

Monitoring Changes in Land Use and Land Cover

Locations: Musi Rawas, North Musi Rawas, Musi Banyuasin and Banyuasin

GIZ Bioclimate, in collaboration with Remote Sensing Solution (RSS), provincial forestry office Forest Management Units (KPH) and community representatives, conducted land cover and land-use change monitoring from base map data made in 2015. Five locations - representing montane, dipterocarp, peat swamp and mangrove forest ecosystems - were surveyed between 18 April and 2 May 2016. The land change monitoring also combined mapping technologies with GPS and unmanned aerial vehicles (drones).

As many as 30 drone datasets and 1,000 GPS points and pictures were collected from the four ecosystem types. Montane forest was under threat from land cover and land-use changes, as forest in Kerinci Seblat National Park had been cleared to plant coffee. Meanwhile, land fires were a major threat to dipterocarp forest (PT REKI) and peat ecosystems in the Merang-Kepayang landscape. Drones used for monitoring produced video documentation of illegal logging occurring in peat swamp forest and heavy machinery (excavators). In mangrove ecosystems, the majority of changes had occurred as a result of changing land use for community aquaculture. However, mangrove and *nipah* forests were still found to be in good condition in the Telang-Banyuasin region.

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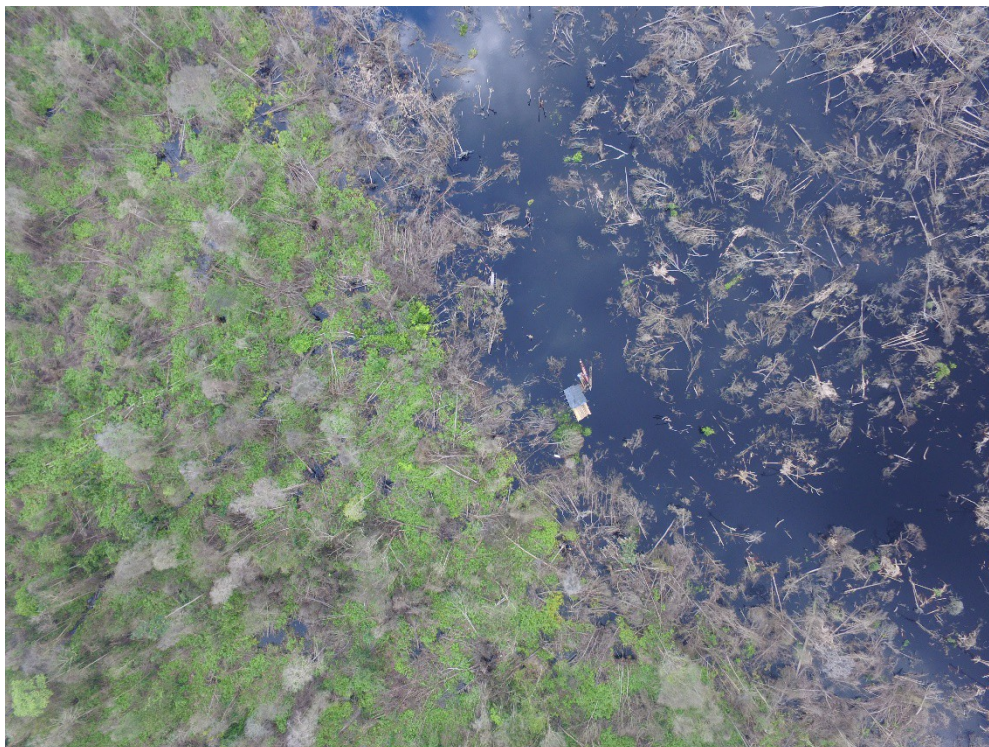


Figure 1. Post forest fire conditions in the Buring region of Musi Banyuasin



Figure 2. Encroachment on Kerinci Seblat National Park (KSNP)



Figure 3. Aquaculture among the mangroves in Banyuasin



Figure 4. Illegal logging in Kepayang, Musi Banyuasin



Figure 5. Burnt over area in the PT REKI region