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Korea's 6th industrial case and competitiveness plan through Japan and China

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Abstract

The types of sixth industry to aim of boosting agriculture and rural areas and Korea's sixth industrial cases (Local community, production-centric, distribution-centric, dine out-centric, treatment-centric, export-centric) and competitiveness measures through Japan and China. Specifically, the competitiveness through the sixth industrial case is to maximize added value through cooperation between communities and to coexist among local residents. Efforts are needed not only to create jobs for the elderly but also to gain consumer confidence, and various measures should be sought to establish a cooperative system. In addition, as customers' needs change rapidly in the smart age, the life cycle of goods and services is getting extremely faster. Therefore, the sixth industry is expected to be able to predict changes in customer and market trends quickly and accurately, thus making efforts to bring new products and services to market more necessary and contributing to achieving rural activation.

Key words: Rural and convergence industry example : type of agricultural convergence industry, Japan's agricultural convergence, China's rural convergence

1. Introduction

In order to find a change in farming structure, the 6th Industrial Bill passed the National Assembly in 2015 and a new change in farming villages is taking place. The sixth industry is the concept of returning the value added from agriculture to farmers of 1st and 2nd industries. A study shows that agricultural human and physical resources, centered on the management of the 6th industry, tend to be consumed in the region due to the 6th industrialization of agriculture. which has been developing into an effective policy for a short period of time [1]. At a time when substantial development direction is needed, such as policies of growth stocks centered on agricultural management, income gap due to the sixth industry, and 6th industrialization policy centered on manufacturing processing. There are various classes of farmers, including senior citizens, and women who are socially weak, new farmers, and returning farmers. Jobs should be created according to their physical strength or ability. Local agriculture should also be reorganized to create jobs.

There is a growing need for agriculture to develop processed goods in response to changes in food consumption patterns and to actively link them with the food industry. In addition, the government can find a way to revive

the local economy to improving the value added in various relationships from linking them to tourism and exchanges. Developing a business that utilizes local resources while integrating producers into manufacturing or sales sectors, and businesses where agriculture and processing, retail, and dining businesses converge is a strategy to revive local economy.

In modern time, local agriculture tends to be over-simplified toward economies of scale due to horizontal diversification. According to the above, the risk is increased and the development of various processed foods is limited. So the vertical diversification is required on the basis of horizontal diversification. This is the consultation of the sixth industrialization, integrating production and processing departments and sales departments that expand their business with manufacturing and sales led by the producers group. Vertical diversification can be expected to increase added value within agriculture and rural villages and to avoid risks of production risks such as weather disasters or price fluctuations.

2. Types of 6th Industrialization

The purpose of the plan is to restore the local community by creating jobs for the elderly or women who dominate the rural areas and improving their income. This method allows agricultural production corporations or regional producers groups to expand their business from production to manufacturing and selling (1st × 2nd × 3rd industry = 6th industrial type) It is advantageous to start small in mountainous areas and expand production of grains, vegetables and fruits to simple processing and direct sales. By producing a variety of products or products that are processed and sold directly through exchange or direct transaction, jobs suitable for women or older people are expanded. A economy of scope effects occur.

2.1 Local community

Starting in 2007 with 13 households after three years of preparation, Sumi Village conducted potato mining as part of its rural experience project in 2008, with 850 people visiting the village making its first sales of 25 million won. In 2009, the number of visitors continued to increase, with the company holding a dedicated office, increasing its sales to 2,500 people and 58.0 million won.

Located in Jangsu-ro, Cheongseong-myeon, Okcheon-gun, North Chungcheong Province, Okcheon Jangseong Village produces eco-friendly rice from wood. Menhir and dolmen from the Bocheongcheon in the upstream of the Geumgang River are actively operating experience programs using historical resources. In addition, the preservation of natural resources in the village is well maintained, making the city people comfortable. It is a town that has been successful in production, processing, sales and tourism services.

