Suggestions for prevention of fires in Kalimantan based on the survey on the residents' recognition and reality (住民の意識と実態の調査に基づくカリマンタン泥炭火災の防止に向けた提案)

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The peatland on Kalimantan Island, Indonesia, is a major source of CO₂ from the decomposition of peat and frequent wildfire in dry seasons, due to desiccation after large-scale drainage. The fire also produces thick smoke, which poses a serious threat to the health of local residents as well as to transportation and economy of the region.

Researches so far have primarily focused on the land profiles, specific conditions that contribute to the susceptibility to fires, and/or the efficacy of wetland restoration for suppression of fires and green-house gas emissions. Yet, little attention has been paid to the congruity of such schemes with the local society.

In order to explore the local residents' recognition of the cause, probable solutions, and current attempts to extinguish or prevent wildfire, questionnaire survey and interviews were conducted in two villages in Central Kalimantan. The questionnaire was answered by 52 and 37 people in the farming and fishing village respectively, and the interviews were conducted with 10 people in total. The survey showed that 66% of the respondents in the farming village attributed the fire ignition to cigarette butt and 27% to land burning, whereas these were mentioned by 42% and 39% respectively in the fishing village. According to a fire-station officer, however, most fires actually arose from land burning by local farmers. Interviews with the residents further clarified that the poor accessibility to the fishing village hinders fire-fighting activities, as well as hampering residents' access to public services such as medical care and schools.

The outcomes suggest that, to prevent ignition of wildfire, the link between burning and fire should be emphasized among farmers. Wetland restoration requires further research on its impacts, especially on agriculture in the farming village and on flood events in the fishing village, thus it would be reasonable to pursue fire-free agriculture in parallel with restoration. To this end, the fire-station has already launched developing compost techniques, which may be another subject that overseas institutes can cooperate with. Any project, however, has to consider the lifestyle and needs of people in varying communities.