The effective factors on workforce demand in agricultural sector of Kerman

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ABSTRACT

Employment share in agriculture sector is increasing and yet workforce efficiency in this sector goes towards improving. The increase in employment share in agriculture in Kerman from 39.31 percent in 1993 to 31.6 percent in 2013 is an emphasis on this claim. The unemployment crisis in recent decade has faced the Kerman's potency of agriculture sector with doubt. An estimation of workforce demand in agriculture sector is necessary to specify the potency of agriculture sector in order to decrease unemployment rate. The time serial data during period 1993-2013 has been used for this purpose. Agriculture production theory is usually used for estimating demand models. Demand models are based on derived demand theories or experimental works. In this research, the workforce's experimental demand has been used which is a function of investment, value added, mechanization coefficient and the area under cultivation. It is possible to distinguish constancy and non-constancy of time serial variables through different tests. This research's data constancy has been used by using 9-stage method and also through considering structural failure issue and by the error correction model for policy-making in short term. The obtained results show that employment attraction toward the increase in area under cultivation is more important compared with the variables of investment, value added, mechanization coefficient. Therefore, enough consideration to increase the area under cultivation in current situation of agriculture role.

KEY WORDS: Employment, investment, value added, mechanization coefficient, the area under cultivation, agriculture sector.

INTRODUCTION

Agriculture is one of the most ancient forms of productive and economical activities in human society. The first and the most important duty of this sector is food and security supply for increasing population of country. (Chabokro and Farahani Jokar, 2003).

The agriculture sector in most of the developed and developing countries has an important role in food production, providing the employment opportunities and agricultural exchanges. If agriculture sector was recognized as the promotion step and economic growth victim of industry sector at the beginning of industrialization era and according to development primary theories, this view in current condition in many countries has given its position to coordinated growth and development of all the country's economic sectors without any specific discrimination. Such condition has also existed in Iran and the onset of country's industrialization attracted the attention of policy-maker and Politian to industry sector more than agriculture one. The most of capitals and investment was transferred from agriculture sector to industry sector and agriculture sector stayed behind the development process. The effects of this backwardness was appeared very soon as the decrease in agricultural revenues, migrate to the cities and workforce aggregation in urban areas. On the opposite side, work demand increase of urban area (industry and service) has not been accountable for rural migrant workforce (agriculture) supply growth and so a great crisis named high unemployment (two-digit) encompassed Iran's economic. In such a condition, a new definition of country's economic sectors position was made and agricultural sector centrality was emphasized as one of the country's economic objectives during development plans, especially second plan. The remarkable share of agricultural sector in country's economic growth in spite of its share decrease from capital stock compared with other sectors has caused that many of policy-makers believe that this sector can be an appropriate place to provide employment. (Haghighat Nejad Shirazi and Khaledi, 2002).

Agriculture sector is one of the main economic activities in country which in spite of impressive economic relative benefits in providing employment including being more economical, providing employment in agricultural sector compared with industry, less need to employment of agricultural sector to currency
investment, more easiness of agricultural sector merging in universal market, less need of agriculture employees to professional and specialized training and at last maintaining the rural population in rural area is evaluated a downward sector and with some serious restrictions. In some part of country due to climate conditions and inappropriate quality of resources, more restrictions on agriculture production process are imposed. However and with respect to industrial development restrictions in present condition of country, referring to agriculture sector and more investment in this sector can be a suitable solution to resolve employment crisis. (Tayyebi and Torkamani, 2002).

Stating the problem:

Agriculture sector is one of the important economic sectors which is very important to note to it in employment dimension. (Karbasi et al, 2003). The main factor of human consideration to agriculture has surely been providing primary needs. The most ancient civilizations were formed in the some areas of the world in which agriculture activities have been possible regarding geographical and environmental location. In fact, other economic sectors have arisen gradually and respecting to agriculture sector's needs. The need to agriculture tools in industry development and also products exchange in have played an important role service sector development. In spite this fact that industry sector and capital factor enjoyed more relative important in production after industrial revolution and gradual elimination of Feudalism economic-political system, but today this sector is also named as economic growth and development backbone. (Tehranchian, 2004).