2.2 Production-centric case

Naju Dew Village, located in Noan-myeon, Naju City, South Jeolla Province, operates processing and experience activities based on a variety of wood production and high-quality agricultural products. It is a production-oriented community village with experiences of village growth and festivals.

Based in Guryong-ro, Hwachon-myeon, Hongcheon-gun, Gangwon Province, USO (Inc) introduced asparagus 25 years ago to settle in the domestic market, but experienced its continued failure. Since then, it has succeeded in growing organic facilities and is currently growing at about 50 hectares from 150 farms nationwide. Asparagus is being grown as a foreign export crop as well as a domestic market by creating large-scale production complexes with new income crops selected by the state. Through this, the company hopes to make a new leap forward.

2.3 Distribution-centric case

Farmers who directly cultivate agricultural products are offering a model of new distribution by selling their products and meeting with consumers, as in the name of the " Gok Farm Market, " located in Buk-dong-dong, Daegu. It is an eco-friendly agricultural goods store that has created a community business between Korean urban agriculture and urban and provincial areas.

The people of the farming community in Hongwon-ri, Hong-dong, Hongseong-gun, South Chungcheong Province provide a certain income opportunity through agricultural labor. It is a Korean-style silver town where middle-aged people gather to enjoy the romance of rural life and ensure their retirement.

Sister's vegetable garden, located in Bangbae 2, Seocho District, Seoul, is a social enterprise and is being promoted by the Korea Women's Peasants Association Food Business Group. There are 15 communities and 150 farms across the country. They use native seeds that grow green. It also helps provide the right food and is in the limelight with city consumer

The IERAE distribution company, located in Haenam, Haenam County, and Masan, South Jeolla Province, began selling its products at 19 billion won per year without any fixed assets. It has grown into a robust distributor of agricultural products.

2.4 Dine out-centric case

The village of Dalom, located in Inwolseo-gil, Namwon-myeon, North Jeolla Province, has 64 farmers participating in the village business, including production, processing and experience, taking advantage of the village. The restaurant is exploring a variety of local dishes including Heungbu's feast rice, which is based on the subjects of Farmstay and Heungbu traditional fairy tale. It is a representative rural experience village in Namwon where 30,000 visitors visit every year.

Seosan Flower Song Ahri village, located in Palbong-myeon, Seosan City, South Chungcheong Province, has a 450-year-old history. Eight peaks of Palbongsan Mountain have outstanding scenery, and it is a beautiful village where the forest, bamboo, Silage stream, flower garden, field farming, and rice farming are combined. Seosan is a representative farming village where you can taste and experience local cuisine.

A Toyo Farming Cooperative Company located in Madge-ri, Heung-eon-myeon, Wonju, Gangwon Province, Toyo(土謠) means that soil is sung. There is also a land museum where author Park Kyung-ni lived. And there is also the Hoechon Village, which is an intangible cultural asset in Gangwon Province. It is also a popular restaurant for farmers with various experience events such as local festivals and Saturday markets.

Namchon, located in Ganggyo-ri, Sangseo-myeon, Buhan-gun, North Jeolla Province, is a beautiful rural restaurant that has been taking care of wild flowers for 13 years. The food is directly made from agricultural ingredients. It is a farm-style restaurant that entertains customers ' eyes and minds.

2.5 Treatment-centric case

The Yangyang Dalae village located in Hawolcheon-ri, Yangyang-gun, Gangwon Province, has emerged as a " healing village " through the opening of a healing camp and a good restaurant for farming households. The restaurant develops about 10 kinds of dishes and menus and visits more than 5,000 people every year.

Hadong Haneul Ddang Bungee village located in Shinjin-gil, Akyang-myeon, South Gyeongsang Province, is realizing the healing farming industry that has been interested in these days. Hwangtobang(sp) and Chiyugil(forest road) are operating experience programs using natural landscapes. In addition, it is the 6th best industrial village where visitors can sell food called the owl health meal and improve customer satisfaction.

