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ABSTRACT

In line with the government's policies for localization, furniture industry in the northern area in Gyeoggi-province at presence has been operated by several furniture industrial complexes in the region in small scale, but now it should be considered from overall view of furniture industry in order to develop more competitive industry. As a matter of this fact, Gyeonggi-province should be engaged in planning to make various industrial clusters of the furniture-related industry based on the northern area of province at structural as well as politic aspects, with the help of the analyzed status of the current furniture industry in region, in supporting them by the systemized policies and developing the overall program to foster furniture as an international-competitive industry.

Therefore this study suggested 'furniture industry center' which will exclusively handle and maintain the network of each furniture company in the northern area of Gyeonggi-province and 'high-tech furniture industry complex' to keep pace with the globalization and to be competitive internationally and also 'common brand business' for the cooperation at technical phase. In order to realize and vitalize such suggestions, it is urgently necessary that the network consists of the furniture companies and the expert of the related department in local universities as the main body for furniture industry, of course Gyeonggi-province as well.

Key words: Furniture industry, Northern area of Gyeonggi-province, Furniture cluster, Furniture industry complex, Policy.

요 약

본격적인 지방화시대를 맞이하여 현재 경기북부 가구산업은 지역의 몇몇 가구산업단지 를 중심으로 영세적으로 이루어지고 있으나, 보다 경쟁력 있는 산업으로 육성하기 위하여 이를 가구산업의 전체적인 관점에서 조명하여야 한다.

이러한 차원에서 경기도에서 경기북부지역에 폭넓게 기반을 두고 있는 가구산업을 방관하기보다는 먼저 구조적 측면이나 제도적인 측면에서 경기북부지역을 중심으로 한 가구산업 현황을 분석한 결과를 통하여 경기북부에 연계된 다양한 산업과의 클러스터 화를 추진하며 적극적인 지원, 체계적인 정책마련 등을 통하여 문제를 해결하며 국제적으로 경쟁력 있는 산업으로서 총체적으로 개발육성 방안이 필요하다고 판단된다.

따라서 본 연구는 경기북부 지역에 각 가구업체의 네트워크를 총괄할 수 있는 전담 기구로서 가구산업센타와 세계화에 맞추어 국제적으로 경쟁할 수 있는 첨단가구산업단지 신설 그리고 기술적 차원에서 협업을 이룰 수 있는 가구관련 공동브랜드사업을 제시하였다. 또한 이러한

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제시들이 활성화되기 위하여 경기도는 물론이거니와 산업의 주체라 할 수 있는 가구업체와 지역 대학의 관련학과 전문가들의 네트워크가 절실하게 필요하다.

1. INTRODUCTION

1-1 Background and Purpose of Study

Since the local government heads have been chosen by direct election of the local residents from 1995 on, it has been entering into a period of local self-government, so the full epoch of localization might be refereed to at this moment. Such new paradigm of local administration is faced with the important task of developing not only the own industry of each region and also new business, in company with new mechanism of the decentralized administration. At this point, namely the economic power of region causes the social gap, it is becoming the reality and at the same time the mission of each local government to select the differentiated industrial complex and area according to regions and cities, and develop the specialized industry as well as the manufacturing business.

Under this condition, this study intended to suggest the programs as politic plans for stimulating the furniture industry concentrated in the northern area of Gyeonggi-province, with regard to vitalizing the economy there, in detail, the overall status of the furniture industry concentrated in the northern area of Gyeonggi-province and also the current problems were basically presented and furthermore these data were systematically analyzed for creating 'furniture industry center' which will exclusively handle and maintain the network of each furniture company in the northern area of Gyeonggi-province and 'high-tech furniture industry complex' to keep pace with the globalization and to be competitive internationally and also 'common brand business' for the cooperation at technical phase. Furthermore for realizing and vitalizing such suggestions, it is urgently necessary that the network consists of not only Gyeonggi-province also the furniture companies and the expert of the related department in local universities as the main body for furniture industry, and the recognition regarding this was the concrete purpose of the present study.

1-2 Methods and Scope

This study attempted a theoretical approach rather than illustrative examples. On such theoretical ground the statistic material of the actual survey institution were utilized in addition and in case of the furniture industry complex case study was included partly. Aforementioned this study is focusing on the northern area of Gyeonggi-province. There are many factories and sales markets in this region like Goyang-, Masuk- and Pochun furniture complex etc. on the one side, but this area in practice was isolated from regional development on the other side, so this study had unavoidably the limitation of the northern area of Gyeonggi-province. Despite of the difficulty that the exact statistic data was not supported sufficiently, this study was willing to remain it as one of the main research topics in future to supplement the illustrative data constantly and to verify it.

