



## The Effect of National and State Land Resource Allocation on Sustainable Rural Development (Case Study: Northern and Southern Bar'an Rural District in Isfahan Province)

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### Abstract

**Purpose-** In addition to preservation of and getting religious and legal rights of the government and people, one of the most important goals of ownership and consolidation of national and government domains is to keep and develop renewable natural resources and to allocate them for development of agricultural and productive activities. The ultimate goal of the legislator, has been movement towards comprehensive agricultural self-sufficiency, deprivation reduction, and development in villages. The present study aims at investigating the effect of national land resource allocation on rural sustainable development. As a result, the rural districts of Northern and Southern Bar'an, as a part of the central province of Isfahan, were selected.

**Design/methodology/approach-** The present study is applied in terms of aims, descriptive-analytical in terms of research method, and survey study in terms of data collection. Data collection was performed through library and field studies. The population of the research consisted of farmers of five villages of the Northern Bar'an rural district and five villages of the Southern Bar'an rural district and 30 experts. A sample 260 farmers were selected using Cochran formula.

**Findings-** The results indicated that the effectiveness of the allocation of national and government lands on the dimensions of rural sustainable development is at a moderate level. It shows poor efficiency of allocation of national and public land resources.

**Research limitations / implications-** Problems like farmers' reluctance to cooperate and questionnaire distribution were among the challenges faced in this research.

**Originality/value:** Given the importance of the studied region in production and agricultural, the findings of the present study can be regarded a big step in exploiting the potentiality of this region to determine strategies for sustainable rural development.

**Key words:** Land allocation, Sustainable rural development, Northern and Southern Bar'an Rural Districts, Isfahan.

**Paper type-**Scientific & Research.

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## 1. Introduction

**A**griculture has long been the subject of human's attention, serving as the most important ground for providing basic human needs, not only for individuals, but also for governments. For this reason, from the ancient time to the present time, with the implementation of diverse methods and measures, attempts have been made to expand agricultural lands, with agricultural development becoming an important approach to rural and national development. Today, in many countries around the world, agriculture is the main economic activity and a key component of rural life (EC, 2000) so that more than 50% of the national revenues of developing countries come from this sector, and the economy of rural areas, which constitutes 75% of the population of these countries (IED, 2018) and 47% of the world's population (World Bank, 2014), is reliant on this sector. However, due to reduction in employment, low productivity and incomes, technological developments, etc., the population working in this sector has fallen sharply, especially in developed countries, reaching 2% in the United States and 5% in Europe (Sengupta, 2018). In rural development theories, however, there is still emphasis on a multifunctional agricultural approach (related industries, production, distribution and sale of products, etc.) (Marsden & Sonnino, 2008) and agriculture is seen as the backbone of the economic system in many regions (IED, 2018). Fei and Ranis also argue that development in the agricultural sector represents a rapid industrial development strategy (Hayami & Ruttan, 1985/1999).

According to Iranian experts, agriculture is one of the most powerful economic sectors in the country, which supplies about one-fifth of GDP, one-third of employment, and more than four-fifths of food needs (Asayesh & Falahtabar, 2013), and the necessity of development and expansion in this sector cannot be overemphasized. However, agricultural development depends on a variety of factors, including the availability of water resources and technology, among other things.

With the advancement of industrial areas in Iran, there were significant changes in approaches and plans from agricultural to industrial development. In the first (1948-1955) and second development plans (1955-1962), special attention had been dedicated to the agricultural sector, but from the third

development plan, the role of agriculture was overshadowed with an emphasis on the industrial development. As such, not only agriculture's share of gross domestic product (GDP) fell, but also the budget allocation to this sector saw a dramatic decline.

With the victory of the Islamic Revolution and with the aim of expanding social justice, reducing social and economic inequalities and reducing deprivation in rural societies, institutions such as the Seven-Member Board of Land Allocation in Rural Communities was established to help improve the economic and social situation of villagers (Azkia and Ghafari, 2013). The purpose of land allocation was to exploit land and water resources for the production of agricultural and animal products (farming, horticulture, forestry, livestock, poultry, aquaculture and beekeeping), with an eye to land restoration, and the creation of employment and revenues for indigenous people. (Land Allocation & Land Restoration Act, May 21, 1980). From another perspective, the ownership and consolidation of national and state lands, in addition to the preservation of and getting the legal rights of the government and the people, can lead to the conservation and development of renewable natural resources and their allocation to the development of agricultural and productive activities, while generating productive employment and laying the ground for the economic self-sufficiency of the country (Ashtiani, 2009). At the same time, the recognition of the concept of sustainable development as a reaction to the consequences of the capitalist economy, which considers economic growth as the unlimited exploitation of natural resources and the transformation of human resources and materials (Khatunabadi, 2005), received particular attention at the global level together with an emphasis on the protection of natural resources and the prevention of environmental degradation along with improved quality of life of individuals. Therefore, an assessment of the impact of allocating national and state land resources on rural communities, on the one hand, and the dimensions of the sustainable rural development approach, on the other hand, requires a scholarly analysis.

There is no accurate data on the performance of the boards of land reform acts after the Islamic Revolution (with all the ups and downs associated with the execution of this Act), but according to the

available information, by the end of 1992, 507.5 thousand hectares of national lands, 53 thousand hectares of confiscated lands, 82 thousand hectares of rain fed lands and 850 thousand hectares of temporary cultivated lands came under the supervision of the said board (Hosseini Abari, 2004). Also, the total area of land allocated was 73276 hectares in Isfahan province until 1988 (Afrakhteh, 2014).

Bara'an Plain in the east of Isfahan is one of the areas in which national and state land resource allocation have been made. According to the official reports, the chief activity in this plain is agriculture (Isfahan Agricultural Jihad Organization, 2016). According to available information, 23 villages in this area (Baraan) have benefited from the allocation of state lands, and the land allocation during 1979 to 1992 targeted more than 350 households. However, villagers in the region are still in the grip of poverty, rising unemployment, lack of rural development, traditional and subsistence farming, low agricultural productivity, regional inequality, permanent and seasonal migration, and other socioeconomic and environmental problems (land use change, land abandonment, soil degradation, wastage of resources, etc.). These problems indicate the ineffectiveness of rural development approaches and strategies in recent decades. Therefore, in this study, the effect of land allocations as one of the important strategies for the development of rural areas in Bara'an has been investigated in an attempt to answer the main question, "What is the effect of national and state resource land allocation on the dimensions of sustainable rural development of in the region?"

## 2. Research Theoretical Literature

### 2.1. Concepts and Views

The basis of this research, as the title suggests, is founded upon several basic concepts (village, sustainable rural development, national and state lands, etc.) and related theories (which explicitly or implicitly refer to the subject).

Village represents the first geographic unit that humans have developed for living together. The human groups that used to lead a migratory life by collecting fruits and hunting, learned farming through experience and gradually abandoned the nomadic lifestyle in favor of settlement. The result was the establishment of village (Nouri & Norouzi, 2017). Therefore, "a village was the natural, social, cultural and administrative unit, with farming constituting the primary activity of its inhabitants" (Taleb & Anbari, 2005). Besides the definition of

the village, one of the challenging issues, especially in recent decades, has been the concept of "development" and its strategies, especially in rural areas. It is a concept, which according to Todaro, is both an objective reality and a subjective state in which society, through the amalgamation of social, economic and institutional processes, provides means to obtain a better life (Todaro, 1985/2005).

In the late 1960's and early 1970's, while the industrial development strategy was recognized as a desirable goal for many countries, a sort of revision was made in development theories. On the one hand, the concept of development was revised from a merely economic dimension to the economic-social development, on the other hand, the necessity of stressing the importance of agriculture and its role in developing countries, as the main activity of the majority of people, received growing attention (Morris, 1998/2008; Sachs, 1992/1998). Therefore, since the 1970s, special attention has been paid to agricultural development as the most important factor in rural development. Since agriculture in many countries provided a source of employment and livelihood for rural people, the effect of agricultural development on rural development was undeniable, and it was regarded as the equivalent of rural development (Dias, & Vikrmayanak, 1983). In this regard, Malthus (1789) may be the first economists who, in his development perspective, has dealt with the geometric progression of population growth and the arithmetic progression of growth in food productions, reiterating the need to focus on cultivating new agricultural lands. He maintained that the newly cultivated lands will be less fertile than the existing ones and will have limited production capacity. Ricardo (1817) also discussed the potentials of agricultural sector (Azad Armaki, 2007). Nevertheless, the current approach regarding the role of agriculture in development is still strongly influenced by the classical school, mainly the ideas of Adam Smith, Malthus, and Ricardo (Hayami & Ruttan, 1985/1999).

