COVID-19 AND HAZE: IMPLICATIONS ON HEALTH, FIRES, AND SOCIAL JUSTICE

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POLITICAL ECOLOGY IN ASIA SEMINAR

Haze and Social (In)Justice in Southeast Asia: Past experience and what next?

*International Conference on New Research in International Development, Human Rights, and International Relations at a Time of Disruption*
Air Quality and Public Health

• SARS in China: death rates were twice as high in highly polluted areas

• COVID-19:
  • Acute respiratory distress syndrome has been a major cause of COVID-19-related deaths
  • Italy
    • more industrial northern regions have seen higher death rates of 12 percent compared with about 4.5 percent in other parts of the country

• United States
  • increase in PM2.5 concentrations of just 1 microgram per cubic meter was associated with a 15 percent increase in Covid-19 deaths
  • US counties that have experienced worsening air pollution over the past 15 to 20 years have a substantially higher mortality rate (prolonged exposure over time)
Air Quality and Public Health in SEA

• In 2019, all ASEAN countries except Brunei was in the top 60 list of countries with the worst air pollution
  • baseline pollution caused by a mix of urban and industrial emissions
  • seasonal air pollution or ‘haze’ related to forest fires and agricultural activity’

• Long-term health consequences:
  • PM2.5 particles have the long-term effect of weakening one’s respiratory, cardiovascular and immune systems
  • A 2016 study estimated that more than 100,000 additional deaths would have occurred in the southern ASEAN sub-region, both during and after the 2015 haze season

• In the context of COVID-19, someone with already weakened lungs and respiratory tracts has a higher risk of not just getting infected and but also suffering worse symptoms
Air Quality and COVID-19

• Early restrictions led to almost immediate improvement of environmental conditions
  • Malaysian Department of Environment reported an improvement in air quality in major cities two weeks into the MCO due to reduced vehicle emissions, industrial stack emissions, and open burning
  • In Jakarta, air quality has improved markedly as people commute less

• However, as countries are now loosening restrictions, conditions are returning to ‘normal’
  • In China, as people start traveling again and industries restarting, air pollution levels are bouncing back
Haze Threat in the Context of COVID-19

• Moderate risk of a severe transboundary haze incident in 2020
  • Dry season is expected to be milder than the unusual drought conditions in 2019
  • Indian Ocean Dipole and ENSO are projected to be neutral into the second half of 2020
  • ASMC forecasts near-normal to slightly-above-normal rainfall for Indonesia, Malaysia, and Singapore

• However, forest clearing and fires are still ongoing
  • Fires raging in northern Thailand, causing severe haze pollution in the northern ASEAN sub-region
  • In Indonesia, there have been reports that a new project to clear massive swathes of rainforests for oil palm in Papua is currently being pushed through, despite being mired in controversy
## COVID-19 Impact on Haze Risk (South-SEA)

<table>
<thead>
<tr>
<th>Category</th>
<th>Impact</th>
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<tbody>
<tr>
<td><strong>Expenditure</strong></td>
<td>COVID-19 response is tapping into disaster relief funding, which means that those funds may not be available in the event of a haze crisis</td>
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<td><strong>Resources</strong></td>
<td>COVID-19 has stressed healthcare systems and led to an increased demand for personal protective equipment. A major haze incident in 2020 would put further strain on healthcare and the supply of N95 masks</td>
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<td><strong>Restoration</strong></td>
<td>BRG's efforts to rehabilitate ecosystems and prevent fires have been impacted</td>
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<tr>
<td><strong>Enforcement</strong></td>
<td>Less capacity is available to prevent illegal forest encroachment and burning. Plantation companies warn that restrictions have made it more difficult to patrol their areas</td>
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<tr>
<td><strong>Response</strong></td>
<td>Social distancing measures are impacting the training and work of firefighting teams</td>
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<td><strong>Engagement</strong></td>
<td>In-person community engagement (by government, NGOs and companies) for fire and haze prevention has been suspended, as meetings and large gatherings are no longer possible</td>
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Economic Implications of COVID-19

• Smallholders
  • less able to request assistance with mechanical land clearing and soil compaction (equipment and crews may not be available), so some may resort to the use of fire

• Corporate plantations
  • COVID-19 resulting in weak export volume and low commodity prices, especially palm oil and biofuels
  • Large growers may be able to continue business-as-usual
  • BUT small/medium growers may have different considerations:
    • Either slow down expansion to ride out the crisis
    • OR continue/increase land clearing in the hopes of increasing profits, while resorting to slash and burn practices as a cost-saving measure
  • Small/medium growers fall within the ‘gray area’ of sustainability..
Implications for Social Justice

• Haze is already a serious social justice issue
  • Poorer people are less able to protect themselves from haze (expensive N95 masks, access to medical care, staying home from work, safe accommodation)
  • Areas most affected by haze are usually far away from administrative centres (eg Sumatera and Kalimantan in Indonesia, Northern Thailand)

• Haze, COVID-19, and social justice
  • COVID-19 responses have already highlighted issues of social justice (social distancing, ability to WFH)
  • Those impacted most will be the poorer, more rural folks
Conclusion

• Too early to determine the full implications of COVID-19 on fires and haze, but if COVID-19 persists, the consequences will be more severe

• Should a major haze incident occur in the midst of COVID-19
  • Added public health burden
  • Poor air quality exacerbating respiratory ailments
  • Rural livelihoods: resorting to more fire-risk behaviour (vicious circle)

• Governments and other stakeholders should take a stronger social justice approach in response to both haze and COVID-19 to mitigate these risks
THANK YOU!

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Resources/Additional Reading: