

## **DEVELOPMENT OF DECISION TREE FOR RESPONSE FOREST FIRE THROUGH THE COMPARATIVE CASE ANALYSIS OF LARGE WILDFIRE**

**Namgyun Kim, Jaehwan Kwak, Man-II Kim**

*National Forestry Cooperative Federation<sup>1</sup>*

[knkblue2@hanmail.net](mailto:knkblue2@hanmail.net), [jaehwan-kwak@hanmail.net](mailto:jaehwan-kwak@hanmail.net), [mikim@nfcf.or.kr](mailto:mikim@nfcf.or.kr)

### **Abstract**

As recent 10-year statistics, the cause of wildfire in Korea is over 70% of accidental origin. The causes of such large wildfires are various factors such as weather conditions, fuel accumulation, difficulty in responding to the night and so on. Essentially by removing these factors to prevent wildfire spread is very difficult. Therefore, it is necessary to focus on preventing the spread of wildfires. The ability of actors such fireman, public officer is very important to prevent the spread of wildfires. Corresponding actors belong to organizations such as the Ministry of National Defense, the Ministry of Environment, and the National Police Agency, as well as the Forest Service, which is the lead government for wildfires. Therefore, integrated management is important for the behavior of actors belonging to various organizations to have the synergy effect of wildfire response. In this study, case analysis of large wildfires at Gosung, Korea in 1996 and 2019 were compared. And, a decision tree was developed to enhance the collaboration function based on the error analysis results of the actors. The developed decision tree reflects the wildfire response standard manual to ensure reliability.

**Keywords:** Wildfire, Decision tree, Case analysis

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<sup>1</sup> Korea