

The Dilemma of Rural Development and Agricultural Market Opening in Korea: The Perspective of Farmers

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한국의 농촌개발과 농업시장개방 문제: 농민의 관점

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Abstract : Based on a survey sample of farm households in three provinces of Korea, this article reports the perspectives of full-time farmers regarding trade liberalization, its effects on their lives, and the future of small-scale farming. While the agricultural sector is being transformed under neoliberal policies, farmers, with little or no preparation for a global market order, are forced to modernize their farming operations. The findings from the survey indicate that farmers accede to terms of global integration in principle while disapproving state rural policies in practice. The survey data also confirm that intra-regional differences in farmers' perceived satisfaction with living conditions, government farm policies, and socio-economic/labor issues. Disparities in the degree of discontent with government policies and socio-economic well-being are explicit between the relatively diversified region of Kyonggi Province and the farming-dependent regions of Chunbuk and Kyongbuk Provinces. The overall findings uphold that most farmers who have not been fully exposed to free market mechanisms are confronted by increased uncertainties and economic hardships. The findings propound that agricultural/rural policies need to reflect long-term, macroeconomic changes, and regionally/locally-based agricultural structure.

Key Words : agricultural trade, rural development, regional comparative studies

요약 : 본 연구에서는 경기, 전북, 경북의 전업농을 대상으로 한 설문조사를 기초로 농산물 무역 자유화 및 농촌의 사회경제적 문제에 대한 농민들의 견해와 그 지역적 차이를 살펴보았다. 농업부문이 보호주의 및 규율체제에서 무역 자유화를 통한 자유시장경쟁체제로 전환됨에 따라 농민들은 세계시장체제에 직접적으로 노출되어 농업 기술과 경영면에서의 현대화를 강요받고 있다. 농민들은 원칙적으로 세계시장체제로의 통합에 대해서 긍정적 반응을 보이고 있으나 실제 이행되고 있는 자유시장정책들에 대해서는 부정적 반응을 보이고 있다. 설문조사 분석 결과 농민들의 생활환경에 대한 만족도, 정부의 농업정책, 노동력 부족 및 농촌의 다양한 사회경제적 이슈들에 대한 관심과 우려는 지역간 차이를 보였다. 대체로 급속한 도시화를 겪고 있는 경기도의 농민들보다는 전북과 경북 농민들의 정부의 농업정책에 대한 회의적인 반응이 높게 나타났다. 자유시장경쟁체제의 메커니즘을 경험하지 못한 농민들은 Uruguay Round 협정의 완결 및 WTO의 New Round 출범으로 앞으로 더 증폭된 경제적 불확실성을 겪을 것으로 보인다. 이는 농업 및 농촌 관련 정책들이 보다 장기적이고 거시적 경제계획의 틀을 바탕으로 지역적으로 상이한 농업구조와 특색에 맞추어 입안·실행될 필요가 있음을 강조한다.

주요어 : 농산물 교역, 농촌개발, 지역비교연구

1. Introduction

1) Purpose of the Study

Agriculture all over the world is currently being

restructured in conjunction with international economic integration partly led by supra-national organizations such as the WTO (World Trade Organization), the IMF (International Monetary

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Fund), and the World Bank. Among the major events arranged by international organizations, the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), which concluded in December of 1993, had immediate impacts on the domestic farm policies of many nations, despite the fact that the implementation of most new regulations is not required until 2004 or later¹⁾ (Schott, 1996; Lawrence et al., 1996).

While the agricultural sector is being transformed under neoliberal policies, farmers in Korea, like most agricultural producers in export-oriented industrial countries, are being forced to modernize their farming operations. A majority of farmers in Korea, who are comparatively disadvantaged due to small-scale, labor-intensive, family-oriented farming, is facing a myriad of problems associated with increasing costs, falling returns, massive amounts of debt, and overflowing imported agricultural products. The Korean public, despite their recognition of the necessity of globalization, continues to believe it is the government's responsibility to assure that policies and programs are in place which assure, without fail, a satisfactory amount of food for domestic consumption. The changes occurring in accordance with neoliberal policies, to a certain extent, pose a threat to the future of the small family farm as a way of life and livelihood where living conditions have not kept pace with those in urban areas.

Emphasizing the importance and complexity of this transition era, much has been written from various perspectives on the effects of the GATT/WTO-driven reform of world agricultural systems. Most of these studies employ a macro-perspective and evaluate the possible effects of GATT/WTO-mandated reforms on either the entire trading system (Bredahl et al., 1996; Tangermann, 1996), a given commodity (Moore, 1993), a particular type of nation such as the LDC's (Jaeger and Humphreys, 1988; Matthews, 1994; Thrupp, 1996, 24-25), or even a single country (Coffin, 1988; Han, 1994). This article also addresses the influence of the GATT/WTO, but from a differ-

ent angle. It discusses results from a survey designed to investigate the perceptions of Korean farmers and their families—those people most affected by free, open, and unsubsidized trade in agricultural commodities.

