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# Plan to Revitalize Local Economy through 6<sup>th</sup> Industry of Agriculture

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#### Abstract

Although the  $6^{th}$  industry of agriculture, the subject of this research, is a policy that is implemented nationwide, the result or its performance can vary depending on judgment and basic plan of the local government concerned. To overcome this, support of the central government and provincial governments is important, but each rural family, rural area or management unit also has to grasp the reality fast and overcome it through voluntary participation. In addition, local governments of the nation should operate this project efficiently by implementing required support and policies in each field. Local governments should also promote revitalization of local economy by providing help to rural families and management units that implement the  $6^{th}$  industry of agriculture through expert consulting, matching of funding paths, and deregulation.

Key words: industry of agriculture, rural family, revitalization of local economy, funding deregulation

## **1. Introduction**

The government is promoting diverse policies in an effort to respond effectively to such problems as aging of rural areas, a fall in growth potential caused by population decline, and degradation of local vitality. Activation of the 6<sup>th</sup> industry of agriculture is also attracting popular attention as a measure of solutions to overcome the problems that rural areas are facing. The 6th industry of agriculture denotes economic activities that are carried out for creating jobs and added values through revitalization of agriculture and rural villages by way of convergence and integration based on the local resources and specialized resources of each locality [1]. Although similar in conception, the 6<sup>th</sup> industry of agriculture is different from the alliance of agriculture and industry in that it places an importance on returning the added values and jobs that are created by utilizing local resources by the initiative of local residents to agriculture and rural villages in linkage with 2nd and 3rd industries. The term '6th industry' was originally proposed by Professor Imamura of Japan as a concept that encompasses 1st, 2nd, and 3rd industries together, but in recent years it is often reframed to signify an entity that suggests an organic union rather than a simple summation of the three industries by way of multiplication. Professor Kobayashi Shigenori of Japan has expanded the range of the term to denote a 'project that is intended to secure income and employment and promote construction of a vibrant local society by enhancing added values of local resources such as agricultural, forestry and fishery products, local scenes, and culture, linking them to local consumers and end users in order to ensure more revenues to agricultural, forestry and fishery

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areas. In other words, the 6<sup>th</sup> industry refers to activities that create new added value by linking agriculture, food, special local products (2nd industry) and distribution, sale, culture, experience and service (3rd industry) based on tangible and intangible resources of rural areas [2].

The 6<sup>th</sup> industry is an economic paradigm for creating quality jobs by nurturing new markets and industries through convergence and integration of agriculture, rural area, science and technology, and ICT. When agricultural products, creativity, and imagination are combined, diverse forms of processed goods (food, medicine, health food, and household items) and tourism experience service goods can be developed. And it is possible to create new jobs that have not existed before, realize productive welfare, and lay the foundation for revitalizing the local economy [3]. A typical example is the Alps village of Cheongyang. Here, a genuine independent festival was created by adding imagination to ordinary resources that exist in every rural area. Cheongyang leads the 6<sup>th</sup> industry by creating a 'World Summer Gourd Festival' in summer and a 'Winter Mt. Chilgap Ice Fountain Festival' in winter respectively, offering interesting things of the locality to see, enjoy, and eat.

# 2. Theoretical Background for Promoting the 6<sup>th</sup> Industry of Agriculture

The 6<sup>th</sup> industry of agriculture is an activity through which local residents intend to solve the problems of the locality on their own using a business method and to redistribute the income from it. What differentiates the 6<sup>th</sup> industry of agriculture from other businesses is its pursuit of significance and meaning with favor such as 'for the community' and 'for the people'. It is in line with local development that is carried out for improvement of the locality based on local resources upon request of local residents [4]. The 6<sup>th</sup> industry of agriculture is a small-scale business wherein many local residents participate voluntarily in certain local units of rural area, creating new economic value and solving local problems at the same time utilizing local resources.

The reason that the 6<sup>th</sup> industry is attracting popular attention as an alternative to the farm household economy lies in the process of added value creation. It is based on the concept that, when organic materials or resources undergo various processes, added value will be created. For example, in the case of low-quality chestnut, it is sold at 100 won per kg. Low-quality chestnut is almost abandoned or traded at a low price since there is no demand for it. However, if demand is created by way of processing, chestnuts that used to be sold at 100 won will be sold at 500 won, and 40 kg of low-quality chestnut will create 20,000 won of income instead of 40,000 won. Actually, in the case of by-products or resources that were abandoned, if new demand is created, there is a tendency that prices are formed or transaction prices are increased according to the principle of supply and demand. Furthermore, if starch is made out of the chestnut, 40 kg of low-quality chestnut will bring you an income of 80,000 won since 40 kg of chestnut will produce 4 kg of starch. Starch is sold at 20,000 won per kg. Not only that, if chestnut-muk (jellied food) is created, it will bring you an income of 168,000 won since 48 kg of chestnut-muk can be produced out of 4 kg of starch, and the chestnut-muk is sold at 3,500 won per kg. Low-quality chestnut that used to be sold at 4,000 will bring you an income of 80,000 won when it is converted to starch, and will bring you an income of 168,000 when it is converted to chestnut-muk. If an experience program is developed and put into operation, the extra income will be further increased. If chestnut shell is used as a natural dye catalyst, another experiential tourist good is created. If a chestnut tour program is created by linking it to other tourism resources of the locality, it will contribute not only to an increase of related farm household income but also to revitalization of the local economy [5].

