

Developing the Assessment and Indicators for Local Institutions in Dealing with Forest Fire Dilemma

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ABSTRACT

This study analyzes the main criteria and indicators in strengthening local institutions in charge of forest management towards dealing with forest fire incidence in Riau Province, Indonesia. Data were collected using in-depth interviews, observation, and questionnaires and analyzed with Microsoft Excel spreadsheets and other Structural Equation Modeling (SEM) techniques such as SPSS and Smart PLS. Moreover, only 87 out of the 120 questionnaires administered to related stakeholders were retrieved. Four variables, including Organization, Capacity, Authority, and Governance, were measured using ten indicators for each. The results showed a significant correlation between local institutions and these variables in solving forest management issues. It means there is a need to strengthen the institutions' structural plans to ensure the effective management of natural resources, and this is achievable through the support and help of the government and communities.

Keywords: forest fire, local institutions, forest management.