

## INTISARI

*Base Transceiver Station tower (BTS tower)* berfungsi untuk mengirim (*transmitter*) dan menerima (*receiver*) gelombang radio antar pengguna telepon seluler. Pembangunan *BTS tower* di lingkungan perumahan mendapat penolakan dari sebagian masyarakat karena eksternalitas negatif yang dihasilkan. Masyarakat yang tinggal disekitar *BTS tower* khawatir terkait kesehatan, keselamatan, dampak visual, estetika dan pemicu kerusakan peralatan elektronik rumah tangga. Kekhawatiran tersebut diekspresikan pada potensi penurunan nilai rumah.

Penelitian ini bertujuan menguji berapa besar pengaruh *BTS tower* terhadap persepsi nilai properti perumahan disekitarnya, menguji hubungan antara besarnya persepsi penurunan nilai properti (%) dengan tingkat kekhawatiran atas keberadaan *BTS tower* di sekitar properti perumahan dan menguji faktor-faktor yang berpengaruh pada probabilitas individu masuk kelompok masyarakat yang permisif/tidak permisif atas keberadaan *BTS tower* di sekitar perumahan. Alat analisis yang digunakan adalah *Contingent Valuation Method (CVM)*, korelasi, dan analisis logit. Data yang digunakan diperoleh dari wawancara terhadap 51 responden pemilik rumah di Kota Kediri yang tinggal disekitar *BTS tower* (kelompok-1) dan kuesioner terhadap 75 responden pemilik rumah di Kota Kediri yang tinggal jauh dari *BTS tower* (kelompok-2) pada bulan Januari 2008-Februari 2008.

Hasil penelitian menunjukkan *BTS tower* berpengaruh negatif secara signifikan terhadap persepsi nilai rumah disekitarnya. Penurunan persepsi nilai rumah antara responden kelompok-1 dan kelompok-2 berbeda. Persentase penurunan persepsi nilai rumah di sekitar *BTS tower* oleh responden kelompok-1 bervariasi antara 4% sampai 25% dengan rata-rata 13,33%, sedangkan kelompok-2 bervariasi antara 6,25% sampai 50% dengan rata-rata 25,51%. Ada korelasi positif antara besarnya kekhawatiran dan persentase penurunan persepsi nilai properti perumahan disekitar *BTS tower*. Hasil analisis logit menunjukkan, faktor demografi berpengaruh terhadap probabilitas responden masuk kelompok yang permisif atau tidak permisif atas keberadaan *BTS tower* di lingkungan perumahan. Responden laki-laki, usia tua, pendidikan rendah dan tingkat pendapatan rendah lebih permisif atas keberadaan *BTS tower* di lingkungan perumahan. Sebaliknya, perempuan, usia muda, pendidikan tinggi dan pendapatan tinggi tidak permisif atas keberadaan *BTS tower* di lingkungan perumahan

Kata kunci : *BTS tower*, eksternalitas negatif, kekhawatiran, penurunan nilai rumah, demografi, *CVM*, korelasi, analisis logit,





## ABSTRACT

The functions of Base Transceiver Station (BTS) tower are to transmit and receive radio wave among cellular phone users. Most people, especially who lives near by, object the construction of BTS tower over their residential neighborhoods for its negative externalities. Health issues, safety, bad visual impact, aesthetic and the ideas that the tower trig some electronic devices damage, are what the people worried about. The people's concerns are expressed on the potential degradations of the houses value.

The aim of this research are to examine the effect of BTS tower on the surrounding residential (houses) perception value; to examine the relation between the houses perception value degradation and the people concern level about the existence of the near by tower; and to examine the factors affecting the people permissiveness on the tower existence. Contingent Valuation Method (CVM), correlation analysis, and logit analysis were equipped. The data are obtained from 51 households surrounding the BTS tower (as the 1<sup>st</sup> group) and 75 households live outside the BTS tower influences (as the 2<sup>nd</sup> group). All of the respondents are located in the city of Kediri, and the surveys were held on January to February 2008.

The result shows that the BTS tower has negative effect on the surrounding houses perception value. There is a difference between the 1<sup>st</sup> group and the 2<sup>nd</sup> one, on the perception of the houses value' degradations. The 1<sup>st</sup> group perceptions on the houses value degradation vary between 4% to 25%, and 13.33% on the average. The 2<sup>nd</sup> group perceptions on the houses value degradation vary between 6.25% to 50%, and 25.1% on the average. There is positive correlation between the level of concern and the houses perception value degradations. The logit analysis shows that the demographic factors affect the permissiveness probability of the respondents. Male, elder, low level education and low incomes are more permissive to the existence of BTS tower around their houses. On the other way, female, younger, high level education and high incomes are less permissive.

**Keywords:** BTS tower, negative externalities, concern level, houses value degradations, demography, CVM, correlation, logit analysis.