Assessment and Analysis of Development Indicator

In Township of Fars Province

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Introduction
A problem which urban planners are always faced with is the unequal growth and development of region. If we take a look at spatial distribution of facilities in regions we can notice that these activities have not been distributed equally. Therefore, one of the common criteria in urban and regional planning is the ranking of regions based on their share of different development indicators. On the one hand, the existing inequality between urban and rural areas and increasing in recent years, the need for more such research will reveal. In this research attempted to Evaluation and analysis of development indicators in township of Fars province by using factor and cluster analysis techniques. In this research having gone through different techniques of factor analysis every townships in Fars province gained some scores in relation to extracted factors. The result of combination index scores has shown in the table of (3). This study determined the most important goals of development levels, reduction and analysis of development indicators using factor analysis, identify homogeneous clusters by using cluster analysis techniques and was provide Solutions and strategy to achieve sustainable development in the township of Fars province.

Materials and methods
Methods comparison has been study methods, quantitative and analytical. Statistical Society of research has 24 township of Fars province in 1385 and they formed the indicators was assessed 43 indicators. To determine the first phase of development of 64 selected variables, with more survey than 21 studies varied due to the lack of information about all city of Fars province review excluded, and final review was conducted with the composite index is 43. The technique of Factor analysis is a statistical method used to describe variability among observed variables in terms of a potentially lower number of unobserved variables called factors. it is possible, for example, that variations in three or four observed variables mainly reflect the variations in fewer such unobserved variables. Factor analysis searches for such joint variations in response to unobserved latent variables. The observed variables are modeled as linear combinations of the potential factors, plus "error" terms. The information gained about the interdependencies between observed variables can be used later to reduce the set of variables in a dataset. Factor analysis originated in psychometrics, and is used in behavioral sciences, social sciences, Geography and other applied sciences that deal with large quantities of data. The technique of Cluster analysis or clustering is the task of assigning a set of objects into groups (called clusters) so that the objects in the same cluster are more similar (in some sense or another) to each other than to those in other clusters.

Case study: Fars province
Fars Province with an area of 122661/073 sq km is located between 27 degree and 00 minutes to 31 degrees and 40 minutes north latitude from the equator and 50 degrees 30 minutes to 55 degrees and 45 minutes east of the Greenwich meridian.

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Fars Province is one of the 31 provinces and known as Cultural Capital of Iran. It is in the south of the country and its center is Shiraz. In 2006 this province had a population of 4.34 million people, of which 61.2% were registered as urban dwellers, 38.1% villagers, and 0.7% nomad tribes. The etymology of the word “Persian” is derived from the cultural capital of Iran and found in many ancient names associated with Iran.

Finding
Finding of research show that using factor analysis technique has been the decrease of 43 variables to 6 final factors, these 6 factors explain and interpret 73.060 percent of variance. Due to a combination of indicators that factor scores obtained level scheme of Fars province has embarked on five levels. Consequently the result of using cluster analysis technique has been the grouping of township in Fars province into 5 homogeneous groups:
• Group I: include the township of Shiraz, Lamerd, Abadeh, Lar and Khonj. Township in this group in terms of homogeneous group.
• Group II: include the township of Khirmbyd, zarin dasht, Frashbd, Mehr and Ghir & Karzyn;
• Group III: include the township of Bavanat and Arsanjan;
• Group IV: townships of Mamasani, Sapidan and Eghlid is located in this group and constitute a homogeneous group.
• Group V: include the township of darab, Neyriz, Estahban, Fasa, Jahrom, Kazeroun, Firouzabad, Marvdasht and Pasargadae.

Conclusion and Solutions
Results show that graded status indicators examined in the survey counties Persian has had inequality and imbalance. And consequently the city of Shiraz because of its excellence in the province of political centralism in the different dimensions of economic, social, cultural, etc. Strategies for planning sustainable development indicators in Fars province is as follows:
  • Strengthening education and health - medical indicators in Shiraz Township;
  • Strengthening health - medical, communications and housing indicators in Khirmbyd Township;
  • strengthening communication indicators in Abadeh Township;
  • strengthening educational, health - medical and cultural indicators in Arsanjan Township;
  • Strengthening education and health indicators in Sepidan Township;
  • strengthening residential and cultural indicators in Lamerd Township;
  • strengthening educational, health and housing indicators in Mamasani Township;
  • strengthening educational and residential indicators in Eghlid Township;
  • strengthening health - medical and cultural indicators in Bavanat Township;
  • Strengthening educational, communications, residential and cultural indicators in Khonj Township;
  • strengthening educational, communications, residential and cultural indicators in Lar Township;
  • Strengthening educational and health - medical indicators in Jahrom Township;
  • Strengthening communication, health - medical and cultural indicators in Estahban Township;
  • Strengthening residential, health - medical and cultural indicators in Neyriz Township;
  • strengthening educational, communications, housing and health - medical indicators in Firouzabad Township;
  • Strengthening educational, health-medical, communications and housing indicators in kazeron Township;
  • strengthening educational, health - medical and cultural indicators in mehr Township;
  • Strengthening educational, communications, health-medical and cultural indicators in Darab Township;
  • Strengthening the residential, education, health - medical and communication indicators in Pasargadae Township;
  • strengthening educational, communications, housing, health-medical and culture indicators in Fasa Township;
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- strengthening educational, health-medical, communication, residential and cultural indicators in Marvdasht Township;
- Strengthening educational, health-medical, housing and cultural indicators in Ghir and Karzyn Township;
- strengthening health-medical, communications, residential and cultural indicators in Frashbnd Township;
- strengthening health-medical, communications, residential and cultural indicators in Zarin dasht Township.

**Key words**
Development indicator, factor analysis, cluster analysis, Fars provinces