Agriculture sector is one of the important economic sectors of country and its role in economic, politic, domestic and international development and stability is not secret for none. (Mir Mohammad Sadeghi, 1995). Agriculture sector has been considered as development backbone in economic, social and cultural development plans and its progress has been economic development's precondition and necessity and other sectors will not achieve prosperity until development obstacles of this sector are resolved. The positive and negative experiences of all the developed and developing countries emphasize this opinion. (Hashem poor, 1999).

Kerman is one of the Iran's province. Kerman province has been located in Southeast of Iran and its area is 180.72 square meters. This province's population in 2013 has been equal to 2.938.988 person according to Iran's statistic center and its capital is Kerman metropolis. Kerman is second vast province of Iran respecting this fact that it encompasses 11 % of Iran's extent and it is after Sistan and Baluchestan respecting extent. Kerman is considered as one of the important and historical provinces of our country. Kerman province is located in Southeast of country and it is somehow an industrial, cultural, political, agricultural, university-scientific, religious and other indicators reference among the provinces of country's South urban areas. Kerman province has also more than 600 recorded national monuments and it is considered as historical province of Iran. Kerman province is considered as one of the poles of Iran's agriculture products production which it not only carries the burden of its population's relative nourishment, but also export each year a remarkable amount of worthwhile agriculture products to over the country. This province's pistachio and date have been and also are one of the non-oil resources which attract foreign currency from abroad. This province has the country first rank in pistachio and date production, third rank in citrus production and fourth rank in horticultural product production. Kerman province is considered as the first producer of date in country through having 42 thousand hectare of fruter palm and 200-270 one thousand tons. The average per capita of date consumption in country is 5-7 kg. This number in Kerman reaches to 30 kg. One of the main items of Kerman's produced date is Mazafati date which it's collecting, packing and maintaining is very important respecting its specific features of this product. Some instance of product of this province in horticulture products are included: lentil, sesame, tomato, cucumber, cumin, etc. and some instance of province products in horticulture products are included: orange, date, crocus, walnut, pistachio, etc. The main export good of this province are included: pistachio and pistachio nut, almond and shelled almond, date, crocus, dried fruits, etc. which are target market of Arabian United States, Germany, Hong Kong, Russia and Iraq and the target market of dare are Swedish, Denmark, Poland, Chili and Lebanon. (Iran's trade development organization, 2003).

Horticultural product area under cultivation of Kerman has been 396524 hectare and production rate was 562804 ton and its performance was 1588 kg/hectare and the area under cultivation of agricultural products (irrigation and dry land) has had 80.88% of rank 15 and its production rate has had 43.18% of rank 5. (Kerman agriculture Jihad organization, 2013).

The Kerman employees' share in agriculture sector is 34.7%, it is 27.9% in industry sector and 37.3 in service sector. The unemployment rate of men, unemployment rate of women, unemployment rate of youth (15-24 years old) , unemployment rate of urban areas and unemployment rate of rural areas are respectively 5.3%, 20.5%, 16.4%, 9.1% an 4.6%. (Iran statistic center, 2014).

Accordingly, this research aims to study the effective factors on workforce demand in Kerman's agriculture sector.

Review on research history:

Zahedi Mazandarani in 2005 in an article of functional necessities of employment development in agriculture sector has investigated set of effective variables in agriculture employment process in the frame of
four scope as bellow: 1. the structure and natural factors scope related to economic activities in agriculture. 2. The scope of administrative and management structure including legal obligations, manpower skills and workforce relationships. 3. Social scope including rural population and life and job condition in agriculture. 4. Cultural scope including people's attitude toward agricultural activities.

Sadeghi and Homayuni Far in 2002 in the article of agriculture role in employment supply and reducing unemployment in addition that refer to agriculture sector employment's share reduction and its efficiency improvement by using workforce experimental demand model, they also conclude that employment attraction toward the area under cultivation decrease is more important compared with investment and value added variables. They received this result in this article that investment and workforce factors act as two alternative factor in an agricultural year.

