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## Minimising the Haze

## PARAMANANTHAN, S

Param Agricultural Soil Surveys (M) Sdn Bhd, A4-3 Jalan 17/13, 46400 Petaling Jaya, Selangor Darul Ehsan, Malaysia

The haze is becoming an annual problem in Southeast Asia. The degree and intensity of the fires and the haze was exceptionally bad in 2015. The haze has affected the health of many people causing eye irritation and respiratory illnesses. It is reported that food and poultry production has been seriously affected in Malaysia — what more in Indonesia and Singapore? The blame of course goes to Indonesia where the slash and burn system practiced by the small farmers had caused the fires to spread to most parts of Indonesia. The blame game is in full swing with the non-governmental organisations (NGOs) mainly blaming the oil palm, rubber and acacia plantations on peatlands for the haze. The Singapore Government is using its current laws to charge its plantation owners in Indonesia. Due to changes in wind directions, the haze has reached South Thailand and the Philippines. Offers of help to put out the blazing forests comes not only from Indonesia's Association of Southeast Asian Nations (ASEAN) neighbours but also from the United States and Russia.

Current efforts to put out the fires centre around fire extinguishing using manpower, cloud-seeding and water-bombing, but with little effect. Current solutions being recently implemented include the construction of canals to bring water from the hills to extinguish the fires. Other solutions proposed include compaction of the peat and the collection of slashed wood to make wood chips or biochar for biofuels. A simple, cheap and workable system of tube-wells to tap underground aquifers below the organic soils and pumping the water into the canals seems to work to prevent the fires from surrounding smallholders spreading into two Malaysian plantations in Central Kalimantan. This proactive method can be used in subsequent years or even in the present situation together with water-bombing to minimise the fires and hence the haze. It is time for us to use science to solve the problem instead of being emotional and blaming each other. For areas that have already been degraded by the fires, a method of regeneration of the degraded peat forest is proposed.

Keywords: Haze, tube-wells, peat fires, aquifers, regeneration.