The focus of this study is placed upon how the lives of farm families have been affected by changes in the direction of government policies. In other words, the purpose of this study is to better comprehend the external global influences upon the agro-food sector of Korea and to explore changing rural socio-economic conditions faced by farm households. The methods employed to acquire empirical data used in this study included a mail survey and personal interviews. For survey areas, Kyonggi, Chunbuk and Kyongbuk provinces were chosen on the basis of their level of dependence on agricultural activities, their levels of economic development, and their geographic locations.

2) Theoretical Context: The Global Food Regime

In understanding the global trade environment in relation to the agro-food sector, it is useful to consider the food regime perspective and the concept of the world division of labor. Within the conceptual framework of the food regime, articulated mainly by Friedmann and McMichael (1989), domestic industrial restructuring and agrarian change are regarded as a complex, interrelated process driven by the international political economy (Buttel and Goodman, 1989; Lowe et al., 1994; McMichael, 1994, 1995). In a sense, agricultural trade liberalization in most nations could be interpreted as the working of the global regulatory mechanism on the current food regime.

The concept of a global food regime could be utilized as an empirical category (Lowe et al., 1994, 9). Two food regimes characterizing the different capital accumulation processes can be identified in history.

The first food regime which was formed in the late nineteenth century relocated capitalist agriculture to the New World. The rapid increase of food

production in the "settler states," specifically in the U.S., Argentina, and Australia, and the food exports from these regions characterized the first regime (Friedmann and McMichael, 1989). The new frame of agricultural trade between nation-states replaced the traditional colonial trade in tropical agricultural products as the most important force shaping the world food system. The first food regime, however, ended during the economic crisis occurring after World War I.

Subsequently, U.S. industrial and agrarian development formed the basis of the next food regime. That is, the second mechanism for the world agro-food sector was produced chiefly by the U.S. following World War II. Price stabilization, farm household income support, and development incentives under the aegis of the New Deal offered the initiatives for the reconstruction of U.S. agriculture. Essentially, this food regime was based on regulation of national economies by nation-states until the global economy encountered the energy and food crises in the early 1970s. After the crises, the national regulatory mechanism was interrupted by the rapid expansion of transnational corporations which seemingly became the organizers of global production and trade.

With the end of the era of economic regulation by nation-states, the proponents of the food regime concept maintain that a new third global food regime is being organized (Le Haron and Roche, 1995; McMichael, 1993, 1994, 1995). The new regime is marked by the Uruguay Round of the GATT, where the U.S. and agricultural-export countries sought to extend free trade to previously excluded agricultural markets in Europe and in East Asia. McMichael (1994) argues that it may not be U.S. producers who benefit, but the transnational corporations which have helped form a new international division of labor via their global sourcing strategy. The development of transport and communications technology freely allows transnational corporations to take advantage of cheap labor overseas and promotes the

globalization of production rather than the national-based production. This division of labor is based on the export of low-value staple crops from developed countries and the export of high-value fruits, vegetables, and meat from developing countries. By subordinating producing regions to global production and consumption cycles, this system might threaten the stability of the national agricultural sectors.

Friedmann (1995) views the Uruguay Round agreements as a vehicle promoting global food trade based on durability and regulated by transnational corporations. This is in conflict with embedded regional order of food production and consumption. The issues represented by this regional order are nutrition, food safety, employment, the environment, land use, and cultural expression as political issues (Friedmann, 1995). The eventual outcome of the GATT negotiations would seem to be the reorganization of world agriculture under corporate privileges, where the family farms of most nations emerge as potential losers. The state still plays the role of the negotiator between the global marketplace and the farmer, and yet the concept of food regimes provides a rationalization that the external factors would be more likely to constrain the scope of the actions nation-states could take in the twenty-first century.

2. Research Methods

1) Survey Development

The major factors posing structural adjustment problems of the Korean farm sector were identified from a review of previous research, a mail survey sent out to farm households in Kyonggi, Chubuk, and Kyongbuk Provinces, and personal interviews with farmers and local government officials. The purpose of the mail survey, which was conducted during June and July of 1997, was to explore farmers' perspectives on current rural socio-economic

issues and agricultural market opening, opinions about government policies in response to changing circumstances, satisfaction with living conditions, and short-and long-term plans for their farms and occupation²⁾.

For survey areas, Kyonggi, Chunbuk, and Kyongbuk were selected on the basis of their levels of comprehensive economic development, their level of agricultural involvement including crop specialization, and their geographic locations. These provinces were also chosen to explore whether regional sectarianism has played any role in shaping farmers' opinions on government policies, given the different regional political alignments for Chunbuk and Kyongbuk Provinces (Yea, 1994).

