this group was founded in 1982, and originally focused on meat production. Meat sales were not very robust, but it had an export license from the government, and being in a coastal region, it soon shifted to frozen seafood production. It later expanded into frozen vegetable production and export.

This firm, and region, does not specialize in one or two main commodities, but rather a cluster of commodities. In the case of B food group, commodities prepared and exported overseas included turnips, burdock, taro, green and white asparagus, lotus root, carrots, spinach, green peppers, green

beans, garlic sprouts and maocai. These products are processed separately, and as part of a mixed or rolled vegetable product. In essence, the commodity under production is frozen vegetables, but having to process such a diverse variety of vegetables undoubtedly complicates the production process from the standpoint of establishing and enforcing standards, in the fields as well as in the factory.

Of the four households we visited in A village, three were under contract with B food group. In the early years of frozen vegetable production, B did not contract with farmers, but instead worked through intermediaries. Recently, however, B has shifted more of its production to grower contracts. This is a major undertaking given the small size of Chinese farms. B food group estimates that it has 8,000 farm households, with a total of 40,000 mu (2,680 hectares) of land, under contract. One interviewee, a woman who farms 2.2 mu, stated that she preferred the contracts to selling through wholesale markets. This was because B provides her with seed and fertilizer interest free until harvest. She also does not have to worry about marketing her crop.

From the standpoint of B, an independent firm group whose core employees own about three-quarters of its stock, one advantage of contract farming is price stability. When local supplies are abundant, the prices it pays to farmers on contract will be above the local average, but in years when supply is short, its prices will be lower than prevailing market prices. Also, B can have better control over production quality when it uses contracts, because it equips contractees with technology, including seeds that are provided by a Japanese client. Finally, B is using its contract system for sourcing organic commodities. Demand for organic frozen foods from clients is growing, and contract production enables B to have the quality and supply it needs to meet this demand.

However, while some households are apparently satisfied, we did meet some individuals who have given up their contract with B. One respondent claimed that her household dropped its contract because B was often in arrears on payments. We also learned that B does continue to buy some of the vegetables it processes on the open market, generally from farms in villages that are the furthest away from the processing facility. This suggests that there is a geography to the contracting system that needs to be explored, and also suggests that one impact of the regionalization of the food production system are spatial inequalities with respect to access to inputs and markets.

It may well be that contracting is the exception, rather than the norm, in Shandong Province. In the remaining two villages we visited, there was virtually no contracting at all. Both C and D villages have a comparatively longer history of vegetable production than C village, dating back to 1983. This was the historical period in China when the household responsibility system was being introduced. Land cultivation rights were returned to farm households in China between 1978 and 1982 [Kerkvliet, 1998]. In D village, we interviewed four farm households, all of whom were producing fruits and vegetables under greenhouse conditions. In C village, we interviewed eight households, who produce vegetables on open ground. On two households in C reported that they occasionally have contracts. Nonetheless, much of the production from both of these villages is exported.

The lack of contracts is possibly due to the fact that E enterprises, which has a processing facility in the area, prefers to utilize seasonal, spot purchases for its raw materials for producing frozen vegetable products. Only 10 percent of E's raw material is purchased through contracts. However, E enterprises does not purchase its commodities at a wholesale or retail market. These intermediaries, who often have political or economic influence in their villages, fill purchase orders for E during the harvest season. Thus, the price E pays usually rises and falls in conjunction with seasonal market prices in the region.

One farm household we met reported that they prefer to sell to E when possible, as opposed to selling their produce in local markets for domestic distribution. The reason is because prices paid by E tend to be higher than local market prices. However, the factory does have specific, and comparatively rigid, standards for the product it buys. As an example, the interviewee mentioned that green beans must be between 8 and 11 millimeters in thickness and 8 to ten centimeters in height, and the farm households must put in extra labor to pre-sort for the factory. A second problem that has arisen in recent years is price variability. Many households have begun putting in extra effort to produce export quality vegetables, but due to declining export demand, orders and prices have fallen. For example, cucumber prices dropped so radically in 1998/99, that some informants told us that they have had to throw cucumbers they harvested during that season because their was no economic benefit

in getting those cucumbers to market.

One clear impact of the development of the responsibility system and increased use of export markets in China has been the exposure to price volatility. This was revealed to us during our visit by the many requests we received from farm household members for information on overseas markets, particularly Japan. These farmers, who only a decade or two ago were selling much of their crop to the Chinese government, now recognize the need for early, accurate information on potential demand for specific vegetables so that they can plant commodities for which there might be higher prices at harvest time. Unfortunately, there does not appear to be an objective, independent sources of market information for Chinese farmers in this region. While the state has abandoned buying, they have not begun to provide many of the services that farmers need to survive in market capitalism. Farmers must depend on the information they receive from company buyers, which, according to our respondents, is often inaccurate.

