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# Southeast Asia's Haze Plight: Is Insurance a Suitable Preventive Mechanism?

By Christopher Lim and Tamara Nair

## Synopsis

The recently-concluded ASEAN Summit reaffirmed a shared approach to fully implement the ASEAN Agreement on Transboundary Haze Pollution. However a more strategic and sustainable solution is needed to address the regional crisis. Key to this is an innovative pricing mechanism which penalises those responsible for causing environmental and public health risks.

#### Commentary

THE VIENTIANE Summit of ASEAN leaders that just concluded reaffirmed standing commitments to address the transboundary haze pollution which has been blighting the region. The leaders also confirmed a shared approach to fully and effectively implement the ASEAN Agreement on Transboundary Haze Pollution. While this served to reinforce the cooperative spirit within ASEAN, a more strategic and sustainable solution is needed to address what is increasingly becoming a regional crisis.

Over the years, there have been countless rounds of negotiations and declarations by officials and political leaders about containing the haze situation in the region while still maintaining existing economic activities. So far, this has been a zero-sum game. Mechanisms to control such activities should be targeted at 'manipulating' cost at the centre so as to dis-incentivise unfavourable actions by palm oil players.

#### **Back to Basics: Production Costs**

Indonesia is the world's biggest producer of palm oil, which is a significant basis of the country's economic security. Palm oil has a myriad of uses: from being an

important ingredient in some chocolates, to washing powders; from chewing gum to biodiesel; it is also used widely in the food industry. The truth is the production of palm oil is a multi-billion dollar industry that employs large numbers and will not be easily swayed by environmental, health or even political concerns and lobbying by concerned groups.

Seemingly, the typical cost categories of palm oil production, in addition to the usual components, include palm oil upkeep, fertiliser and its application, and harvesting. It would appear that the pre-production phase in land clearance and related activities (such as land burning) is possibly left out in cost computation.

If we work on the premise that burning of the land is a necessary step in the production process, this would then imply that forest fires and the resultant haze are part and parcel of palm oil production. Then logically, the true full cost of forest fire control systems and haze control must be factored into the production cost of palm oil. If not, this will in fact translate to buyers of palm oil enjoying a 'subsidy' because price does not reflect true cost.

Let us also assume that plantations have not included the full cost of forest fires and resultant haze in their production process. In short, in not doing so firms have not considered increased health costs and other externalities incurred directly or indirectly due to palm oil production processes. This simply makes it an unsustainable practice in the long run.

#### **Proposed Control Mechanism**

We would like to propose an ASEAN-based insurance scheme for forest fire control, which would include haze control. This is a possible preventive strategy and can work equally well in mitigating effects of the haze, both in the source region as well as in countries around the region that suffer as a result of this event. It involves ASEAN governments teaming up with private sector partners, including international insurance and fund management companies to market insurance policies to all palm oil plantations. Appropriate incentives to induce private sector participation should also be part of this proposal.

We propose the mechanism be made compulsory for all plantation owners regardless of the size of their plantations. This means large plantations and/or traders must factor the insurance premium liabilities incurred by their suppliers from small holdings through proper pricing mechanisms. This insurance must be purchased at the instance of securing land concessions for palm oil plantations. These policies may be renewed on a yearly basis.

The fires, and the noxious gases and particulate matter they release, will now have a price and the firm is handed the responsibility of deflating its own costs. Any occurrence of uncontrolled burning within the year of coverage will increase the cost of insurance. To make this a more palatable option and encourage plantation owners to secure such policies, ASEAN governments could provide some form of a matching grant for premiums to firms, subject to a cap for the first five years.

This would help kick-start the mechanism. However, in the instance of fires and

resultant haze, the grant for the premiums will be reduced. Insurance premiums will be pegged to the land size of plantations, land area of fires and duration of fires.

For small holdings we propose the creation of cooperatives to a) participate in the insurance scheme, and b) more effectively engage in price negotiations (which now would include insurance liability). This levels the playing field for all plantation owners. Initial matching grants for the insurance scheme can be tiered accordingly for small holder cooperatives.

### Transaction Tax, Pricing Arguments and Spin-offs

In addition, for immediate action we propose that the Indonesian government explore the imposition of a 'discriminatory transaction tax for plantations on fire' based on physical quantities transacted rather than price. For example, if a particular plantation is identified as a source of burning - through satellite images - this tax can be imposed upon the firm. The value will be calculated based on amount of commodity traded. This should be between any plantation owner and buyers, domestic or foreign. We suggest quantities rather than sales value to minimise transfer pricing.

This 'discriminatory' measure will also incite surrounding plantations to reduce fires and control spread as it will be in their commercial interests to do so. Such a mechanism will also make it expensive for traders to buy from irresponsible producers. The 'transaction tax' can then be used to fund firefighting activities.

With these proposals it is likely the price of palm oil will temporarily increase to factor in the entire production process. We foresee this as one of the biggest disadvantages of such schemes. However, plantation owners and their suppliers who do NOT have burning practices as part of their production process will find their insurance premiums stable and somewhat negligible. They will also not incur additional taxes. Thus, they sell at a more competitive price. This could then end up working in favour of companies that chose to reduce the overall production cost by reducing unfavourable activities.

Not only will this particular mechanism make firms responsible, it will also provide a source of funds to purchase firefighting equipment and related materials and manpower. In addition, we foresee possibilities for such insurance schemes to be modified and extended to other agricultural sectors in the region. This is especially true for those activities that produce negative environmental impacts as a result of processes in any part of their production cycle.

Such pricing schemes have the potential to create 'win-win' solutions for all parties concerned. This in the long run could possibly result in a haze-free Southeast Asia.

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