2) Methods of an Analysis of Survey Data

The survey data collected represent the respondents' opinions on various rural issues and demographic information. The survey data were examined on the basis of the respondents' locations, types of farming, socio-demographic characteristics, and self-reported quality of life.

First, in order to obtain a more comprehensive picture and to identify a combination of variables for subsequent statistical analyses, a factor analysis technique was employed.

Second, the composite indices were calculated according to representative variables from each factor. In other words, each composite index of opinions was made of the mean value of raw scores of variables loaded significantly on each derived factor.

Third, the univariate test procedures of analysis of variance (ANOVA) was used to compare the four indices of opinions by the criterion variables. That is, the indices were used in the analysis of variance to examine relationships between respondents' opinions and their location and socio-economic/demographic conditions.

With regard to independent variables, the respondents' provincial affiliations, types of farming, ages, educational levels, family sizes, and degrees of satisfac-

tion with living conditions were selected.

The criteria employed for classification of the categorical variables and the procedure of comparisons of the indices are as follows.

First, to compare regional differences of opinions, respondents' provincial affiliation was employed as a locational variable. Provinces of the survey locations were coded 1 to 3, with Kyonggi Province being 1, Chunbuk Province being 2, and Kyongbuk Province being 3.

Second, respondents were classified into three groups on the basis of their income structure. A cluster analysis technique was applied to classify different types of farming according to their income structure. Cluster 1 was named as "rice farming households"; cluster 2, as "mixed livestock and field-crop farming households"; and cluster 3, as "orchard farming households."

Third, the respondent's age, education, and family size were taken as demographic grouping variables. The respondent's age was categorized into four groups to compare the opinion indices. Categorical values for age are 1 for below 39 years of age, 2 for 40 to 49 years of age, 3 for 50 to 59 years of age, and 4 for over 60 years of age. The opinions of the elderly groups (older than 50 years of age) were assumed to be more in concert with rural policies than those of the young groups. It was also hypothesized that the educational level may have different effects on the farmers demand for and use of information in their decision making. Respondents' educational levels were coded as follows: 1 for no formal education or primary school education, 2 for middle school education, 3 for high school education, and 4 for college education or higher. In addition, given that the so-called "empty nesters" are assumed to suffer more from labor shortages than a large family, family size was categorized as follows: 1 represents two family members, 2 represents three to four family members, and 3 represents large families with five members or more.

Fourth, Index 1 indicating the degree of satisfac-

tion with living conditions, of which the method of calculation is explained in the next section, was also categorized into three groups: 1 for a high level of dissatisfaction (below 2.4286), 2 for a medium level of dissatisfaction (2.4287 to 2.8571), and 3 for a low level of dissatisfaction (over 2.8572). The higher level of dissatisfaction with the quality of life is assumed to be associated with the high degree of discontentment with government policies.

3. Labor Shortages, Trade Liberalization, and Skeptical Outlook in Rural Korea: Results of an Analysis of Survey Data

All of the scale items in the questionnaire were listed according to their subject categories in order to explicate the nature of question items and to clarify

their meanings to respondents. Therefore, it was anticipated that the items in an identical subject category would share the membership on the extracted factors. The result of this factor analysis, which produced four factors, indicated, to an acceptable degree, the validity of *a priori* categories of scale items.

As a next step, indices representing the four derived factors were generated from the mean scores of the representative variables that comprised the factors (Table 1). These indices of opinions generated through factor analysis were then compared according to the respondents' locations, types of farming, demographic characteristics, and self-reported quality of life.

The following tables report the results of analysis of variance. The mean values can be placed in context by locating them on a range of values from 1 for

Table 1. Indicators of Indices

Index 1 = Mean (Q1_1, Q1_2, Q1_3, Q1_4, Q1_5, Q1_6, Q1_7)
Where Index 1: The Degree of Satisfaction with Living Conditions
Q1_1: Transportation
Q1_2: Medical/Health Care
Q1_3: Cultural/Educational Facilities
Q1_4: Water/Sewage
Q1_5: Housing Quality
Q1_6: Garbage/Sanitation
Q1_7: Shopping Convenience
Index 2 = Mean (Q2_1, Q2_2, Q2_3, Q2_4)
Where Index 2: The Degree of Concern about Rural Labor Shortages
Q2_1: Shortage of Labor
Q2_2: Difficulty in Doing the Farming due to Aging
Q2_3: Increasing Abandoned Farmsteads
Q2_4: Difficulty in Finding a Potential Wife
Index 3 = Mean (Q3_1, Q3_2, Q3_3)
Where Index 3: The Degree of Skepticism toward Government Rural Policies
Q3_1: Do you think the governments policies are consistent?
Q3_2: Have you benefitted from the post-opening farm polices?
Q3_3: Have Agricultural/Livestock Cooperatives contributed to agricultural development?
Index 4 = Mean (Q4_1, Q4_2)
Where Index 4: The Degree of Concern about Agricultural Market Opening
Q4_1: Open markets will lower income
Q4_2: Effects of agricultural market opening

the lowest to 5 for the highest. As the mean values of the Indices increase, the respondents' satisfaction with living conditions and concerns pertaining to rural labor issues increase, while their skepticism toward government policies and concerns about the opening of markets decrease.

