

### Hotspots Highlight

- Based on the NOAA 12 Satellite Data, the number of hotspot in the period of September 12<sup>th</sup> – 18<sup>th</sup> has not decreased (in national scale the number of hotspot 7,119). In this period, the highest number of hotspot occurred on September 18<sup>st</sup> (2,371).
- The greatest number of hotspots still occurring in Central Kalimantan (2,031), South Sumatra (849), and South Kalimantan (721). Besides in Sumatra and Kalimantan, the hotspot was also detected in Java, e.g. West Java (112), Central Java (212), and East Java (369).

### Titik Panas Utama

- Berdasarkan Data Satelit NOAA 12, jumlah titik panas pada periode 12-18 September 2006 belum turun (dalam skala nasional jumlah titik panas 7.119). Dalam periode tersebut jumlah titik panas terbanyak terjadi pada tanggal 18 September 2006, sebanyak 2.371.
- Jumlah titik panas terbanyak masih berada di Kalimantan Tengah (2.031), Sumatera Selatan (849), dan Kalimantan Selatan (721). Selain di Sumatera dan Kalimantan, titik panas juga terdeteksi di Pulau Jawa, antara lain di Jawa Barat (112), Jawa Tengah (212), dan Jawa Timur (369).

### Current Weather Situation

- There is no significant difference with the current weather situation from the previous week. Rain has begun to fall in several areas, whereas most of the other areas are in dry condition. The rain season is not supposed to arrive, so the rain that has fallen in several areas are sporadic or artificial in character.
- Rain has begun to fall in the provinces of Riau, West Kalimantan, and Central Kalimantan (artificial rain). Whereas, the dry season is continuing in, South Kalimantan, South Sumatra, Jambi, and other areas which are identified as hotspots.

### Keadaan Cuaca

- Keadaan cuaca tidak ada perbedaan yang signifikan dengan minggu sebelumnya. Hujan sudah mulai turun di beberapa daerah, sedangkan sebagian besar daerah lainnya masih dalam kondisi kering. Musim hujan memang belum saatnya tiba, hujan yang terjadi di beberapa daerah sifatnya sporadis atau berupa hujan buatan.
- Hujan sudah mulai turun di Riau, Kalimantan Barat, dan sebagian Kalimantan Tengah (hujan buatan). Sedangkan musim kemarau masih berlangsung di Kalimantan Selatan, Sumatera Selatan, Jambi, dan daerah lainnya yang teridentifikasi masih mempunyai titik panas.

### Current Fire Activity

- The fires occurred in Sumatra have affected conservation areas, such as Way Kambas National Park in Lampung, Padang Sugihan Wildlife Reserve (South Sumatra), and Tanjung Kumpeh Forest Park (Jambi). Meanwhile, fires in Central Kalimantan still affected peat land in Tumbang Nusa, Pulang Pisau District.
- In addition to fires that are routinely occurring in Sumatra and Kalimantan, fire has also affected the forest in Java. In West Java fire occurred in Ciremai Mountain forest (1,328 ha). In Central Java forest fire occurred in slope of Merbabu, Kelir, and Slamet (80 ha) Mountains. In East Java fire occurred in protected forest in Lawu Mountain slope.

### Kejadian Kebakaran

- Kebakaran yang terjadi di Sumatera melanda kawasan konservasi, seperti TN Way Kambas di Lampung, SM Padang Sugihan di Sumatera Selatan, dan Tahura Tanjung Kumpeh di Jambi. Sedangkan di Kalimantan Tengah kebakaran masih melanda lahan gambut di Tumbang Nusa, Kabupaten Pulang Pisau.
- Selain kebakaran di Sumatera dan Kalimantan, yang merupakan kejadian rutin, kebakaran juga melanda hutan di Pulau Jawa. Di Jawa Barat kebakaran terjadi di hutan Gunung Ciremai (seluas 1.328 Ha), Di Jawa Tengah kebakaran terjadi di hutan lereng Gunung Merbabu, Gunung Kelir, dan Gunung Slamet (seluas 80 Ha). Di Jawa Timur kebakaran terjadi di hutan lindung lereng Gunung Lawu.