In 2007, members of Eumseong-ri meditation in Eumseong-eup, Chungcheongbuk-gun, built a village in Dongeum-ri. Hwangto Meditation Village produces and operates healing programs, such as meditation, while nurturing a healthy body and village and leading a natural and friendly life. This is the sixth-centric, six-

industrialization village where they are striving to live a healthy life together.

2.4 Export-centric

Located in Cheongju-si, Cheongwon-gu, North Chungcheong Province, 'Jang Hee-do Ga' is a company that produces brown rice vinegar and traditional liquor in connection with the 6th industrialization. Established in 2015, it sells 150 bottles of traditional liquor a month to market, and also exports a certain amount to Singapore. It is also an export business that has been training and experiencing for 10 weeks.

'Petite Aml', located in Hwado, Namyangju-si, Gyeonggi-do, is a company that makes rice bread without adding gluten. It is increasing its competitiveness by creating theme parks using local rice and increasing the value of added rice. In particular, ice cream is very popular with vegetarians because it does not include milk or eggs. It is exporting to the United States and Europe.

3. Development and Cases of 6th Industry in Japan and China

3.1 Implementation of 6th industry of Japan

Recently in Japan, the 6th industrial development of agriculture, which combines agriculture with various industries to create new value-added products. The concept of the 6th industrialization that Japan is pushing for is that the workers of the first industry (agriculture, forestry and fishery) are actively involved, and the concept of the second industry (manufacturing, processing) and the third industry (distribution, service and tourism) A case in point of Japan's sixth industrialization is the direct distribution of agricultural products, linking fresh, processed and processed agricultural water sales, farm restaurants and rural tourism. In addition, the fields of farm and functional agricultural products for rehabilitation purposes are linked with medical institutions, and in case of experience-based agriculture businesses, they are allied with various industries such as lodging, travel and real estate. Since the 6th industrial speech was implemented in March 2011, the company has received 1,298 cases of recognition for the 6th industrial development project, exceeding expectations [2].

3.2 Japanese 6th Industrialization Fund

In August 2012, Japan's Ministry of Agriculture, Forestry and Fisheries introduced the "Agricultural and Fisheries Growth Industry Fund," which is jointly created by the government and the private sector, to provide funds for the promotion of the sixth industrialization. It is a joint investment by the government and the private sector to establish a supporting body for the development of agriculture, fishing and development, and is supported by the 6th industrial recognition system by investing in sub-funds (local funds, theme funds) funded by the private sector. As of March 2013, 18 sub-funds (23 billion yen from private sector and 23 billion yen from supporting organization) will be set up by private institutions and agriculture, forestry, and fishing organizations [3].

In October 2012, the JA national convention decided to promote the 6th industrial development of the National Agricultural Cooperative Federation, seeking expansion of its business areas, including processing and distribution. An official in charge of industrialization said, "Since the fund is a fund established by the National Agricultural Cooperative Federation, it has high connection with the agricultural industry, and it can also invest in direct sales and processing facilities." It plans to actively respond to diverse needs of participating farmers and organizations by dividing roles among the system organizations. [4].

3.3 Japanese 6th Industrialization case

The 6th industrial development process of Japan's industrialization is closely related to the direct trade areas in mountainous areas, village farming, and agricultural industry solidarity. In terms of the state budget and support from 2008 related to industrialization of agriculture, the commerce, and industrial solidarity was promoted by Japan and in December they pass the law of "the 6th industrial development of Agriculture" in 2010 through cooperation between agriculture, the commerce, and industrial. In 2012, the Ministry of Agriculture,

Forestry and Fisheries established a fund for growth and industrialization of farming and fishing industries to enhance the market size of the 6th industry. And for that, they make it easier for entrepreneurs to take out loans and strengthen company finance. The target for support will receive 50 % of the capital to the local fund and 25 % or more of the remaining 50 % will be invested by the merger company, which will be invested by the processing and sales partners [5].

Japan's 6th industrial market is worth about \$ 10 billion, and the agricultural products processing and Nonghyup, which are run by farmers and farmers [6].