1) Differences by Location

The grand mean score on Index 1, the degree of satisfaction with living conditions, was $2.6321 \pm .6137$, implying a moderate degree of dissatisfaction (Table 2). Indicators of the quality of living conditions included satisfaction with transportation, medical care, cultural/educational facilities, water/sewage quality, housing quality, garbage/sanitation, and shopping convenience. The overall dissatisfaction with the current quality of life was fairly explicit in the survey. Further, the results of the post hoc test indicate that Chunbuk farmers in the survey have a

higher level of discontent than Kyonggi respondents. In comparison, Kyonggi respondents showed a comparatively lesser degree of dissatisfaction.

The grand mean score on Index 2 representing the degree of concern about the problems resulting from rural labor shortages was $4.2702 \pm .5784$, reflecting a very high degree of concern (Table 2). The indicators of this index show how important such issues as shortages of labor, difficulty in doing the farming due to aging, increasing abandoned farmsteads, and difficulty in finding a potential wife are in the respondent's economic and social standing. Locational differences were statistically significant, with Kyongbuk and Chunbuk respondents expressing greater concerns than Kyonggi farmers. Again, Kyonggi farmers, who benefit from their proximity to the largest urban service center, seem to be in a comparatively better situation regarding available labor than farmers in the other provinces.

Table 2. Comparisons of Indices by Location

	N	Mean \pm St.Deviation	F	Sig.	Sig.Different Group in Pairwise Comparison
Index 1 Satisfaction with Living Conditions					
Location	483	2.6321 \pm .6137	4.135*	.017	(1&2)
1) Kyonggi Province	154	2.7310 \pm .5488			
2) Chunbuk Province	145	2.5281 \pm .6870			
3) Kyongbuk Province	184	2.6312 \pm .5933			
Index 2 Concern about Labor Shortages					
Location	483	4.2702 \pm .5784	9.481*	.000	(1&2, 1&3)
1) Kyonggi Province	154	4.1088 \pm .5988			
2) Chunbuk Province	145	4.3155 \pm .6074			
3) Kyongbuk Province	184	4.3696 \pm .5074			
Index 3 Skepticism toward Government Policies					
Location	483	2.6018 \pm .8150	3.653*	.027	(1&3)
1) Kyonggi Province	154	2.7338 \pm .8309			
2) Chunbuk Province	145	2.5977 \pm .8534			
3) Kyongbuk Province	184	2.4946 \pm .7571			
Index 4 Concern about Agricultural Market Opening					
Location	483	4.2029 \pm .6563	1.188	.306	
1) Kyonggi Province	154	4.1818 \pm .7227			
2) Chunbuk Province	145	4.2724 \pm .5951			
3) Kyongbuk Province	184	4.1658 \pm .6431			

Note: *Significant at $p < .05$

Negative perceptions of government policies were also notable among the farmers participating in the survey. The total mean score of Index 3 indicating the degree of skepticism toward government policies was $2.6018 \pm .8150$, implying disapproval of current policy directions (Table 2). The indicators of this index included: "Do you think the governments policies are consistent?"; "Have you benefitted from the post-opening farm polices?"; and "Have Agricultural/Livestock Cooperatives contributed to agricultural development?" With this set of questions, the respondents from Kyongbuk Province registered a lower score than Kyonggi farmers. Despite this perception of political association, the respondents in Kyongbuk Province appear to be more discontent with government policies than the other respondents.

When asked about the effects of the opening of

agricultural markets, the respondents expressed a high degree of concern ($4.2029 \pm .6563$). Unlike the previous three composite indices of measurements, this index was not significantly different across provinces (Table 2). All of the farmers in the survey regarded that continuing agricultural market opening is an important factor in their economic problems, negatively affecting their incomes. Without any locational differences, the farmers incorporated in the survey have indicated that they consider the liberalization of agricultural markets as a source of great anxiety. Clearly, the respondents perceive that the introduction of cheaper farm products from abroad is taking a toll on their incomes, making them ever more pessimistic about the future.

