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Abstract:

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The developing countries can be distinguished by spatial disparities and by this a wide gap between urban and rural settlements were produced as well as the appearance of primate cities. The effect of spatial development as a dynamic and continuous process can be perceived in the state of population distribution inside settlements inter and intra regions as well as the hierarchy of urban settlements according to time series. The research proved that the improvement judgment of the structure of the urban system using Gene factor is not accurate because it cannot be accounted for the internal components of the system which make a contrariety between the whole judgment (country) and partial components (Provinces including Sulaimaniyah Province). The population of settlements is distributed in this research for the first time according to interaction axes representing by main roads with Province center to diagnosis the internal spatial immigration towards Sulaimaniyah city as a primate city and delineate the identity of immigrants inside the city. Also for the first time this research makes a quantitative comparison between the urban settlement system of Sulaimaniyah Province at time series using the correlation coefficient according to the logarithmic form of Zipf's (rank- size) rule. This research delineate the optimal case of number and population size of urban structure in Sulaimaniyah Province using the iteration method in which the minimum population size of urban settlement with respect to (W.Christaller) theory is not less than (, inhabitants). The amount of primacy is calculated and compared with the optimal situation and also the dispersion was measured using the standard error estimates of regression line model at time series , and respectively and compared with the optimal case which has been calculated by the proposed method of one iteration only. This proposed method of optimization which represents a scientific and subjective basis in originating new urban settlements in the future with respect to future population distribution and a certain policies of housing in the regional plan and deliver the decision makers from objectivity and extemporization judgment which is current in the country till now.

(Log-normal) (Primate)

(Primate City)

(G.K.Zipf) (J.Q.Stewart)

(X) (Y)

$$P_r = P / r^q \dots\dots\dots ()$$

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 (Stanback & Knight)

(Mark Jefferson) . []

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$$G = \Sigma (y_i + y_{i-}) N_i / , \dots\dots\dots ()$$

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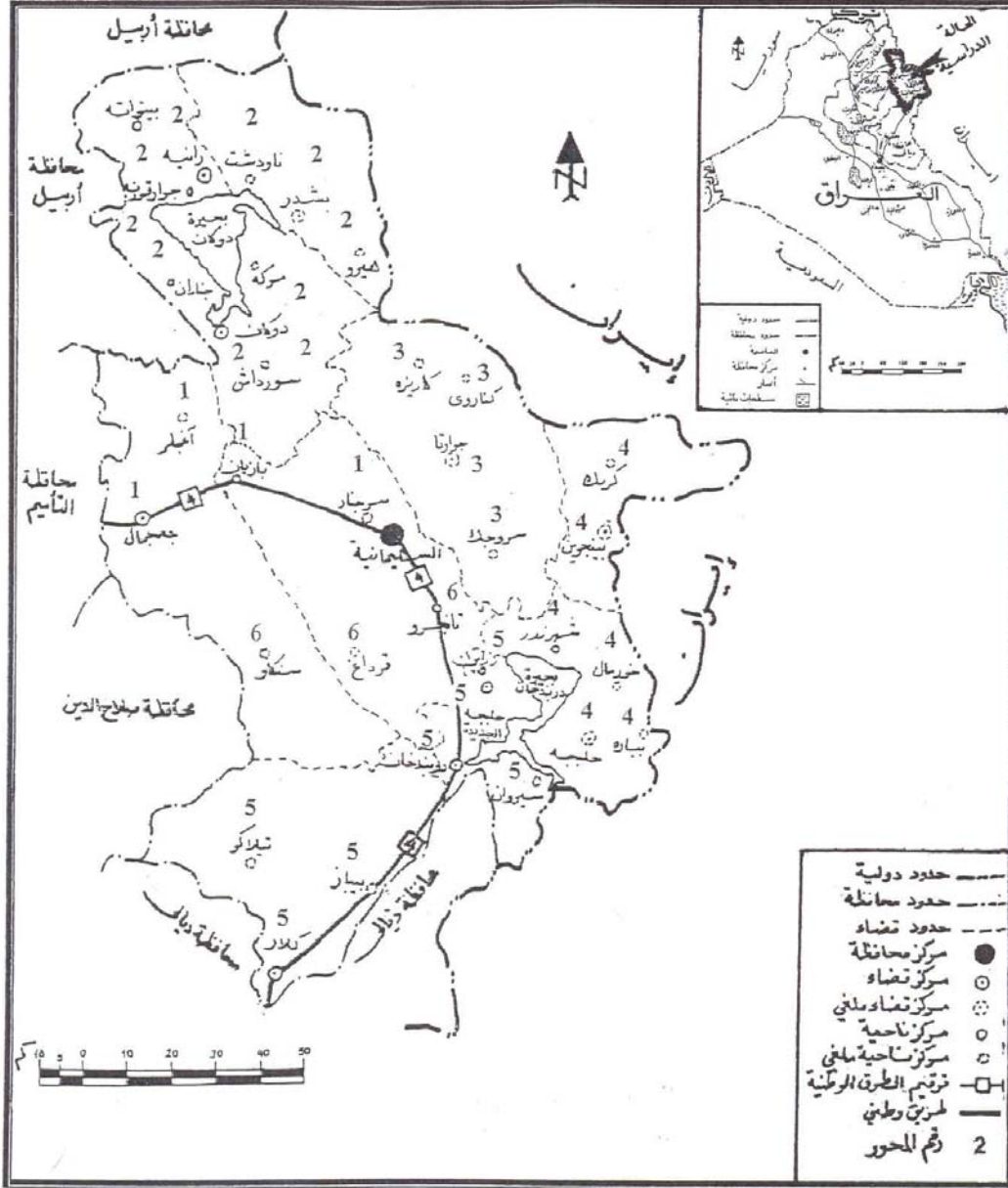
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شكل 1 ترميز الأقسضية والنواحي ضمن محافظة السليمانية موزعة على محاور الطرق الست الرئيسية والمربوطة بمدينة السليمانية [11]

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$$P = \Sigma U_i / \Sigma (/ r_i) \dots\dots\dots ()$$

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