

# ARTICLE ASSESSMENT THE EFFECT OF DEHKHODA SUGARCANE AGRO-INDUSTRY ON ECONOMIC CHANGES OF DAGHAGHELEH VILLAGE

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## ABSTRACT

Dehkhoda agro-industrial complex is the seventh companies in a series of affiliated agro-industries of Sugarcane Development Company and Subsidiaries. In this study, Daghagheleh village the suburb of Ahvaz city has been analyzed which is located near to this agro-industry. The objectives of this study include: understanding the effects of Dehkhoda agro-industrial complex activities on employment trend, emigration and changes of major crops sample in village area. This research has been done by descriptive- analyzing method and by using field observations and questionnaire completion. The statistical population of it includes residents of the village about 100 households. Final evaluation of data and variables was done by using factor analysis and one-sample t-test. The obtained results stated that Dehkhoda agro-industrial complex has not only have positive and effective impact on improving employment conditions and reducing unemployment, reducing migration, fundamental changes in major crops sample and totally economic developments, but also its negative results was observed in studied village.

# INTRODUCTION

The life of each village is depended on dynamism and its economic durability. So that one of the most important causes of depletion and abandoned of many of country's villages stem from weaknesses and inefficiency of their economies. Iran country due to its unique geographical location is considered one of the few countries with a good diversity of climate and atmosphere, therefore; it causes to create diverse economic productivity in its villages, so that in some rural areas of Iran economic activities are seen in different kinds.

Immigration debates and increasing emigration of peasants to cities and problems related to this issue are current issues and problems of villages of country. The main reason of rural emigration to cities has been to earn money and finding job, therefore; in this regard the activity of Dehkhoda agro-industrial Company in creating jobs in its operational range is of great importance.

Agro-industry is a combination of agricultural activities and its affiliates industry, that plains are such places has a high capacities and potentials for such activities. In this regard Khuzestan's plain is one of the largest plains with smooth and flat limited area in Iran with highest natural potentials such as water, air and soil.

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**KEY WORDS** 

Agro-industry, employment, economic

development,

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> Dehkhoda agro-industrial complex is the seventh companies in a series of affiliated agro-industries of Sugarcane Development Company and Subsidiaries; it was established to achieve country's economic and social major targets, in order to provide a part of required sugar of country and other applied products in chain of productions of downstream industries of sugarcane, and creating sustainable employment, by cooperation of ministry of agriculture with Saderat and Melli banks.

Given to the strategic importance of sugar product, sugar council was established in 1983 and execution the plan of sugarcane development and subsidiaries in Khuzestan was ratified by Islamic Consultative Assembly, and ministry of agriculture was obliged by it to establish 7 units of sugarcane agro-industries in a land area in extent of 84 thousand hectares, in order to become self-sufficient in sugar supply needs of the country and part of the other nutritive and industrial needs of society [1].

Karoon agro-industry complex has caused to provide employment in nearby villages, job diversity, increasing job opportunities, reducing permanent immigration from village to urban areas, increasing daily migration from neighborhood's urban areas to the region and changing cropping pattern in under studied rural district [2].

Reached to this result in his analyses that construction of Nazarabad industrial town, has had a positive role in various economic and social aspects of villages of Najmabad rural district [3].

It has been reported in other research that Miami industrial district of Shahrood city by creating job opportunities for peasants and increasing their income, caused peasants to emigrate to the city [4].

Reached to the result that economic performance of villages of Sowme'eh Sara province has been influenced by surrounding cities and these influences has been different from past to present and

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effectiveness of rural economic performances from province has not been hierarchically. The villages of the province are in relation with other cities in addition to cities of this province as well [5].

According the report of the Housing Foundation of Islamic Revolution [6], rural guidance plan in upper Abgarmack, by creating capabilities in the field of agriculture, industry and services has caused to provide opportunities for employment and consequently high population density in comparison with other parts of the province.

Industrial districts have not been successful in creating job opportunities for peasants of Markazi province, because most of their employees were urban residents [7].

Establishment of industries in villages causes to reduce migration and to preserve the population of the region [8].

considers industrialization as a motive motor of rural development in China and he believes that by establishing industry in rural regions, in addition to increase families' income, the food consumption patterns and durable consumption goods have been changed significantly [9].

Non-agricultural activities have had a considerable share in homogenization and stability of peasants' income during the year. Liedholm's analysis shows that fluctuation of monthly income of rural families in Thailand with industrial activities has been much less than variability of total income of rural families with agricultural activities [10].