2) Differences by Types of Farming

The indices were compared according to the

Table 3. Comparisons of Indices by Types of Farming

	N	Mean \pm St.Deviation	F	Sig.	Sig.Different Group in Pairwise Comparison
Index 1 Satisfaction with Living Conditions					
Types of Farming	483	2.6321 \pm .6137	.480	.619	
1) Rice Farming	137	2.6715 \pm .6273			
2) Mixed Farming	216	2.6058 \pm .6381			
3) Orchard Farming	130	2.6341 \pm .5577			
Index 2 Concern about Labor Shortages**					
Types of Farming	483	4.2702 \pm .5784	7.605*	.022	
1) Rice Farming	137	4.1369 \pm .6558			
2) Mixed Farming	216	4.3137 \pm .5501			
3) Orchard Farming	130	4.3385 \pm .5151			
Index 3 Skepticism toward Government Policies					
Types of Farming	483	2.6018 \pm .8150	.070	.933	
1) Rice Farming	137	2.6156 \pm .7848			
2) Mixed Farming	216	2.5864 \pm .8388			
3) Orchard Farming	130	2.6128 \pm .8121			
Index 4 Concern about Agricultural Market Opening					
Types of Farming	483	4.2029 \pm .6563	.857	.425	
1) Rice Farming	137	4.2263 \pm .6530			
2) Mixed Farming	216	4.2269 \pm .6484			
3) Orchard Farming	130	4.1385 \pm .6735			

Note: *Significant at $p < .05$

** For comparison of Index 2 by types of farming, the Kruskal-Wallis test was used.

three types of farming: rice, mixed, and orchard farming households. Indices 1, 3, and 4 were found to be not significantly different by types of farming. However, with respect to Index 2, it was indicated that the mixed farming households in the survey were most concerned about issues related to labor shortages while rice farming households registered the lowest score (Table 3). Given the fact that mixed farming combined with field crops and livestock as well as orchard farming are comparatively more labor intensive than rice cultivation, it is rather obvious that differences in labor inputs contribute to differences in the respondents' concerns about the needs for labor. Further, this labor-intensive work prevents these groups of farmers from seeking non-

farm jobs, which also leaves them more dependent on revenues from agriculture. On the whole, livestock and field-crop producers as well as orchard farmers, due to high demand for intensive labor inputs in farming practices, are expected to suffer more seriously from insufficient labor supply than rice cultivators.

3) Differences by Socio-demographic

Variables: Age, Education, and Family Size

Comparisons of the indices by a set of demographic variables also disclosed some dissimilar features (Table 4, 5, and 6). As Table 4 displays, Index 3, indicating the degree of skepticism toward government policies, alone was significantly different

Table 4. Comparisons of Indices by Age Groups

	N	Mean ± St.Deviation	F	Sig.	Sig. Different Group in Pairwise Comparison
Index 1 Satisfaction with Living Conditions					
Age	483	2.6321 ± .6137	1.663	.174	
1) 30's or Younger	59	2.5230 ± .7136			
2) 40's	176	2.5974 ± .5927			
3) 50's	150	2.6533 ± .6180			
4) 60's or Older	98	2.7274 ± .5722			
Index 2 Concern about Labor Shortages					
Age	483	4.2702 ± .5784	2.355	.071	
1) 30's or Younger	59	4.3347 ± .5640			
2) 40's	176	4.1832 ± .6360			
3) 50's	150	4.2917 ± .5627			
4) 60's or Older	98	4.3546 ± .4815			
Index 3 Skepticism toward Government Policies					
Age	483	2.6018 ± .8150	5.637*	.001	(2&3, 2&4)
1) 30's or Younger	59	2.5593 ± .8199			
2) 40's	176	2.4223 ± .7443			
3) 50's	150	2.7044 ± .8377			
4) 60's or Older	98	2.7925 ± .8421			
Index 4 Concern about Agricultural Market Opening					
Age	483	4.2029 ± .6563	.280	.840	
1) 30's or Younger	59	4.1949 ± .6949			
2) 40's	176	4.1818 ± .6663			
3) 50's	150	4.2433 ± .6391			
4) 60's or Older	98	4.1837 ± .6477			

Note: *Significant at $p < .05$

by age groups ($F= 5.637, p=.001$). Of interest, the farmers in their 40's were shown to be more pessimistic about government policies than the older farmers. Farmers in their 60's or older were least disapproving of government programs. Elderly farmers seemed to be less pessimistic about government policies than young farmers despite the fact that they were being excluded from the post-Uruguay Round rural support programs. In contrast, younger farmers appear to be outspoken about government policies and programs in spite of comparatively large benefits from the government supports.

With regard to the categorical variable of the farmer's levels of education, the opinion indices

were not found to be significantly different in this survey sample (Table 5). However, the comparison of indices by the family size revealed differences in opinion on labor issues (Table 6). It does not come as a surprise that households with a large number of family members are less concerned with labor issues than a small family. Farm households which consist only of a couple whose children are assumed to have left the household composed about one fifth of the sample population. In consideration of the older ages of these respondents, it is apparent that this group of "empty nesters" is experiencing hardships in having sufficient agricultural labor force but also in doing an exacting job themselves.

