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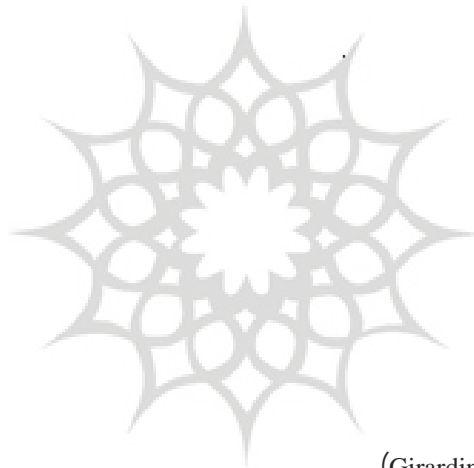


( ) (Kirchner et al., 1996) (Bockstaller & Girardin, 2003)

( ) (Meul et al., 2009)

(Mitchell (Gilmour, 1973) (Rigby et al., 2001)  
& Sheehy, 1997)

(Bockstaller & Girardin, 2003)



(Gras et al., 1989)

(Girardin et al., 1999)

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(Meul et al., 2009)

(Kalantari, 2001)

(Gilmour,

.1973)

(Crabtree & Brouwer, 1999;

Mitchell et al., 1995; Smith et al., 2000; Vos et al.,

.2000)

(Cloquell-Ballester et al., 2006)

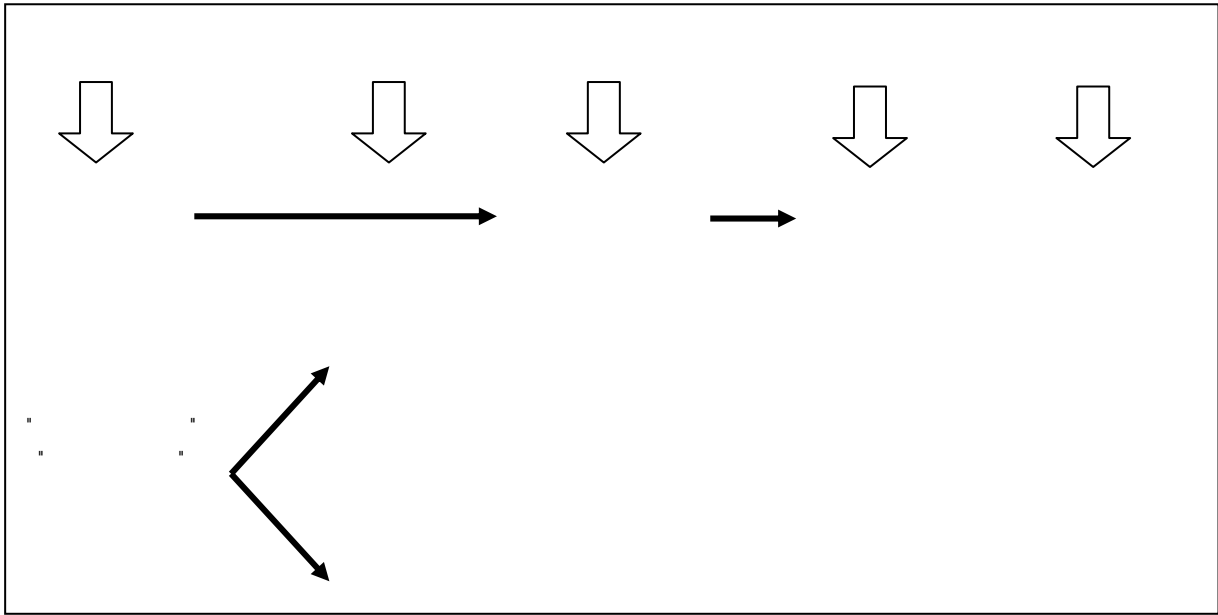
(Harrison, 1990;

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3. Design Validity  
4. Output Validity  
5. End-use Validity

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1. Simple Indicator  
2. Composite Indicator



(Bockstaller & Girardin, 2003)



(Kalantari et al., 2006)

(Kalantari,  
( )