The crystallization of ideas, approaches and strategies in the field of development and its implications, including human development and conservation of the environment, happened in the late 80s. From the intersection of these discussions, the paradigm of "sustainable development" came to fruition. In this way, sustainable rural development strategy can be considered the zenith of rural development strategies. Therefore, "sustainable rural development" is concerned with the provision

of all the needs of rural people, taking into account the rights of all people to exploit available resources, not only for the current generation, but also for future generations without undermining their abilities (Nouri and Norouzi, 2017)

By the definition, national lands consist of natural forests or groves, as well as rangelands, which in accordance with the Nationalization of Forests and Rangelands Act passed in 1962, belong to the government (Iranian Organization of Forests and Rangelands, 2001) and "state lands", whether registered or not, are state-owned lands that have been transferred to the government through various means such as land reform, unknown owner, etc., along with lands belonging to the state that have been allocated to natural and legal persons or governmental institutions without being returned to the government for any reason (Ashtiani, 2009).

"The allocation of national and state lands" falls under the land reform, which is one of the economic strategies of rural development. Land reform usually involves the redistribution of property rights in favor of landless farmers or those with limited plots of land. Among its various forms, the transfer of land from large landowners to smallholders [prior to the Islamic Revolutionary], the allocation of lands to new inhabitants or transformation of state-owned lands into private and cooperative [in the post-Revolution era] can be mentioned. This development approach is so important that Myrdal calls it the key to agricultural development, and Economic Commission of Latin American along with FAO consider it as a prerequisite for the development of agriculture and rural areas (Todaro, 1985/2005). Peter Dorner, also contends that land reforms pave the way for increasing productivity and production, which is followed by a fair distribution of income and incentives for investment. The history of developed countries such as Japan, the United Kingdom and the former Soviet Union suggest that they also have undertaken land reform to fuel development (Dorner, 1972/1977).

Hayami & Ruttan have also introduced agricultural development theories in the form of six models in their work "Agricultural Development, an International Perspective". These models include 1. Resource Exploitation, 2. Resource Conservation, 3. Location Model, 4. Diffusion model, 5. Productivity and 6. Induced Innovation. The first model, which, as the oldest model, has been used for a longer term, and the second model that values the conservation of the environment and resources (Hayami & Ruttan,

1985/1999), can be cited as theoretical infrastructures of this research.

In Iran, land reforms were implemented in two forms before and after the revolution. Prior to the revolution and in line with the political developments during the Pahlavi era (1962), some measures were taken in this regard. After the victory of the Islamic Revolution, the Revolutionary Council approved the bill on the allocation and restoration of land in 1979 with the aim of providing deprived villagers with lands. By the enforcement of this law, the revival of lands and the expansion of production capacity and the full support of farmers were put on the agenda of Seven-Member Board (Hosseini Abari, 2004). Another legal means of land allocation is Article 75 of the law of collecting certain state revenues and allocating them for specific purposes, which was enacted by the Islamic Consultative Assembly of Iran in 1994. Under this law, the Ministry of Agriculture can, within the framework of economic plans, transfer lands on the basis of the mechanism envisaged in the Regulations (Ashtiani, 2009).

In this context, the issue of the allocation of national and state lands with respect to its objectives is linked to the economic, social and environmental dimensions of sustainable development. This is the issue explored in this paper, and its effects in a sample area (Bara'an) in Isfahan province has been assessed.

## 2.2. Research Background

The review of the relevant literature suggests a bulk of studies have been carried out on agricultural development and sustainable rural development. However, a paucity of specific applied research in the study region from the perspective of this paper is felt. However, some related studies by researchers in Iran and other countries could be cited.

Bazi (1999) investigated land allocation and its socioeconomic effects in the Aghghala area, concluding that although land allocation was associated with a decrease in production per unit area, it has resulted in relative improvement of the living conditions of villagers. Ghanbari & Barghi (2010), in a research on the role of cooperatives in the development of rural areas of Isfahan province, concluded that these cooperatives had not been successful. Badri, Rokn al-Din Eftekahri, Salmani & Behmand (2011), by analyzing the role of the agricultural production system, reported that by increasing the level of cultivation and yield, a number of outcomes such as food security, increased social participation and solidarity and ultimately

sustainable rural development can be achieved. [Nayeri \(2012\)](#) also did a historical study of agricultural land allocation in the Islamic Republic of Iran during the years 1978-89, indicating that achieving social justice and fighting poverty along with economic self-sufficiency have been the main reasons for this course of action. [Hadizadeh Bazzaz, Bouzarjamhourii, Shayan & Noghangi \(2015\)](#) assessed the performance of production cooperatives in providing infrastructure services to villages and their implications for sustainable agricultural development, pointing out that the performance of cooperatives have been at best mediocre in terms of socioeconomic sustainability and undesirable with respect to environmental issues. Also, [Amouzade, Jalali, Alipour, Papoli Yazdi & Ghorbani \(2016\)](#), in a study titled "Land allocation, a project aimed at development or facilitation of land expropriation in northern Iran", concluded that the land allocation to natural and legal persons has fallen short of achieving of all its predicted legal objectives (employment generation, income growth, and the reduction of natural resource degradation).

In foreign studies, [FAO \(2002\)](#), in its research on land seizure and rural development, stated that vulnerable families, through access to land, can obtain sustainable livelihoods, which is an integral part of sustainable development. In a paper titled "land reform and sustainable development," [Boyce, Rosset & Stanton \(2005\)](#) posited that the redistribution of agricultural lands is effective in economic development and environmental quality. They argue the land is the most important asset in the agricultural economy and is effective in reducing poverty. In addition, the traditional knowledge of farmers and promoting a sense of responsibility toward land ownership also contribute to environmental protection. [FAO \(2006\)](#) explored the relationship between land reform, poverty and sustainability in Rwanda, reporting that increased investment in agriculture has been accompanied with rising disputes over land ownership. [Pasakarnis & Maliene \(2009\)](#) introduced new policies on land tenure principles to foster sustainable rural areas in Lithuania. They asserted that land fragmentation to generate agricultural products was the major problem and introduced a policy of consolidation of ownership with environmental and sustainability

considerations as an effective tool for land management and the realization of sustainable rural development. Also, [Gerstter, Kaphengst, Knoblauch & Timeus \(2011\)](#) by assessing the impact of land ownership in rural areas, pointed out that the nature of ownership has diverse effects on rural poverty in different countries. Nevertheless, land allocation to villagers is necessary in order to mitigate poverty and ensure food security. [Plewa \(2013\)](#) in a report on rural development statistics in the [European Union](#) analyzes rural development based on sustainable development indicators in the period of 2007-2013, suggesting that for the years of 2014-2020, ensuring sustainable management of natural resources and obtaining a balanced land development for the purpose of job creation and sustainability constituted an effective strategic plan for EU. Considering the budget of the agricultural sector in India, [Sengupta \(2018\)](#) also called for an increase in government investment in agriculture and in rural development. Based on the issues raised in the theoretical foundations and research literature, the conceptual model can be described according to [Figure 1](#).

### 3. Research Methodology

#### 3.1 Geographical Scope of the Research

Bara'an rural area consists of two rural districts of Northern and Southern Bara'an, and in terms of the geographical division, it falls under the control of Isfahan Province. It is located in 51 degrees 45 minutes to 52 degrees and 6 minutes east longitude and 32 degrees 19 minutes to 32 degrees and 55 minutes north latitude. This area, situated in the southwest of the city of Isfahan at a distance of 24 and 38 kilometers from this city ([Figure 2](#)), has an area of more than 501,375 square kilometers ([Iranian Statistics Center, 2011](#)).

According to the available information, there are more than 4250 farmers working in 13 thousand hectares of cultivated land in Northern Bara'an, and 3930 farmers working on more than 14445 hectares of cultivated land in the Southern Bara'an ([Agricultural Jihad Organization of Isfahan, 2016](#)). The ratio of employment in the agricultural sector to other sectors is 70% in Northern Bara'an and 67% in Southern Bara'an, respectively ([Iranian Statistics Center, 2011](#)).