Table 5. Comparisons of Indices by Educational Level

	N	Mean \pm St.Deviation	F	Sig.	Sig.Different Group in Pairwise Comparison
Index 1 Satisfaction with Living Conditions					
Educational Level	483	2.6321 \pm .6137	.115	.951	
1) No or Primary School	86	2.6561 \pm .6594			
2) Middle School	185	2.6201 \pm .6387			
3) High School	184	2.6390 \pm .5929			
4) College or Higher	28	2.5918 \pm .4342			
Index 2 Concern about Labor Shortages					
Educational Level	483	4.2702 \pm .5784	.085	.968	
1) No or Primary School	86	4.2965 \pm .5524			
2) Middle School	185	4.2635 \pm .6155			
3) High School	184	4.2622 \pm .5734			
4) College or Higher	28	4.2857 \pm .4447			
Index 3 Skepticism toward Government Policies					
Educational Level	483	2.6018 \pm .8150	2.475	.061	
1) No or Primary School	86	2.7984 \pm .7537			
2) Middle School	185	2.5910 \pm .8284			
3) High School	184	2.5127 \pm .7953			
4) College or Higher	28	2.6548 \pm .9622			
Index 4 Concern about Agricultural Market Opening					
Educational Level	483	4.2029 \pm .6563	2.353	.071	
1) No or Primary School	86	4.0756 \pm .7051			
2) Middle School	185	4.2919 \pm .6244			
3) High School	184	4.1739 \pm .6630			
4) College or Higher	28	4.1964 \pm .6137			

Note: *Significant at $p<.05$

Table 6. Comparisons of Indices by Family Size

	N	Mean \pm St.Deviation	F	Sig.	Sig.Different Group in Pairwise Comparison
Index 1 Satisfaction with Living Conditions					
Family Size	483	2.6321 \pm .6137	1.527	.218	
1) 2	105	2.7020 \pm .6164			
2) 3 or 4	203	2.5792 \pm .6271			
3) 5 or More	175	2.6514 \pm .5943			
Index 2 Concern about Labor Shortages					
Family Size	483	4.2702 \pm .5784	5.845*	.003	(1&3)
1) 2	105	4.4071 \pm .5086			
2) 3 or 4	203	4.2869 \pm .5758			
3) 5 or More	175	4.1686 \pm .6042			
Index 3 Skepticism toward Government Policies					
Family Size	483	2.6018 \pm .8150	1.810	.165	
1) 2	105	2.7206 \pm .8283			
2) 3 or 4	203	2.6026 \pm .7720			
3) 5 or More	175	2.5295 \pm .8511			
Index 4 Concern about Agricultural Market Opening					
Family Size	483	4.2029 \pm .6563	.180	.835	
1) 2	105	4.1810 \pm .6509			
2) 3 or 4	203	4.1946 \pm .6824			
3) 5 or More	175	4.2257 \pm .6312			

Note: *Significant at $p < .05$

4) Differences by the Quality of Life Indicator

As Table 7 shows, Index 2 which implicates the major socio-economic issues related to the declining availability of farm labor was statistically different when compared to the three categories of respondents based on their satisfaction with living conditions ($F=7.617$, $p=.001$). The high dissatisfaction group had a lower score on Index 2 than the medium dissatisfaction group, indicating a higher degree of concern about the declining agricultural labor force (Table 7).

Further, Index 3 representing the skepticism toward government agricultural policies was also shown to be statistically different when compared to the degree of satisfaction with the quality of life ($F=10.150$, $p=.000$). The post hoc analysis showed that the respondents reporting low dissatisfaction

registered a lower score on Index 3 than those with a high level of dissatisfaction. In other words, a pessimistic view of state policies and low political trust are evident in the high dissatisfaction group. It is little doubt that the respondents in this high dissatisfaction group believe that they are not properly supported by government agencies such as the agricultural cooperatives and rural aid programs.

As in comparisons with the other sets of independent variables, the concern about the opening of agricultural markets did not differ when compared across groups with varying levels of satisfaction with their living conditions.

5) A Composite Summary of Results

The locational comparisons have indicated that Kyonggi farmers express a lower degree of concerns about various rural issues than those in the other

Table 7. Comparisons of Indices by Self-Reported Quality of Life

	N	Mean ± St.Deviation	F	Sig.	Sig. Different Group in Pairwise Comparison
Index 2 Concern about Labor Shortages					
Quality of Life	483	4.2702 ± .5784	7.617*	.001	(1&2)
1) High Dissatisfaction	188	4.3750 ± .5283			
2) Medium Dissatisfaction	139	4.1259 ± .6316			
3) Low Dissatisfaction	156	4.2724 ± .5625			
Index 3 Skepticism toward Government Policies					
Quality of Life	483	2.6018 ± .8150	10.150*	.000	(1&3)
1) High Dissatisfaction	188	2.4238 ± .8234			
2) Medium Dissatisfaction	139	2.6043 ± .7662			
3) Low Dissatisfaction	156	2.8141 ± .8008			
Index 4 Concern about Agricultural Market Opening					
Quality of Life	483	4.2029 ± .6563	2.266	.105	
1) High Dissatisfaction	188	4.2819 ± .6482			
2) Medium Dissatisfaction	139	4.1439 ± .6655			
3) Low Dissatisfaction	156	4.1603 ± .6525			