2. Characteristic and Current Status of Furniture Industry

2-1 Characteristic of furniture industry

Furniture had been used as important subsidiary apparatus for the residence and living of human and has been becoming various according to the diversification of living space and

environment of human, and been still developed even up to now. Furniture industry which plays an important role for human life is recognized as a labor-intensive business compared to other manufacturing sectors. Furniture as a product belongs to typical durable goods and at the same time to the fashion-related goods of which selection is strongly depended on design and demand on fashion in the market. Also it's kinds & purposes are different and the quality & price are multifarious, so the demands are quite departmentalized. Therefore it is generalized that various kinds are produced in small volume. Like this, furniture manufacturing business has different characteristics compared to other manufactures, so the analysis of such characteristics will contribute to development of the furniture industry of the northern area of Gyeonggi-province for future. The characteristics are as follows.

First of all, furniture industry can be defined as a labor-intensive business. Furniture industry as a labor-intensive business has half or one-tenth ratio of working place, machine equipment and capital intensity compared other manufacturing industries, in wooden furniture as well as in metal furniture industry, so it is highly dependent on the labor.

Second, furniture industry is a high value-added business. The wooden furniture industry is the highest value-added market among the manufacturing businesses processing wood.

Third, furniture industry is the small & medium enterprises-oriented business. Moreover it is typical industry for the small and medium enterprises, and furniture as a product is the fashion-related goods having the practicality and artistry, which is correspond with the diverse needs of customers according to their different living space and environment, age, life style and income level and specialized on item by item, so it is suitable business for the small and medium companies.

Forth, furniture industry has great influences on increasing export. In view of the current trend that the labor-intensive industry is regarded as a sunset business in the advanced countries, it can build a market increasing export remarkably according to efforts.

Fifth, furniture industry is the fashion industry reacting to the demand and season flexibly and being the various and sensitive goods, and it is closely associated with the cultural activities and belongs to durable goods. As personal and household product, it's consumption is largely influenced by the total population and increase of the households, the number of marriages and the construction industry, and as durable goods it's market is differentiated by the standard of living and income level, and actually the cycle of consumption is showed differently in case of general furniture every 10 year, but for clothes and bedding every 5 year. (KTC , 2004)

Sixth, furniture industry is treated as the necessities of life. Furniture as the industry to provide people with essentials is constantly demanded on expectations of an improvement in population & income growth and in quality of living & office space.

Seventh, in furniture industry it is late to collect bills, by contrast there should be many articles in stock, so it needs long-term period to make the finished goods after investing funds and furthermore it requires the maximum period for recovering funds among all other manufacturing businesses and that is why furniture industry highly depends on raw materials, intermediate goods and inventory assent.

2-2 Current status of furniture industry in domestic market

The domestic market of furniture industry amounts to 9 trillion won (\$ 7.8 billion) and it's portion among domestic manufactures is 2.8 % according to the number of furniture manufacturing companies in 2008 and 1.65 % according to the number of employees, and the volume of the being shipped out and the cost of main production are $0.72 \sim 0.70$ % and the added value forms 0.75 %.

Division	Number of company (EA)	Monthly average of employee (person)	Market amount (unit: Million)	Cost of main production (unit: Million)	Added value (unit: Million)
Manufacturer	116,285	2,857,106	1,113,308,983	755,355,740	367,630,271
Furniture manufacturer	3,275	47,243	8,003,917	5,297,603	2,742,394
Market share (%)	2.82	1.65	0.72	0.70	0.75

Table 1. Current status of domestic furniture industry

Source : National Statistical Office, Report of nationwide businesses (2008)

Furniture industry is managed in small company focusing on domestic demand mainly and the export portion shows 6.4 % compared to the market amount. The export scale of the entire manufacturing business is approx. 343 trillion of the market amount 990 trillion, so 34.6 %, while furniture manufacturing amounts to 9 trillion with export of 575 billion, which shows 6.4 % export portion. The percentage of small company is presented at the ratio of 81.6 % to 86. 9 % in the entire manufacturing and furniture manufacturing business respectively, and it is showed that furniture industry is run in small scale compared to the manufacturing industry overall. In view of the fact that the global furniture market is expected to reach \$ 210 billion, the importance of domestic furniture industry in the world furniture market is modest to nonexistence, just 0.3 %, because the export scale of domestic furniture industry is estimated at \$ 6.2 million. On the other hand this percentage means the high potential to tap into overseas market. (GRI, 2010)

Table 2. Proportion of small enterprises (with less than 10 employees) in furniture industry