Esfandiari in 2007 in the article of study the Iran's economic sector employment providing and through emphasis on agricultural sector and by using input-output table in 1998 (including 30 sectors) has calculated employment potential and different sectors production by using the methods of Ras Mosen, Hezari and Diamond. The results show that key industries from employment viewpoint is very much different from key industries from production viewpoint. Also agriculture is in first rank of key sectors in 3 pattern from 4 applied ones. Although Esfandiari's research is one of the first accomplished researches regarding employment by using input-output table, but the relative sector's size in none of applied methods is not included.

Morgan in 2001 in effective factors on workforce demand analysis in England during the stages of 1981-1994, has considered the job security effect on adjusting workforce demand during time as decreasing and significant and he has concluded that job security increases employment long-term level regarding work times and not the number of employees.

Rocha and Restosia in 2002 in the study of employment fluctuations and agriculture sector's share, have shown by using two-part patterns and real business cycles among agriculture and non-agriculture sector that simultaneously with the increase in employment size in agriculture sector, employment instability in macro level and also solidarity between employment and total production will be decreased.

Kavago and et al in 2003 have used in estimating agricultural production function of the variables of production level, the number of employees, the lands under cultivation, the number of livestock, machines and equipment The land and livestock in their study have been explainer of long-term capital and a guarantee for supplied subject from inside the agriculture sector.

Tain and Ferredy in 2005 studied the effect of some variables such as tax and government's expenditures on Gross Domestic Production, growth and employment and the results showed that growth and employment will be decreased through the increase in tax and the increase in government's expenditures leads to employment increase.

Fetas and Mye Hef in 2001 studied in a research the dynamic effects of financial policy on consumption and employment variables. The general balance classic models were used in this study and then they were compared with obtained results of structural self-regression vector. The obtained results showed that the government's expenditures increase leads to sustainable increase in production, consumption and investment and wage and private sector employment increase.

**MATERIALS AND METHODS**

The estimating workforce demand in agriculture sector is necessary for specifying balanced condition in healthy agriculture growth. For this purpose, two kinds of models are usually applied: the models which are based on derived demands theories and the models which are based on experimental works. The experimental method has been used in this research due to existing insufficiency in information related to workforce demand.

**Workforce demand:**

*The theories which are subordinated of workforce demand:*

Workforce demand refers to the number of workforce which they are requested in market wage from employers. The employers adjust workforce employment so that firm maximizes its profit. In the cases that there is extra workforce supply, workforce demand function is used to determine employment which this method is known as workforce demand approach.

The demand functions of subjects will be obtained as some functions of receptor and subject prices through minimization of total expenditures of subject toward technology restrictions for assumed receptor and assumed prices of subjects. According to Lem Shefard, demand functions of subjects will be obtained by derivation of producer cost function. If job and capital are two main production factors, producer cost function is defined as below by assuming that r, y, w are respectively workforce, capital and production price.

\[ C = c (w, r, y) \]
This function is homogenous and a first rank function and it has a linear relationship with independent variables. If a partial derivation is taken from above cost function toward wage or workforce price, workforce demand function will be obtained:

$$L^d = \frac{\partial C(w,r,y)}{\partial w} = L^d(w,r,y)$$

Because workforce demand function has zero homogeneity features, it can be written as below

$$L^d = L^d(y, \frac{w}{r})$$

Therefore, workforce demand depends on production level and relative prize of workforce. The relation between workforce demands and independent variables is as below:

$$\frac{\partial L^d}{\partial (\frac{w}{r})} < 0 \quad \frac{\partial L^d}{\partial y} > 0$$

