

## Hotspots Highlight

- In the period of August 1<sup>st</sup> - 7<sup>th</sup> 2006, the most frequent occurrences of hotspots were in Riau and West Kalimantan. In other areas, a dramatic increase in number of hotspots was reported in South Sumatra and Jambi in the same period. Similar trend also occurred in Central Kalimantan.
- In Riau, 797 hotspots were recorded. These occurred inside industrial timber plantation (HTI) concessions (24.09%), logging (HPH) concessions (24.72%), estate crops' concessions (1.88%), and other land uses (53.07%).
- In West Kalimantan, 426 hotspots were recorded. These occurred inside HTI concessions (6.09%), HPH concessions (3.98%), estate crops' concessions (6.24%) and other land uses (83.69%).

## Titik Panas Utama

- Pada periode tanggal 1-7 Agustus 2006, titik panas terbanyak terdeteksi di Riau dan Kalimantan Barat. Selain itu, titik panas di Sumatera Selatan dan Jambi meningkat tajam dalam minggu pertama Agustus ini. Peningkatan titik panas juga terjadi di Kalimantan Tengah.
- Di Kalimantan Barat tercatat sebanyak 426 titik panas, yang terindikasi di kawasan konsesi HTI (6,09%), konsesi HPH (3,98%), konsesi perkebunan (6,24%) dan penggunaan lahan lainnya (83,69%).
- Di Riau tercatat 797 titik panas, yang terindikasi di konsesi HTI (24,09%), konsesi perkebunan sawit (24,72%), overlap konsesi HTI dengan perkebunan (1,88%), dan penggunaan lahan lainnya (53,07%).

## Current Weather Situation

- In early August, the weather in several areas, including Sumatra and Kalimantan, was generally in dry condition. Several areas in Riau were very dry - with rainfall lesser than 10 mm per week.
- This condition was predicted to continue in the whole month of August. If rains come, the occurrence is likely to be sporadic. Forest and land fires hence will still likely to occur in several areas.

## Keadaan Cuaca

- Memasuki bulan Agustus ini cuaca di beberapa wilayah, termasuk Sumatera dan Kalimantan, masih dalam kondisi kering. Pada beberapa daerah di Riau tingkat kekeringan sangat tinggi, curah hujan kurang dari 10 mm per minggu.
- Kondisi kering ini diprediksi akan terus berlangsung selama Agustus ini. Walaupun ada hujan, terjadinya tidak merata, sehingga kebakaran hutan masih akan terjadi di beberapa tempat.

## Current Fire Activity

- In the period of August 1<sup>st</sup> - 7<sup>th</sup> 2006, forest and land fires still occurred in several areas. In Riau and West Kalimantan, the level of occurrence of fires has yet to decline. In South Sumatra, Jambi, and Central Kalimantan, the number of hotspot was even going up.
- In the same period, the most frequent occurrence of hotspots was detected on August 6<sup>th</sup> for Riau (238 hotspots) and August 7<sup>th</sup> for West Kalimantan (235).

## Kejadian Kebakaran

- Dalam kurun waktu 1-7 Agustus 2006, kebakaran hutan dan lahan masih terjadi di beberapa wilayah. Di Riau dan Kalimantan Barat masih belum menunjukkan tanda-tanda kebakaran hutan akan mereda, bahkan di Sumatera Selatan, Jambi, dan Kalimantan Tengah titik panas terjadi peningkatan jumlah titik panas.
- Dalam kurun waktu yang sama, jumlah titik panas tertinggi terdeteksi pada tanggal 6 Agustus untuk Propinsi Riau dan 7 Agustus 2006 untuk Kalimantan Barat. Titik panas di Riau mencapai 238, sedangkan Kalimantan Barat 235.