<p><b>Social Factors</b></p> <ul style="list-style-type: none"> <li>• Forest and land fires are generally caused by social factor, i.e. human behavior, both intentionally or unintentionally. Fires in Sumatra and Kalimantan have mostly been deliberately caused for land burning, therefore the occurrence is always repeated annually.</li> <li>• Whereas, forest fires taking place in Java, based on Perhutani report, were caused by carelessness. In this case, the element of deliberateness has been ruled out, therefore the forest fire in Java is not an annual occurrence.</li> </ul>	<p><b>Faktor Sosial dan Musim</b></p> <ul style="list-style-type: none"> <li>• Kebakaran hutan dan lahan pada umumnya disebabkan oleh faktor sosial berupa perilaku manusia, baik disengaja maupun tidak disengaja. Kebakaran di Sumatra dan Kalimantan lebih banyak disebabkan oleh kesengajaan dalam membakar lahan untuk tujuan tertentu, sehingga kejadian ini selalu berulang tiap tahun.</li> <li>• Sedangkan kebakaran hutan di Pulau Jawa, berdasarkan laporan dari Perhutani, disebabkan oleh kecerobohan/kelalaian. Dalam kasus ini penyebab kebakaran adalah faktor ketidaksengajaan sehingga kebakaran hutan di Jawa bukan merupakan kejadian tahunan.</li> </ul>
<p><b>Current Haze Situation</b></p> <ul style="list-style-type: none"> <li>• Haze still affected South Sumatra and Jambi. Haze in South Sumatra has caused a river traffic disturbance, meanwhile in Jambi it has postponed the air traffic.</li> <li>• Haze has reappeared in Central Kalimantan, after a short disappearance caused by artificial rain. Thin haze has also began to emerge in Central Java which has been caused by forest fire.</li> </ul>	<p><b>Situasi Kabut Asap</b></p> <ul style="list-style-type: none"> <li>• Kabut asap masih melanda Sumatera Selatan dan Jambi. Kabut asap di Sumatera Selatan menyebabkan terganggunya lalu lintas perairan, sementara di Jambi lalu lintas udara (penerbangan) sempat terganggu.</li> <li>• Kabut asap mulai muncul lagi di Kalimantan Tengah, setelah sempat hilang akibat hujan buatan. Kabut asap juga mulai muncul di Jawa Tengah akibat kebakaran hutan di wilayah itu, meskipun hanya berupa kabut tipis.</li> </ul>
<p><b>Related Activities</b></p> <ul style="list-style-type: none"> <li>• Indonesian National Armed Forces (TNI) in cooperation with Technology Research and Implementation Office (BPPT) has conducted artificial rain in Central Kalimantan. The two artificial rain which lasted for two days was able to wipe out haze in Palangkaraya and its surroundings.</li> <li>• Forest and land fires case investigation still continues. Civil Investigator (PPNS) of Environmental Impact Control Office (Bapedalda) Riau has investigated five managers of five estate crops companies. Meanwhile, Bukit Kualii's farmers, in Sanggau District, have urged police to investigate 100 ha land fire occurred in August.</li> </ul>	<p><b>Kegiatan Terkait</b></p> <ul style="list-style-type: none"> <li>• TNI bekerjasama dengan BPPT melaksanakan hujan buatan di Kalimantan Tengah. Hujan buatan selama dua hari ini untuk sementara mampu menyapu asap di Palangkaraya dan sekitarnya.</li> <li>• Pengusutan kasus kebakaran hutan dan lahan masih tetap berlangsung. Penyidik Pegawai Negeri Sipil (PPNS) Badan Pengendalian Dampak Lingkungan Daerah Riau telah memeriksa lima pengelola dari lima perusahaan perkebunan. Sementara petani Bukit Kualii, Kabupaten Sanggau, Kalimantan Barat, mendesak polisi mengusut kebakaran lahan 100 ha pada Agustus lalu.</li> </ul>

## Media Activity

- **Republika on Line**, 14-16/09/06, Peat Land Protected Forest in border of Indragiri Hulu (Inhu) and Indragiri Hilir (Inhil) Districts (28,000 ha) was identified to have been deliberately burned for oil palm plantation. "Protected peat land area could have not been burned, if only certain parties had not attempted to mobilize community, on behalf of the farmer group, to burn forest area," said Chief of Forest and Land Fires Control Center (Pusdalkarhulta) Riau, Wan Abu Bakar, on Monday (18/9). The same case had also occurred in Jambi. Forest and land fires in Jambi were identified to had been deliberately afflicted by community and oil palm companies.
- **Kompas**, 14/09/06, Chief of Agricultural Technology Research Office of Central Kalimantan, Muhrizal Sarwani, said that the burning method can give short time profit, i.e. magnesium, calcium, and potassium contents found in the dust particles. However in the long run, this method can destroy the environment because it omits some elements, such as nitrogen, carbon, and sulphur which are required by plants. "There is method without burning, i.e. by herbicide. The minimum cost is Rp. 250,000 per hectare, that is more expensive than burning method," he said. Land burning also destroys peat land and catchments area. One hectare of peat land can save 88.60 million litres of water.
- **Haze on Line**, 13/09/06 The Asean Specialised Meteorological Centre (ASMC) has forecasted below average rainfall will occur until early October 2006 during the current dry season in the southern part of the region. Therefore there is a possibility for land and forest fires to escalate during this period, said the Asean Secretariat in a press release. During this current dry season, which started in July Asean member countries have reported significant increases of hotspots in the region, in particular Sumatra and Borneo . Several parts of the region have been reported to possess a sporadic periods of moderate to unhealthy air quality. However, the situation has been under control, mainly due to the actions taken by the Asean member countries.

