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Haze Pollution and Peatlands: Can ASEAN Finally Breathe Easy?

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Synopsis

President Jokowi's visit to Riau Province recently and his comments on fires and smoke haze have raised hopes across the region. But the mere act of blocking canals on peatlands is, but one, of many interrelated and multifaceted issues he has to tackle.

Commentary

THE PEOPLE of ASEAN have been enduring choking haze - primarily smoke from wild fires - for the past two decades. Despite numerous efforts, promises, and actions, the haze pollution has only gotten worse. However, the publicity surrounding newly-elected Indonesian President Joko Widodo's recent visit to Riau Province, where most of the transboundary haze originates, hopefully points to a change for the better.

The President said: *"For the past 17 years, forest fires are due to the practice of negligence and complacency. This is simply just an issue of whether we want to or not, whether we intend to or not … to solve the problem."* But if it was that simple, why were his predecessors not able to pull it off?

Understanding complexity of the problem: Peatlands

To better understand the complexity of the problem, one needs to appreciate the primary source of the haze, the root causes, and the multiple actors and vested interests that collide and collude to make simple solutions complex and intractable. To be fair fires and haze are not uniquely Indonesian, but occur throughout the region where forests and peatlands occur.

Unfortunately for Indonesia, because of its large extent of forest and peatlands, the unfavourable wind direction brings the haze over and discomfits its neighbours. But the people of Indonesia are the ones who suffer the most from the haze and it is in Indonesia's interest to solve it.

Peatlands are the least understood, unrecognised, and the first to be exploited among all of the natural ecosystems. But it is the most damaging as far as fires and haze are concerned. Peatlands contribute about 90% of the haze, therefore reducing peatland fires will substantially reduce or even

eliminate transboundary haze pollution. The ASEAN region has about 25 million hectares of tropical peatlands, about 60% of the world total.

Peatlands are unique wetland ecosystems which are formed over thousands of years consisting of partly decomposed vegetation which is primarily carbon, and can only remain in its stable state if sufficient water is present. Lowering of the water level will expose and turn the peatsoil into tinder.

Peatlands are often seen as swamps, waste land and inhabitable. Large areas are exploited for plantations, agro-forestry and cash crops. Invariably, the first intervention on virgin peatland is to drain the water through deep canals (which also transport valuable timber) to plant other non-native species of commercial value. This is akin to draining blood from the body. It permanently destroys and kills the peatland ecosystem and its unique biodiversity, and creates the perfect condition for recurrent fires and choking smoke haze thereafter.

Canal blocking: Poking fingers in the dyke?

Actually, there are well established sustainable methods of farming and managing peatlands. But as Singapore's Minister in charge of the environment Dr. Vivian Balakrishnan succinctly put it: *The reason companies take shortcuts, burn forests, drain peatlands is simply because the economics favour such behaviours.* This, of course, applies not only to companies, but all those operating on peatlands.

President Jokowi's visit to Riau included a personal demonstration of canal blocking to a crowd of local people. Canal blocking is done to rewet the peatlands to make them less prone to fires. But what comes to mind is who built the canals in the first place. The abandoned maze of well-planned deep canals suggest that they must have been the work of deep-pocket investors carried out with heavy machinery. But no one was made responsible to block the canals after they had left.

Most times, it is the locals who are directly affected risking their lives building rudimentary makeshift canal blocks. If only the local authorities and the companies could help out and do this on a systematic and regular basis.

Peatlands: Victim of conflict and vested interests

Large concessionaires have well--managed system of canals within their concessions. Experts estimate a water level of 40-60 cm below ground level is needed for maximum productivity of crops and maintaining the ecological integrity of peatlands. Companies looking at quick short-term gains are just keen to destroy the peatland ecosystem with a single cropping cycle, and then look for new fertile areas to plant.

Strangely, there are protests against the Indonesian moratorium against opening new peatland areas, and the regulation on maintaining water level, when these regulations are only helping the companies to get better value out of their existing concessions. Most importantly, the footprint of a peatland ecosystem covers a much larger area in terms of its hydrological (water) system. Systemic water management can only take place at this landscape level, not individuals blocking canals or even large plantations managing water within their concessions.

In any case, the biggest challenge in managing water, or the acute lack of it, is during the dry season. This is when the water level drops significantly and there would not be enough water even to fill the canals, let alone to put out fires on peatlands as they occur. *This is the primary reason for the severe episodes of haze pollution in the region, and it should be clear why during these times everyone points the finger at each other.*

All in all, even the seemingly simple task of blocking canals raises many systemic issues that can only be resolved through sustained political leadership and government stewardship working closely with all stakeholders.

Peatlands: The ecosystem approach

It is refreshing to hear President Jokowi frequently mention the ecosystem approach and his concern

for widespread monoculture – dependence on a single species of commercial value - during the visit. Being trained in forestry, he knows what he is talking about, and that his symbolic act of canal blocking is not going to solve the problem.

As a former furniture businessman, he perfectly understands the importance of sustainable natural resource management and its huge contribution to the economy and employment. Already he has merged the forestry and environment ministries to provide better coordination among environment and natural resources-related policies and implementation.

While the people of ASEAN may have to hold their breath a while longer, things are moving in the right direction in Indonesia as far as addressing forest fires and smoke haze is concerned.

** This is the first in a series on the issue of haze pollution in ASEAN.*

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