

# TECHNICAL SPOTLIGHT



Date: 18 June 2010 For Immediate Release

Contact: Dr. Kim Mahn-joh (+82-31-290-1187)  
Div. Special-purpose Trees  
Korea Forest Research Institute  
44-3 Ohmokcheon-dong, Gwonseon-gu, Suwon 441-350, Republic of Korea

## *Insights into Agroforestry*

*in Light of "Forest Products and Production Processes for a Greener Future,"*

*One of the Essential Themes at the XXIII IUFRO World Congress in Seoul*

### **What Is Agroforestry?**

Agroforestry refers to sustainable forest management combined with short-term forest income sources such as fruits, vegetables, medicinal herbs and tree sap. It is an integrated approach that allows diversification as wood production is time-consuming with low profitability and slow circulation of capital. This convergence serves multiple purposes including thinning; formation of forest land; grazing of cows, goats and sheep; bee-keeping & insect breeding; and mushroom cultivation.

### **Why Is Agroforestry Needed?**

Agroforestry is needed more than ever as an alternative to ensure a more efficient use of forest land and sustainable forest management (SFM) by meeting the needs for balanced land development; healthy food and forests as leisure space for the public; and timber-based income sources for residents in mountainous villages.

In the Korean forest industry concentrated on wood production, it takes 30 to 50 years to grow young seedlings for production. Wood production solely based on forestry is not that profitable with little capital. The forest land has a lower unit productivity than other land types; not so many people engage in the industry for a living. With the high rate of forest cover in Korea, use of forests should be augmented through efficient forest management.

With the upgraded living standard, more and more people are interested in healthy food products free of fertilizer and pesticides and natural forest products. In the past, farmers preferred plantation of vegetables, medicinal herbs and other plants to reduce costs in production and administration while raising income in addition to the forest land. However, such mass production lowered the quality and prices of products.

The demand for vegetables produced in mountains is rapidly growing with their unique flavor and taste as well as their functions for health. However, the harvest of wildlife vegetables has been on drastic decrease year by year. Now it is urgent to implement measures to produce naturally-grown resources through group cultivation in specific areas at a time when these are severely damaged due to reckless collection of vegetables and logging for bud gathering.

The Korean forests are aged and suitable for cultivation in the forests as they came under large-scale afforestation and sustainable forest management in the 1960s. Agroforestry can cope with the rising demand for high-quality forest products based on efficient use of forest land as well as protect the naturally-grown plant resources.

### **Non-timber Products Suitable for Agroforestry**

Forest products hold great value as resources including fruit trees, tree sap, tree shoots, special-purpose trees and herbs, but they are time-consuming as regards harvest deep in the mountainous areas. In general, the income compared with the labor cost is not enough to secure stable income for mountain villagers despite high returns of non-timber products favored by many Korean people.

### **Types of the Agroforestry Complex**

Agroforestry is divided into forests aged for cutting (30 ~ 50 years), sweeping cutting caused by wildfire and use of the existing forests: cultivation after clear cutting and cultivation in the forests.