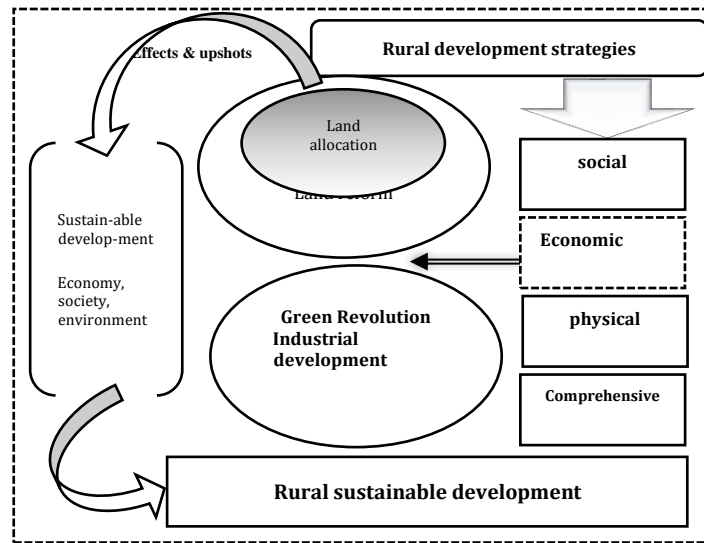


Figure 1. Conceptual model of the research  
(Source: Research Findings, 2018)

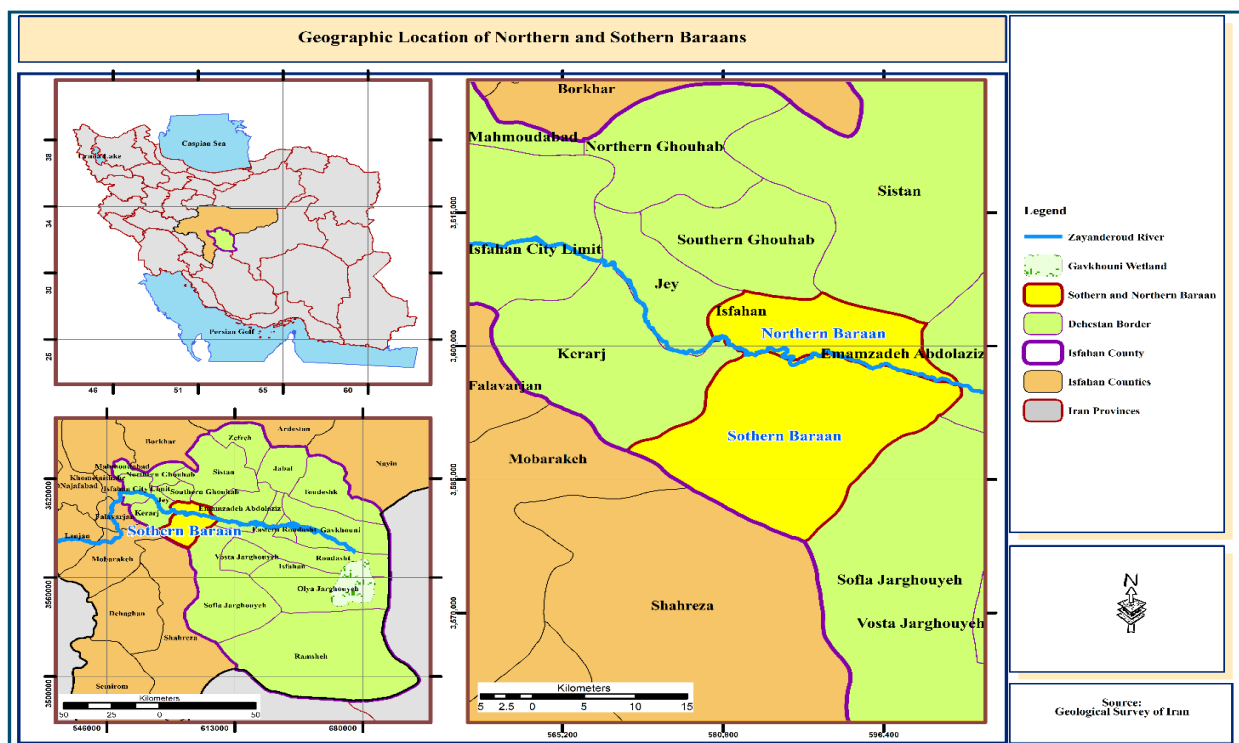


Figure 2. Location of the study area in the city, province and country  
(Source: Research Findings, 2018)

### 3.2. Methodology

This is an applied research in terms of its objective which adopts a descriptive method based on a survey study. The data collection was also conducted using library research and field study. The statistical population consisted of farmers from 5 villages in the Northern Bara'an (Shidan, Ruran,

Rahimabad, Qarneh and Kabootar Abad) and 5 villages in the Southern Bara'an (Hossein Abad, Jozdan, Timiart, Fasaran and Brisar). Based on the Cochran formula, 260 households were selected as the sample. These households were distributed according to the "principle of equal sharing" among the villages under study and the cluster and random

sampling methods were used to select the villages. Also, rural experts, including agricultural experts and rural decision makers as well as planning authorities, with an estimated number of  $n=30$ , were selected as the secondary population. The questionnaire was distributed among the subjects, and 23 completed questionnaires were returned 7 questionnaires were incomplete (not returned, not

filled properly or containing many errors) were excluded to improve the accuracy of results).

Data collection instrument consisted of note taking and questionnaires and the validity of instrument was evaluated based on the views of relevant experts. The reliability of the questionnaire was calculated using Cronbach's alpha as described in Table 1. Data were scored on a 5-point Likert scale and analyzed by SPSS software.

**Table 1. Cronbach's alpha coefficient in the statistical sample**

(Source: Research Findings, 2018)

Items	Alpha value	
	Experts	Farmers
Economic	0.883	0.839
Social	0.868	0.769
Environmental	0.722	0.870
Total items	0.888	0.876

### 3.3. Research Variables and indices

In order to investigate the effect of national and state land resource allocation on sustainable development

of rural areas in Baraan, a set of indices embracing three dimensions of sustainable rural areas were employed as described in Table 2.

**Table 2. Research variables and indices**

(Source: Research findings. Adapted from: Amouzade et al., 2016; Badri et al., 2011; Norouzi et al., 2018).

	Indices	Variables
Social	Justice	Reducing the social gap between the village and the city, alleviating poverty in rural society, improving the quality of life of villagers, promoting education and agricultural skills, reducing ethnic tribal differences and ownership disputes, nurturing respect for each other's rights, etc.
	Participation	Participation in the creation of home-based businesses, expanded contact and partnership with government agencies, improved cooperation of rural residents, the prevention of agricultural land fragmentation, fostering of collective work and participation in shared cultivation.
	Migration	Curtailling rural-urban migration, decreasing youth migration, n the gravity of settlement in the village, reducing seasonal migration of villagers, increasing the stay of people in the village
Environmental	Soil and water conservation	Raising awareness of the destructive effects of improper exploitation of groundwater, promoting awareness about preventing soil degradation and erosion, reducing unauthorized construction and land use change, raising farmers' awareness of grabbing national and state lands
	Environment	Raising awareness about rural environment, strengthening the protection of the natural resources of the village, increasing the productivity of surface water resources, increasing the utilization of groundwater resources, preventing the salinization of soil resources
Economic	Employment	The generation of new employment opportunities, increased job opportunities for women and youth employment in the agricultural sector
	Income	Increasing the income of rural residents creating sustainable revenues, increasing annual revenues from activities related to agriculture, increasing the saving of rural resident
	Efficiency and production	Changing and improving agricultural production, increasing the application of mechanized agricultural tools, modern irrigation methods, enhancing the quality of manufactured products, increasing agricultural exports, expanding cultivated lands, raising production
	Investment	Encouraging investment in the village, contributing to the return of capital to the villages

## 4. Research Findings

### 4.1. Descriptive Findings

According to the descriptive findings related to the farmers' characteristics, the mean age of subjects

was 50 years. 92.3% were married and 7.7% were single. As for the level of education, 15% were illiterate, 80.7% had elementary education up to diploma, 1.3% had higher education and 1.2% had a bachelor's degree or higher. Regarding the status

of employment (main occupation), 91.5% were farmers, 5% were livestock breeders, 0.8% had an office job and 2.7% were involved in other businesses. The monthly income of 21.9% was less than 500 thousand Tomans, 56.5% between 0.5 and 1 million, 18.1% between 1 to 1.5 million and 3.5% between 1.5 and 2 million Tomans. As far as the land allocation is concerned, 5% of subjects had received less than 2 hectares, 93.1% between 2-5 hectares and 1-1% more than 5 hectares of land, and less than 0.8% were deprived of any land. In the case of land ownership prior to the land allocation, 33.5% were land owners while 66.5% did not have any property. In fact, this result indicates the relative realization of land allocation objectives (providing land for the poor rural population).