Therefore, through the increase in production level and fixing other conditions including relative prices of workforce, workforce demands will be increased which actually, more production evokes more workforce. In the other hand, through the increase in relative price of workforce and fixing production level, the workforce demand will be decreased. It means that capital is replaced with workforce. (Amini and Falihi, 1998). Due to lack of related information regarding wages in agriculture sector and also capital profit rate (controlling profit rate on behalf of government) this method application is faced with problem and so experimental model is used:

$$L = \alpha + \beta_1K + \beta_2AV + \beta_3LAND + \beta_4TECH + e_t$$

L: workforce demand
K: Investment (constructive budget + facilities)
AV: Value added
LAND: The area under cultivation
TECH: Mechanization coefficient

The efficiency of each factor in workforce demand is estimated to determine independent variables efficiency by estimating above function through logarithmic method. Then the percentage of workforce demand changes can be obtained by calculating the attractions related to investment, value added, and area under cultivation and mechanization coefficient. The ECM model must be used for short-term investment. In this model, short-term workforce demand changes are studied in which the investment changes effect, area under cultivation and mechanization coefficient along with ECM with a pause period is called error correction component.

RESULTS AND DISCUSSION

Employed population in economic main sectors:

Employee's distribution in economic activities main sectors including agriculture, industry and service is one of the characteristics of workforce situation which relative demand of economic sectors for workforce will be specified after it. Table 1 shows employment share according to economic main sectors during the years 2003-2013 in Kerman. Employee's share of agriculture sector from 39.31% in 2007 has been decreased to 29.1% in 2012, but totally it has descending procedure. The decrease in Employee's share of agriculture sector (and the increase of industry sector) in economic development process of countries is a natural affaire and it is considered as one of the development criteria and it is desirable when the share of this sector's employees reach to less than 10% in total economic. (The experience of developed countries). This affaire must be consistent with agriculture land integration, efficiency increase, enhancing agriculture land per capita, technology application growth and new institutions. (Sadeghi and Homayuni Far, 2002).

Industry sector employee's share has been increased from 27.65 in 1997 to 31.3% in 2013. This share has been decreased from the year 2013 up to 2013, but it has totally has an ascending process. At first, the share of industry sector's employees is increased in desirable development process, and after passing the industrialization primary process, it must be decreased in favor of service sector. The share of service sector's employees has been increased from 33.09% in 1997 to 39.6% in 2013. This share has been decreased from the year 2012 up to 2013, but it has totally had an ascending process.

Rural –urban employment and unemployment of Kerman:

Table 2 shows the employment condition in rural and city during the years 1997-2013. The city in center of employed population residence in industry and service sectors and rural is center of employed population residence in agriculture.
The rural employed' share is decreasing from 1993 up to 2012 and it is increasing from 2012 up to 2013 and urban employed' share is decreasing from 1993 up to 2007 and it is increasing from 2007 up to 2013 and totally it has had an decreasing process. So, the most created job has been related to rural areas.

Table 1:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>39.31</td>
<td>34.8</td>
<td>29.1</td>
<td>31.6</td>
</tr>
<tr>
<td>Industry</td>
<td>27.6</td>
<td>28.7</td>
<td>31.3</td>
<td>29.8</td>
</tr>
<tr>
<td>Service</td>
<td>33.09</td>
<td>36.5</td>
<td>39.6</td>
<td>38.6</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>


The rural unemployed share is increasing from 1993 up to 2012 and it is decreasing from 2012 up to 2013 and totally it has had an decreasing process and urban unemployed' share is increasing from 1993 up to 2007 and it is increasing from 2007 up to 2013 and totally it has had an increasing process. So, the most unemployment's share has been related to urban areas. Migration from rural to urban areas has had a determining role in this regard based on different reasons.