In support of the government's active support for the revitalization of the 6th industrial culture, Japan's Agriculture, Forestry and Fisheries Ministry is implementing a basic policy action plan for the revival of farming and fishing. In Ibaraki Prefecture, Based on the 6th industrial law, agri-business promotion office is established in the current government office and is engaged in the 6th industrial support program, related to the 6th industrial development support center of the Korea Agriculture Promotion Corporation, and the Kwandong Agricultural Service [7].

3.4 The Definition of China's 6th Industrialization

The start of China's 6th industrial development was to narrow the income gap between labor and industry, which increased imports of agricultural products and led to a fall in domestic agricultural prices as market opening expanded in small agricultural structures. In the case of China, the income gap between urban and rural areas is a problem in the process of economic growth. The income gap between urban and rural areas is widening due to the rapid growth of urban and industrial sectors, although the income of China is increasing in both urban and rural areas. The income gap between urban and rural residents in China is 2.20 times higher than in 1990, and it is increasing to 3.23 times in 2010. In particular, the gap is expanding rapidly since the WTO joined in 2002 [8]. This kind of problem of such farming households is not only a decrease in agricultural production but also a decline in the local economy. Therefore, solving the income problem and promoting stable management are the foundation for ensuring sustainable development of farming, and conditions that drive the improvement of self-sufficiency and the revitalization of the local economy. The 6th industrialization, which is based on agricultural production in rural areas, is a policy tool to solve the income problem by creating jobs and value added within farming villages, directly related to direct trade and tourism. In this regard, the 6th industrialization has significant implications in China, which has a small agricultural structure.

3.5 Examples of Agricultural Industry Management in China

In China, if you look at the agglomeration of industrial organization, you will see a total of 308,700 units at the end of 2012, the number of leading companies in the market is around 110,000, and in the case of the total supply of agricultural products, Their agricultural and processed goods account for about a third of the total supply of agricultural products and in major cities, two-thirds of the supply of groceries. In addition, as of the end of June 2013, there were 828,000 professional joint farmers, accounting for 25.2 percent of the total number of farmers. The Chinese government is making efforts to further develop its agricultural industrialization business as a new management body for agriculture. They are fostering and supporting the industrialization of agriculture, realizing that their businesses have long been driven by small production and management, and focusing on leading businesses to change their policies. In 2011, through the National Agricultural Industrialization Pilot stage, the leading companies have been able to consolidate their resources, strengthen their functions to industrialize agriculture, and thus increase the effects of employment. In 2011, the Ministry of Agriculture selected a total of 76 national agricultural industrialization pilot bases. Afterwards, it certified 77 pilot bases in 2013. In March 2013, the Ministry of Agriculture announced its opinions on supporting the development of the leading agricultural industry by the State Council, and the central

government and local governments provided special funds for the development of farming industry businesses, thereby ensuring that the leaders and farmers [9].

3.6 Comparison of 6th Industrial Characteristics of China and Japan

In China and Japan, the reasons why 6th industrial culture has started to spread voluntarily in and supporting regions are related to income problems in the agricultural sector or rural areas. The widening of income gap between urban and rural areas is a common problem for both countries, especially in Japan, where farm income is declining. Factors causing income problems can include changes in income growth and consumption patterns caused by market opening amid aging and underestimating farming workers. The import of agricultural products, determined by the smaller farming structure, will increase imports if tariffs are lowered by market opening, which in turn will lead to a fall in the prices of local agricultural products, making it inevitable for a decrease in income. Also, the change in consumption patterns makes it difficult to produce small quantities of various products and require agricultural products. One of the responses to this decline in income is the 6th industrialization of agriculture. Under the premise of a small-scale farming structure, the business area is expanded to include trade, tourism, and direct trade by utilizing agricultural product processing, special product development, and local natural resources. There is a difference between the 6th industrialization of China and Japan. First of all, it is characterized by the Chinese style or Japanese style, the corporate-led imbalance trade (the Chinese style), and the manufacturer-led marketing ability limit (the Japanese style). [8].