### MATERIALS AND METHODS

The present study is descriptive - survey method that it was done by using questionnaire in Daghagheleh rural community in order to investigate the effect of Dehkhoda sugarcane agro-industry on its economic changes. Items were determined scientifically from the perspective of researchers and then items in form of 22 questions questionnaire were analyzed in 3 indexes include 5 items of social indexes, 12 items of economic indexes and 5 items of shifting cultivation indexes. As was said, the statistical population of families of Daghagheleh village was 100 households. Validity of questionnaire was confirmed by view of a number of specialists and its reliability was confirmed with the implementation of the questionnaire over 20 families of statistical population and calculation of equamax rotation (kmo-0/715). After completing the questionnaire the descriptive methods were used such as frequency, average, standard deviation as well as statistical t tests of independent groups for comparison the views of respondent groups to the questionnaire in terms of sex, age and education. Normalization of data was done by valid test of Kolmogorov-Smirnov and their analysis by SPSS software. Criterion of judgment and conclusion was the average of obtained scores.

## **RESULTS AND DISCUSSION**

All 100 distributed questionnaires were collected. According to obtained results of questionnaire, 18 percent of respondents were single and 82 percent were married; the family's numbers of 39 percent of respondents were 0-3 persons, family's numbers of 52 percent of respondents were 4-7 persons and family's numbers of 9 percent of respondents were 8-11 persons, 58 percent of respondents were under diploma, 33 percent diploma, 3 percent associated degree, 6 percent of them bachelor degree and higher; 10 percent of respondents were 17-23 years old, 28 percent were 24-30 years old, 29 percent were 31-37 years old, 25 percent were 38-44 years old and 8 percent were 45-51 years old; 23 percent of respondents were unemployed, 2 percent were employee, 8 percent were workers and 67 percent had other jobs

#### Investigating the effects of social indexes in under studied village

In order to examine the effects of social indexes in under studied village the following items were used: "to what extent has Dehkhoda agro-industry been effective on immigration of your village, to what extent has development of Dehkhoda agro-industry complex been for the aim of job creation in the region, to what extent has Dehkhoda agro-industry been effective in reducing migration of village's residents to the city, how many families have moved to your current residence from neighboring villages during the last ten years, how often in the week do you go to Ahvaz to provide the needs of your life [Table 1].

Given to [Table 1] the average of total impact of social indexes is equal to 2/38 that was not in appropriate condition in terms of rating.

Among the items of research in part of social indexes, the lowest average is belong to "to what extent has Dehkhoda agro-industry been effective on immigration of your village" with an average of 2/03 and standard deviation of 0/834 and the highest of it belongs to the index of "how often in the week do you go to Ahvaz to provide the needs of your life" with an average of 2/71 and standard deviation of 1/04.

Table 1: The effects of social indexes in Daghagheleh village

item

The amount of effectiveness

average



		Very <b>wee</b> k	weak	medium	good	Very good		
1	to what extent has Dehkhoda agro- industry been effective on immigration of your village	26	52	015	4	0	0/834	2/03
2	To what extent has development of Dehkhoda agro-industry complex been for the aim of job creation in the region	23	40	033	4	0	0/833	2/18
3	To what extent has Dehkhoda agro- industry been effective in reducing migration of village's residents to the city?	19/0	42	027	11	10	0/943	2/33
4	how many families have moved to your current residence from neighboring villages during the last ten years	11/0	28	048	10	30	0/912	2/66
5	How often in the week do you go to Ahvaz to provide the needs of your life?	8/0	43	025	18	60	1/04	2/71
total		17/4	41	629	10	20	0/ 503	2/38

### Investigating the effects of economic indexes in under studied village

In order to investigate the effects of economic indexes in under studied village the following items have been used: "to what extent do you prefer to provide your own needs in your residence village, given to the current situation have you ever thought to have permanent immigration, how many of your close friends, relatives and your family are employed in Dehkhoda agro-industry, how many people of your immediate family are engaged in agricultural work on their private land, how much has Dehkhoda agro-industry complex been effective to expand ancillary services in your village, to what extent has establishment of Dehkhoda agro-industry been effective in reducing unemployment in your village, to what extent has establishment of Dehkhoda agro-industry bad role in workers' skill, to what extent has employment in Dehkhoda agro-industry been effective in changing your family income (it has caused to increase income), to what extent do the women of families contribute to their family's livelihoods, to what extent do you like your children will work in the future in the Dehkhoda agro-industry complex, how much of the land around your village is occupied by Dehkhoda agro-industry, how much of your agricultural products is sent to outside of the village to sale in foreign markets" that they have been evaluated by items of [Table 2]. Given to [Table 2] the average of total impact of economic indexes is equal to 2/45 that was not in appropriate condition in terms of rating.