Descriptive findings regarding experts also showed that the majority of respondents were male (86%), 91.3% were married and 7.8% were single. As for the level of education, 13% had high school diploma, 4.4% had associate degree, 34.8% had a bachelor's degree and 47.8% had a master's degree. With regard to the age, 13%, were between 35 and 26 years old, 30.5% in the range of 36-45 years, 52.2% between 46 and 55 years old and 4.3% in the range of 55-65 years.

#### 4.2. Inferential Findings

To evaluate the normal distribution of research data, Kolmogorov-Smirnov test was used. Since the significance level ( $\text{sig} = 0.558$ ) was larger than 0.05, the assumption of normal distribution was confirmed. Single sample t-test was also used to assess the effect of national and state land resource allocation on different dimensions of rural sustainable development. Since a 5-point Likert scale had been adopted, number 3 was considered as the average. The results for different dimensions and the two groups are as follows:

##### A: Farmers' Perspectives

**1. Social Indicator** (Justice, Participation, Migration): According to the results of [Table 3](#), as for the subscale of justice, the reduction of social gap between city and rural dwellers ( $M = 3.64$ ) had a high impact, and the reduction of ethnic, tribal, and ownership differences ( $M = 2.82$ ) had a weak effect and the rest of items had a moderate effect. Therefore, as suggested by the [FAO's results \(2006\)](#), due to the importance of ownership, disagreements and disputes between rural residents have been on rise. Field studies have also shown that over time, in wake of limited water resources, and

especially recent droughts, such disputes have been intensified. The results of the combined index were moderate with respect to the significance level. In the subscale of participation, all items, exhibited a weak effect, and the composite index was also weak. The same was true about the subscale of migration, so that according to the mean of all items, the analysis indicated a weak effect and the total composite index was also weak. The remarkable point in this context was the great impact of the migration of young people, the introduction of new technology and tools for agriculture, and the limitation of agriculture due to water resource constraints. In fact, although from farmer's perspective, the allocation has not had a positive effect on social dimensions of sustainable development, it has affected the variables of the study.

Therefore, in general, it can be argued that from the viewpoint of farmers and rural consumers, the allocation of land and national resources have exerted a weak effect on various social indicators, though in some cases such as "reducing social gap between the city and the rural dwellers and establishing justice", positive effects have also been observed. In other words, a large share of the people who benefited from these allocations acknowledged its effect on upholding justice.

**2. Environmental Index** (Water, Soil and Environment Conservation): As shown in [Table 4](#), under the water and soil conservation subscale, the mean of all items was less than average, which indicates the weakness of all items, except for the reduction of national and state land expropriation that had a moderate effect. Also, the composite index had a weak effect. In the environmental subscale, the item of improved productivity of groundwater resources ( $M = 3.15$ ) had a high effect, and the rest of items and the composite index with a mean of 2.80 exerted a weak effect.

According to the results of [Table 4](#), although some of the items had positive effects, in general it can be posited that from the perspective of farmers and beneficiaries, the allocation of national and state lands has imposed a weak effect on the environmental dimension of sustainable rural development. In this context, the notable point is the low level of literacy among the beneficiaries, on the one hand, and the lack of training courses by relevant authorities and institutions regarding the environmental aspects and improper utilization of resources, on the other hand, which have affected



the results of this study. Of course, the role of environmental constraints and climatic hazards (especially droughts) in the last two decades should not be overlooked, as it has led to an augmented utilization of groundwater resources and the promotion of new

irrigation methods. The important and negative point is intensified exploitation of groundwater, which is clearly evident in these results.

**Table 3. Single sample t-test of social index and its sub criteria**

(Source: Research Findings, 2018)

Sub-scale	Social index	Test Value=3						Index evaluation
		T value	Mean	Sig. level	Mean difference	0.95 confidence interval		
						Lower limit	Upper limit	
Justice	Reduced social gap between city and villages	2.61	3.16	0.009	0.161	0.039	0.283	High
	Reduced rural poverty	-1.39	2.90	0.165	-0.092	-0.222	0.038	Moderate
	Change and improvement of the quality of life in rural areas	-1.68	2.90	0.093	-0.100	-0.216	0.016	Moderate
	Training of agricultural skills	1.29	3.06	0.197	0.069	-0.036	0.174	Moderate
	Reducing ethnic and ownership disputes	-2.70	2.82	0.007	-0.173	-0.299	-0.047	Weak
	Respect for the property rights of the villagers	1.95	3.10	0.051	0.100	-0.005	0.200	Moderate
Participation	Composite	-0.140	2.99	0.889	-0.005	-0.086	0.075	Moderate
	Contributing to family employment	-3.30	2.83	0.100	-0.169	-0.270	-0.068	Weak
	Contact and partnership with state organizations	-2.44	2.84	0.015	-0.157	-0.284	-0.030	Weak
	Fostering cooperation and support among villagers	-4.32	2.76	0.000	-0.238	-0.347	-0.129	Weak
	Prevention of agricultural land segmentation	-6.59	2.57	0.000	-0.423	-0.549	-0.296	Weak
	Collective work and participation in mass cultivation	-0.843	2.45	0.000	-0.542	-0.669	-0.415	Weak
	Composite	-7.63	2.69	0.000	-0.306	-0.385	-0.227	Weak
Migration	Reduced migration of villagers to the city	-4.10	2.70	0.000	-0.296	-0.438	-0.154	Weak
	Curtailed migration of the youth from rural areas	-5.12	2.60	0.000	-0.392	-0.524	-0.241	Weak
	Increased attractiveness of stay in the village	-8.24	2.42	0.000	-0.576	-0.714	-0.439	Weak
	Reduced seasonal migration of villagers	-10.11	2.28	0.000	-0.719	-0.859	-0.579	Weak
	Longer stay of people in the village	-8.11	2.40	0.000	-0.592	-0.736	-0.448	Weak
	Composite	-8.78	2.48	0.000	-0.515	-0.631	-0.399	Weak
	Total composite	-7.43	2.72	0.000	-0.275	-0.348	-0.202	Weak

**Table 4. Single sample t test of environmental index with its subscales**

(Source: Research Findings, 2018)

Sub-scale	Environmental index	Test Value=3						Index evaluation
		T value	Mean	Sig. level	Mean difference	0.95 confidence interval		
						Lower limit	Upper limit	
Water and Soil Conservation	The adverse effects of excessive exploitation of groundwater	-2.42	2.84	0.116	-0.153	-0.279	-0.028	Weak
	Prevention of soil degradation and erosion	-4.08	2.75	0.000	-0.250	-0.370	-0.129	Weak
	Reduced construction of unauthorized buildings and change of land use	-4.99	2.64	0.000	-0.357	-0.498	-0.216	Weak
	National and state lands grab	-0.591	2.96	0.555	0.034	-0.149	0.080	Moderate
	Composite	-4.29	2.80	0.000	-0.199	-0.290	-0.107	Weak

Sub-scale	Environmental index	Test Value=3						Index evaluation
		T value	Mean	Sig. level	Mean difference	0.95 confidence interval		
						Lower limit	Upper limit	
Environment	Increased attention to the environmental issues in villages	-7.24	2.61	0.000	-0.338	-0.494	-0.282	Weak
	Improved conservation of natural resources of the village	-3.14	2.81	0.002	-0.180	-0.294	-0.067	Weak
	Increased productivity of surface water resources	-3.35	2.78	0.001	-0.215	-0.341	-0.088	Weak
	Augmented efficiency of groundwater resources	2.34	3.15	0.020	0.150	0.024	0.275	Weak
	Prevention of soil salinity	-0.112	2.99	0.911	-0.007	-0.143	-0.127	Weak
	Composite	-2.73	2.87	0.007	-0.128	-0.221	-0.035	Weak
Total composite		<b>-4.33</b>	<b>2.83</b>	0.000	<b>-0.163</b>	<b>-0.238</b>	<b>-0.089</b>	Weak

**3. Economic Index** (Employment, Income, Productivity, Production and Investment): The results of t-test for the economic aspect of sustainable rural development suggested that the subscale of employment, considering the mean of all items and the composite index, had a weak effect. The income level was also low for all items and the composite index was weak. The subscale of production and efficiency increased the use of agricultural mechanization with enhanced quality of products imposing a positive effect, and application of new methods of irrigation and raising the production of agricultural products and the

composite index exerting a moderate effect, and the remaining items having a weak effect. Moreover, according to the mean obtained from the investment subscale, all items and the composite index had a weak effect, and the total composite index was also weak (Table 5). In general, it can be argued that from the perspective of farmers and beneficiaries, all economic items and indices, except for efficiency and production, had a weak effect. These results indicate that the objectives of land allocation, especially the economic goals, have not been realized.

