# The Assessment of Physical and Social Housing Indexes in Determine of Predominantly Poor Blocks Using Factor Analysis Model (Case Study: Kermanshah City)

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## **Extended Abstract**

## Introduction

Poverty in Iran is developing like other countries, and makes a lot of troubles to the cities. Kermanshah as an enormous city faces with poverty. In this study, we have considered the skeletal pathology of this city. The purpose of this study understands the condition and features of dwelling to make some exact study of damages. Research method is quantitative analytic, we have applied the statistical blocks information in 1385 and 9 indices including: fancily dimension, population in houses, pure head- money, gross head- money, pure accumulation, deal of urban population, population residential compression, fancily population in any house, individual population in house. They have classified to three indices using statistical methods and analyzed using Arc/GIS software. Statistical population is Kermanshah city in 1385. Results show that Kermanshah has 1718 blocks that is 21/1 percent too rich population. 1149 blocks that is 1411% rich, 3475 blocks, i.e. 42/7% in average level, 1224 blocks, i.e. 15/1% poor, and 529 blocks i.e. 6/5% very poor population. These results just applied indices.

One of the evaluations of poverty is dwelling. Suitable dwelling means not to be so crowded. In general, poverty in cities of Iran is obvious. So, in this study, we show poverty in Kermanshah as a symbol of physical reflection of social inequality emphasizing on quantitative

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indices. House is the first need of a family, in developing country, just limited number of people could gain suitable dwelling.

Poor social groups always have a lot of troubles to make a good dwelling. So, they dwell in some places which have a lot of population, thus, they become poor. Poverty cycle in Kermanshah obviously shown, as a result we analyzed all these indices.

## Methodology

This research is an appliedresearch and statisticalSociety is Kermanshah City in 2006. The necessary data has been collected form Iranian censes center based on 2006 national censes also for preparing data Arc/View, Arc/GIS and Microsoft Excel software has been used in this study. After data preparing with use Factor analysis in SPSS software 9 indexes has been classified to 3 factors. Consideringeach of thefactorsextractedthe city blocks were classified in 5 groups such as veryaffluent, affluent, fair, poor, verypoorgroups. In this paper for spatial distribution of urban poverty in Kermanshah city 9 indexes were used such as average household size, population density in housing units,...

## **Results and Discussion**

This approach is a kind of practical one. Statistical society is Kermanshah in 1385. We take the information from center of statistic in Iran at 2006 and Arc/GIS software to specify the indices and ported to Excel software. At last we used SPSS to classify this model from 9 factors to 3 factors 8. Variance percentage and accumulation variance have been determined. Blocks are set as too rich, rich, average level, poor and much poor.

### Conclusion

On the skeletal- social indices point of view Kermanshah has 1718 blocks i.e. 21/1% too rich, 1149 blocks i.e. 14/1% rich, 3475 blocks i.e. 42/7% average level, 1224 blocks i.e. 15/1% poor, and 529 blocks i.e. 6/5% much poor population. These results are gathered just based on these special indices, and using much more indices would make some trouble and change these results.

## **Suggestions**

- To poor's, dwelling is an economical place, so economic planning to them should be of the lowest level of the city etc. neighborhood.
- We should applied research about dwelling with governmental parts cooperation.
- In dwelling organization should use experts of urban planning, sociology, economy and management interactively.
- Responsible organs should consider about dwelling indices, and make local responsible aware about them.
- Programs are about dwelling should be integrated and managers should cooperate with different organs.

Keywords: Urban Poverty, Dwelling, GIS, Factor Analysis, Kermanshah.