Among the items of research in part of economic indexes, the lowest average is belong to index of "how many of your close friends, relatives and your family are employed in Dehkhoda agro-industry" with an average of 2/03 and standard deviation of 0/869 and the highest of it belongs to the index of "to what extent do you like your children will work in the future in the Dehkhoda agro-industry complex" with an average of 2/98 and standard deviation of 1/16.

Table	2: The effects of	economic indexes in	n Daghagheleh village

order	questions	The amount of effectiveness					Standard deviation	average
						9000		
6	To what extent do you prefer to provide your own needs in your residence village?	6/0	26	42	23	3	0/922	2/91
7	Given to the current situation have you ever thought to have permanent immigration?	6/0	38	38	15	3/0	0/902	2/71

#### SUPPLEMENT ISSUE



8	How many of your close friends, relatives and your family are employed in Dehkhoda agro-industry?	33/0	34	30	3	0	0/869	2/03
9	How many people of your immediate family are engaged in agricultural work on their private land?	11/0	43	37	9	0	0/808	2/44
10	How much has Dehkhoda agro- industry complex been effective to expand ancillary services in your village?	31/0	31	35	3	0	0/881	2/10
11	To what extent has establishment of Dehkhoda agro-industry been effective in reducing unemployment in your village?	35/0	42	15	8	0	0/909	1/96
12	To what extent has establishment of Dehkhoda agro-industry had role in workers' skill?	17/0	42	38	3/0	0	0/726	2/27
13	To what extent has the employment in Dehkhoda agro-industry been effective in changing your family income (it has caused to increase income?	23/0	41	32	4/0	0	0/829	2/17
14	To what extent do the women of families contribute to their family's livelihoods?	8/0	32	490	8/0	3	0/855	2/66
15	To what extent do you like your children will work in the future in the Dehkhoda agro- industry complex?	9/0	26	38	12/0	15	1/16	2/98
16	How much of the land around your village is occupied by Dehkhoda agro-industry?	15/0	35	37	10/0	3	0/969	2/51
17	How much of your agricultural products are sent to outside of the village to sale in foreign markets?	4/0	37	47	11/0	1	0/763	2/68
	Total	16/5	35/6	36/5	9/08	2/3	0/404	2/45

### Investigating the effects of shifting cultivation indexes in under studied village

In order to investigate the effects of shifting cultivation indexes in under studied village the following items have been used: "to what extent has the kind of your cultivation been changed in the past ten years, to what extent has establishment of Dehkhoda agro-industry complex been effective in changing type of your cultivation, to what extent has the amount of your cultivation been added after construction of Dehkhoda agro-industry, to what extent do your family is provided from agricultural activities, to what extent has Dehkhoda agro-industry complex been effective in establishment of communication paths" that they have been evaluated by items of table 3. Given to the table 3 the average of total effect of shifting cultivation indexes is equal to 2/46 that is not in appropriate condition in terms of rating.

Among the items of research in part of shifting cultivation indexes, the lowest average is belong to "to what extent has amount of your cultivation been added after construction of Dehkhoda agro-industry" with an average of 2/28 and standard deviation of 0/865 and the highest of it belongs to the index of "to what extent do your family is provided by agricultural activities" with an average of 2/74 and standard deviation of 0/760.

Table 3: The amount of effectiveness of shifting cultivation indexes in Daghagheleh village

o questions	The amount of effectiveness	average Jiati
<b>,</b>		Sta dey dey



18	to what extent has the kind of your cultivation been changed in the past ten years	6/0	33/0	047	13	1	0/810	2/70
19	To what extent has establishment of Dehkhoda agro- industry complex been effective in changing type of your cultivation?	21/0	39/0	034	2	4	0/956	2/29
20	To what extent has the amount of your cultivation been added after construction of Dehkhoda agro- industry?	18/0	44/0	031	6	1	0/865	2/28
21	To what extent do your family is provided by agricultural activities?	6/0	26/0	057	10	1	0/760	2/74
22	To what extent has Dehkhoda agro- industry complex been effective in establishment of communication paths?	18/0	40/0	037	5	0	0/820	2/29
Total		13/8	36/4	241	7/2	1/4	0/563	2/46

# CONCLUSION

1- Dehkhoda agro-industry complex has not had any determinative and effective role on economic developments of Daghagheleh village.

2- Dehkhoda agro-industry complex has not had any determinative and effective role on social developments of Daghagheleh village.

3- Dehkhoda agro-industry complex has not had any effective role in reducing emigration in under studied region.

4- Establishment of Dehkhoda agro-industry complex has not been effective on employment and reducing unemployment rate in under studied region.

5- Activity of Dehkhoda agro-industry complex has not had any effective role in under studied region on creation major changes in cropping pattern (dominant cropping).

### CONFLICT OF INTEREST

Authors declare no conflict of interest.

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