Analyzing the Sustainability of Villages of khawvamirabad District Faced with Natural and Human Crisis

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1. Introduction

Stability achieved when the rural areas of natural and socio-economic crisis in a way that protects the natural environment and the rural community to interact with each other to act in good condition. This is one of the most important strategies to assess the sustainability of existing rural settlements. In the first approach to identify the critical points and critical factors and the control of natural and human crises in order to achieve sustainability and survival of their villages, For this reason, today, in the context of rural development and planning of terms such as diagnosis, assessment and comprehensive assessment of the status quo to be much.

The study area villages Khawmyrabad of Marivan, Kurdistan province is located at the zero point of the border with Iraq. There are multiple crises of the remoteness of the center and morphological characteristics, climatic and tectonic rural parts of the sector has been unstable, with drain and depopulation. The questions raised in this connection are the most volatile crisis and rural areas that are part of the relationship between the distance from the city center and the sustainability of the rural population, which significant relationships are: Identify the major natural disasters, economic, social and critical points with priority sector by experts, which can provide further insight into the current situation in order to establish the groundwork for better planning and population decline in rural areas provide highly volatile. To prioritize hierarchical analysis or expert judgment (AHP) used as a multi-criteria decision making techniques. Note that this method compares favorably to the decision and provides various options; it can be a suitable method for this study.

2. Study area

Marivan Township one of the 10 township of Kurdistan province in the West of Iran, adjacent to Iraq and in longitude 45 degrees 58 minutes and 46 degrees 45 minutes east longitude and 35 degrees 02 minutes and 35 degrees 48 minutes north latitude located. This township including central district, Sarshiv and Khawvamyrabad district. Khavvmyrabad district with an area of 338 square kilometers has 32 villages inhabited and is located at the border with Iraq, It has 2763 households and a population of over 11407 people. In terms of coupons division in the Mediterranean climate placed.

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Marivan mountainous region in the immediate Sanandaj - Sirjan Zagros folds that have been strong and weak metamorphism. The study area is influenced on the one hand on the Sanandaj-Sirjan zone and high Zagros structure. Although the specific structures in Sanandaj -Sirjan is more, but cannot ignore the impacts of Zagros highlands in this region, the main symbol of this drift and faults are abundant in the South West and adjacent to the Zagros region in the study area. However, climate and tectonic besides being far away from the center have encountered the region with diverse socio-economic and natural disasters.

3. Material and methods

This study, in terms of objective, applied and methods of doing it, is descriptive - analytical. In this study, we evaluated the existing challenges of the data (Census, 1385 and 1390) and maps of the area by experts (4 MSc Geography of Rural Planning, 2 Master in Development Sociology, 1 person of Dehyari, 2 bachelors senior natural geography (geomorphology trends in environmental planning) was determined. The AHP method to prioritize rural or oral judgment of experts as one of multiple criteria decision making techniques and software were used Expert choice. Finally, the final weight was calculated for each of the villages in the Excel software. Preparation of base data layers and maps required utilizes Arc GIS software based on the map 1: 250,000 geological and topographic maps Bane- Marian 1:50,000 was followed to answer questions used Kruskal-Wallis test, analysis of variance and linear regression analysis and other research have been. First calculate the relative weight of the criteria according to experts in the couple were in a diagonal scale. Comparison in a matrix of n in n (in this study, 8 × 8) occurs. A gives pair wise comparison judgment matrix: A= aij represents , and the aij show the judge the planner and the excellence criterion I (row) with regard to measures j (column) according to the original target. Calculate the relative weight of the criteria by judging experts and using Expert Choice software (total coefficient is equal to one important criteria). then the weight of sub-criteria in compare to related criteria determine and finally in attention to defined levels of experts that for all criteria and sub criteria defined, relative weigh of each option determine against sub criteria or directly by criteria itself and the final weigh in the regard of sum multiple of options. Finally, the final weight for each option determines the position of the villages in the class of stable and unstable.

4. Results and discussion

The calculations confirm the assumption research suggest that exposure to more rural regions (44%) is a semi-permanent class. unstable stair take about 22% of villages, While potentially stable class (top), 34% of the villages in the region to be included in the overall average of 3.45 that indicates the stability of the region in the semi-stable category. these result show that the planning which have done by now was not suitable. there is a necessary for change in planning for unstable villages especially for semi stable villages according to their instability level, population and capabilities. Orientation program that is associated with this group of villages (semi-permanent) takes place, it must be based on the combined vision and carefully done, Because of

rapid changes, and regardless of the underlying cause of these villages is critical and unstable conditions. As expressed in research theory and the result of comparisons show, the main factors of crisis making in economic and social sects are unemployment, low level of services, reduced population rate, and high rate of illiteracy. Other research assumes that the significance of the relationship between population size and stability of the rural sector was confirmed to be stated that the allocation of resources, facilities and orientation programs to the more densely populated areas. This reduces the vulnerability of the rural economic and social crisis and increased stability level. In contrast, the distance between the degrees of stability of the villages near the city center, a significant relationship was found to assume that the impact of research and significant relationship between the city center and the sustainability of rural rejected. So emphasis on populated villages and developed as a pole and a center for organizing other low populated villages and improving services to marginal part could be helpful to decrease instability level.

5. Conclusion

Although natural factors are less important in terms of creating crisis, but the combination of these factors in rural areas also suffer the humanitarian crisis has multiplied deterioration (sherke, Benawchela, Mohammad, Gagel, Anjiran). For removing this problem in regard of similarities and closeness this group of villages to each other, by using resettlement strategy by emphasizing on aggregation and integration of villages is a logical solution. In overall summary Close to 65% of total of the villages' has in class of unstable and metastable. So more attention and applied planning, in the short and medium term timeframe necessary to solve the immediate crisis.

Keywords: Stability, Crisis, AHP, Khawvamirabad.

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