Division			The number of companies				
		Overall (a)	Less than 10 (b)	Proportion (b/a)			
Manufacturing business overall	nationwide	320,053	261.194	81.6%			
Furniture industry	nationwide	10,059	8,742	86.9%			

Source: National Statistical Office, Report of nationwide businesses (2008)

3. Analysis of current status and solution of furniture industry in the northern area of Gyeonggi-province

3-1 The general status in the northern area of Gyeonggi-province

Gyeonggi-province has been changed to the local government with the increasing population from the stationary population, especially the current trend in the northern-border area is an increase in population and it is recently active in this region that the plan to ease the concentrated population in the capital area and the inter-Korean exchanges, so the character of the city is being turned. Also the economical polarization is growing, so the gap between the northern and southern area of Gyeonggi-province is ever widening, and this is related to the dichotomy of the region between the city aspect being developed and the agricultural & border district being stationary and furthermore

this polarization influences seriously on the regional differential between the northern and southern area and on the gap of the standard of living between the rich and poor in actual.

3-1-1 Regional scope and population

The northern area of Gyeonggi-province is divided into the border and the general northern area, and to the border area it belongs that 3 city or county such as Paju, Kimpo and Yeoncheon and the general area includes 8 city or county like Uijeongbu, Dongducheon, Goyang, Guri, Namyangjoo, Yangjoo, Pocheon and Gapyung.

Statistical information dated on December 31, 2008 said that Gyeonggi-province consists of a total population of 2,916,467 in the total area 4,285.05 km². In terms of spatial relationships, the northern and border area was divided from the north in DMZ, the north Civilian Control Line and the south Civilian Control Line, and to the south the north side of Han River and Kimpo city are included in Gyeonggi-province, and DMZ covers 2 kilometers north and south from the Military Demarcation Line and has been administrated by UN Military Armistice Commission. Military reservation area covering 25 kilometers south from the MDL is classified in the restricted area and the limited area, and where more than 25 kilometers away from the MDL was designated as the surrounding area of military facility. (Gyeonggi-province, 2009)

3-1-2 Status of industry

Rules and regulation in the northern area of Gyeonggi-province limits on the ground of company, in result there are many small factories there and the ratio of the number of company in the northern area compared to the entire Gyeonggi-province shows that the large enterprises are 4.4 %, while the small companies form 36.8 %, so the business scale remains pretty small, also in case of the high-tech industry there are 4,051 companies in this region sharing just 21.7 % of the entire Gyeonggi-province businesses.

Under the main industries it is included that the traditional textile and furniture industry and the high-tech industry like LCD business has been recently entered. Furniture industry among others is especially small and backward compared to other industries.



Sunghoon Park, Productivity analysis according to location of companies, GRI interim research Fig. 1. The furniture-related industry cluster in Gyeongggi-province.

3-1-3 Guideline for development strategy in the northern area of Gyeonggi-province

As guideline for the development strategy of the northern area of Gyeonggi-province it can be counted that the stimulation regional development through the deregulating, attracting the companies and developing tourism, the improvement of environment for settlement by securing infrastructure and public facility, the environmental preservation based on the natural ecology protection and cleaner technology, the fostering an environment to reunify the divided Korea by facilitating exchange and reconciliation between the South and North and the set-up of basic direction to prepare for the inter-Korean exchange and unification finally.

If the development strategy is considered in detail according to regional scope, the axis of city development such Ilsan in Goyang and Paju/Gyoha.Munsan should be oriented to new function for the inter-Korean exchange & preparation for the unified nation, the international relation, the study for education & research, logistic & distribution, the information-oriented policy and the place to help north Korean refugees, and the axis of development for the other part e.g. Uijeongbu-Yangju-Dongducheon-Yeoncheon should focus on building infrastructure for the inter-Korean exchange and preparation for the unified nation, on beginning the construction of highway and the electrification of railroad of the Yongsan-Wonsan line in earnest, on developing the hub-city and also on developing residence complexes in country house form, hill areas and mountainous district as the environment-friendly project. (Gyeonggi-province, 1998,)

3-2 Current status of furniture industry in the northern area of Gyeonggi-province

Furniture industry forms a big portion in the whole industries of Gyeonggi-province. The recent information of GRI (Gyeonggi Research Institute) described in the table 3 and 4 supports this fact. The domestic furniture market amounts to 9 trillion, among this scale Gyeonggi-province shares 3.7 trillion which accounts for a big portion in terms of the market amount, the number of companies & employees and the turnover in comparison with nationwide. The number of companies contribute 42 % of the overall manufacturing sector nationwide, namely there are 10,059 furniture manufacturer nationwide and 4,259 in Gyeonggi-province. In case of the number of companies with more than 10 employees, 1,282 companies are distributed in overall Gyeonggi-province, in detail 680 companies in the southern area and 602 in the northern. The furniture industrial cluster in Gyeonggi-province is Gwangju, Pocheon, Namyangjoo, Kimpo and Paju. In particular, the manufacturing in mattress, bed, sofa and other interior material has the high percentage.