Table 2:

<table>
<thead>
<tr>
<th>Economic sector</th>
<th>Total of province</th>
<th>Urban</th>
<th>Rural</th>
<th>Total of province</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>91.5</td>
<td>91.3</td>
<td>95.1</td>
<td>8.5</td>
<td>8.7</td>
<td>4.9</td>
</tr>
<tr>
<td>2007</td>
<td>86.6</td>
<td>83.3</td>
<td>91.3</td>
<td>13.4</td>
<td>16.7</td>
<td>8.7</td>
</tr>
<tr>
<td>2012</td>
<td>87.9</td>
<td>85.9</td>
<td>91.3</td>
<td>12.1</td>
<td>14.1</td>
<td>8.8</td>
</tr>
<tr>
<td>2013</td>
<td>91.8</td>
<td>89</td>
<td>96.7</td>
<td>8.2</td>
<td>11</td>
<td>3.3</td>
</tr>
</tbody>
</table>


Variables' stasis test:

Firstly, the variable s' stasis test was performed in this research to determine estimation's appropriate strategy. A time serial is static when its average, variance, covariance and correlation coefficient is fixed during time. In the other words, it should be independence of time. In this regard, recognizing stasis or non-stasis of time serial variables is possible through different tests.

This research's data stasis has been investigated by using 9- stages method and also through considering structural failure issue. The results of stasis test have been shown in below tables.

Table 3: The results of variables' stasis test.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Stasis condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce demand</td>
<td>(2) L</td>
</tr>
<tr>
<td>Investment</td>
<td>(1) K</td>
</tr>
<tr>
<td>Value added of agriculture sector</td>
<td>(2) V</td>
</tr>
<tr>
<td>The area under cultivation</td>
<td>(1) A</td>
</tr>
<tr>
<td>Mechanization coefficient</td>
<td>(1) TECH</td>
</tr>
</tbody>
</table>

Reference: Research findings

In this part, structural failure test was done because it would be possible that non-stasis if some of the variables is due to structural failure. In this method, variables' stasis issue can be studied respecting to structural failure. The results showed that 1(2) variables are converted to 1 (1) after respecting structural failure. Because annual data were not static and 1 (1), so the mass analysis was used. According to the obtained results of table 2, the hypothesis (r=0) has been rejected in all three stages. (Test's statistic quantities are larger than crisis values at confidence level of 95%). Respectively the hypothesis of the presence of one mass vector, two mass vector and more were tested. As it is observed in below table, according to the maximum of special value test, at first the hypothesis r<=4 can be rejected in third pattern condition. In effect test, the hypothesis r <=1 cannot be rejected in fourth pattern condition. (Calculated statistic (32.1183) is smaller than crisis value at confidence level of 95% (40.4069). There are two mass vector according to effect test. Therefore, According to effect test, the fourth pattern can be selected as the best condition and the most appropriate status to estimate long-term and short-term relations.

Mass vector estimation:

There are two mass vectors according to the results obtained of below table. According below table, in first vector, workforce demand has a positive and significant relationship with agriculture's value added and the area under cultivation and respectively 1% increase in value added of agriculture sector and area under cultivation causes the increase of 2.635 and 0.174 in workforce demand and it has negative and significant relationship with mechanization coefficient. Totally workforce demand has positive and significant relationship with value added
and the area under cultivation in Kerman according to second vector and mechanization coefficient has been significant with a large coefficient and it has a negative relationship with workforce demand.