Yet, we would also note that many farm householders we met are happy with the economic possibilities that producing for the market brings. It is important to note that Shandong, in part because of its geography and location, is the only province in China to have experienced above average economic growth both before and after 1978 [Wei, 1998]. Many observers of China have noted that inequalities exist across regions and households, and that many of these have increased in recent years [Bramall, 1993]. We witnessed an expression of this with the large numbers of day laborers looking for work (at approximately \$2.00 per day) in one of the villages we visited. At the same time, many farm households, at least in the region we visited, have experienced new economic opportunities as a result of producing for export markets, which undoubtedly helps to explain why many local residents support many of the policy changes that have taken place recently China.

Evidence from South Korea

Cherry tomatoes

Sedomyun town has been famous for many years for tomato production because of fertile soil and affluent water. However, the shift from regular tomato to cherry tomato production is a recent phenomenon. With the liberalization of Korean agricultural markets and the implementation of the WTO system in 1991, the Korean government began to emphasize diversification, which meant a switch from rice to horticultural farming. To promote this policy, the government provided financial subsidies to more adventurous farmers who built greenhouses to plant flowers and fresh vegetables. Thus, prior to 1994, 40 percent of total greenhouse building expenses in South Korea were subsidized by the government and 60 percent were low interest loans provided by the National Agricultural Cooperative Federation. Some farmers in Sedomyun town used this opportunity to build greenhouses and plant cherry tomatoes. Early innovators made money and more farmers joined them.

There are 820 households in Sedomyun town and 570 farms are involved in tomato production. Among the 30 villages in the town, Kahoe and Kwiduck Villages specialize in cherry tomato production in vinyl greenhouses, which is referred to locally as "facility production," (in contrast with "outdoor farming"). Facility production is capital intensive and the bulk of the initial development funds came from the government through the Agricultural Cooperative Bank in the form of subsidies or low-interest loans. Farmers began exporting cherry tomatoes to Japan, Hong Kong, and Russia in 1994. Exports peaked in 1998 with 210 tons of tomatoes being exported through the Agricultural Cooperative Trading Company and a couple of private traders. Local Agricultural Cooperatives play a key role in the organization of the cherry tomato export system. The process begins when Japanese buyers relay their cherry tomato orders to Korean exporters, such as the Agricultural Cooperative Trading Company. The Korean exporters in turn ask local agricultural cooperatives to collect tomatoes from farmers. The Local Agricultural Cooperatives then select and purchase the tomatoes from the local producers.

Cherry tomato export volume depends on the differential between the Japanese and Korean market prices. There is no long-term contract between the importer and producer. It appears as though the Agricultural Cooperative, and not farmers, is the most active actor for promoting exports.

Exports are symbolically important as a Ministry of Agriculture and central government policy goal for overcoming the Korean agricultural crisis, especially the liberalization of the rice sector. At the same time, the Korean government looks for exports to solve overproduction and low price problems in the production of certain commodities.

The key findings from the interviews with the cherry tomato farmers were as follows:

- (1) Because too many farmers across South Korea have begun to grow cherry tomatoes, the price has declined sharply, which has contributed to financial instability for local farmers;
- (2) The large capital investment for building greenhouses has become a serious problem. Government subsidies are no longer available and farmers are borrowing heavily from cooperative banks or other private financial institutions. Cherry tomato producers have accumulated much more debt than rice farmers.
- (3) Wage labor is important in cherry tomato production. Male owners have become "capitalists" hiring local females (often in their 50s and 60s) as workers for planting and harvesting.

Paprika farms

Three paprika farms were visited. The owners and a manager were interviewed. Paprika has become an important fresh vegetable export to Japan in 1999. Since there is almost no demand for paprika in Korea, most of the paprika produced in Korea must go to the Japanese market.

One paprika farm (Hankuk Nongwon) in Kyongki-do Province is operated by 13 farmers who participate in a type of joint stockholding structure. The glasshouse is 20,000 square meters in size and many of the operations, including watering, humidity control, temperature, and light control, are fully automated. The farmers formerly grew roses, but because due to overproduction, they changed to paprika in 1998. One hundred percent of their production is exported to Dole-Japan via the Agricultural Cooperative Trading Company. A "verbal contract" is made with Dole-Japan, which is competing in the Japanese market against other firms who import paprika from Holland, New Zealand, and Saudi Arabia. Profits are not assured because of high heating and labor costs. Seeds, most other inputs, and technical advice are provided by Dutch experts. The farm hires 25 workers a day. Each worker receives 27,000-40,000 Korean won (equivalent to around 30 US dollars) per day in wages.