At analyzing by and large the industrial structure of the northern area of Gyeonggi-province, it was presented that the northern area competed on an equal footing with the southern in terms of the number of companies and employees. (GRI, 2010,)

	Number	Number vision		ocation gistrat		istrati	on				
ninistrative district	of company (more than 10↑)	al	po e	livi 1al	rial olex		n	nplo ees	urnover nit: Mil)	xport it: Mil)	kss
Gyeonggi province	,282 485)	9	3	89		.53	9	,710	334,148	5,687	
outhern	0(281)	2	8	92	\$	71		445	46,907	1,524	
e northern	2(204)	7	5	97		82	0	265	87,241	2,163	
Goyang	7(3)			7		7		84	9,870	136	ya
imyangjoo	0(51)	5		30		30		756	98,360		
Jijeongbu	4			1		L		5	1,233		
Paju	2(84)	5)	57		52		780	.09,828	2,027	
Guri	0			-		-		-	-		

3. Current status of furniture manufacturing company more than 10 employees (2010)

Yangjoo	0(4)		0	0	81	11,198	
Pocheon	5(60)	9 6	85	8	7 525	53,672	
ngducheon	1		l	L	0	-	
Japyeong	2(1)		2	2	15	3,080	
eoncheon	1(1)		l	L	19	0	

(Unit : ea, person)

Table 4. Status of the detailed manufacturing sectors and employees

Detailed manufacturing sectors		Ν	umber of company	Number of employees			
			Gyeonggi-province		Nation	• • • •	
		wide		tion	wide		tion
320	Furniture manufacturing	10,059	4,259	42%	62,672	30,367	48%
3201	Bed and interior material	1,228	636	52%	13,525	4,169	31%
32011	Chair for transportation	331	53	16%	9,297	1,202	13%
32012	Mattress and bed	137	106	77%	1,155	858	74%
32019	Sofa and other interior material	760	477	63%	3,073	2,109	69%
3202	Wooden furniture	7,749	3,053	39%	39,600	20,602	52%
32021	Specific wooden furniture for kitchen & restaurant	3,953	930	24%	12,501	4,365	35%
32022	Lacquerware inlaid with mother-of-peal	34	6	18%	127	18	14%
32029	Other wooden furniture	3,762	2,117	56%	26,972	16,219	60%
3209	Other furniture	1,082	570	53%	9,547	5,596	59%
32091	Metal furniture	884	474	54%	7,978	4,776	60%
32099	Others	198	96	48%	1,569	820	52%

Source : National Statistical Office, Report of standard company, 2008

3-3 Analysis of of furniture industry in the northern area of Gyeonggi-province

The analysis of furniture industry in the northern area of Gyeonggi-province indicates the following problems generally.

Above all, the scale being too much small and backward should be pointed out. Most of them are making business without any registration in sporadic forms rather than entering into the complexes officially. Although the modernization process is underway around several furniture industry complexes, but the influences is little recognized.

Second, the serious imitation should be indicated. Although furniture industry depends on the fashion trend much, it is insufficient that the theoretical knowledge regarding design overall.

Third, the industrial clustering is highly needed for the long-term perspective, because the furniture industry complexes are much more competitive than each furniture dealer. At present, it is

taken as good examples that Masuk furniture complex in Namyangjoo, Unjung furniture complex in Paju and Songwoo furniture complex in Pocheon, and among them Unjung complex particularly should get the focus in future.

A vicious circle of the poor price competitiveness can be ranked in forth problem. Concerning the profit of furniture industry in Korea, it is relatively higher in wooden furniture sector than the average margin of the manufacturing industry overall, but lower in metal furniture sector on contrast, so this makes it difficult for furniture manufacturers to find the appropriate profit margin in order to balance up a loss at losing the profit and therefore the vicious circle of the declining competitiveness keeps repeating.

Finally, the problem is in distribution. The distribution of furniture manufacturer in Korea can be classified in the following channels generally, namely the process from manufacturer through it's own dealer to the customer, the process from manufacturer through it's exclusive agency who deals with other manufacturer's good to the customer –this is usual distribution channel of the small & medium company-, and lastly through a department store, a agricultural cooperative, a fisheries cooperative and a discount store for the officials to the customer. On the basis of such distribution channels, the northern area of Gyeonggi-province should utilize the convenient transportation as it's strong point, but it failed in reality.