.2001)

$$CV = \frac{1}{\bar{y}} \left[ \frac{1}{n} \sum_{i=1}^n (y_i - \bar{y})^2 \right]^{1/2}$$

$$= y_i \quad = CV$$

$$= \bar{y} \quad i$$

$$\bar{y} \cdot \quad = n \quad ( )$$

$$\bar{y} = \frac{1}{n} \sum_i y_i$$

(Williamson, 1965; Shankar & Shah, 2003)

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$$CV_w = \frac{\sqrt{\sum_i (y_i - \bar{y})^2 \frac{P_i}{P}}}{\bar{y}}$$

=CVw

$$= \bar{y} \quad i$$

$$= y_i$$

$$= P \quad i$$

$$= p_i$$

$$= n$$

$$T = \left( \frac{1}{n} \right) \sum_{i=1}^n \left( \frac{Y_i}{u} \right) \log \left( \frac{Y_i}{u} \right)$$

(

5. Weighted coefficient of variation

1. Coefficient of Variation
2. Williamson Coefficient
3. Theil Index
4. Herfindal Index

$$= y_i \quad = n \quad = T$$

$$= u_i$$

) log n (

(Shankar & Shah,

(

.2003)

$$H = \sum_i^n \left( \frac{y_i}{\sum_i^n y_i} \right)^2$$

= n

= H :

= y\_i

.(Salimifar, 2002)

( )

(Kalantari, 2001)

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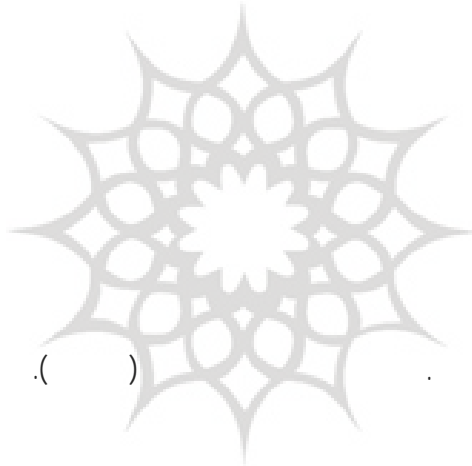
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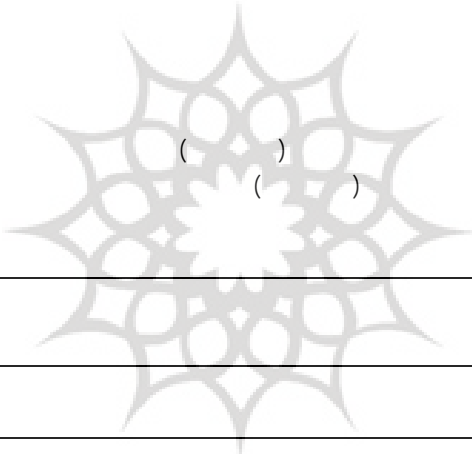
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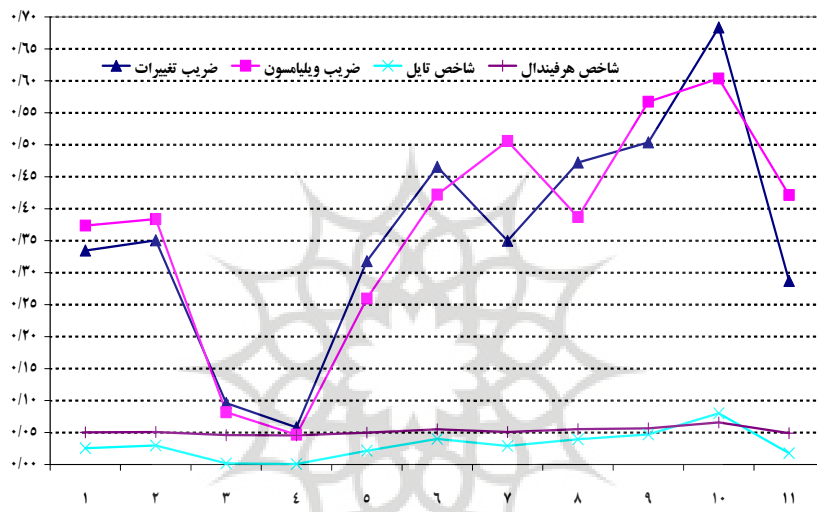