Two other paprika farms are in Chollabuk-do Province, which is about a 4-hour drive from Seoul. They are both similar to the one in Kyongki-Province and they also do business with Dole-Japan. One particular farm (Chamsem) was proud to be designated as the only "Dole Family Farm" in Korea. They began producing paprika in 1996 without any guarantee of a market. The Agricultural Cooperative Trading Company played a role in making contact with Japanese buyers. Now Chonbuk Trading Corporation, a semi-statal, provincial level firm, is playing a mediating role between the paprika farm and Dole-Japan.

The key findings from the interviews with paprika farmers were:

- (1) Production is extremely capital intensive because of the expensive glasshouse building and automated facilities; government subsidies initially were very important;
- (2) Technical advice by foreign experts from Holland and Belgium is important for a good harvest;
- (3) The paprika farm owners are not "typical" farmers: their educational level is high (college and even graduate school). One owner worked for a prestigious company before growing paprika, and all of the owners are very alert to Japanese market conditions;
- (4) According to the interviewees, close ties (or mutual trust) exist between the paprika farm owners and Dole-Japan. They work together to penetrate the Japanese paprika market.

Eggplant

We conducted interviews with an eggplant farm operator in Chollabuk-do. The operator is a member of an Export Task Team that has 14 member-farmers in the region. The Export Task Team was organized under the leadership of the Chonbuk Trading Corporation. Members collectively sign a contract with Japanese buyers who procure eggplant for processors or wholesalers. Eggplant selection is made collectively. The 37 year-old operator we interviewed complained about fatigue due to the constant monitoring. Eggplant farmers generally are younger than rice farmers because (1) eggplant production is labor intensive; (2) eggplant exports require entrepreneurship; and (3) the size of an

eggplant operation is smaller than rice paddies.

Japanese importers are very selective about quality and payment is made only after a careful product evaluation is completed in Japan. Eggplant prices are pre-fixed by different months: in December 18,000 won/kg, January-March 19,000 won/kg, and April-May: 16,000 won/kg for grade A eggplants. The price for grade B is half of grade A. Total sales are about 50-60 million won per year. Labor and heating are two important production costs. The vinyl greenhouse used on this farm was built seven years ago with the help of a government subsidy and loans. The owner initially produced watermelons but began to grow eggplants 5 years ago. The extension center of Chollabuk-do Province was important in his decision to grow eggplants for export.

The key findings from our interview with the eggplant farmer were:

- (1) The Chonbuk Trading Corporation is an important actor in arranging eggplant exports both financially and technically.
- (2) The Export Task Team is a stable provider of eggplants to Japanese importers and it seems that, unlike the cherry tomato case, there exists a rather stable relationship between the producer and the importer.

Implications from a Comparison of the Chinese and Korean Cases

The process of globalization has been felt strongly by farmers in both countries. In China, changes in state policy that allowed farm households to sell to the market, and increased access to the Japanese market, were key development. In South Korea, the launching of the WTO system and gradual liberalization of rice market were major events. In the latter case, farmers were angry and frustrated and these feelings were strongly expressed in the elections and street rallies. The Korean government tried to find a way to sooth the farmers and to provide alternatives in a difficult political situation. Opposition does not appear to have been as great in China. Perhaps this has to do with the economic situation of many Chinese farm households prior to 1980.

In the Korean case, the government felt compelled to come up with alternatives, like "export farming" and "facility production," to help farmers cope with liberalization. Thus, in the cases we saw, the government provided financial generous subsidies and low interest loans to farmers. Farmers, especially the younger and more adventurous ones, built greenhouses and began to grow flowers, cucumbers, eggplants, cherry tomatoes and paprika. In China, the state also encouraged farmers to export, and facility production was common in the area we visited. However, the state does not appear to have provided much in the way of capital, or even support (for example, market information). Rather, at least one firm we visited was providing interest free loans to farmers in the form of seeds and other inputs. Labor costs are also much lower in China, so it is likely that China is more attractive than South Korea to private investors in the agri-food industry.