3-4 Politic solution of furniture industry in the northern area of Gyeonggi-province

Considering all analysis of current status of furniture industry in the northern area of Gyeonggi-province comprehensively, the solution was drawn up that the furniture industry among the various existing industries inside of the region can be highly vitalized according to the corresponding policy supports, and the policies can be suggested as the below Table 5.

Politic plan for furniture industry of the northern area of Gyeonggi-province								
Furniture industrial	Furniture Industry Center	Common brand business						
cluster								
* CEO'S view								
Very positive	* CEO's view	* CEO's view						
Flexible according to the	Very positive	Neutral attitude						
intensity of policy								
* Benchmarking	* Benchmarking	* Benchmarking						
Case study of Unjung	Similar to the small and medium	Study on common brand in						
furniture complex in Paju	business support center	different ways						
* Problem to be solved	* Problem to be solved	* Problem to be solved						
Location &	Question of function and location	Intensive network of institute,						
	after construction of center /	industry, university and research /						
Participant in industrial	Network of institute, industry,	Link with furniture industry center						
cluster	university and research	in future						

Table 5. Suggestion of policy for furniture industr	y of the northern area of Gyeonggi-province
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The detailed explanation is followed up in addition.

First, the Furniture Industry Center was suggested on the basis of structural point of view. The core hereupon is to build up a network and to develop a role model for the future function, for this purpose the furniture industry center should contribute to developing the efficient and successful design and also increasing the competitiveness of furniture companies by focusing on the

importance of design creation and not only selecting the idea model which definitely influence on the make or break of design, also suggesting it's application to furniture manufacturers.

Second, the furniture industrial clustering was proposed on a trial basis, in order to foster the high-tech industry through globalization. The most important point of the furniture industrial clustering is to choose the right location and to attract the participating companies in the cluster by developing effective inducements, as the successful case like Unjung furniture complex showed.

Finally, the vitalization of common brand business was suggested from the technical aspect. The development of common brand should increase the competitiveness of the furniture manufacturers lying in the northern area of Gyeonggi-province compared to the other countries and concentrate on creating the environment-friendly and luxurious image, moving away from the present image of cheap price product. But prior to that, it has to be clearly understood first what the establishment of common brand business means for the vitalization of the northern area of Gyeonggi-province, and also the direction for the future should be definitely identified.

In conclusion, also Gyeonggi-province should be engaged in planning to foster the furniture-related industry based on the northern area of province, in supporting them by the systemized policies and developing the future-oriented and overall program, and the furniture companies and the expert of the related department in local universities as the main body for furniture industry should attempt to vitalize regional furniture industries and economy one another.

4. Conclusion

In conclusion, furniture industry in the northern area in Gyeoggi-province has been operated by several furniture industrial complexes in the region in small scale, but in order to foster furniture as more competitive industry, Gyeonggi province should promote the industrial cluster with various industries involved in the northern area of Gyeonggi-province by applying the analysis of current status of furniture industry based on the structure and politic plans in the region. Furthermore Gyeonggi-province should be engaged in planning to make active supports and systemized plans as solutions, and in developing the overall program to foster furniture as an international-competitive industry. Therefore this study suggested 'furniture industry center' which will exclusively handle and maintain the network of each furniture company in the northern area of Gyeonggi-province and 'high-tech furniture industry complex' to keep pace with the globalization and to be competitive internationally and also 'common brand business' for the cooperation at technical phase.

Lastly, farsighted policies by Gyeonggi-province are needed to foster the related industries based on the northern area of Gyeonggi-province widely and all policies should be carries out by not only Gyeonggi-province also the furniture companies and the expert of the related department in local universities as the main body for furniture industry.

5. Bibliographies

- GRI(Gyeonggi Research Institute), 2005, Master plan for development of furniture industry in Gyeonggi-province, Sanghoon Lee et al. p. 89~91.
- GRI, 2010, Productivity analysis according to location of companies, GRI interim research, Sunghoon Park.

GRI, 2010, Plan to strengthen competitiveness of furniture industry of northern area in Gyeonggi-province, Sanghoon Lee et al. p. 7, 23.

Gyeonggi-province, Gyeonggi Vision 2020, 1998, p.11~32.

Gyeonggi-province, Statistic chronology, 2009.

- Gyeonggi-province, Administrative Affairs 2, Economy & Agriculture Policy Bureau's own investigation, 2010.
- KTC(Korea Trade Commission), 2004, Investigation of competitiveness of furniture industry, Korea .Environment & Merchandise Testing Institute.

National Statistical Office, Report of standard company, 2008.

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