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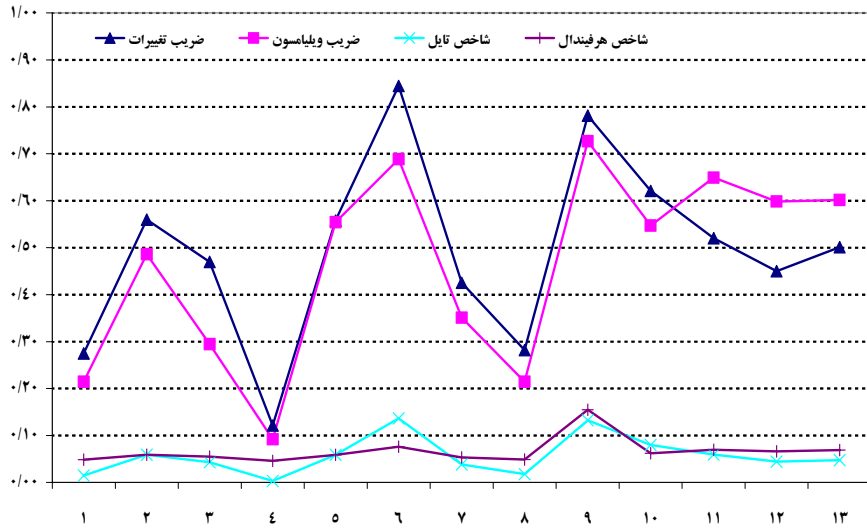
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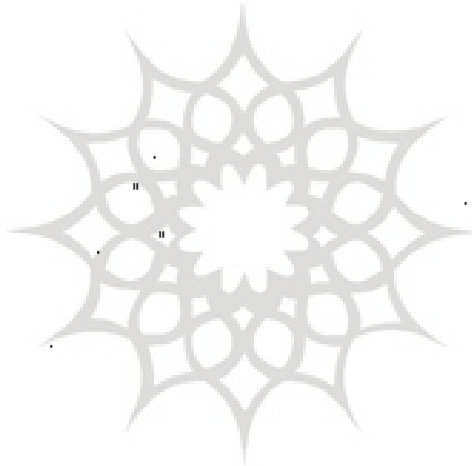
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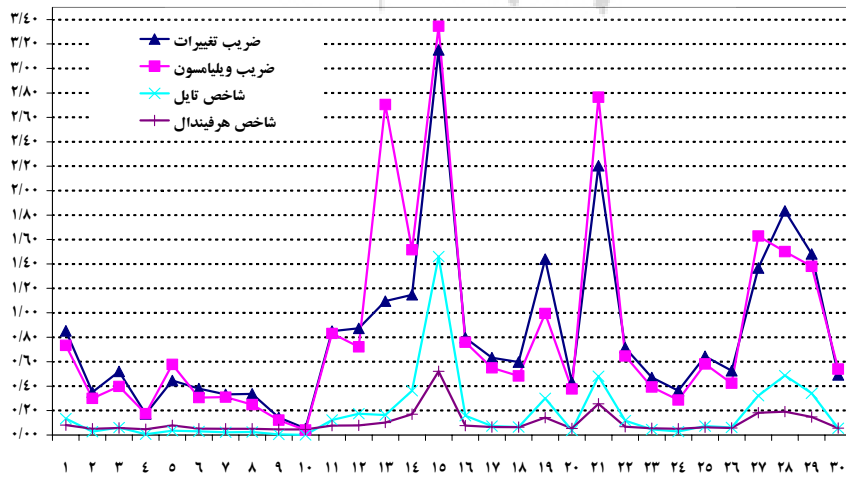


