Abstract

Agroforestry is a very important industry that provides people with food resources. However, the forestry households of South Korea are facing a crisis that will have critical impacts on the provision of food resources in the nation. This study set out to examine problems with the forestry households of the nation by looking into their current management and conducting an interview with forestry household managers. It also aimed to search for plans to overcome the issues faced by forestry households and promote the development of the forest industry.

This study examined the current population of forestry households, the age of managers, the number of forestry household members, and the current income of forestry households as well as the age of forestry managers, the members of forestry households, and the income trends of the forestry industry and anticipated that the phenomena of forestry managers leaving the industry and forestry households shrinking would continue in the long run. An interview was conducted with 11 forestry household managers around the nation to examine the actual management of forestry households. They pointed out such major problems as difficulties with securing clients, issues with the gathering and storage of forest products, and challenges with product distribution and sales.

Based on these findings, the study proposed the following measures to help the forestry households overcome their economic crisis in the nation: first, they should form a cooperative of forestry households to create an opportunity for the forest industry to evolve into a 6th industry; and secondly, the government should provide a variety of supportive programs to ensure the vitalization of distribution.

[Keywords] Korea Crisis, Forestry Household Crisis, Forestry Household Prevention Plan, Economic Crisis, Role of Government

1. Introduction

Forests play critical roles that include providing various economic and environmental benefits. The forest industry of South Korea is recently facing a crisis due to the aging of forestry practitioners and the everyday reduction of forestry households both in number and size. Lumber, one of their major sources of income, requires a lot of time invested to hold its economic value; and thus, fails to serve as a source of income for forestry households. In addition, the crisis of forestry households has been exacerbated by the introduction of cheap forest products into the South Korean market after opening trade. In South Korea, forestry households are labor-intensive and have low pricing competitiveness in the market due to the high production costs for cultivation, which means that small forestry households have a difficult time generating income through their forest
products except for a few environment-friendly high-quality ones.

Agroforestry holds huge importance as an industry to provide food resources to the nation. Nevertheless, forestry households in the nation face a crisis today that will have negative impacts on the distribution of food resources in the future. This study, thus, intended to examine problems with forestry households by reviewing the current management of forestry households in the nation and interviewing some of their managers, and explore measures to help them overcome their problems and promote the development of the forest industry.

2. Current Management of the Forest Industry in South Korea

2.1. Current population of forestry households

The Agriculture, Forestry, and Fishing Industry Survey(2017) by the Statistics Korea reported that as of December 1, 2016, the number of forestry households was 87,000, down by 2.9% year-to-year. The population of forestry households was 204,000 down by 5.9% year-to-year. The members of forestry households continue to leave the business[1].

2.2. Current state of forestry household managers

The study also examined the age of forestry managers and members of forestry households and found that the average age of forestry managers was 63.2 years in 2016 and that the forestry households whose managers were in their sixties were the most at 41.6%. There was no single manager aged 39 or younger. Of the entire forestry households, 71.5% had two members or fewer, which suggests that the forest industry is in a very serious situation in terms of future growth possibilities[1].

2.3. Current income of forestry households

Income per forestry household increased 4.2% from the previous year in 2016, continuing the rising trend since 2012. The total income of forestry households was, however, low at 11,314,000 won per year. Forestry households showed very high dependence on forestry income at 33.7%[2][3]. These findings indicate that forestry households face limitations with running a household based on the current forest industry.

It is estimated that the trend of forestry managers leaving the business will continue along with the shrinking of forestry households based on the findings about the age of forestry managers, members of forestry households, and income trends of forestry in the nation.

3. Problem with Forestry Households Management

The investigator conducted an interview with 11 managers of forestry households around the nation to examine the actual management of forestry households. The results show that they had the following management problems: first, they had a difficult time securing clients. Forest products should be sold to generate income, but they suffered difficulties with securing clients and promoting their products due to high online advertising costs; second, there were problems with gathering and storing forest products. All the households of wild herbs and vegetables, mushrooms, and tree fruits found the biggest problem in the shortage of manpower during gathering time. It was also problematic that the value of their products would deteriorate due to the lack of storage facilities after gathering; and lastly, they had difficulties with distributing and selling their products. The value added of forest products is not returned to forestry households due to the margin rate of the middlemen. They also had difficulties with addressing customer complaints.

4. A Case Study on Outstanding Forestry Household Management

The investigator visited and examined a wild grape farm in Paju to apply a successful case of producing, selling, and serving forest products for the stabilization of forestry
household management. The wild grape farm formed a cooperative with its peers in the area and sold wild grape wine and jam products. The farm increased its sales by linking its products to tourism service including an experience of making wild grape jam and exploring a wine cave. <Figure 1> shows the wild grape wines sold by the farm, and <Figure 2> shows its products linked to tourism.

**Figure 1.** Cases of wild grape wine products.

![Image of wild grape wine products](image1)

**Figure 2.** Cases of tourism-linked products.

![Image of tourism-linked products](image2)

and made the following proposals for the creation of new income for forestry households for the stabilization of their management: first, a cooperative of forestry households should be formed to create a chance for the forest industry to evolve into a 6th industry. It will have positive effects on the way that small forestry households produce and grow forest products in an organized manner, and develop and distribute high value products; secondly, they need to create value by developing processed food. They will have to recruit and educate talents via a village or cooperative organization and carry out a project supported by the government based on the connection between the central and local areas; and finally, the government should provide them with various government-funded programs for the vitalization of distribution. Example products will include the development and improvement of varieties, construction of joint processing and storage facilities, creation of a tourism village, and manpower support for the harvest period so that forestry households will be able to develop their own competitive edge for themselves.

### 6. Reference

**6.1. Additional references**


### 5. Conclusion: Plans to Help Forestry Households Overcome Their Crisis

In an effort to help forestry household managers overcome their management problems, the study surveyed experts in the consumer and marketing fields for their opinions
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