

A Remote Sensing Approach to Calculate Population Using Roads Network Data in Lebanon

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Abstract : In developing countries, such as Lebanon, the demographic data are hardly available due to the absence of the mechanization of population system. The aim of this study is to evaluate, using only remote sensing data, the correlations between the number of population and the characteristics of roads network (length of primary roads, length of secondary roads, total length of roads, density and percentage of roads and the number of intersections). In order to find the influence of the different factors on the demographic data, we studied the degree of correlation between each factor and the number of population. The results of this study have shown a strong correlation between the number of population and the density of roads and the number of intersections.

Keywords : population, road network, statistical correlations, remote sensing

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