## Social and Seasonal Factors

- Social factors, such as human behaviour, can be considered as a dominant factor triggering fires. Seasonal factors, on the other hand, can be viewed as enhanced of fires. Investigation conducted in West Kalimantan and Riau, for example, indicated that social/human factors mainly contribute to the occurrence of forest and land fires.
- The number of hotspots in West Kalimantan and Riau was significantly high and this was added with Central Kalimantan. This indicates that seasonal factors have allowed and strengthened the continuation of haze resulting from land clearing using fires (as part of human behaviour).

## Faktor Sosial dan Musim

- Faktor sosial, dalam hal ini perilaku manusia, lebih dominan sebagai pemicu terjadinya kebakaran, sementara faktor musim sebagai pendukung. Seperti investigasi yang dilakukan di Kalimantan Barat dan Riau mengindikasikan bahwa faktor sosial/manusia sangat berperan dalam kejadian kebakaran hutan dan lahan.
- Jumlah titik panas di Provinsi Kalimantan Barat dan Riau belum menunjukkan penurunan yang signifikan, bahkan terjadi kenaikan di Kalimantan Tengah. Hal ini menunjukkan faktor musim kemarau masih memberikan dukungan terhadap perilaku manusia untuk terus membakar lahan.

## Current Haze Situation

- Haze situation correlates to the number of fires' occurrence. The high level of fire occurrence in Sumatra and Kalimantan has resulted in haze affecting on both islands. In West Kalimantan, the haze has forced the Vice Governor to warn people to not to go outside home.
- Haze still affected Riau, and now this has started in and affected West Sumatra and South Sumatra. Haze from Sumatra has again threatened neighbouring countries, i.e. Malaysia and Singapore, due to the direction the wind flowing toward Malacca Strait. This was confirmed by the Malaysian Department of Meteorology, stating that haze affected several areas in North and West Coast of Malaysia on Monday (7/8).

## Situasi Kabut Asap

- Situasi kabut asap berkorelasi dengan jumlah kebakaran yang terjadi. Belum surutnya kebakaran hutan dan lahan di Sumatera dan Kalimantan menyebabkan wilayah tersebut masih diselimuti asap. Di Kalimantan Barat, kabut asap memaksa Wakil Gubernur meminta masyarakat untuk tidak keluar rumah.
- Kabut asap masih menyelimuti Riau, bahkan dalam seminggu ini asap sudah mulai menyelimuti Sumatera Barat dan Sumatera Selatan. Asap dari Sumatera ini kembali mengancam negara tetangga, yakni Malaysia dan Singapura, karena arah angin menuju ke Selat Malaka. Seperti dikonfirmasi oleh Departemen Meteorologi Malaysia, bahwa beberapa daerah di pantai utara dan barat Malaysia, pada hari Senin (7/8) diliputi kabut asap.

## Related Activities

- In West Kalimantan, the Investigation Team on Land Fire pursued land and forest fires doers. Since Wednesday, August 2<sup>nd</sup>, the team has collected evidences on deliberate burning. The first operation took place in Sambas District. The target was a plantation owned by PT W in Sejangkung sub-district.
- In Riau, police officers started operations in seizing forest and land fires doers. An operation done on Wednesday (2/8) resulted in one person caught red-handed igniting fire in Bengkalis District. To overcome forest and land fires in Indragiri Hulu and Indragiri Hilir districts, fire fighters from Manggala Agni Rapid Response Team was sent.

## Kegiatan Terkait

- Di Kalimantan Barat, Tim Investigasi Kebakaran Lahan memburu pelaku pembakar lahan. Sejak Rabu (2/8) tim telah mengumpulkan bukti-bukti pembakaran yang dilakukan dengan sengaja. Daerah operasi pertama adalah Kabupaten Sambas. Sasarannya ialah perkebunan milik PT W di Kecamatan Sejangkung.
- Di Riau, aparat kepolisian merazia para pelaku pembakaran lahan. Razia yang dilakukan pada hari Rabu (2/8) berhasil menangkap seorang pelaku yang sedang membakar lahan di Kabupaten Bengkalis. Selain itu, dalam upaya penanggulangan kebakaran hutan, di Indragiri Hulu dan Indragiri Hilir telah diturunkan tim pemadam kebakaran dari Manggala Agni dan Tim Reaksi Cepat.