The 6<sup>th</sup> industry is related not only to the problem of rural local unit but also to the securing of food stability that can ensure self-sufficiency of a world-wide food shortage problem. As such, the 6<sup>th</sup> industry can be regarded as essential as an activation strategy of agriculture that can enhance the national self-sufficiency rate of agriculture and maintain the domestic agriculture. As agricultural structure of Korea is small and distributed regionally, and as jobs and income are declining, efforts should be made to revitalize local economy utilizing the 6<sup>th</sup> industry [4].

For activation of the 6<sup>th</sup> industry of agriculture, nothing is more important than nourishing entrepreneurs who would lead this initiative in the countryside. The 6<sup>th</sup> industrialization of the rural area is being carried out with the village as a unit in most cases. And for activation of the local economy, income should be created

continuously and markets should be secured smoothly. Hence, there is a need to promote efficient operation of the  $6^{th}$  industry by ensuring a favorable business environment for enterpreneurs. For the  $6^{th}$  industrialization of rural areas, village unit attempt is assessed as a desirable type. And for efficient operation of the resources of village communities and rural areas, creative income generating activity of local enterpreneurs and active and voluntary participation of local residents are essential. To promote the aim of community revitalization, it is necessary to change the policy from the viewpoint of individual management and ensure its implementation [6].

## 3. Resident Participation Leadership in the 6<sup>th</sup> Industrialization

In resolving outstanding issues utilizing local resources by residents or resident communities, participation of local residents is an essential element. Voluntary participation of many local residents is essential to ensure maximum resolution of outstanding local issues rather than maximum profit. In spite of this fact, enhancing the participation rate of residents and enhancing the leadership and management capability of the managers of the 6th industrialization remain in separate areas, requiring a separate approach in terms of policy choice. In other words, keeping in mind that the 6<sup>th</sup> industrialization of rural tourism is intended for local problems to be resolved by local residents themselves, resident participation, propulsion power for the 6<sup>th</sup> industrialization is backed that much more. For the purpose, the managers should work hard to enhance the level of the 6<sup>th</sup> industrialization [4].

Recent trend for the development of rural areas is bottom-up development in establishing the development plan which is based on opinions of local residents. This is so especially, since the 6<sup>th</sup> industrialization is recognized by the residents as a new local policy measure that is different from the existing policies. With regard to the leadership theory, a transformational leadership that enhances the will for change and transformation is emphasized as a new paradigm. Transformational leadership demands the leaders to inculcate group members to perceive the group's goal, encourage action for common goal, and bring about change through new inspiration [7-8]. In transformational leadership, the leaders emphasize awarding of intellectual stimulation to the group members beyond the frame of the existing thinking [8]. As sub-domains of transformational leadership, such qualities or domains as charisma, individualized consideration, and intellectual stimulation are commonly presented [9]. Notable characteristics of transformational leadership includes an ability to transform the members of the organization to exert themselves more than expected so that it leads to additional performance [8]. Core capability of the 6<sup>th</sup> industrialization is not an absolute concept that represents an activity or ability to simply increase profit but means an ability to accomplish and maintain competitive advantage that represents a relative superiority over competitors [10-12]. Hence, in the 6<sup>th</sup> industrialization, there is a need to approach from the perspective of management and to develop diverse capability in order to maintain the competitive edge over other villages. However, except for certain special products, most rural tourist villages are similar in agricultural products and environment, making it difficult to secure and maintain a relative or competitive edge over other rural tourist villages. Therefore, core competency affects added value increase and business efficiency, and the relative superiority of core competencies means that they are more likely to acquire more economic value [13-14].

# 4. Activation plan for the 6<sup>th</sup> industrialization

The 1st industry sector has a task of constructing a supply and production system of stable and uniform quality. Hence, in order to construct a uniform and stable supply base, it is necessary to induce agricultural families and farmers who have difficulty in implementing the 6<sup>th</sup> industrialization such as aged farmers and small-scale farmers to become a participating agricultural family through direct dealing and contract cultivation. At the same time, construction of production related infra-structure and funding of raw materials operation are necessary more than anything else. In 2nd industry sector, construction of a joint processing system and

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installation of shared facilities, modernization of processing and poor facilities, funding of R&D for creating added value, deregulation, and solution of funding problems are required. In 3d industry sector, market opening, deregulation, and ensuring of smooth financing are important tasks to be carried out through joint promotion of poor advertising and marketing among the 6<sup>th</sup> industrialization business partners.

#### 4.1 Activation through Deregulation and Abolition

It is important to diversify management and activate the 6<sup>th</sup> industry by easing and abolishing regulations by 1st, 2nd, and 3rd industry. New product development, equipment installation, production and experience licensing, facility standards, manufacturing registration, and deregulation in cultural asset protection areas are required. Development of small quantity and multi-item products, production and experience licensing, and easing of facility standards are required more than anything else. In case revenues from the experience program operation are reinvested in the creation of facilities and jobs, it would be necessary to relax the area standard of rural recreation complexes by providing tax relief and deregulation related to rural tourism, and provide a rural homestay breakfast.

