



**S. RAJARATNAM SCHOOL
OF INTERNATIONAL STUDIES**
A Graduate School of Nanyang Technological University

RSIS COMMENTARIES

RSIS Commentaries are intended to provide timely and, where appropriate, policy relevant background and analysis of contemporary developments. The views of the authors are their own and do not represent the official position of the S.Rajaratnam School of International Studies, NTU. These commentaries may be reproduced electronically or in print with prior permission from RSIS. Due recognition must be given to the author or authors and RSIS. Please email: RSISPublication@ntu.edu.sg or call (+65) 6790 6982 to speak to the Editor RSIS Commentaries, Yang Razali Kassim.

No. 113/2013 dated 20 June 2013

Haze over Southeast Asia: Battling Transboundary Pollution Together

By J. Jackson Ewing

Synopsis

Transboundary haze originating from Indonesia is again polluting areas of Southeast Asia. Lamenting this situation and demonising Indonesia will do little to address the issue, however. More robust and pragmatic cooperation is needed, but Jakarta has to play its part.

Commentary

THE UNRELENTING haze is back. A smoky fog began descending upon Singapore and parts of Malaysia on 13 June 2013 and by 17 June was readily observable by sight and smell across thousands of square kilometres. Singapore's Pollutant Standards Index (PSI) has since consistently hovered above safe thresholds (levels above 100), reaching an all-time high of over 320 PSI on the evening 19 June. The haze is certain to affect the island for days to come.

If past experiences offer any guide, this may cost Singapore millions of dollars in health expenses, lowered productivity, absenteeism, and reduced consumer activity – in addition to the less quantifiable impacts that haze has on quality of life.

Why now?

The current haze event, like its major predecessors, stems from the combination of forest burning primarily in areas of central Sumatra with winds out of the west and southwest. Dry weather has created fire-prone conditions, and a growing number of haze-producing 'hotspots' have been detected in Sumatra as a result. These are only the proximate causes, however; the drivers of haze stem from a convergence of economic, political and environmental conditions linked to land clearance.

Economic interests have propelled deforestation in Sumatra and Kalimantan for decades. The two large islands lost over 40 per cent of their forest cover between 1990 and 2005 and increasing forest clearing rates have extended into this decade. Profitability comes in the form of initial timber extraction followed by newly cleared lands being brought under cultivation. The growing markets for products such as oil palm and rubber, along with Indonesia's own ambitious food production goals, incentivise these processes.

Burning remains the preferred land-clearing practice by small-scale farmers and larger entities alike. It is quick and efficient, requires minimal labour, enriches soils and acts as a default strategy in lieu of affordable

alternatives. It is difficult to determine the precise ratios of small- versus large-scale forest burning, as many small-scale cultivators change locations frequently and are not captured in official government statistics.

Moreover, the lines between actors can blur as leases held by small-scale landowners are often contracted by corporate enterprises to grow specific products. That said, estate-level land clearance and cultivation during recent decades have clearly upped the scale of forest burning far beyond that wrought through traditional slash and burn agriculture, and fuelled transboundary haze as a result.

Politically, notwithstanding accusations of outright apathy, Indonesia recognises the importance of the haze problem from health, environmental, reputational and even economic perspectives. The populations and physical environments most heavily impacted by the haze are in Indonesia. Haze puts the country under severe regional criticism and destroys forest resources that could have profitability beyond land clearance.

There have been recent tangible steps by Indonesia to mitigate the haze problem, and ministers from affected ASEAN states praised the country in May last year for reducing haze hot spots. The Yudhoyono administration has prioritised forest preservation, and altered land management bureaucracies to this end.

Nonetheless, Indonesia's efforts to control forest clearance have often proved ineffectual in the face of economic drivers. The financial benefits of land-clearing are frequently afforded greater priority by powerful actors in forested areas than are the national and regional impacts of forest burning – no matter what policies emerge from Jakarta. These powerful actors at times include local government officials who have been seen to collude with forest clearing companies for economic and political gain.

Meanwhile, deficient enforcement and prosecution capacities, pervasive corruption, expanding political decentralisation and the sprawling nature of the Indonesian archipelago magnify the challenges of reining in such activities.

Environmental trends represent the third key driver of haze with arguably the most unpredictable future. Past haze events have coincided strongly with the El Niño phenomenon, which contributes to dry conditions and decreases in rainfall. Current climate science lacks confident understanding of the relationship between El Niño and the warming trends.

Still, higher temperatures and more pronounced dry periods are both predicted for parts of Indonesia and Southeast Asia at large. If these conditions become more frequent in haze-producing regions, the occurrence and magnitude of haze events will likely increase.

Extending regional cooperation

Indonesia is culpable for the transboundary pollution being inflicted upon its neighbours. As such, there are international legal and normative foundations for adjudicating haze as an infringement of sovereignty and rights in impacted countries. The practical import of such measures is not readily apparent in Southeast Asia, however, and appears anathema to the consensus-oriented approach favoured by ASEAN.

ASEAN has opted for cooperation, and the haze issue has been placed squarely on the regional agenda since acute episodes in 1997-1998. Despite Indonesia's failure to ratify the ASEAN Agreement on Transboundary Haze Pollution, regional cooperation since then has improved haze monitoring and had modest success in its prevention and mitigation. Such progress includes the provision of resources to address the root causes of haze in high risk areas of Riau and Sumatra, along with information sharing on zero-burning agricultural techniques, fire-fighting improvements, better peatland management and more robust air quality monitoring.

There are two primary pathways for Singapore and other haze-affected countries to extend these efforts. The first is to more proactively regulate the activities of companies operating in land-based commodities sectors in Indonesia.

Some major players in these sectors have origins in neighbouring countries and could thus be monitored more closely to discourage land burning practices. An Indonesian forestry official has called for such efforts in Singapore and Malaysia specifically while ministers from Singapore have called on Jakarta to name and shame these companies as Malaysia initiated an ASEAN meeting to tackle the worsening problem.

Forest preservation and ASEAN solidarity

Secondly, affected countries could play a larger role in incentivising Indonesia's forest preservation activities. A mechanism focusing on Reducing Emissions for Deforestation and Forest Degradation (REDD+) holds particular promise to this end as it offers capital incentives for maintaining forests and the services which they

provide.

REDD+ is currently supported almost wholly by countries from outside the region such as Norway and Australia that do so as part of efforts to address climate change. Countries in Southeast Asia with the capacity, such as Singapore, Malaysia and Brunei, could contribute to these efforts as part of their haze-reduction strategies.

Like many transboundary environmental challenges, haze is an injustice to impacted countries. Still, instead of lamenting this situation and demonising Indonesia, Singapore and other affected neighbours should seek innovative and pragmatic avenues to work alongside Indonesia on the haze issue – as they have offered – thus clearing the air in the region in the process.

At the same time, Indonesia should do its part to fundamentally address a major regional environmental issue that originates within its borders to prevent further strains to ASEAN solidarity.

J. Jackson Ewing is a Research Fellow at the S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University, and coordinator of the Environmental Security, Climate Change and Natural Disasters Programme at the RSIS Centre for Non-Traditional Security (NTS) Studies.