Note: *Significant at $p < .05$

two provinces in the survey. Respondents from Chonbuk and Kyongbuk Provinces are more distressed by low quality of living and more disenchanted with state policies than Kyonggi farmers. Partly owing to rapidly spreading urbanization, rising land values, and the locational advantages resulting from easy access to resources and services in Seoul, Kyonggi farmers in the survey seem relatively well buffered from many of the adversities facing the rural economy in other areas. Moreover, the regionalism hypothesized to distinguish Cholla Province from the other more prosperous areas appears to have little influence on farmers' attitudes. What differentiates the level of concerns about rural socio-economic issues is found between relatively diversified Kyonggi Province and the other regions. In spite of these regional differences, farmers in the survey showed an equally high degree, across the board, of apprehension about their future situation.

Comparisons of the four indices by farming types indicate that mixed and orchard farming households are more affected by the declining rural population and farm labor force than rice farmers. In addition to

rising labor costs, increasing imports of livestock products, especially beef and chicken, and seasonal/yearly fluctuations of yields and prices of crops have squeezed profit margins of mixed farmers. This denotes a pressing need for a relief from their economic distress.

With regard to the socio-demographic variables, ANOVA results showed that the level of education does not have any statistically significant differences on the indices. However, younger respondents in the survey were more emphatic about their dissatisfaction with government programs. Whereas no statistically significant differences were found on the labor issues by age groups, it is apparent that farm households of "empty nesters" are suffering from a lack of farm workers.

With respect to perceptions of the quality of life, the most dissatisfied group reported greater concern about issues related to the depopulation of rural areas and a more pessimistic view of government policies. It is no wonder that those farmers who are most distressed by their low quality living conditions have negative perceptions of government

agencies and programs. Locational differences in satisfaction with living conditions, concerns about a paucity of agricultural labor, and government-policy evaluations have a wide range of potential applications in regional policy-making processes. The introduction of cheaper foreign farm products is another negative factor adding to the uncertainty of the farm family's future livelihood. The overall results indicate rural policies based simply on economic efficiency will increasingly lead to the unequal distribution of resources and that this distortion of production relations, specific to Korea, neglect the needs of the rural poor, inducing further problems related to outmigration and regional disparities.

4. The Dilemma of Rural Development and Agricultural Market Opening in Korea

As the economic logic of "the survival of the fittest" is rigorously applied to various aspects of society and economy in Korea, the burden to economize the farming industry is imposed upon each and every farm household in the nation. Small holders are, however, encountering much more severe financial setbacks than larger farmers, which is partly due to more limited access to resources. The increasing openness of agricultural markets depresses local farmers' prices, diminishing their economic returns. Individual farmers' capacity to modernize farming practices and to increase economies of scale is limited not only by a hostile, competitive market but also by a cessation and/or a reallocation of subsidies. The new rural policies are developed with practical goals intended to phase out inefficient, small-scale farmers in order to create a lean and competitive farm sector.

The major agrarian issues in Korea can be discussed at the global, national, and local levels. Firstly, in terms of the global restructuring of agro-food systems, national agricultural structural

changes and development can be better understood by locating the nation's agriculture within the broader context of world capitalist economy. The predicaments farm families encounter with the market openings are not limited to Korea. Mexican commercial farmers who have been negatively affected by the implementation of NAFTA (McDonald, 1997) or Greek farmers who have resisted the CAP of the E.U. (Louloudis and Maraveyas, 1997) have to face possible dislocation as well if they do not adapt themselves properly to the new market order.

As indicated in the discussion of the concept of the food regimes, the emergent global political-economic and production-consumption relations are driven by policies informed by the neoliberal logic. Under the third food regime, the "self-regulating market" functions on the basis of competition, efficiency, and individual responsibilities. McMichael (1994, 278) contends that the global agricultural liberalization involves "massive spatial and sectoral shifts accompanied by continual, unresolved political struggles around questions of political regulation, social distribution, and economic recovery." The voices of Korean farmers exemplify these unresolved political struggles. Korean farmers' discourse demonstrates how this global restructuring of agro-food systems is affecting local farm families, and in turn how these farmers perceive and respond to it. The findings from the survey indicate that Korean farmers accede to terms of global integration in principle while disapproving of state rural policies in practice. This is one local response. Differences in a local response are an arena where local social and cultural diversities become manifest, and thus where comparative studies need to be carried out (Jarosz, 1996).