#### 4.2 Funding and Raising Plan of Business Utilization

In order to improve poor facilities such as building infrastructures related to 1st, 2nd, and 3rd industries, financing is required. Most of management units of the 6<sup>th</sup> industrialization are in small-scale and require environmental improvement and equipment modernization. Therefore, they need support for low-interest loans necessary for establishment and operation of facilities for professional education and experience, experience tourism, and healing experience as well as sales outlets. In addition, methods of securing funds necessary for developing health functional food, designs, advertisement and marketing should be devised for high added value. For the purpose, it is necessary to enhance utilization of support and support projects provided by the Ministry of Agriculture, Food and Rural Affairs and the provinces concerned. It is also necessary to consider 6<sup>th</sup> industry business nurturing fund, 6<sup>th</sup> industrialization professional fund, 6<sup>th</sup> industrialization venture support fund, and 6<sup>th</sup> industry, convergence type SMB nurturing of agriculture, industry, and commerce, village side-dish and traditional food, and support for local food outlet installation should also be taken into consideration.

A business model that combines rural areas and healing should be constructed by linking 6<sup>th</sup> industrialization to agriculture, industry and commerce. There is a good prospect that diverse healing projects would appear which utilize the trend for curing body and mind while agriculture and rural villages meet with healing. It is necessary to create new projects that combine local resources such as traditional food, natural environment, life culture --beginning with agriculture, husbandry, and fishery products that only rural areas can provide-- with healing. It is also necessary to promote 6<sup>th</sup> industrialization that enhances profitability of rural tourism model for healing and stability, health functional food and traditional food by creating convergence type healing food special complexes of agriculture, industry, and commerce. In addition, development of 6<sup>th</sup> industry business profit models is necessary by business diversification. Detailed examination of such projects as educational farm, rural experience tourism, rural homestay, and farm house restaurant is necessary, and revenue should be created and shared through business diversification and linkage programs. Enhancement of local resident participation is necessary by simultaneous implementation of local food outlets, rural experience tourism, and farm house restaurant. 6<sup>th</sup> industry activation should be promoted by exploring sustainable profit model such as direct transaction network, urban-rural exchange, and studying in rural and mountain village, and by introducing local traditional food and lodging for stay-type tourism.

## 4.3 Nurturing 6th Industry Start-up Leaders and Industrializing Future Growth

It is necessary to promote active participation of agricultural business successors, traditional food masters, and master craftsmen by designating them as 6<sup>th</sup> industrialization leaders and to enhance utilization of new knowledge farmers and Agriculture Meister College students by evoking their interest in 6<sup>th</sup> industry start up. Especially, consulting, start up support, and reinforcement of education should be provided to young people who are returning or planning to return to rural or mountain farming to facilitate their stable settlement in order to nurture them into creative leaders of 6<sup>th</sup> industrialization. High value added 6<sup>th</sup> industrialization. As such, creation of new high added value of agricultural products through convergence with ICT in the processes of production, distribution and consumption should be actively promoted. It is also important to create a safe and convenient distribution network by utilizing ICT in the processes of distribution cost reduction, distribution management, and electronic commerce, and to provide easy access to consumers

## 5. Conclusion

The 'decline and aging' in rural population is obstacles to activation of agriculture economy, and discussions on 6<sup>th</sup> industrialization of agriculture and rural areas are being actively carried out to ameliorate the situation. The goal of the 6<sup>th</sup> industrialization is to ensure continuous economic growth of the area by activating rural economy. The 6<sup>th</sup> industrialization was introduced to Korea belatedly in comparison to advanced countries and its level is also somewhat low due to insufficient data and inadequate technology. Especially, in the case of Jeolla Namdo, promotion of the 6<sup>th</sup> industrialization. For activation of the 6<sup>th</sup> industry of agriculture, easing and abolition of regulations, financing plans, enhancement of utilization, devising profit models for 6<sup>th</sup> industry, fostering, customized consulting, 6<sup>th</sup> industry start up and nurturing of leaders, and support for opening new markets, and active advertisement and marketing should be promoted.

The 6<sup>th</sup> industrialization can maximize social wealth including consumer and producer surplus when it is so constituted as to meet the conditions of each agriculture and rural area, satisfy consumers of agricultural and fishery products as well as the demand or preference of rural area tourists. Furthermore, as concern for nature and health is closely related to tourism and rural products, demand for agricultural and fishery products but also to increased demand for processed agricultural and fishery products but also to increased demand for rural tourism and tourist items. An increase in the number of tourists increases the opportunity for direct marketing for rural and fishery products for potential consumers. Strategies for 6<sup>th</sup> industrialization are urgently needed, and deciding on what industry to nurture for which area is also very important. 6<sup>th</sup> industrialization area group should be derived taking the demand and preference of rural tourists who are potential consumers for agricultural and fishery products of the locality into consideration.

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