## Media Activity

Media coverage, in this period, among others, highlighted forest fire prevention efforts, as follows:

- **Kompas**, 05/08/06, In West Kalimantan, the Investigation Team on Land Fire pursued land and forest fires doers. Since Wednesday, August 2<sup>nd</sup>, the team has collected evidences on deliberate burning. The first operation took place in Sambas District. The target is a plantation owned by PT W in Sejangkung sub-district.
- **Haze on Line**, 01/08/06, Riau province was carrying out investigation on burnt land. The head of the Provincial Center for Forest and Land Fire Control, Wan Abubakar, said his investigators had indicated two possible plantation companies having been involved in burning forest and land.
- **Press Release**, 08/08/06, WWF Indonesia together with other NGOs (Walhi Riau, Jikalahari, Greenpeace Southeast Asia) released a press statement about peatland fire. This NGO coalition called on the Government to stop granting concessions for forest conversion and land clearing on peatlands. The recent data showed that the major factor responsible for this year's forest fires in Indonesia is a result of forest conversion, mainly on peat soil sites.

## Kegiatan Media

Beberapa media dalam minggu ini antara lain menyoroti upaya penanggulangan kebakaran hutan dan lahan, seperti yang diwartakan berikut ini:

- **Kompas**, 05/08/06, Tim Investigasi Kebakaran Lahan memburu pelaku pembakar lahan. Sejak Rabu (2/8) tim telah mengumpulkan bukti-bukti pembakaran yang dilakukan dengan sengaja. Daerah operasi pertama adalah Kabupaten Sambas. Sasarannya ialah perkebunan milik PT W di Kecamatan Sejangkung.
- **Haze on Line**, 01/08/06, Pemerintahan Provinsi Riau melakukan investigasi pada lahan yang terbakar. Kepala Pusat Pengendalian Kebakaran Hutan dan Lahan (Pusdalkarhutla), Wan Abubakar, mengatakan bahwa tim investigasi telah menemukan indikasi adanya dua perusahaan yang kemungkinan terlibat pembakaran hutan dan lahan.
- **Siaran Pers**, 08/08/06, WWF Indonesia dan beberapa LSM (Walhi Riau, Jikalahari, Greenpeace Southeast Asia) mengeluarkan pers rilis tentang kebakaran di lahan gambut. Koalisi LSM tersebut menyerukan kepada pemerintah untuk menghentikan konversi lahan gambut. Data terkini menyebutkan bahwa kebakaran hutan tahun ini di Indonesia banyak disebabkan oleh konversi hutan, terutama di lahan gambut.

## Hotspots Analysis

- Riau (33.88% in lowland forests, 0.15% in mangrove areas, 0.15% in swamp areas, 65.82% in unproductive drylands);
- Jambi (42.65% in lowland forests, 5.01% in highland forest, 7.52% in swamp areas, 49.47% in unproductive drylands);
- Sumatera Selatan (18.81% in lowland forests, 18.81% in highland forest, 26.66% in swamp areas, 60% in unproductive drylands);
- Lampung (6.09% in lowland forests, 4.35% in swamp areas, 89.57% in unproductive drylands);
- West Kalimantan (38.36% in lowland forest, 2.73% in mangrove areas, 13.69% in swamp areas, 5.47% in unproductive wetlands, 5.47% in unproductive drylands, 5.47% in plantations, 30.14% in agriculture lands);
- Central Kalimantan (60.63% in lowland forest, 0.18% in highland forest, 11.95% in swamp areas, 4.52% in unproductive wetlands, 20.66% in unproductive drylands, 0.03% in plantation, 1.99% agriculture lands);

