Strategi peningkatan fungsi ruang terbuka hijau dalam rangka mewujudkan bandar udara ramah lingkungan studi di Bandar Udara Internasional Soekarno Hatta = Strategy in improving the function of green open space in order to achieve the eco airport study on Soekarno Hatta International Airport

Sutarmaji, author

Abstrak

BaTuntutan akan kualitas bandara yang lebih baik mendorong pengelolaan bandar udara yang ramah lingkungan eco airport . Masalah polusi udara dan kebisingan di bandar udara timbul akibat peningkatan jumlah penerbangan dan kendaraan bermotor. Tujuan penelitian ini untuk mengetahui: 1 tingkat kualitas udara ambien dan kebisingan, 2 luas dan kemampuan RTH menyimpan karbon dan menyerap polutan, 3 . pengetahuan dan persepsi para pihak tentang fungsi RTH, dan 4 Strategi peningkatan fungsi RTH di Bandar Udara Internasional Soekarno Hatta.

Metode yang digunakan adalah mix methods. Terdapat 10 titik sampel yang diukur kualitas udara dan kebisingannya. Luas RTH diperoleh dari digitasi citra satelit. Biomassa bagian atas dihitung dengan rumus alometrik. CO2 dan CO ekuivalen dihitung dari perbandingan berat atom dan molekul relatif penyusunnya. Serapan CO2 per tahun dihitung dari stok karbon dibagi umur pohon. Pengetahuan dan persepsi para pihak diketahui dengan menyebar dan mengolah hasil kuesioner.

Hasil penelitian menunjukkan bahwa tingkat polusi CO, Pb dan debu masih dibawah baku mutu, kecuali debu di Jalan C1. Semua titik sampel memiliki tingkat kebisingan diatas baku mutu 70 dB A. Luas RTH adalah 1.109,35 ha 63,82 luas bandar udara memiliki 90 jenis dan 19.602 pohon dengan kandungan karbon 31.437 ton CO2 ekuivalen. Kemampuan menyerap polusi CO dan CO2 masing-masing sebesar 20.007 ton dan 1.492 ton/tahun. Sebanyak 81,8 pengunjung tahu tentang RTH, sedangkan persepsinya 30 baik, 69 sedang, dan 1 rendah. Pengelola RTH telah memiliki perencanaan, pengorganisasi, pelaksanaan, monitoring dan evaluasi kegiatan terkait RTH.

Kesimpulan penelitian ini adalah strategi peningkatan fungsi RTH dalam rangka mendukung bandar udara ramah lingkungan, yaitu: 1 . Penetapan RTH sebagai lokasi hutan kota. 2 Pengkayaan jenis peredam kebisingan. 3 . Penggantian RTH yang hilang akibat pembangunan. 4 . Membuat dan merawat sumur resapan, lubang biopori, informasi jenis pohon di lokasi RTH.

.....The demand for better airport quality encourages eco airport management. Air and noise pollution problems at airports arise from increased number of flights and motor vehicles. The purpose of this study was to know 1 ambient air quality and noise levels, 2 the total area and the ability of green open space to absorb carbon and pollutants, 3 knowledge and perceptions of several parties concerning Green Open Space, and 4 strategy in improving the function of green open space at Soekarno Hatta International Airport.

The method used is mix methods. There were 10 points measured for the level of air quality and noise pollution. The total area of green open space was being obtained from digitization of satellite image. The value of upper biomass was calculated using the allometric formula. CO2 and CO equivalents were being measured by comparing atomic mass and the relative molecules of the constituents. Annual CO2 absorption was measured from carbon stock divided by the age of the tree. The knowledge and perceptions of the

related parties were obtained by spreading and processing the results of the questionnaire.
The results indicated that the pollutant measurements of CO, Pb and dust were below the standard quality, with exception dust on road C1. All points possessed noise levels above 70 dB standard quality. Green Open Space was 1,109.35 ha 63.82 of overall Airport area, consisted of as many as 19,602 trees from 90 species with 31,437 tons of CO2 equivalent. The ability to absorb CO and CO2 pollution is around 20,007 ton and 1,492 ton per year respectively. As many as 81.8 of visitors knew about the green space, while the perception concerning to the green space were 30 good, 69 moderate, and 1 poor. Managers had been conducting planning, organizing, implementing, monitoring and evaluating related activities in the Green Open Space.
The conclusion of this study is strategy in improving the function of Green Open Space in order to achieve the eco airport, includes 1 . Determination Green Open Space as urban forest. 2 Enriching noise reducing tree species 3 .Replacing Green Open Spaces that vanished due to development. 4 . Building and fostering absorption wells, biopore holes, information regarding tree species at Green Open Space locations.