**Table 5. Single-sample t-test of economic index with its subscales**  
(Source: Research Findings, 2018)

Sub-scale	Social index	Test Value=3						Index evaluation
		T value	Mean	Sig. level	Mean difference	0.95 confidence interval		
						Lower limit	Upper limit	
Employment	Creation of new employment opportunities	-3.78	2.75	0.000	-0.246	-0.374	-0.118	Weak
	Increased employment of women	-13.39	2.10	0.000	-0.892	-1.02	-0.761	Weak
	Motivation of youth to engage in agricultural activities	0-9.66	2.28	0.000	-0.715	-0.861	-0.569	Weak
	Composite	-10.39	2.38	0.000	-0.617	-0.735	-0.500	Weak
Income	Augmented income of villagers in recent years	-8.40	2.37	0.000	-0.629	-0.773	-0.480	Weak
	Increased expectations of high income in the future	-10.16	2.37	0.000	-0.623	-0.743	-0.502	Weak
	Improvement of income sustainability in agriculture	-11.59	2.23	0.000	-0.769	-0.899	-0.638	Weak
	Increased income from agriculture-related activities	-10.57	2.23	0.000	-0.769	-0.912	-0.626	Weak
	Elevated saving of rural residents	-14.40	1.95	0.000	-1.04	-1.18	-0.899	Weak
	Composite	-12.37	2.23	0.000	-0.766	-0.888	-0.644	Weak

Sub-scale	Social index	Test Value=3						Index evaluation
		T value	Mean	Sig. level	Mean difference	0.95 confidence interval		
						Lower limit	Upper limit	
Efficiency and production	Change of methods and improvement of production methods	-6.60	2.63	0.000	-0.369	-0.479	-0.259	Weak
	Agriculture mechanization	2.68	3.15	0.008	0.153	0.040	0.266	High
	Use of modern irrigation techniques	1.45	3.08	0.147	0.084	-0.030	0.199	Moderate
	Increased quality of manufactured products	3.46	3.18	0.001	0.188	0.081	0.295	High
	Commercialization of agricultural products	2.70	2.81	0.007	-0.180	-0.312	-0.049	Weak
	Expansion of cultivated lands	-2.61	2.80	0.009	-0.192	-0.337	-0.047	Weak
	Elevated production of agricultural goods	0.694	3.04	0.489	0.042	-0.077	0.162	Moderate
<b>Composite</b>	-0.801	2.96	0.424	-0.039	-0.134	0.056	Moderate	
Capital	Increased investment in rural areas	-5.51	2.61	0.000	-0.388	-0.527	-0.249	Weak
	Return of capital withdrawn from the village	-7.90	2.40	0.000	-0.600	-0.749	-0.450	Weak
	Composite	-7.25	2.50	0.000	-0.494	-0.628	-0.360	Weak
	<b>Total composite</b>	<b>-8.95</b>	<b>2.52</b>	<b>0.000</b>	<b>0.479</b>	<b>-0.584</b>	<b>-0.374</b>	<b>Weak</b>

What can be gathered from the evaluation of the economic indexes in Table 5 and field observations is that land allocations initially led to an increase in the level of cultivated lands and therefore production. At the same time, the increasing trend of using agricultural machinery and equipment in the country created a sense of necessity for incorporation of these machines in agricultural activities. The mechanization of crop cultivation had a bearing on production and quality of products, among other things. On the other hand, it decreased the use of unexploited labor and female employment and deteriorated the migration of agricultural workers. Therefore, for various reasons, land allocation was unable to satisfy the economic expectations of the villagers and contribute to the sustainable development of the rural economy.

### **B: Experts' Perspectives**

**1. Social Index (Justice, Participation, Migration):** According to the results of Table 6, in the subscale of justice, the item of training agricultural skills and promotion ( $M=3.04$ ) with a significance level of 0.043 and the observance of the property rights of individuals ( $M=3.17$ ) were higher than the numerical criterion (3) set by the researcher. Other social items (poverty reduction, change in quality of life, and training agricultural skills and promotion) had moderate effects. The

experts and farmers differed with respect to the item of "reduction of social gap". Another notable point is that both groups coincided about ethnic and ownership differences. Also, the composite index was moderate. In the subscale of participation, the item creating family employment ( $M=3.34$ ) at a significance level of 0.043 and the item of contact and partnership with state organizations ( $M=3.52$ ) at a significant level of 0.036. Had a high effect while other items together with the composite index exerted a weak impact. There was also a difference between the two groups of farmers and experts with regard to this item. This can be attributed to the establishment and development of agricultural service centers after the revolution in rural areas. However, the results of field observations regarding the reduced level of services and the relative dissatisfaction of villagers with the function of these institutions had a huge impact on these results. In the subscale of migration, the item of seasonal migration of the villagers ( $M=2.91$ ) at a significant level of 0.057 had a moderate impact while other items and the composite index exerted a weak effect. In general, experts argue that land allocation have failed to play a positive role in reducing migration of villagers to urban areas.

**Table 6. Single sample *t* test for social index and its subscales**  
(Source: Research Findings, 2018)

Sub-criteria	Social index	Test Value=3						Index evaluation
		T value	Mean	Sig. level	Mean difference	0.95 confidence interval		
						Lower limit	Upper limit	
Justice	Reducing social gap between villages and the city	-1.67	2.60	0.107	-0.391	-0.874	0.092	Weak
	Mitigating poverty in rural society	-.940	2.82	0.357	-0.73	-0.557	0.209	Moderate
	Changing and improving the quality of life in villages	-.940	2.82	0.357	-0.173	-0.557	0.209	Moderate
	Training and promoting agricultural skills	0.225	3.04	0.824	0.043	-0.357	0.444	Moderate
	Settling ethnic, tribal, and property disputes	-2.51	2.43	0.020	-0.565	-1.03	-0.098	weak
	Fostering respect for property rights of people in villages	0.940	3.17	0.357	0.173	-0.209	0.557	Moderate
	Composite	-1.33	2.81	0.194	-0.181	-0.461	0.099	Moderate
Participation	Creation of family employment and businesses	2.15	3.34	0.043	0.347	0.012	0.683	High
	Contact and partnership with state organizations	2.22	3.52	0.036	0.521	0.036	1.00	High
	Improved cooperation of the villagers	-3.53	2.34	0.002	-0.652	-1.03	-0.269	Weak
	Prevention of agricultural land segmentation	-3.65	2.13	0.001	-0.869	-1.36	-.376	Weak
	Collective work and participation in mass cultivation	-6.24	1.86	0.000	-1.13	-1.50	-0.754	Weak
	Composite	-3.36	2.64	0.003	-0.356	-0.576	-0.136	Weak
Migration	Reducing the immigration of villagers to the city	-3.02	2.43	0.006	-0.565	-0.952	-0.177	Weak
	Inhibiting the migration of rural youth	-2.42	2.52	0.024	-0.478	-0.887	-0.068	Weak
	Increasing the desirability of living in the village	2.30	2.52	0.031	0.478	-0.908	-0.048	Weak
	Constraining seasonal migration of villagers	-2.00	2.91	0.057	-0.347	-0.707	0.011	Moderate
	Increasing the stay of people in the village	-1.33	2.64	0.038	-0.478	-0.927	-0.029	Weak
	Composite	-3.01	2.53	0.006	-0.469	-0.792	-0.146	Weak
	Total composite	-3.03	2.66	0.006	-0.335	-0.565	-0.105	Weak

The above results suggest that from the perspective of experts, land allocation had a moderate effect on the subscale of social justice and a weak effect on other subscales, failing to exert a positive effect in this regard. In fact, the results of this table corresponded to the farmers' responses in all of the items with both groups concurring on the weak impact of land allocations on social dimension of sustainable rural development.