## Analisa Titik Panas

- Riau (33,88% di hutan dataran rendah, 0,15% di hutan bakau, 0,15% di daerah rawa, 65,82% di lahan kering tidak produktif);
- Jambi (42,65% di hutan dataran rendah, 5,01% di hutan dataran tinggi, 7,52% di daerah rawa, 49,47% di lahan kering tidak produktif);
- Sumatera Selatan (18,81% di hutan dataran rendah, 18,81% di hutan dataran tinggi, 26,66% di daerah rawa, 60,00% di lahan kering tidak produktif);
- Lampung (6,09 di hutan dataran rendah, 4,35% di daerah rawa, 89,57% di lahan kering tidak produktif);
- Kalimantan Barat (38,36% di hutan dataran rendah, 2,73% di hutan bakau, 13,69% di daerah rawa, 5,47% di lahan basah tidak produktif, 5,47% di lahan kering tidak produktif, 5,47% di perkebunan, 30, 14% di pertanian);
- Kalimantan Tengah (60,63% di hutan dataran rendah, 0,18% di hutan dataran tinggi, 11,95% di daerah rawa, 4,52% di lahan basah tidak produktif, 20,66% di lahan kering tidak produktif, 0,03% di perkebunan, 1,99% di pertanian)

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- South Kalimantan (24.78% in lowland forest, 1.77% in mangrove areas, 7.96% in swamp areas, 3.54% in unproductive wetlands, 37.17% in unproductive drylands, 3.54% in plantation, 16.54% in agriculture lands) ;
- East Kalimantan (42.10% in lowland forest, 5.26% in highland forest, 5.26% in swamp areas, 10.53% in unproductive wetlands, 7.89% in unproductive drylands, 28.95% in plantation)

- Kalimantan Selatan (24,78% di hutan dataran rendah, 1,77% di hutan bakau, 7,96% di daerah rawa, 3,54% di lahan basah tidak produktif, 37,17% di lahan kering tidak produktif, 3,54% di perkebunan, 16,54% di pertanian) ;
- Kalimantan Timur (42,10% di hutan dataran rendah, 5,26% di hutan dataran tinggi, 5,26% di daerah rawa, 10,53% di lahan basah tidak produktif, 7,89% di lahan kering tidak produktif, 28,95% di pertanian)

## Fire Analysis

- During the period of August, the dry season will likely to continue in most areas in Indonesia. Hence the level of possible fires occurrence is still high.
- Weak law enforcement targeting forest and land fires doers contributes to the increase in forest and land fires occurrence during this dry season.
- Conversion of peat land to industrial timber plantation and estate crops plantation is significantly contributing to continuous fires .

## Analisa Kebakaran

- Selama bulan Agustus ini musim kemarau belum akan berakhir di sebagian besar wilayah Indonesia, sehingga tingkat kerawanan terhadap kebakaran hutan dan lahan masih tinggi.
- Belum adanya upaya yang signifikan dalam penegakan hukum terhadap pelaku pembakar lahan, masih memberi peluang untuk terjadinya kebakaran hutan dan lahan secara terus menerus dalam musim kering ini.
- Konversi lahan gambut untuk HTI dan perkebunan berpotensi besar memicu kebakaran yang sulit untuk dipadamkan.

1 "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.

1 "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.

Source : National Environment Agency, Singapore ; ASEAN Haze Action Online; Geophysics and Meteorological Agency (BMG – Indonesia); Direktorat of Forest Fire Control, Ministry of Forestry RI (SiPongi); and field findings. Please check further info on forest and land fires in Riau at <http://www.eyesontheforest.or.id>

Sumber: National Environment Agency, Singapore; ASEAN Haze Action Online; Badan Meteorologi dan Geofisika – Indonesia; SiPongi; dan temuan di lapangan. Lihat lebih lanjut peta kebakaran hutan dan lahan di Riau di <http://www.eyesontheforest.or.id>

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