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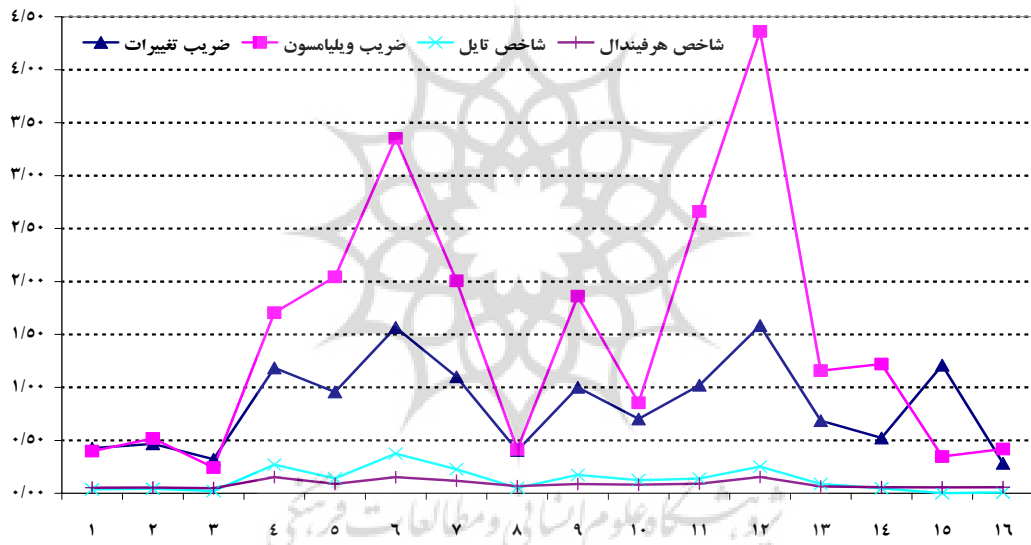
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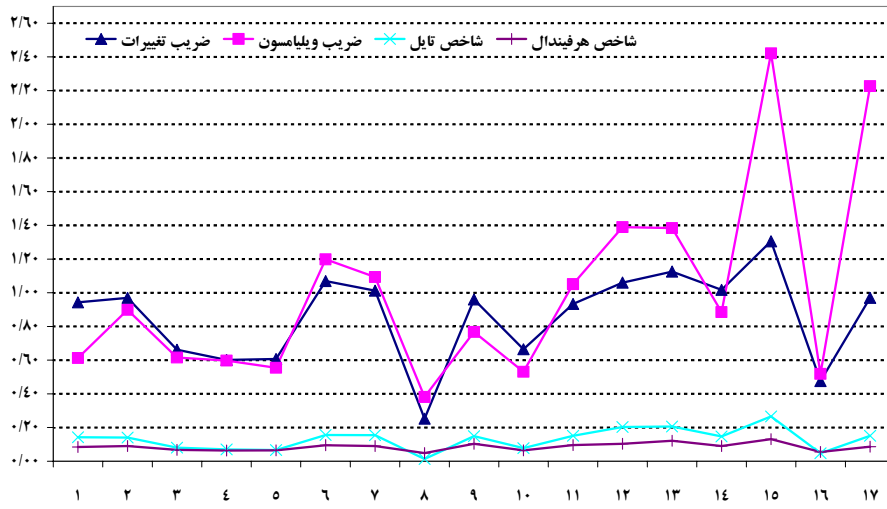
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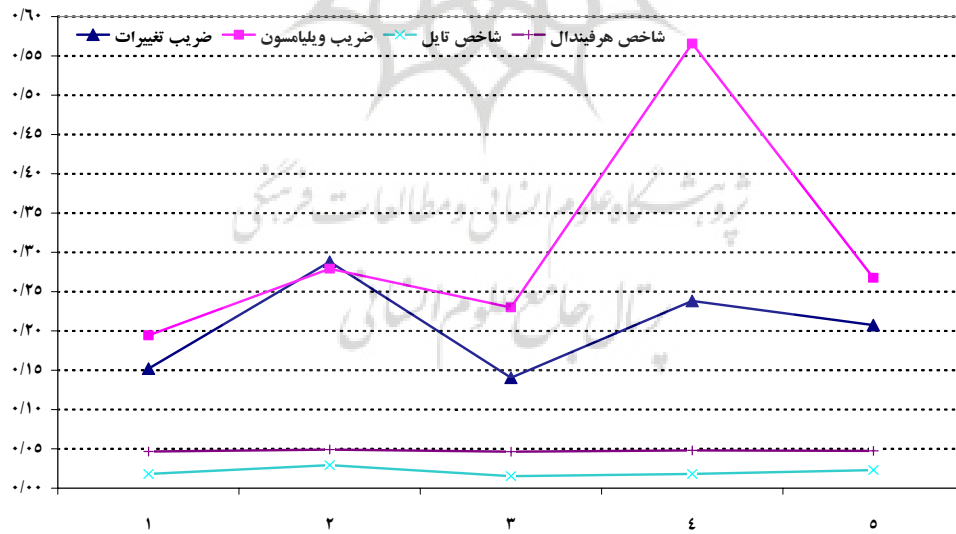
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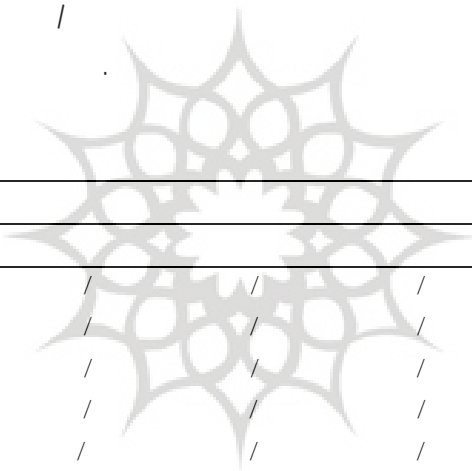
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# Formulating and Validation of Suitable Indices for Analyzing Spatial Agricultural Development Inequalities (Case Study of Fars Provinces)

