

Observations on Repressive Environmental Policies and Landscape Burning Strategies in Madagascar

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Madagascar is aflame. Slash-and-burn fires nibble at the rainforest, while vast conflagrations burn a quarter to a third of the grasslands each year. Environmentalists decry these fires as a root cause of deforestation, soil degradation, and habitat destruction. Yet, during a year of fieldwork in a highland Madagascar village, my impression was that to the rural residents, vegetation fires are an ordinary event, not worthy of note. Even as fire advances down a nearby slope, farmers continue to till the earth and market-goers chat as flames lick at the grass along their path. During the course of an interview, smoke may have billowed up from across the valley, but this never entered the conversation unless I brought it up.

Two distinct reasons contribute to making these fires "non-events." First, burning is a useful, common, and well-adapted environmental management practice, hardly worth a notice. Outsiders to rural Madagascar often hold the bias that fire is detrimental, potentially dangerous, or at the very least extraordinary. In rural Madagascar, fire is central to the agropastoral logic that governs Malagasy farming systems.

There are countless ways in which fire is used for environmental management. By far the most widespread is the pasture renewal fire. Like ranchers in Kansas, or pastoralists in the Serengeti, at specific times of year the Malagasy burn their grasslands to improve forage quality. The fresh green growth, which follows fire, is critical to cattle nutrition at the end of the dry season. Fire also has numerous other uses. Fallow fields and uncultivated grasslands are burned to prepare them for planting. Fire wards off invading locusts and fire does the work of many FARMERS in clearing irrigation ditches and field edges, allowing water to flow freely and minimizing rat habitat. In highland tapia woodlands, fire helps maintain the ecological dominance of the pyrophilic and economically useful *Uapaca bojeri* tree, A source of fruit as well as habitat for a wild silkworm. People also burn the tapia woodland undergrowth to control populations of silkworm parasites. Finally, preventive burns are used to protect houses and crops from the wildfires that result from dangerous fuel buildup.

To highland farmers then, fire is as normal a tool as the spade or the ax. It rarely merits more than a passing glance; it is a non-event. In contrast, urban Western society views vegetation fires as spectacular and out of the ordinary. Wildfires at the urban fringe destroy homes and threaten lives, as occurred in Oakland Hills in 1991 or Greece in 1998. While the Western public is beginning to appreciate the natural role of fire in ecosystems, ecologically

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<http://www.africa.ufl.edu/asq/v3/v3i2a17.pdf>

overdue fires such as the 1989 Yellowstone conflagration attract considerable attention. For these reasons, outsiders may be shocked at what they see as the apparent carelessness or apathy of the rural Malagasy with respect to fire.

The second cause of fire as a non-event is the criminalization of fire. Colonial and independent administrators, foresters, and environmentalists have fought rural burning practices for one hundred years as a result of the biases discussed above. While the law does not forbid all fires outright, it is rather strict, and punishment is feared by the rural Malagasy. As a result, face to face with "outsiders", farmers will carefully avoid the subject of fire--even with flames nipping at their heels.

Following the 1896 conquest of Madagascar, French colonial administrators sought to control the fires, which burned so frequently and ubiquitously. Their scientists informed them that the fires destroyed the valuable forests and impoverished the soils, yet some district officers argued for the people's need to burn to maintain their pastures. Legislation in 1907 banned all fires except for locust control and pasture renewal, with the idea that the development of modern ranching--improved forage production and hay cutting--eventually would make even pasture fires obsolete.

New laws in 1930 tightened the screws but still allowed for pasture fires upon authorization. Touring colonial officers made speeches against the use of fire while foresters and gendarmes received incentives to enforce the legislation. In independent Madagascar, legislation echoed colonial laws, and the government organized periodic media and awareness campaigns against fires. In the 1970s, penalties for illegal wildfires were severely stiffened, yet enforcement fell behind. Anti-fire efforts again intensified in the late 1980s as environmental money began to pour into the country. Citing the mounting problem of fires, around 1990 the Malagasy forest service stopped issuing pasture-burning authorizations in many regions

The result of these politics--the regulation and even criminalization of a traditional agricultural practice--closes the lines of communication. Fire is not open to discussion with outsiders. Farmers know that fires are strictly forbidden. They hear anti-fire propaganda in politicians' speeches and on the radio, and they resent the cumbersome formalities (or bribes) necessary for legal burning. Yet they depend on this useful tool, and so, to protect themselves, fire is not discussed; it occurs at night, and is blamed on "passers-by" or "evil people". In this context, local organization and management of fires becomes impossible. Recent legislation (see articles by Bertrand and Henkels in this issue) may produce a less repressive atmosphere and thus a more realistic and effective fire management.

This story of fire as a non-event contains several lessons for researchers working on resource management issues in Africa. First, in most cases, a researcher will be an "outsider" carrying a set of biases that may hamper objective research. Had I not detached myself from my biases, I would have seen the Malagasy peasants as ignorant, apathetic pyromaniacs. Thus, researchers must examine their biases, seek alternate explanations, and listen to the logic of their informants. This is nothing new, but it is worth repeating, and it applies to nearly all social and environmental issues, from family planning to water use.

Second, researchers and policy-makers must be aware of the possibly counter-productive nature of punitive policies. Repression can disrupt functional production systems, and create resentment, distrust, and a culture of lies and corruption. Repression hampers dialogue. Finally,

repression stifles the development of potentially constructive local initiatives, as any compromise is categorically outside the legal realm of possibilities.

In highland Madagascar, there will always be fire, and there probably should be. The question is how much, where, and how to manage it. Policies and research which respect the local logic for burning and which encourage dialogue are the best means to a future fire politics that accommodates as many interests as possible.