Certainly, the public and semi-public sectors have been playing a very important role in fresh vegetable exports from Korea. From financing to export organizing, the Provincial office, Agricultural Cooperatives, Agricultural Cooperative Trading Company, Chonbuk Trading Corporation were important. This may be due to the politics of having to initiate "export farming" and "facility production" in the early 1990s in the face of widespread grower discontent with liberalization policies. Such opposition does not appear to have been strong in China.

There are, of course, many similarities between the Chinese and South Korean cases that we examined. First of all, while the absolute level of investment differs, vegetable production in both countries is capital intensive, as evidence by the extensive use of greenhouse facilities in commodity production. In addition, operations in both countries are both labor intensive. Certainly, neither location is suitable to land intensive cultivation of beef and grain crops, like the United States, Canada and Australia. Horticultural items also tend to be more susceptible to damage in transport, and especially in the case of China, many items grown are East Asian in character. Thus, farms focus on the production of horticultural commodities for export.

Second, the bulk of items are exported to Japan, via networks of various actors. In the case of paprika, the Korean producers are very active in monitoring the Japanese market and working with Dole-Japan. In the case of cheery tomato exports from Korea, it is the Agricultural Cooperatives who

play a key role in arranging exports. Eggplant producers are similar to the cherry tomato producers in size of farm, but are more active in organizing exports. They have extensive knowledge of the Japanese market situation and have formed an Export Task Team to collectively contract and select their produce. In China, meanwhile, locally owned firms have teamed up with overseas firms to secure commodities, arrange for processing, and organizing exports.

Third, rural social networks are being transformed. During the field research in China, we were struck by the daily labor market that we found in one of the villages, where the reported daily wage was \$2.00 per day, and where a large gathering of potential workers were present every morning. Also, many of the householders we talked with were very comfortable talking about markets, exports and prices, and were very concerned about overproduction issues. Unfortunately, we were not present long enough to be able to determine how these changes have affected community ties in the villages we visited, but the literature on rural transformation in China does frequently refer to the disparities and divisions that are growing between regions and households.

In the Korea setting, rice farming needed cooperation and collaboration among farmers in a community. However, now farms are being individualized as firms. They compete with each other for market access, better prices, and cheaper labor. In Sedomyun Town (cherry tomato), most farmers produce cherry tomato but there is no mutual exchange of labor that has been common in rice farming, even though social networks are still important for dealing with community affairs. The case of paprika is extreme. The paprika farm is an enclosure and there is almost no interaction with the local community. The owners of the paprika farm usually are not local people. They have bought land and built a large modern glasshouse, and the only interaction with the community is through wage-relations. They hire many workers, especially women for harvesting, selecting, and packing. As for eggplant, the new form of organization, i.e., Export Task Team, is important. This organization is for a particular goal, export, and does not necessarily overlap with the community. However, it is too early to tell exactly what kind of social impact this form of organization will bring about to the community, social relationships do appear to be undergoing some major transformations.

Conclusions

Our conclusions are preliminary in nature. Perhaps our greatest finding has been that the impacts of globalization are complex and require extensive study in specific locales. Our own research is limited in this regard, and we can only hope to propose some preliminary conclusions as to the impact of globalization on rural areas of East Asia at this time.

One finding we do have that we think is of tremendous import to the literature on globalization is that, at least in the East Asian example, a focus on individual, multinational firms as the promoters of the creation of global production systems is inaccurate. Rather, in both of the cases we studied, it was the networks, of domestic and foreign firms, that create the organizational structures that are prompting the restructuring of local agriculture. This does not diminish the power of what is taking place, but suggests that the actors of globalization are diverse.

A second finding has to do with the vulnerability of producers within this regionalizing agri-food system. Particularly in the context of the recent economic downturn in Japan, producers have quickly come to realize that the success of their farms is dependent on economic situations outside of their communities over which they have now control and have little knowledge. However, these same producers still accept the legitimacy of exporting as an economic strategy and maintain hopes of economic success. Clearly, local producers, or at least those who are engaged in producing commodities for export, are willing participants in the process of globalization. Unfortunately, we did not have an opportunity to interview some of the many part-time and day laborers who work in the fields and greenhouses we saw. A fruitful potential avenue of future study would be to compare the lives, and ideologies, of growers and workers in these facilities and on these farms. In particular, does labor view the transformation in production systems and the development of export markets with the same enthusiasm as producers?

Finally, we found that local markets are often, but not always, a residual market for producers

who are growing for export. This was particularly apparent in China, where domestic prices for the same commodities are lower, although in order to be able to sell to the export sector growers must follow higher standards. The major exceptions to this trend were the South Korean paprika growers, where there is no significant domestic market for their commodity.

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