

## ASEAN's Response Strategy in Addressing Transboundary Haze Pollution

By ADELINA KAMAL

The land and forest fires that hit the ASEAN region in 1997-1998 have been so severe that the United Nations Environment Programme (UNEP) labeled them as among the most damaging in recorded history. Their environmental, economic and social dimensions and impact, and the associated transboundary haze pollution have been profound. The total economic losses in terms of agriculture production, destruction of forest lands, health, transportation, tourism, and other economic endeavors have been estimated of \$9.3 billion.

Over the past two decades, fires and haze in the ASEAN region have been influenced by rapid demographic changes, increased human activity, and climatological factors. The pernicious practice of burning forests to clear land for commercial purposes together with the extraordinarily dry weather has produced a poll of catastrophic proportions. Severe droughts have also combined with developmental and agricultural activities in the rain forests and indiscriminate use of fire for land clearance. These and other contributory factors have made the ASEAN region prone to wildfires, which will remain a serious threat for some time.

As a partnership for sharing experiences, information, responsibilities and benefits, and working toward a common good, the ASEAN is in a strong position to address the problem at the regional level. Since the early 1980s, ASEAN member countries (AMCs) have launched several national and regional initiatives to control the fire-and-haze problem. In the wake of the 1997-98 episode, the ASEAN Senior Officials on the Environment-Haze Technical Task Force (ASOEN-HTTF) formulated the Regional Haze Action Plan (RHAP). Their adoption of this instrument in December 1997 was considered a turning point in the region's approach to preventing and mitigating the damages from recurrent fires and haze.

The RHAP outlines an overall framework for guiding the process of strengthening the region's capacity to address its transboundary haze pollution problem. Its primary objectives are to:

- *prevent* land and forest fires through better management policies and enforcement,
- establish operational mechanisms to *monitor* land and forest fires, and
- strengthen regional land and forest *fire-fighting* capability with other *mitigation* measures.

The RHAP therefore has three major components: *prevention, mitigation, and monitoring*. Different countries have been designated to spearhead the activities that fall under each component. Malaysia takes the lead in prevention, Indonesia in mitigation, and Singapore in monitoring fires and haze. Each ASEAN member country will also undertake the national-level actions that relate to the three components. Implementation of RHAP at the sub-regional and regional levels catalyses and complements the measures carried out at the national level.

Since the adoption of the RHAP, the Haze Technical Task Force under the guidance of ASEAN Environment Ministers has undertaken various initiatives, which are highlighted in Box 1. Major ongoing ASEAN activities include development of Fire Suppression Mobilization Plans (FSMPs) for all fire-prone areas, promotion of "zero-burning" policy adopted by ASEAN through dialogue sessions and corporate awareness campaigns, strengthening of monitoring networks including the ASEAN Specialised Meteorological Centre based in Singapore, training program to strengthen the low enforcement capability of Asean Member Countries (AMCs), community-based fire management activities, and public and community awareness campaigns. A website - ASEAN Haze Action Online ([www.haze-online.or.id](http://www.haze-online.or.id)) - provides a variety of regularly updated information on the haze situation and ASEAN's response in dealing with the issue.

### Box 1: Highlights of ASEAN's Recent and Ongoing Initiatives on Transboundary Haze Pollution

<ul style="list-style-type: none"> <li>• Establishment of two Sub-Regional Fire-fighting Arrangements (SRFAs) for Borneo and Sumatra (April 1998);</li> </ul>
<ul style="list-style-type: none"> <li>• Implementation of ASEAN-ADB project - Strengthening the Capacity of ASEAN to Prevent and Mitigate Transboundary Atmospheric Pollution (1998 - 1999);</li> </ul>
<ul style="list-style-type: none"> <li>• Adoption zero burning policy and strict enforcement of the policy (April 1999);</li> </ul>

