



Pertambahan penduduk dan keterbatasan lahan permukiman merupakan sumber permasalahan kependudukan dan permukiman. Penelitian ini memanfaatkan data penginderaan jauh dan SIG untuk penentuan kualitas lingkungan permukiman serta perubahannya. Tujuan penelitian ini adalah mengkaji perubahan kualitas lingkungan permukiman tahun 1987 – 1996 dan menentukan prioritas perbaikan kualitas lingkungan permukiman berdasarkan perubahan tersebut.

Penelitian ini menggunakan data penginderaan jauh berupa foto udara pankromatik hitam putih sebagai sumber data utama. Foto udara yang digunakan memiliki skala 1 : 11.000 dan 1 : 13.000 dengan tahun perekaman 1987 dan 1996. Foto udara digunakan untuk menyadap informasi variabel kualitas lingkungan permukiman berupa : kepadatan bangunan, tata letak, lebar jalan masuk, pohon pelindung, lahan kosong, lokasi permukiman, dan jarak terhadap Sekolah Dasar. Data lain yang digunakan yaitu data sekunder dan data lapangan berdasarkan sampel dengan metode *stratified proportional purpose sampling*. Data lapangan dan sekunder digunakan untuk memperoleh informasi variabel : sumber air bersih, sanitasi, saluran air, dan tempat pembuangan sampah. Penentuan kualitas lingkungan permukiman dan perubahannya menggunakan metode pengharkatan dengan pembobotan, sedangkan prioritas perbaikan ditentukan berdasarkan kualitas lingkungan permukiman dan perubahan yang terjadi.

Hasil yang diperoleh dalam penelitian ini yaitu kualitas lingkungan permukiman tahun 1987 dan 1996, perubahan kualitas lingkungan permukiman serta prioritas perbaikan kualitas lingkungan permukiman. Luas permukiman Kota Yogyakarta bertambah 169,34 Ha dan mengalami perubahan kualitas lingkungan permukiman berupa : peningkatan kualitas meliputi 20,45%, penurunan kualitas meliputi 23,95%, dan 55,6% lingkungan permukiman tidak berubah. Penurunan kualitas lingkungan permukiman mengarah ke pinggiran kota akibat peningkatan kepadatan bangunan dan peningkatan kualitas lingkungan permukiman terjadi mendekati pusat kota karena peningkatan fasilitas permukiman. Prioritas perbaikan kualitas lingkungan permukiman meliputi prioritas I seluas 198 Ha (10,70%), prioritas II seluas 408 Ha (22,04%), prioritas III seluas 990 Ha (53,48%), serta sisanya meliputi unit-unit dengan prioritas terakhir dan tanpa perbaikan. Prioritas I banyak terdapat di lingkungan permukiman sekitar sungai dan pinggiran kota, sedangkan prioritas II banyak terdapat di lingkungan permukiman sekitar sungai, terutama Sungai Code. Prioritas yang lain terdapat di di lingkungan permukiman yang menyebar di seluruh daerah penelitian.



**ABSTRACT**

The increase of population and limited land of settlement are source for demographic and settlement problems. This research utilized remotely sensed data and GIS for analyze of settlement environmental quality and its changes. These research are aimed to study the changes of settlement environmental quality in 1987 and 1996 then determine the improvement priority of settlement environmental quality based on those changes.

The remotely sensed data that use in this research are black and white panchromatic aerial photographs as the main data sources, which have the scale of 1:11000 and 1:13000 were recorded in 1987 and 1996. Aerial photographs are used to obtain the information regarding settlement environmental quality variables, namely: building density, site arrangement, the width of entry street, canopy trees, bare land, settlement site, and distance to elementary school. Other data that is used are secondary and field data. Field data is obtained using stratified proportional purposive sampling. Secondary and field data are used to obtain the information concerning the variables of: fresh water sources, sanitation, water channels, and rubbish dump. The determination of settlement environmental quality and its changes uses grading method which weighting factor the above variables, whereas the improvement priority is determined based on the settlement environmental quality and the changes happened.

Outputs from this research are the settlement environmental quality of year 1987 and 1996, the changes of settlement environmental quality, and the improvement priority of settlement environmental quality. The area of settlement in Yogyakarta has increased around 169.34 hectares and has experienced the changes of settlement environmental quality in the form 20.45% of increasing quality, 23.95% of decreasing quality, and 55.6% of settlement does not changes at all. The decrease of settlement environmental quality direct to suburb area because of the increasing building density and the increase of settlement environmental quality happen to approach the city centre because of the increasing settlement facilities. The improvement priority of settlement environmental quality include: First Priority of 198 hectares (10.70%), Second Priority of 408 hectares (22.04%), Third Priority of 990 hectares (53.48%), and the rests covers all units with lowest priority and without any improvement. First Priority happens mostly in the settlement near the river and suburb area, whereas Second Priority happens mostly in the settlement near the river, especially Code River. The other priorities happen to the settlement environmental which spread to all area.