

# EVALUASI KETERSEDIAAN RUANG TERBUKA HIJAU KOTA JAMBI MELALUI PEMANFAATAN CITRA PENGINDERAAN JAUH

Oleh  
**Puti Nadiya Fitra Tasih**  
**14/364939/GE/07738**

## INTISARI

Ruang Terbuka Hijau Kawasan Perkotaan (RTHKP) memiliki fungsi sebagai kawasan konservasi atau lindung guna menjaga kelestarian hidrologis wilayah perkotaan tersebut. Peran penting RTH ini menjadi salah satu alasan untuk diperlukannya inventarisasi dan evaluasi terkait persebaran keberadaannya di Kota Jambi. Pemanfaatan kemajuan teknologi dalam hal ini berupa citra penginderaan jauh beresolusi tinggi yakni Sentinel 2A-MSI diharapkan mampu memberikan informasi RTH secara spasial. Tujuan penelitian ini ialah 1) memetakan sebaran ruang terbuka hijau (RTH) di Kota Jambi dan 2) mengevaluasi ketersediaan ruang terbuka hijau (RTH) berdasarkan kebutuhan jumlah produksi oksigen di Kota Jambi.

Fokus dalam penelitian ini ialah RTH Tegakan, dimana ekstraksi informasi terkait kenampakan ini didapatkan melalui proses interpretasi visual citra Sentinel 2A-MSI di dukung oleh data RTRW dan data penggunaan lahan. Klasifikasi yang digunakan dalam mengelompokkan kenampakan RTH beracuan pada Peraturan Menteri No 05/PRT/M/2008. Evaluasi ketersediaan RTH berdasarkan pendekatan kebutuhan oksigen dilakukan menggunakan metode perhitungan Gerarkis, dimana dalam penelitian menggunakan 2 jenis konsumen sebagai tolak ukur yakni jumlah penduduk dan jumlah kendaraan bermotor.

Jenis RTH tegakan yang berhasil di interpretasi melalui citra Sentinel 2A-MSI terbagi menjadi 6 kelas yakni, RTH hutan kota, RTH taman kota, RTH sabuk hijau, pemakaman, RTH sempadan sungai, dan RTH sempadan danau. Berdasarkan hasil olah data diketahui jumlah ketersediaan oksigen yang ada di Kota Jambi masih sangat mencukupi suplai kebutuhan oksigen bagi konsumen oksigen yakni penduduk dan kendaraan bermotor setiap harinya di Kota Jambi. Adapun kecamatan yang mengalami surplus paling tinggi ialah di kecamatan Alam Barajo sebesar 650.601.080 kg/hari hal ini sebanding dengan banyaknya di temukan jenis RTH tegakan berupa sabuk hijau dan hutan kota di wilayah ini.

**Kata Kunci :** *Kebutuhan konsumsi oksigen, Kota Jambi, Metode Gerarkis, Permen PU No 05/PRT/M/2008, RTH, Sentinel 2A-MSI.*

*Evaluation Of The Green Open Space Availability In Jambi City  
Through Remote Sensing Images Utilization*

*By:*

Puti Nadiya Fitra Tasih

14/364939/GE/07738

**ABSTRACT**

*Urban Green Open Space (RTHKP) has a function as a conservation or protected area in order in the hydrological sustainability of the urban area. The important role of green open space is one of the reasons for the need for an inventory and evaluation related to the distribution of its existence in Jambi City. The utilization of technological advances in this case in the form of high-resolution remote sensing images, namely Sentinel 2A-MSI, is expected to be able to provide spatial green open space information. The objectives of this study are 1) to map the distribution of green open space (RTH) in Jambi City and 2) to evaluate the availability of green open space (RTH) based on the need for the amount of oxygen production in Jambi City.*

*This research focuses on the RTH Stand, where the extraction of information related to this appearance is obtained through a visual interpretation process of Sentinel 2A-MSI images supported by RTRW data and land use data. The classification used in classifying the appearance of green open space refers to the Ministerial Regulation No. 05/PRT/M/2008. Evaluation of the availability of green open space based on the oxygen demand approach is carried out using the Gerarchis calculation method, which in this study uses 2 types of consumers as a benchmark, namely the number of residents and the number of motorized vehicles.*

*The types of standing green open space that were successfully interpreted through Sentinel 2A-MSI imagery were divided into 6 classes, namely, urban forest green open space, city park green open space, green belt green open space, cemetery, river border green open space, and lake border green open space. Based on the data processing results, it is known that the amount of oxygen available in Jambi City is still very sufficient to supply oxygen needs for oxygen consumers, namely residents and motorized vehicles every day in Jambi City. The sub-districts that experienced the highest surplus were in the Alam Barajo sub-district of 650,601,080 kg/day, this is comparable to the number of green-belt stands and urban forests found in this region.*

**Keywords:** *Oxygen consumption needs, Jambi City, Gerarchical Method, Minister of Public Works Regulation No. 05/PRT/M/2008, RTH, Sentinel 2A-MSI.*