

# Community-based fire management, land tenure and conflict: insights from Sumatra, Indonesia

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## Abstract

A collaborative research project involving the Center for International Forestry Research (CIFOR), International Centre for Research in Agroforestry (ICRAF), United States Department of Agriculture Forest Service and the European Commission found that community-based fire management in parts of Indonesia can have both positive and negative impacts on the forest environment, and can lead to short- and long-term changes in income. This paper examines two examples from Lampung Province in southern Sumatra, Indonesia, where communities manage fire in different forest types to increase income generation, but without a conscious effort to maintain environmental services or achieve biodiversity conservation. In Sekincau, located in a national park, communities manage forest fire to facilitate the establishment of coffee gardens in the residual understorey or in open areas. Based on knowledge of fire behaviour, communities often encourage fire to escape from adjacent areas and burn in previously illegally logged forest. Fires are also managed to prevent damage to adjacent coffee gardens. This suggests that the community knows how to manage fire to meet specific objectives.

In Menggala in the vast swamps of east Lampung Province, the traditional communities use fire as a tool for burning organic matter to prepare the ground for "traditional swamp rice cultivation" (sonor) during extended dry periods. The fires burn large areas of swamp forest well beyond the boundaries required for rice production. The fires have facilitated the regeneration and expansion of areas of *Melaleuca cajuputi*, a fast-growing species that responds positively to disturbance. The regenerating forests are harvested for domestic consumption and supplementing income through the production and sale of charcoal, poles and sawn timber.