Secondly, at the national level, Korean agriculture, which lags far behind the nation's strategic manufacturing sector, also indicates how rural development policies are affected by national schemes for economic growth. During the period of rapid industrialization, the Korean farm sector provided the urban

industrial sector with a constant labor supply as well as cheap food staples. Conversely, state intervention including price supports and various kinds of subsidies led farm families to become dependent upon external capital for their survival. As Kasimis and Papadopoulos delineate (1997, 216), such state policies encouraged farm households to conduct "a capitalist venture" without a true "capitalist spirit".

In an era of declining national regulation, what is essentially required in agricultural production and marketing is described to be flexible specialization based on the combination of advanced technology and cheap labor (McMichael, 1994, 4-5, 279). In view of the decreasing and greying rural population in Korea, however, the evolution of conditions for any form of comparative advantage based on cheap labor are impracticable.

Thirdly, at the individual farm level, the current labor shortages in rural Korea implicates family farm differentiation. That is, whether or not the continuing marginalization of farm families would ultimately lead to their demise is a matter of lengthy debate and further studies. Without over-generalizing the complicated context, a certain proportion of farm families are liable to turn into urban/rural wage laborers, contract farm households, or other forms of production, partly depending on the availability of regional/local employment opportunities. The turnover rate in the agricultural sector is going to increase during this period of implementation of, and adjustment to, the GATT Uruguay Round agreements. Nevertheless, the family farm has survived as a "small, part-time, quasi-subsistence" farm, resisting a commodification process in capitalist development of agriculture (Marsden et al., 1987, 299).

Still, according to the "treadmill" theory, full-time farmers will not be able to get out of a cost-price squeeze, by which the prices obtained for farm products will not rise on a par with the costs of production (Bowler, 1992, 14). This theory implies that the financial difficulties of farm families will not ease

even with their continual intensification of capital and labor in production. The common and overwhelmingly fatalistic view of farmers in this study attest to the large number of farm families trapped in a quandary. The question of the transformation of Korean family farms and the uneven development of agriculture needs to be explored with further empirical evidence.

5. Conclusion

The global restructuring of agro-food systems motivates nation-states to aim at "national competitiveness rather than national coherence" with regard to their agricultural sectors (McMichael, 1994, 5). By and large, state policies have geographically- and locality-biased components. In the case of Korea, the rationalization of market mechanisms and unregulated capital are inclined to exacerbate the existent socio-economic disparities in not only urban versus rural relations but also intra-regional relations. The deeply rooted, political economic alliance further challenges the Korean government in conforming to recognized principles, rules, and standards. Insofar as farming is pursued as a way of life, the government should recognize its obligation to provide fair conditions in which basic human needs are met.

Notes

- 1) The major agricultural issues discussed in the Uruguay Round negotiations are divided into market access, domestic support, and export competition. First, non-tariff measures are to be abolished and tariffed. Then, tariffs should be reduced by 36 percent by developed countries and 24 percent by developing countries. Secondly, domestic support of agriculture is to be reduced by 20 percent by developed countries (over a six-year period from 1995 to 2000) and 13.3 percent by developing countries. For developing countries, 13.3 percent of domestic support is to be reduced during the period from 1995 to 2004. Thirdly, export subsidies are to

be reduced by 21 percent in terms of the volume of exports supported by subsidies and by 36 percent of the expenditures on export subsidies over the period 1995-2000. In accordance with the agreements, Korea is to implement tariff reductions and tariffication commitments over a 10-year period from 1995 to 2004. In 1995, Korea imposed agricultural tariff quotas on 1,417 agricultural products. Minimum access provisions were applied to imports of rice. Rice imports should be increased to 4% of domestic consumption until 2004.

The sampling method used for the survey was based on a disproportional stratified sample with specific entry criteria. The sample population selected in the survey was farm households recognized as "primary" or "pure" farm households in the Korean government statistics, which include full-time farm households and Class I part-time farm households of which agricultural income accounts for more than 50 percent of total household annual income. Then, the "primary" households were roughly classified into large- (e.g. larger than two hectares of paddy), medium- (e.g. one to two hectares of paddy), and small-scale (e.g. smaller than one hectare of paddy) farm operations according to their cultivated land area and the number of livestock and poultry. On the basis of this farming scale classification, at least two households of each type were chosen in each township-level administration district (eup or myon). This method was designed to produce representative samples for the widest possible range of farm types. During the period from June 23 to 30 of 1997, questionnaires were mailed out to 630 sample farm households, with 210 forms sent to households in each of the three provinces. The total response rate was 77 percent. Only completed surveys were considered to be usable. Those questionnaires which did not include answers to all of the questions were excluded from the analysis. The format of the opinion questions was a 5-point Likert scale ranging from strongly disagree to strongly agree.

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