### Table 4: Matrix ranking test and recognizing the presence of width of origin and process.

<table>
<thead>
<tr>
<th>Crisis value</th>
<th>Fourth pattern</th>
<th>Third pattern</th>
<th>Second pattern</th>
<th>Opposite hypothesis</th>
<th>Null hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>159.8618</td>
<td>Computational statistic</td>
<td>Crisis</td>
<td>Computational statistic</td>
<td>Crisis</td>
<td>Computational statistic</td>
</tr>
<tr>
<td>82.40344</td>
<td>63.87610</td>
<td>49.88824</td>
<td>47.85613</td>
<td>57.66567</td>
<td>54.07904</td>
</tr>
<tr>
<td>41.73430</td>
<td>42.91525</td>
<td>22.88374</td>
<td>29.79707</td>
<td>30.63811</td>
<td>35.19275</td>
</tr>
<tr>
<td>20.50408</td>
<td>25.72211</td>
<td>10.53313</td>
<td>15.49471</td>
<td>16.37484</td>
<td>20.26184</td>
</tr>
<tr>
<td>8.706662</td>
<td>12.51798</td>
<td>0.084488</td>
<td>3.841466</td>
<td>5.437021</td>
<td>9.164546</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crisis value</th>
<th>Computational statistic</th>
<th>Crisis</th>
<th>Computational statistic</th>
<th>Crisis</th>
<th>Computational statistic</th>
<th>Effect statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>77.45840</td>
<td>38.33101</td>
<td>47.22950</td>
<td>33.87687</td>
<td>53.87666</td>
<td>34.08570</td>
<td>r&gt;=0, r=non</td>
</tr>
<tr>
<td>40.66914</td>
<td>32.11832</td>
<td>27.449</td>
<td>27.58434</td>
<td>27.02757</td>
<td>28.58808</td>
<td>r=1, r=c=1</td>
</tr>
<tr>
<td>11.79742</td>
<td>19.38704</td>
<td>10.44864</td>
<td>14.26460</td>
<td>10.93781</td>
<td>15.89210</td>
<td>r=3, r=c=3</td>
</tr>
<tr>
<td>8.706662</td>
<td>12.51798</td>
<td>0.084488</td>
<td>3.841466</td>
<td>5.437021</td>
<td>9.164546</td>
<td>r=4, r=c=4</td>
</tr>
</tbody>
</table>

| Reference: Research findings |

* *, ** and *** respectively indicate significance at the level of 10, 5 and 1 percentage.

**Vector error correction model:**

The coefficient of the statement of vector error is called balance speed according to the results of table 6. Therefore, they should be negative to being observed in long-term estimation of this process. According to table 6, balance speed toward workforce demand long-term balance has obtained -0.04076 which the coefficients have been negative.

**Table 6:**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mass vector 1</th>
<th>Mass vector 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>D (L)</td>
<td>-0.40764</td>
<td>-0.32E-7</td>
</tr>
<tr>
<td>Standard error</td>
<td>0.3472</td>
<td>7.3E-7</td>
</tr>
<tr>
<td>D (K)</td>
<td>991581.4</td>
<td>1.9568</td>
</tr>
<tr>
<td>Standard error</td>
<td>197352.1</td>
<td>0.4746</td>
</tr>
<tr>
<td>D (LAND)</td>
<td>-63.0352</td>
<td>0.000476</td>
</tr>
<tr>
<td>Standard error</td>
<td>115.830</td>
<td>0.00025</td>
</tr>
<tr>
<td>D (TECH)</td>
<td>-2.62E-05</td>
<td>-2.30E-11</td>
</tr>
<tr>
<td>Standard error</td>
<td>1.2E-05</td>
<td>2.6E-11</td>
</tr>
<tr>
<td>D (VA)</td>
<td>9.43258</td>
<td>-2.11E-05</td>
</tr>
<tr>
<td>Standard error</td>
<td>4.83976</td>
<td>1.0E-05</td>
</tr>
</tbody>
</table>

**Conclusion and suggestions:**

The share of agriculture sector's employees has been decreased from 39.31% in 1993 to 31.6% in 2013 which the economic development process is a desirable affair. The agriculture sector's share, industry sector's share and service sector's share in 2013 have respectively been 31.6%, 29.8% and 38.6%.

The employment and unemployment process in city and rural during the period of 1982-2011 is as this manner that the employment rate in city from 91.3% in 1993 has been decreased to 89% in 2013, while the employment rate in rural has been increased from 95.1% in 1993 to 96.7% in 2013. However, unemployment has been increased from 8.7% to 11% in city and it has been decreased from 4.9% to 3.3% in rural. With respect to this fact that the most created job has been in urban areas, the share of rural unemployment has been decreased and the share of urban unemployment has been increased.
Agriculture development process regarding employment and its situations in developing countries is a movement from workforce self-employment in agriculture toward urban modern sections or rural non-farm sections. Therefore, the employment role in agriculture is decreasing and on the other hand, it goes toward employment efficiency improvement in this sector.