## Hotspots Analysis

- Riau (24.12% % % in lowland forests, 57.46% in swamp areas, 18.42% in unproductive dry lands)
- Jambi (22.98% in lowland forests, 57.66% in swamp areas, 19.35% in unproductive dry lands)
- South Sumatra (9.56% in lowland forests, 57.66% in swamp areas, 34.84% in unproductive dry lands)

## Kegiatan Media

- **Republika on Line**, 14-18/09/06, Hutan Kawasan Lindung Gambut (KLG) di perbatasan Kabupaten Indragiri Hulu (Inhu)-Indragiri Hilir (Inhil) seluas 28.000 hektare diidentifikasi sengaja dibakar untuk kemudian dijadikan areal perkebunan sawit. "Kawasan Lindung Gambut ini seharusnya tidak terbakar jika saja tidak ada gerakan dari pihak tertentu memobilisasi masyarakat atas nama kelompok tani untuk membakar kawasan hutan," ujar Ketua Pusdakarhulta Provinsi Riau H. wan Abu Bakar MS, Senin (18/9). Hal yang sama terjadi di Jambi. Kebakaran hutan dan lahan di Jambi terindikasi sengaja dibakar masyarakat dan perusahaan perkebunan kelapa sawit.
- **Kompas**, 14/09/06, Kepala Balai Pengkajian Teknologi Pertanian Kalteng Muhrizal Sarwani mengungkapkan, cara pembakaran dapat memberi keuntungan jangka pendek, yaitu ada kandungan magnesium, kalsium, dan kalium dalam abu. Dalam jangka panjang, metode ini merusak lingkungan karena menghilangkan unsur seperti nitrogen, karbon, dan sulfur yang juga dibutuhkan tanaman. "Ada metode tanpa bakar, dengan herbisida. Biaya minimal Rp 250.000 per hektar, lebih mahal dari pembakaran," katanya. Pembakaran lahan juga merusak gambut dan tata air kawasan. Satu hektar gambut dapat menyimpan 88,60 juta liter air.
- **Haze on Line**, 13/09/06 The Asean Specialised Meteorological Centre (ASMC) telah meramalkan bahwa curah hujan di bawah rata-rata sampai awal Oktober 2006 selama musim kemarau di daerah bagian selatan. Oleh sebab itu masing ada kemungkinan peningkatan kebakaran hutan dan lahan dalam periode tersebut, demikian dikatakan Sekretariat ASEAN dalam jumpa persnya. Selama musim kemarau ini, yang dimulai bulan Juli, sejumlah wilayah negara ASEAN dilaporkan mengalami kenaikan jumlah titik panas, khususnya Sumatra dan Kalimantan. Beberapa bagian di wilayah tersebut dilaporkan mempunyai kualitas udara yang tidak sehat secara sporadic. Meskipun demikian, keadaan sudah terkontrol, terutama dengan adanya upaya yang dilakukan negara-negara anggota ASEAN.

## Analisa Titik Panas

- Riau (24.12% di hutan dataran rendah, 57.46% di daerah rawa, 18.42% di lahan kering tidak produktif)
- Jambi ( 22.98% di hutan dataran rendah, 57.66% di daerah rawa, 19.35% di lahan kering tidak produktif)
- Sumatera Selatan (9.56% di hutan dataran rendah, 55.59% di daerah rawa, 34.84% di lahan kering tidak produktif)