2) **Environmental Index (Water, Soil and Environment Conservation):** According to the results of Table 7, the subscale of water and soil conservation and the item of alleviating national and state land expropriation ( $M=3.00$ ) at a significance level of  $p=0.000$  had a moderate effect. Other items of environmental index and total composite index exerted a weak impact. Indeed, as far as environmental issues are concerned, national and state land resource allocation has not been successful.

**Table 7. Single-sample t-test for environmental index and its subscales**  
(Source: Research Findings, 2018)

Sub-scale	Environmental index	Test Value=3						Index evaluation
		T value	Mean	Sig. level	Mean difference	0.95 confidence interval		
						Lower limit	Upper limit	
Water and Soil Conservation	The destructive effects of excessive groundwater consumption	-3.64	2.08	0.001	-0.913	-1.43	-0.392	Weak
	Prevention of soil degradation and erosion	-4.70	2.04	0.000	-0.956	-1.37	-0.534	Weak
	Reduction of unauthorized construction and change of land use	-4.15	2.21	0.000	-0.782	-1.17	-0.392	Weak
	Inhibition of national and state land grab	0.100	3.00	0.000	-0.542	-0.432	0.123	Moderate
	<b>Composite</b>	4.04	2.33	0.001	-0.663	-1.00	-0.323	Weak
Environment	Increasing attention to the environment of the village	-3.81	2.30	0.001	-0.695	-1.07	-0.317	Weak
	Greater conservation of natural resources of the village	-3.21	2.43	0.004	-0.565	-0.930	-0.200	Weak
	Increasing the productivity of using surface water resources	-2.51	2.47	0.020	-0.521	-0.951	-0.091	Weak
	Improving the productivity of groundwater resources	-4.30	2.04	0.000	-0.956	-1.41	-0.495	Weak
	Preventions of soil salinization	-4.59	2.00	0.000	-1.00	-1.41	-0.548	Weak
	<b>Composite</b>	-4.78	2.25	0.000	-0.747	-1.07	-0.424	Weak
	Total composite	-4.99	2.29	0.000	-0.705	-0.998	-0.412	Weak

The stance of experts on the impact of these land allocations on the environmental index of sustainable rural development is thought provoking. They argued that with the exception of reduction in national and state land expropriation, which could be driven by various reasons (such as declining interest in dryland farming, climate problems, monitoring by relevant institutions, etc.), the evaluations are negative in all other items, which call for further studies on its underlying reasons. Nevertheless, field evidence suggests a significant decline in economic justification of agriculture and as a result, a shift in land sales and change of land use. It has also led to decreased level of surface water, improved exploitation and lowered groundwater levels. Economic pressures and the necessity to provide livelihood for increasing households have pushed environmental concerns down the list of political agendas.

**3. Economic Index (Employment, Income, Productivity, Production and Investment):** The results of Table 8 show the employment subscale, the items of job creation ( $M=3.00$ ) at a significance level of  $p=0.000$  had a moderate effect. Of course, this view of the experts is mainly based upon the early years, and it has declined progressively since then.

Other items as well as the composite index had a weak effect considering their mean and level of significance. As for the subscale of income, all items and the composite index had a weak effect, as suggested by their mean and level of significance. In the subscale of efficiency and productivity, the use of modern irrigation methods ( $M=3.47$ ) at a significant level of 0.478 had a high impact and other items and the composite index had a moderate effect, as indicated by their mean and level of significance. As for the subscale of investment, both items (increased investment and return of capital to the village) and the composite index exerted a moderate effect, as demonstrated by their mean. Of course, this investment is primarily concerned with the creation of second houses, villa gardens, change of land use to tourism and industry, and the investment of urban residents, among other things, which generally cannot be considered as the indicators of the sustainability of rural development. In other words, it has affected the village's production, leading to informal, unsustainable and diverse businesses that are incompatible with rural economic foundations. Also, the total composite index was found to have a weak impact.

**Table 8. The single sample t-test of economic index and its subscales**

(Source: Research Findings, 2018)

Sub-criteria	Social index	Test Value=3						Index evaluation
		T value	Mean	Sig. level	Mean difference	0.95 confidence interval		
						Lower limit	Upper limit	
Employment	Creation of new employment opportunities	0.325	3.00	0.000	-0.235	-0.345	0.450	Moderate
	Increased employment of women	-6.75	1.82	0.000	-1.17	-1.53	-0.813	Weak
	Motivation of youth to engage in agricultural activities	-4.47	2.30	0.000	-0.695	-0.999	-0.391	Weak
	Composite	-4.93	2.37	0.000	-0.623	-0.885	-0.361	Weak
Income	Growing income of villagers in recent years	-4.30	2.13	0.000	-0.869	-1.28	-0.451	Weak
	Increased expectations of high income in the future	-2.90	2.52	0.008	-0.478	-0.820	-0.136	Weak
	Improvement of income sustainability in agriculture	-2.42	2.52	0.024	-0.478	-0.887	-0.068	Weak
	Increased income from agriculture-related activities	-2.64	2.56	0.015	-0.434	-0.775	-0.094	Weak
	Increased saving of rural residents	-3.87	1.26	0.001	-0.739	-1.13	-0.343	Weak
	Composite	-4.10	2.40	0.000	-0.600	-0.903	-0.297	Weak
Efficiency and production	Change of methods and improved production techniques	0.569	3.08	0.575	0.086	-0.230	0.404	Moderate
	Agriculture mechanization	0.720	3.13	0.479	0.130	-0.245	0.506	Moderate
	Use of modern irrigation techniques	2.71	3.47	0.013	0.478	0.112	0.844	High
	Increased quality of manufactured products	-0.569	2.91	0.575	-0.086	-0.404	0.230	Moderate
	Commercialization of agricultural products	0.235	3.00	0.000	-0.121	-0.432	0.504	Moderate
	Expansion of cultivated lands	1.55	3.34	0.133	0.347	-0.115	0.810	Moderate
	Elevated production of agricultural goods	1.66	3.26	0.110	0.260	-0.064	0.586	Moderate
	Composite	1.51	3.17	0.144	0.173	-0.063	0.411	Moderate
Capital	Increased investment in rural areas	-0.238	2.95	0.814	-0.043	-0.423	0.336	Moderate
	Return of capital withdrawn from the village	-1.29	2.73	0.208	-0.260	-0.677	0.155	Moderate
	Composite	-0.863	2.84	0.397	-0.152	-0.517	0.213	Moderate
	Total composite	-2.62	2.69	0.015	-0.300	-0.537	-0.063	Weak

### 5. Discussion and Conclusion

The most important geographical criterion in defining villages is associated with environment and natural resources on which livelihoods depend. In this context, agriculture can be seen as the major symbol of rural economics. In his famous definition, Todaro argues that agricultural development is the basis for rural development, which is in turn a prerequisite for national development. From another perspective, more than seven decades (1948-2018) have passed since the introduction of national development planning in Iran, but still underdevelopment, poor service, migration, unemployment, environmental damages, development instability, among other things, are characteristics of the rural areas in the country. Accordingly, since the past decades (before and

after the revolution), rural and agricultural areas as the center of national development, despite their ups and downs, have been at the center of attention. In this context, one of the administrative strategies has been the allocation of national and state lands, especially after the Islamic Revolution, with the aim of providing people with lands, and alleviating poverty among rural people. This action has received its fair share of admirations and criticisms, and diverse results have been yielded so far.

The rural area of Bara'an in Isfahan province, one of the agricultural poles of this province and country, is among the areas in which the above law and strategy were implemented and 23 villages benefited from these land allocations. However, scant scholarly attention has been paid to the effects of these land allocations. Therefore, in the present study, agricultural land allocations were

investigated from the perspective of sustainable rural development.

The results of individual characteristics of farmers suggested that the mean age of the farmers was relatively high and their level of education was low, but agriculture constituted the main occupation of more than 90% of subjects. With regard to the area of allocated lands, more than 90% of allocations consisted of 2-5 hectare plots of lands, which (assuming that other parameters are normal) is

relatively acceptable. Also, more than 66% of subjects had not owned any land before the implementation of the plan, which is one of the positive outcomes of this plan. The results of single sample t-test in both sample groups (farmers and experts) indicated that in general, the effect of allocating national and state lands on various economic, social and environmental indicators was weak, and this plan had failed to improve sustainable rural development (Table 9).