<ul style="list-style-type: none"> <li>• ASEAN Haze Action Online (<a href="http://www.haze-online.or.id">www.haze-online.or.id</a>), which includes a public-access website on fire and transboundary haze and a restricted intranet-based system for monitoring RHAP implementation (April 1999);</li> </ul>
<ul style="list-style-type: none"> <li>• Establishment of RHAP Co-ordination and Support Unit within the ASEAN Secretariat to provide coordination and support to the implementation of RHAP (April 1999);</li> </ul>
<ul style="list-style-type: none"> <li>• Implementation of Immediate Action Plans (IAPs) in Riau and West Kalimantan Provinces for addressing fires and haze problems in fire-prone areas, and development of an operating procedure for activating forest fire-fighting resources in the ASEAN region (Fire Suppression Mobilization Plans) (1999 - ongoing);</li> </ul>
<ul style="list-style-type: none"> <li>• Convening of dialogue sessions with plantation companies as part of the effort to promote the zero burning policy and raise awareness on zero burning techniques among plantation companies (Jan 2000 - ongoing);</li> </ul>
<ul style="list-style-type: none"> <li>• Establishment of the Sub-Regional Climate Review Group to closely monitor the weather condition especially during the dry seasons (April 2000);</li> </ul>
<ul style="list-style-type: none"> <li>• Establishment of the Sub-Regional Fire-fighting Arrangements Legal Group on Law and Enforcement to discuss legal and law enforcement matters and the implementation of zero burning policy among all relevant parties (June 2000);</li> </ul>
<ul style="list-style-type: none"> <li>• A pilot activity in West Kalimantan Province to explore traditional values of Dayak and Melayu tribes in managing fires and haze in or surrounding their areas (March 2001);</li> </ul>
<ul style="list-style-type: none"> <li>• Development of an ASEAN Agreement on Transboundary Haze Pollution (2001 Development of an ASEAN Fire Danger Rating System as part of the effort to strengthen regional wildfire prevention, management and mitigation (ongoing);</li> </ul>
<ul style="list-style-type: none"> <li>• Development of a GIS Database for Sumatra, Borneo and Peninsula Malaysia to strengthen the capacity of the AMCs to use spatial data layers for forest fire prevention, monitoring and suppression planning in the ASEAN region (ongoing);</li> </ul>
<ul style="list-style-type: none"> <li>• Video-conferencing for the ASEAN Secretariat and SRFA Member Countries to provide facilities for discussions and meetings particularly during emergency situations and dry periods (ongoing);</li> </ul>
<ul style="list-style-type: none"> <li>• Capacity development programs for the RHAP-CSU in the forms of training programs on video conferencing, website development information management, on-the-job training, etc. (ongoing);</li> </ul>
<ul style="list-style-type: none"> <li>• Strengthening of the RHAP's monitoring network of national- and regional-level institutions, which include the ASEAN Specialised Meteorological Centre (ASMC), national meteorological agencies, and other related agencies in the region (ongoing);</li> </ul>
<ul style="list-style-type: none"> <li>• Development of prototype FSMPs in South Sumatra, South Kalimantan and East Kalimantan Provinces (2000 - June 2001);</li> </ul>
<ul style="list-style-type: none"> <li>• A pilot Land and Forest Fire National Disaster Simulation Exercise to create a practice field for learning and strengthening existing institutional structures responsible for coordination and response aspects of national land and forest fire disaster (June 2001);</li> </ul>
<ul style="list-style-type: none"> <li>• Launching of a joint ASEAN-ADB publication entitled Fire, Smoke and Haze - the ASEAN Response Strategy, which provides reviews on fire and haze episodes worldwide, its causes and impacts, the social and economic impacts of the 1997- 98 haze episode in the ASEAN region and the ASEAN Response Strategy, particularly the short, medium and long term strategies of the RHAP (Jakarta, August 2001);</li> </ul>
<ul style="list-style-type: none"> <li>• A joint training program for prosecutors and investigators as part of the effort to strengthen the law enforcement capacity of the AMCs (2002);</li> </ul>
<ul style="list-style-type: none"> <li>• Development and conduct of a feasibility study for the establishment of a center to manage environmental disasters with emphasis on land and forest fires and haze (2002);</li> </ul>
<ul style="list-style-type: none"> <li>• Convening of a World Conference and Exhibition on Land and Forest Fire Hazards to bring together international fire experts, senior government officials, researchers, plantation companies, and communities to deliberate issues and discuss strategies with regard to land and forest fires. (Kuala Lumpur, 2002).</li> </ul>

Realizing the need to focus on fire management efforts in specific areas, the Haze Technical Task Force (HTTF) has established a Working Group on Subregional Firefighting Arrangement (SRFA), each for Sumatra and Borneo. Subsequently the HTTF established two her working groups focusing on legal and low enforcement (the SRFA Legal Group on Low and Enforcement), and climate and meteorological conditions (the Sub-regional Climate Review Meeting). The RHAP Coordination and Support Unit, a special unit within the ASEAN Secretariat, was set up in April 1999 to support the working groups in implementing RHAP activities. The ASEAN Secretariat and the SRFA members: Brunei Darussalam, Indonesia, Malaysia and Singapore also use video conferencing facilities to interact among themselves, particularly in emergency situations needing immediate action.

Recognizing the need to further enhance regional cooperation on transboundary haze, ASEAN has developed an ASEAN Agreement on Transboundary Haze Pollution. This Agreement will address policy and technical measures with regard to monitoring, assessment and prevention, technical co-operation and scientific research, mechanisms for co-ordination, lines of communication, simplified customs and immigration procedures for immediate deployment of people and goods across borders in the event of transboundary haze pollution. The Agreement commits AMCs to take specific actions to prevent and monitor land and forest fires and the resulting haze on a sustained basis. It also intensifies the current regional and sub-regional arrangements through provisions of technical co-operation and procedures for joint emergency response.

The RHAP has been helpful in generating various measures and actions to address the trans-boundary haze pollution issues. Transboundary haze pollution, however, is a problem too large for one agency to manage alone. It requires concrete actions collaboratively undertaken by ASEAN itself, the national governments of AMCs, the international donor agencies, non-governmental organizations (NGOs), private sector, as well as local communities. It also requires a considerable amount of resources, in terms of time, financial and technical inputs. While ASEAN has taken the lead by undertaking various core measures at the regional and national levels, support from all relevant stakeholders would help in speedily alleviating this pollution problem.

The above summary only provides a glimpse of transboundary haze-related activities in the region.

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## References

ASEAN & ADB, 2001 *Fire, Smoke, and Haze: The ASEAN Response Strategy* (Jakarta and Manila)

ASEAN, 2001 *Second ASEAN State of the Environment Report* (with UNEP; Jakarta)

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Asean Haze Action Online [www.haze-online.or.id](http://www.haze-online.or.id) has been established by the Regional Haze Action Plan (RHAP) Co-ordination and Support Unit (CSU) of the ASEAN Secretariat. The website provides general information on ASEAN response mechanisms, primarily through the Regional Haze Action Plan, to the issue of haze and forest fire incidences and their impact on the environment. Reports, workshops, relevant legislation and other efforts significant to combating fire and haze are included. Up-to-date news complete with links to country and regional satellite images from organizations such as National Oceanic and Atmospheric Administration (NOAA), the Forest Fire Prevention and Control Project and the Integrated Forest Fire Management Project are also available.