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<ul style="list-style-type: none"> <li>• Lampung (37.65% in lowland forests, 3.53% in swamp areas, 58.82% in unproductive dry lands)</li> <li>• West Kalimantan (7.44% in lowland forest, 49.59% in swamp areas, 4.96% in unproductive wetlands, 4.13% in unproductive dry lands, 33.88% in agriculture lands)</li> <li>• Central Kalimantan (43.05% in lowland forest, 30.29% in swamp areas, 6.43% in unproductive wetlands, 14.00% in unproductive dry lands, 2.18% in plantation, 4.04% agriculture lands)</li> <li>• South Kalimantan (28.19% in lowland forests, 4.17% in swamp areas, 7.38% in unproductive wetlands, 46.31% in unproductive dry lands, 10.20% in plantation, 10.07% in agriculture lands)</li> <li>• East Kalimantan (30.12% in lowland forest, 4.82% in mangrove areas, 8.43% in swamp areas, 46.99% in unproductive dry lands, 9.64% in agriculture lands)</li> </ul>	<ul style="list-style-type: none"> <li>• Lampung (37.65% di hutan dataran rendah, 3.53% di daerah rawa, 58.82% di lahan kering tidak produktif)</li> <li>• Kalimantan Barat (7.44% di hutan dataran rendah, 49.59% di daerah rawa, 4.96% di lahan basah tidak produktif, 4.13% di lahan kering tidak produktif, 33.88% di pertanian)</li> <li>• Kalimantan Tengah (43.05% di hutan dataran rendah, 30.29% di daerah rawa, 6.43% di lahan basah tidak produktif, 14.00% di lahan kering tidak produktif, 2.18% di perkebunan, 4.04% di pertanian)</li> <li>• Kalimantan Selatan (28.19% di hutan dataran rendah, 4.17% di daerah rawa, 7.38% di lahan basah tidak produktif, 46.31% di lahan kering tidak produktif, 10.20% di perkebunan, 10.07% di pertanian)</li> <li>• Kalimantan Timur (30.12% di hutan dataran rendah, 4.82% di hutan bakau, 8.43% di daerah rawa, 46.99% di lahan kering tidak produktif, 9.64% di pertanian)</li> </ul>
<p><b>Fire Analysis</b></p> <ul style="list-style-type: none"> <li>• Dry season has not fully ended till October. Therefore, forest and land fires will still occur, it does not even rule out the possibility that the intensity could increase</li> <li>• The fire has also begun to affect forest in Java. This indicates the fire has yet finished, although rain has fallen in several areas.</li> </ul>	<p><b>Analisa Kebakaran</b></p> <ul style="list-style-type: none"> <li>• Sampai Oktober musim kemarau belum sepenuhnya berakhir, dengan demikian kebakaran hutan dan lahan masih akan terjadi, bahkan tidak menutup kemungkinan intensitasnya meningkat.</li> <li>• Kebakaran juga sudah mulai melanda hutan di Pulau Jawa. Hal ini menunjukkan kebakaran belum berakhir, meskipun di beberapa daerah sudah mulai turun hujan.</li> </ul>

**Notes:**

"Hotspots" indicated that the area is generating heat that exceeds a level set for satellite sensors to be registered as "hot". Not all hotspots are fires and satellites do not registered all fires occurred. Many fires are deliberate and may not be damaging ("*Titik Panas*" menunjukkan bahwa daerah tersebut mengeluarkan panas melebihi ambang batas panas yang sudah ditentukan sehingga alat sensor panas pada satelit membacanya sebagai daerah yang dianggap "panas". Tidak semua titik panas adalah kebakaran dan satelit tidak mencatat semua kebakaran yang terjadi. Beberapa kebakaran memang sengaja dibuat dan kemungkinan tidak berbahaya/merusak).

"Unproductive lands" mean that the areas have been cleared cut but abandoned and usually were mostly covered with *Imperata cylindrica* ("*Lahan tidak produktif*" adalah lahan yang terlantar yang tidak digarap biasanya hanya ditumbuhi semak belukar atau alang-alang).

Source/Sumber: National Environment Agency, Singapore ; ASEAN Haze Action Online; Geophysics and Meteorological Agency (Badan Meteorologi dan Geofisika/BMG – Indonesia Indonesia); Directorate of Forest Fire Control, Ministry of Forestry RI (Direktorat Pengendalian Kebakaran Hutan, Departmen Kehutanan – SiPongi); and field findings (dan temuan di lapangan). Please check further info and maps on forest and land fires in Riau at (lihat lebih lanjut peta kebakaran hutan dan lahan di Riau di) <http://www.eyesontheforest.or.id> also check available forest and land fires info and maps at (dan juga lihat info dan peta lebih lanjut tentang kebakaran hutan dan lahan di) <http://www.wwf.or.id/fire>

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