**Table 9. The Impact of national and state land resource allocation on different dimensions of sustainable rural development**

(Source: Research Findings, 2018)

Variable	Sample	Frequency	Mean	T	مقدار	Evaluation
Social dimension	People	260	2.72	-7.43	0.000	Weak
	Experts	23	2.66	-3.03	0.006	Weak
Environmental dimension	People	260	2.83	-4.33	0.000	Weak
	Experts	23	2.29	-4.99	0.000	Weak
Economic dimension	People	260	2.52	-8.95	0.000	Weak
	Experts	23	2.69	-2.62	0.015	Weak

Nevertheless, the measures taken in some areas such as reduction of social gap and improvement of social justice have exerted a positive influence on the two groups.

Comparison of the views of the two groups of farmers and experts yielded comparable results. Therefore, in response to the research question, it can be said that the allocation of national and state land resources has exerted a weak effect on various dimensions of sustainable rural development.

Comparing the results of this study with other domestic and foreign studies exhibited a number of similarities and differences. The results are consistent with the researches of Bazi (1999), Ghanbari & Barqi (2010), Hadizadeh Bazzaz et al. (2015), Amouzadeh et al. (2016), regarding the failure of land allocation plans and agricultural development policies. However, it is in contrast with the results of some foreign studies (FAO, 2002; Boyce et al. 2005; Gerstter et al., 2011). In this context, factors such as the manner of execution and lack of expertise on the side of administrators, absence of supervision after land allocation, lack of education and promotion and absence of long-term

planning in this area could be cited as the reason for this disparity of results.

Based on the above results, it is suggested that expert views on land allocation to be articulated to prevent continuous destruction of resources. Also, implementation of educational and promotional programs aimed at optimizing the use of allocated lands can be effective. It is suggested that, in the event of continuation or implementation in other areas, the allocations should be conditional so that the allocated lands can be reclaimed by the state in the case of migration and non-utilization by the villagers. The support of state institutions and especially Jihad Keshavarzi to equip these lands, establish a regulatory system on exploitation of lands, create and strengthen agricultural related industries, introduce modern irrigation systems, etc., are among factors that would influence the outcomes of these land allocations.

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## References

1. Afrakhteh, H. (1393/2014). *Rural Geography of Iran*. Tehran, Iran: SAMT. [In Persian].
2. Amouzadeh, M., Jalali, Gh., Alipour, A., Papoli Yazdi, M.H., & Ghorbani, M. (1395/2016). National land assignment allocation, a development project or a project for facilitating land grab expropriation in northern Iran. *Geographic Research*, (31)1, pp. 138-156. [In Persian].
3. Asayesh, H., & Fallahtabar, N. (1392/2013). *A study of villages*. Tehran, Iran: Geographical Organization of the Armed Forces. [In Persian].
4. Ashtiani, M. (1388/2009). *Instructions on amendments of national and state land allocation principles for agricultural and non-agricultural projects*. Tehran, Iran: Agricultural Education. [In Persian].
5. Azad Ermaki, T. (1386/2007). *Development sociology, principles and theories, (Volume II)*. Tehran, Iran: Elm. [In Persian].
6. Azkia, M., & Ghaffari, Gh. (1392/2013). *Rural Development with an emphasis on the Iranian rural society*. Tehran, Iran: Ney. [In Persian].
7. Badri, A., Rokn al-Din Eftekahri, A., Salmani, M., & Behmand, D. (1390/2011). The role of agricultural utilization systems (family-based) in sustainable rural development (Qir & Karsin City-Fars Province). *Human Geography Research* (43.)76, 33-48. [In Persian].
8. Boyce, J.K. Rosset, P., & Stanton, E.A. (2005). Land reform and sustainable development. *Political Economy Research Institute (PERI)*, (98), 1-22.
9. Dias, Hiran. D., & Vickramanayake, B.W.E (1983). *Manual for Training in Rural Development planning*. Human Settlements Division Asian Institute of Technology, Bangkok, Thailand.
10. Dorner, P. (1977). *Land reform and economic development*. Translated by Ahmad (A. Karimi, Trans.). Tehran, Iran: Amir Kabir. (Original work published 1972). [In Persian].
11. European Commission. (2000). Agriculture's contribution to rural development, 2000 *International Conference on Non-Trade Concerns in Agriculture*, Ullensvang, Norway.
12. FAO. (2006). A case study on the implications of the ongoing land reform on sustainable rural development and poverty reduction in Rwanda, *2006 International conference on agriculture reform and development*, Porto Alegre, Brazil.
13. Gerstter, Ch., Kaphengst, T., Knoblauch, D., & Timeus, K. (2011). *An Assessment of the effects of land ownership and land grab on development - with a particular focus on small holdings and rural areas*, Ecologic Institute, Brussels.
14. Ghanbari, Y. & Barqi, H. (1389/2010). The role of cooperatives in the development of covered rural areas (Isfahan Province). *Quarterly Journal of Village and Development*, (13)2, 81-101. [In Persian].
15. Hadizadeh Bazzaz, M, Bouzarjamhourii, Kh, Shayan, H. & Noghangi, M. (1394/2015). Evaluation of the performance of rural production cooperatives with sustainable agricultural development approach (Case Study: Neishabour City). *Journal of Rural Planning and Research*, (4) 2, 111-125. [In Persian].
16. Hayami, Y. & Ruttan, V. (1378/1999). *Agricultural development: an international perspective*. (Trans. M. Koopahi). Tehran, Iran: Ministry of Jihad-e-Agriculture. (Original work published 1985). [In Persian].
17. Hosseini Abari, H (2004). *A preamble to the rural geography of Iran* (3<sup>rd</sup> Edition). Isfahan University, Isfahan, Iran: Isfahan University. [In Persian].
18. IED (2018). *The importance of agriculture for the economy and the specific features of Mediterranean agriculture*. Larissa, Greece.
19. Iranian Statistics Center. (1390/2011). *Detailed results of population and housing census of Isfahan province*. [In Persian].
20. Jihad Keshavarzi Organization of Isfahan Province. (1394/2015). *Agriculture Statistics Department*. Statistics and Information Office, Isfahan. [In Persian].
21. Khatun Abadi, A (1384/2005). *Some aspects of sustainable development (from theory to action)*. Isfahan, Iran: Jihad Daneshgahi, Isfahan University of Technology. [In Persian].
22. Marsden, T., & Sonnino, R. (2008). Rural development and the regional state: Denying multifunctional agriculture in the UK. *Journal of Rural Studies*, 24(4), 422-431
23. Morris, A. (1387/2008). *Geography and development*. (S. Lotfi, Trans.). Babolsar, Iran: Mazandaran University Press. (Original work published 1998). [In Persian].



24. Nayeri, L. (1391/2012). A historical study of agricultural land deposits in the Islamic Republic of Iran from 1976-86. (Unpublished Master's thesis)., Imam Khomeini Research Center and Islamic Revolution, Tehran, Iran. [In Persian].
25. Norouzi, A. Mahdavi, D., & Tavakkoli, Kh. (1397/2018). A study of the role of agricultural promotion and education in rural sustainable development: Case study: of rural areas of Chaharmahal and Bakhtiari Province. *Development Strategy Journal*, (14) 54, 134-159. [In Persian].
26. Nouri, H., & Norouzi, A. (1396/2017). *Principles of environmental planning for sustainable rural development (Vol. 2)*. Isfahan, Iran: Isfahan University, Isfahan. [In Persian].
27. Organization for Forests and Rangelands of Iran (2001). *The laws of natural resources of the country*. Organization of Forests, Tehran. [In Persian].
28. Pasakarnis, G., & Maliene, V. (2009). *Land readjustment for sustainable rural development*. International Vilnius Conference: Knowledge-Based Technologies and or Methodologies for Strategic Decisions of Sustainable Development, (169-174). Vilnius, Lithuania.
29. Plewa, J. (2013). *Rural Development in the European Union Statistical and Economic Information*. European Commission Directorate-General for Agriculture and Rural Development. Brussel, Belgique
30. Sachs, W. (1377/1998). *A new glance at the concepts of development*. Translated by (F. Farahi & V. Bozorgi, Trans.). Tehran: Markaz. (Original work published 1992) [In Persian].
31. Sengupta, J. (2018). Why budget 2018 should have special focus on agriculture. *India Matters*.(1-3) <https://www.orfonline.org>.
32. Taleb, M., & Anbari, M. (1384/2005). *Rural sociology, dimensions of change and development in rural society of Iran*. Tehran, Iran: University of Tehran. [In Persian].
33. Todaro, M. (1384/2005). *Economic development in the third world*. (G.A. Farzadi, Trans.). Tehran, Kuhsar. (Original work published 1985). [In Persian].
34. World Bank (2014). <http://wdi.worldbank.org/table/3.1>



