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"Solidarity in a competing world fair use of resources"

## Wildfire Research and Management Supports Local Communities in Mt. Kenya

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## Abstract

Human-induced wildfires have caused major loses to forest resources, wildlife and property in Mt. Kenya forest, one of the five water towers of Kenya. The Central Highlands Conservancy covering Mt. Kenya forest has limited and insufficient technical fire management capacities to control the spread of large scale fire events in the recent past. The project FIREMAPS seeks to support wildfire management in Mt. Kenya forest by developing fire danger maps to be used by communities and the government to identify fire hot spots, support fire prevention and firefighting. As wildfire related research and management are multi- and interdisciplinary in nature there is no single organisation that can handle these issues on its own. The project achieves its goal by (i) undertaking a multistakeholder participatory engagement of communities around Mt. Kenya forest to identify fire prone areas and causes of wildfires and (ii) analysing records on socio-economic activities, weather data, vegetation types and wildfire data to develop fire danger maps. In this contribution we present the approach for collecting and analysing data on fire events, socio-economic activities, weather data and vegetation types. Questionnaires were used to collect the attitudes and preferences of local people towards fire management. Fire records were digitised and geographically referenced to identify hot spots. Scientific evidence on the fire danger in different forest districts and local knowledge of communities on fire management in Mt. Kenya were combined through an interactive learning approach at community level. This allows making the research relevant to the needs of communities, improving their capabilities, and supporting knowledge and technology exchange. This will enable communities to sustainably use and manage forest resources. The recommendations for monitoring and managing of wildfires will be disseminated to volunteer village fire crews, community leaders and other relevant stakeholders considering the fire danger maps.

Keywords: Fire danger, fire ignition, Kenya, knowledge

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