In general, the types of organization can be organized by dividing them into horizontal, vertical, or organizational from above, or organizational from below. Industrialization management of China's sixth industrial agriculture is vertical organizing by non-farming companies and organizing from above. The purpose of the project is to enhance market agility including exports, which is led by businesses based on small farming businesses and lack of managerial resources. The problem is that it creates an unequal relationship with farming households.

Japan's 6th industrialization is the type of horizontal organization, organized from below by farming or rural areas. Through this process, the government expects the effect of creating employment in the region and increasing the cost of wealth. Business sources say that China is based on traditional agricultural production and is only the 6th industry to engage in economic activities such as processing, direct dealing and exports, and that Japan uses a variety of materials. There is a difference between the two countries in that not only the sixth industrialization of agreements from agricultural production.

4. Conclusion

The 6th industry refers to those developed by linking the second processing industry and the three-car tourism service distribution industry based on various resources held by farming villages, including agricultural products. Therefore, the 6th industry has different forms depending on the driving body and the project. There is a business diversification system in which farmers focus on diversifying their businesses, and an industrial partnership in which farmers connect with other industrial workers. Based on business, it can be divided into the types which are Local community, production-centric, distribution-centric, dine out-centric, treatment-centric and the export-centric types. This is characterized by stereotyping with leading projects, even if various projects are deployed.

Now when Korea's FTA with several countries is likely to worsen the profits of businesses related to the 6th industrial sector due to increased imports of cheap agricultural products. The most important strategy to survive the infinite competition at a time when Korea has to strengthen its profits from cheap agricultural products and to strengthening connectivity with other industries as well as enhancing internal capabilities, the company must

promote sales of goods and services and increase profits of individual businesses, rather than enhancing the profits of the 6th industry. Thus, the 6th industry will need efforts to gain consumer confidence, and in addition, it will have to seek various ways to establish a cooperative system. In addition, as customer needs change rapidly in the smart era, product and service life cycles are getting faster and consumers are increasingly looking for new products. Therefore, the sixth industry is deemed to be increasingly needed to rapidly and accurately predict changes in customer and market trends and to bring new products and services to market.

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References

- [1] Jeong Hyeon-hi, Lee Gwan-ryul, Gwon Oh-seong, Kim Yeong-su, "Strategies for utilizing and expanding local resources in the 6th industrial sector of South Chungcheong Province" (2016-40)
- [2] Japan Institute of Agriculture and Forestry, May issue report, 2011
- [3] Japanese Agricultural Cooperative Federation, 2012.10.9.
- [4] Japan's 6th Industrialization Fund Trend, NHERI weekly Briefing, Nonghyup Economic Research Institute, 2013.
- [5] Kim Tae-gon, Huh Ju-yeong, 6th Industrialization and Value Added Creation of Agriculture – Mid - to long-term promotion of community business (1/3 year), Korea Rural Economic Institute, 2011.
- [6] Lee Seong-wu, Kim Hyeon-jung, Hwang Je-hi, Park Jong-hun, Park Gyeong-jun, Farming industry Establishment of the 6th Industrialization Statistics in Rural Area, Rural Development Agency, 2014.
- [7] Kobayasi Sigerino, Kosiba Yurie, Ohasi Megumi, and Tabata Akiko, An Overview of the Characteristics and Policies of Japan's 6th Industrial Development – Build a producer-driven value chain and accelerate innovation, Rural Economic Institute, 2014.
- [8] Choi I-seok, A Study on the Competitive Strategy of 6th Industry, Pai Chai University School of Consulting, 2014.
- [9] Ju Jun-bong, Policy Trends and Regional Cases of Agricultural Industry Management in China, The 6th International Symposium on the Industrialization of Agriculture, Korea Rural Economic Institute, 2013.
- [10] Meeting 6th Industry Dream and Hope in Food Resources, National Food Science Institute 2017
- [11] <http://www.soomy.co.kr/main/main.php>