It is necessary that workforce demand in agriculture sector is estimated to determine balanced condition in agriculture sector. Two type of models are usually used for this purpose: the models which are based on derived demand theories and the models which are based on experimental works. Workforce demand refers to the number of workforce which are requested on behalf of employers (farmers) in market wage. The employers (farmers) adjust the workforce employment as the firm's profit will be maximized. The workforce demand function will be used to determine employment when there is extra workforce supply (agriculture or rural sector in Iran economic).

Agriculture workforce's experimental demand function is considered as a function of investment, value added, mechanization coefficient and agricultural area under cultivation and its coefficients and signs fits with employment expectation, in the manner that investment coefficient sign is negative and indicates that two subject of workforce and investment in Iran's agriculture are competitor with together. While value added and the area under cultivation have a positive effect on workforce demand of agriculture.

The models' variables convergent and its disturbing component at the 10% level is I (0) according to 9-stage testing method. The MCE model (error correction model) has been used for short-term policy making. In this model, workforce demand's time changes or employment is a function of time changes value of investment, value added with pause, the area under cultivation and the variable of first model disturbance or MCE. Variables' coefficient, expecting mechanization coefficient have been positive and smaller than 1 and it indicates balance process adjustment steadily in short time. It means that if a policy is enforced on value added and the area under cultivation and other effective variables on workforce demand which has not brought in model excepting mechanization coefficient, it will tend toward employment long-term balance value in sort-term and steadily. Because employment attraction is more valid toward the area under cultivation increase and the effectiveness amount is more, so policy is executable with political for decrease unemployment rate in rural through the increase in area under cultivation.

One of the clear feature of agriculture sector in this sector's tendency toward more workforce employment, but in desirable development process employment attraction toward agriculture products is very small and it may be even negative. This attraction is negative in developed countries and it is positive in other countries. This attraction is also positive regarding Iran, but it is about 0.1%. In the other words, production enhancement or employment increase policies will not have a sensible effect on employment increase procedure. But the area under cultivation level increase policy can be effective in employment enhancement. The land per capita of Iran agriculture is less than 6 hectare which it has no place in modern agriculture.

Land rareness growth is considered as largest determining factor in workforce migration of agriculture, although employment opportunities in modern non-agricultural sectors have also had worthy effect in this process. Econometric analysis of agriculture workforce's experimental demand showed land's short-term significant effect (the area under cultivation) on workforce demand, while its long-term effect enjoyed a less
degree of validity. The mass test also showed that land's causal effect on employment is absolute after one year. In the other words, the area under cultivation variable has had an effective causal

With respect to current inappropriate condition of employment in our country, it is obvious that this inappropriate condition changing requires precise plans in short and long term. Regarding effective factors on workforce's demand in agriculture sector of Kerman, below suggestion are proposed in order to settling the unemployment problems and more employment enhancement.

The continuation of agricultural exploitations depends on capital presence in order to make possible to equip factors t for agriculture. So providing capital and increasing fixed investments in this sector will be worthy help for more employment. Also respecting to relative benefit of agriculture sector to provide employment, investment in agriculture sector and guiding private capitals in infrastructural structures and investment security providing can accelerate development process and also it prevent some problems such as unemployment.

Raising the share of agriculture sector in GDP (Gross Domestic Production) leads to workforce demand increase in this part. The production resources restriction decrease, applying productive correct methods, agriculture policies insufficiency decrease can be effective in raising agriculture products output and agriculture revenue. Respecting to agriculture sector user being and technology effect on production factor efficiency increase, we can help to technology improvement process of agriculture sector and guide this sector toward capitalization by increasing investment in modern equipment.

The appropriate policies must be enforced to other economic sector because of extra force respecting the effect of wage rate decrease compared with the price of other subjects on investment enhancement in agriculture sector.

The ways of value added increase and promoting efficiency in this sector must be under consideration respecting to the effect of value added of agriculture sector in previous stage on investment rate in next stage.

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