



Controlling a Regional Threat: Fighting Fire in Indonesia

Update

December 1, 1998

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This update is based on papers by Martin Hardiono of the World Wide Fund for Nature, Indonesia, and Major Djuanda of the Indonesian Navy. Both men worked with the special fire control team established by President Suharto in September 1997 to manage all aspects of fire-related information. Additional details were provided by Jefferson Fox.

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Larger-than-expected fires in Indonesia last month have given a renewed sense of urgency to international efforts to prevent and fight forest fires in that country, and funds are flowing into an ASEAN fund earmarked for such efforts. But analyses of past fire-fighting efforts suggest that improved technical assistance will not be enough: real progress requires that the underlying causes of fires, the political climate that hampers response, and traditional barriers that impede the flow of critical information all be addressed.

Fires are nothing new to Indonesia, where for centuries shifting cultivators have used it to clear small patches of forest and generate new fertilizer. During 1997-98, however, massive fires destroyed millions of hectares, caused more than \$4.5 billion in damage, and, according to some estimates, generated greenhouse gas emissions greater than the annual output of cars and power stations in western Europe. Satellite imagery of these fires tracked 80 percent of them to large government-backed palm oil plantations and forestry concessions. It was their extensive and often uncontrolled fires that were the real source of problems.

The fires created a thick, choking haze that covered the region, creating serious health problems; causing accidents on land, at sea, and in the air; closing roads, airports, and shipping lanes; and resulting in a steep drop in tourism in a region where declining economies could ill afford it. Indonesia's poor handling of the crisis drew widespread criticism, as did the half-hearted response of the Indonesian military—which had principal responsibility for coordinating fire fighting.

For months, ASEAN has wrestled with how best to prevent future fires, and how to deal with them once they do start. With funds from Australia, New Zealand, the United States, the UN Environment Program, the Global Environmental Facility, the Asian Development Bank, and others, ASEAN and Indonesia have developed a fire prevention and suppression strategy. It will provide training in fire fighting and haze management, improve meteorological services, launch air and ground surveillance in Sumatra, strengthen early-warning systems, and provide technical assistance for coal and peat fire suppression.

But are these initiatives the most effective way to prevent fires and reduce their disastrous impacts? Not by themselves, suggests a study of the experiences of the Indonesian fire control team that was responsible for collecting, storing, analyzing, and delivering fire-related information. Its experiences demonstrate that Indonesia's needs are far more complex than the newly proposed technical assistance suggests.

The recommendations that follow are based on an analysis of the lessons learned by the fire control team.

Clarify the military's roles and responsibilities in fighting fires. The Indonesian government will have to: a) establish clear lines of communication and cooperation within the military itself, as well as between the military and other entities (state agencies, nongovernmental organizations, and foreign governments); b) extricate the military, both as a whole and as individuals, from business deals benefiting from fires; and c) establish the military's clear responsibility for environmental protection (as several other nations have recently done in recognition of the centrality of the environment to national stability).

Despite a mandate to assist in disaster mitigation, the military's role in suppressing the fires was limited. This role was confounded by several factors. The unfortunate coincidence of an election year made members of the military more prone to political maneuvering and to competition among themselves that stifled collaboration. The armed forces are obliged to support government-sponsored development programs, such as the palm oil plantations where most of the fires occurred, and also often have business interests in them. Thus, they have a conflict of interest when it comes to policing these programs. In addition, because fires are a normal phenomenon, there was little sense of crisis among local military chiefs who failed to grasp the scale of the problem.

Link contributions of aid to enforcement of existing environmental and forestry laws, and provide technical assistance and training to improve enforcement capabilities.

Indonesia has relatively good environmental and forest management laws, but they have long been unenforced. In addition to support for government agencies, especially the open-minded and far-sighted Ministry of Environment, aid should go to nongovernmental organizations (NGOs), which have been at the forefront of the movement to enforce existing environmental legislation.

Improve the government's ability to collect, store, analyze, and share accurate information. This includes enhancing the technical aspects of information management, as well as developing protocols for information sharing, fostering interagency cooperation at all levels, and paying government employees a living wage so they are not caught in a conflict of interest where personal business concerns override public obligations.

During the crisis, fire control was hampered by a lack of information. Information needs ranged from the static (baseline ecological and socioeconomic data) to the dynamic (fire occurrences and haze dispersal patterns). While some agencies were forthcoming with a wealth of material, some of it was unusable due to technical incompatibilities between data sets. Other agencies cited the high cost of generating and preparing data and were reluctant to give it away freely. A centralized bureaucracy impedes collaboration, and political rivalries among government agencies foster competition. Indonesia's "political economy of truth" also inhibits the open sharing of information, when doing so could upset existing power structures and the financial security of certain individuals. Many civil servants, for example, openly admit to having falsified field data under the doctrine loosely translated "as long as father (President Suharto) is happy."

Improve telecommunication capabilities.

Telecommunications are limited in many parts of Indonesia. Few radio antennas have the capacity to transmit signals throughout an entire province. In Kalimantan, where telecommunications are restricted to a few areas, most news is delivered in person as people make their way up and down river for trade and other purposes. As a result, fires could only be reported with great difficulty and much delay, and information and education about the fires was not easily relayed to those in the vicinity.

Strengthen the role of NGOs in fire-prone areas.

In addition to ensuring enforcement of environmental legislation, NGOs have a broader role to play. With their well-established networks, committed members, and specialized expertise, they have proven their competency in areas as diverse as fire reporting and monitoring, communicating with and educating local constituencies, and watchdogging government agencies—all unhindered by the politics and vested interests of government agencies.

Conduct an educational campaign to change public perception of the significance of fires, and clarify people's roles and responsibilities in reporting them.

With fire an ordinary occurrence, many communities were disinclined to report them. In part, people did not realize the magnitude of the problem, nor did they believe any action would be taken in the case of fires deliberately set in government-backed projects.

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