GH.H. ABDOLAHZADE<sup>1</sup>, KH. KALANTARI<sup>2</sup>, A. ASADI<sup>3</sup>, AND J. DANESHVAR<sup>4</sup>

1, Gholamhossein Abdollahzade, Faculty Member, Gorgan University of Agricultural Science and Natural Resources2- Khalil Kalantari, Associate Professor, Faculty of Agricultural Economics and Development, University of Tehran3- Ali Asadi, Associate Professor, Faculty of Agricultural Economics and Development, University of Tehran4- Zheila Daneshvar Ameri, Asistant Professor, Faculty of Agricultural Economics and Development, University of Tehran

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## ABSTRACT

The main aim of current paper is formulating and validation of suitable indices in order to analyzing spatial agricultural development inequalities in Fars province. The study was carried out in two phases. In phase one with review of literature, regarding agricultural development, spatial inequality, and indicators, 92 agricultural development were identified. These indices were classified in five components as under: 1) social;-cultural, 2) structural-performance, 3) technical-management, 4) economical, and 5) infrastructural-services. These indices were validated by 57 experts who randomly were selected from faculty members of 6 Iranian agriculture faculties as research samples. In order to meet experts consensus and validate the indicators, statistical methods such as mode, mean, standard deviation and coefficient of variation were used. In second phase, data was collected for 87 validated indices, through 2003 agricultural census and Fars statistical yearbooks for 2004 to 2007, by using Coefficient of Variation (CV), Williamson Coefficient, Theil Index and Herfindal Index, the spatial inequalities of each indicator in Fars provinces were analyzed. The result showed that, except four indices, the rest of 87 indices are appropriate for analyzing spatial agricultural development inequalities. Calculating inequalities coefficients also revealed that economical-financial and structural-services indicators such as; agricultural credit institutes, agricultural and rural industries and rural and agricultural cooperative are in high inequality situation. The calculated composite index also showed that Shiraz county is ranked in first position and Khorambid county in the last position in this context.

**Key words:** Agricultural Development, Validity, Indicator, Spatial Inequality, Fars Province.

\* Correspondent Author:

E-mail: khkalan@ut.ac.ir