## تأثیر واگذاری اراضی منابع ملی و دولتی بر توسعه پایدار روستایی

(مطالعه موردی: دهستان‌های برآن شمالی و جنوبی در استان اصفهان)

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### چکیده مبسوط

#### ۱- مقدمه

کشاورزی از دیرباز مورد توجه انسان و به‌عنوان مهم‌ترین زمینه برآورد نیازهای اولیه او دارای اهمیت ویژه بوده است. همین امر موجب گردید که از گذشته تاکنون با روش‌ها و اقدامات مختلف، سطح اراضی افزایش یافته و به لحاظ نظری توسعه کشاورزی به رویکردی مهم برای توسعه روستایی و ملی تبدیل شود. در ایران نیز با پیروزی انقلاب اسلامی، نهادهایی چون هیئت‌های هفت‌نفره واگذاری زمین تشکیل و تلاش گردید تا به بهبود وضعیت اقتصادی و اجتماعی روستاییان کمک شود. هدف از واگذاری اراضی، بهره‌برداری از منابع آب و زمین با در نظر داشتن احیاء، ایجاد اشتغال و درآمد برای افراد بومی بوده است. جلگه برآن در شرق شهرستان اصفهان از جمله مناطق اجرای طرح واگذاری بوده است. بنابراین در این پژوهش به بررسی میزان تأثیر واگذاری‌ها به‌عنوان یکی از راهبردهای مهم در راستای توسعه پایدار منطقه پرداخته شده است.

#### ۲- مبانی نظری تحقیق

روستا معرف اولین واحد جغرافیایی است که انسان‌ها برای سکونت در کنار هم تشکیل داده‌اند. گروه‌های انسانی به تجربه کشاورزی آموختند، یکجانشین شدند و نتیجه آن ایجاد روستا بود. گذشته از تعریف روستا، یکی از مباحث چالش‌برانگیز مفهوم «توسعه» و راهبردهای تحقق آن بویژه در نواحی روستایی است. از دهه هفتاد،

توسعه کشاورزی به‌عنوان مهم‌ترین عامل توسعه روستایی مورد توجه خاص قرار داشت و از آنجاکه در بسیاری از کشورها کشاورزی تأمین‌کننده اشتغال و معیشت روستاییان بود، قابل قبول شد که توسعه کشاورزی بر توسعه روستایی نقش مؤثری داشته و آن را معادل توسعه روستایی می‌نامیدند. در این ارتباط شاید مالتوس (۱۷۸۹) از اولین اقتصاددانانی است که در دیدگاه توسعه‌ای خود، ضرورت توجه به زیرکشت بردن اراضی جدید کشاورزی را یادآور شد. باین‌وجود تفکر فعلی درباره نقش کشاورزی در توسعه هنوز شدیداً تحت تأثیر مکتب کلاسیک قرار دارد. «واگذاری اراضی» نیز خود زیر مجموعه اصلاحات ارضی است که به‌عنوان یکی از راهبردهای اقتصادی توسعه روستایی مطرح است. در این ارتباط موضوع واگذاری اراضی با توجه به اهداف آن به‌گونه‌ای مرتبط با ابعاد اقتصادی، اجتماعی و محیطی توسعه پایدار است که در این پژوهش مورد توجه قرار گرفته است.

#### ۳- روش تحقیق

این پژوهش بر اساس هدف کاربردی و از نظر روش، توصیفی-تحلیلی است. شیوه گردآوری اطلاعات کتابخانه‌ای-میدانی بوده و جامعه آماری شامل کشاورزان (۲۶۰ خانوار) و کارشناسان مرتبط با روستا (۳۰ نفر) بوده است. ابزارهای گردآوری اطلاعات فیش‌برداری و پرسشنامه بوده و داده‌ها در نرم‌افزار SPSS و با کاربرد آزمون تی-تک نمونه‌ای تجزیه و تحلیل شده است.

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#### ۴- یافته‌های تحقیق

##### الف: از دیدگاه کشاورزان

۱- شاخص اجتماعی: در زیرمعیار عدالت گویه کاهش فاصله طبقاتی با میانگین (۳/۱۶) تأثیر زیاد، کاهش اختلافات قومی و مالکیتی با میانگین (۲/۸۲) تأثیر ضعیف و بقیه گویه‌ها و شاخص ترکیبی متوسط‌اند. در زیرمعیار مشارکت، همه گویه‌ها و شاخص ترکیبی نشان‌دهنده تأثیر ضعیف هستند. زیرمعیار مهاجرت به همین منوال و شاخص ترکیبی کل نیز حالت ضعیف دارد. ۲- شاخص محیطی: در زیرمعیار حفاظت آب‌و‌خاک، میانگین به‌دست‌آمده از تمام گویه‌ها کمتر از حد متوسط و نشان از ضعیف بودن در تمام گویه‌ها به جز کاهش تجاوز به زمین‌های ملی و دولتی که در شرایط متوسط قرار دارد، است. از زیرمعیار محیط‌زیست نیز افزایش بهره‌وری از منابع آب‌های زیرزمینی در حالت زیاد و سایر گویه‌ها و شاخص ترکیبی تأثیرگذاری ضعیف دارند. ۳- شاخص اقتصادی: در زیرمعیار اشتغال، تمام گویه‌ها و شاخص ترکیبی حالت ضعیف دارند. زیرمعیار درآمد نیز در همه گویه‌ها و شاخص ترکیبی ضعیف است. از زیرمعیار بهره‌وری و تولید، افزایش استفاده از مکانیزاسیون کشاورزی و کیفیت محصولات، تأثیر خوب و کاربرد شیوه‌های نوین آبیاری و افزایش تولید و شاخص ترکیبی تأثیرگذاری متوسطی دارند. همچنین در زیرمعیار سرمایه‌گذاری، تمام گویه‌ها و شاخص ترکیبی در حالت ضعیف قرار دارند.

##### ب: از دیدگاه کارشناسان

۱- شاخص اجتماعی: زیرمعیار عدالت، گویه آموزش و ترویج و رعایت حقوق مالکیتی افراد بالاتر از معیار عددی موردنظر اند. سایر گویه‌ها و شاخص ترکیبی متوسط است. در زیرمعیار مشارکت، گویه اشتغال خانوادگی با میانگین (۳/۳۴) و ارتباط با سازمان‌های دولتی با میانگین (۳/۵۲) تأثیر خوب و سایر گویه‌ها و همچنین شاخص ترکیبی ضعیف بوده‌اند. در زیرمعیار مهاجرت گویه کاهش مهاجرت فصلی در حالت متوسط؛ سایر گویه‌ها و شاخص ترکیبی در حالت ضعیف اند. ۲- شاخص محیطی: زیرمعیار حفاظت آب‌و‌خاک و کاهش تجاوز به زمین‌های ملی و دولتی با میانگین (۳/۰۰) در حالت متوسط اند. سایر گویه‌ها و شاخص کل در حالت ضعیف قرار دارد. ۳- شاخص اقتصادی: از زیرمعیار اشتغال، گویه ایجاد فرصت‌های شغلی در شرایط متوسط و

سایر گویه‌ها و شاخص ترکیبی در شرایط ضعیف قرار دارند. از زیرمعیار درآمد، همه گویه‌ها و شاخص ترکیبی ضعیف اند. از زیرمعیار بهره‌وری و تولید، گویه استفاده از شیوه‌های نوین آبیاری در حالت تأثیر زیاد و سایر گویه‌ها و شاخص ترکیبی متوسط‌اند. در زیرمعیار سرمایه‌گذاری، همه گویه‌ها و شاخص ترکیبی در حالت متوسط‌اند.

#### ۵- بحث و نتیجه‌گیری

مهمترین معیار جغرافیایی در تعریف روستا ارتباط با محیط و منابع طبیعی و معیشت وابسته به آنها است. در این زمینه از کشاورزی به‌عنوان نماد اصلی اقتصاد روستایی می‌توان نام برد. چنانچه تودارو نیز در تعریف بسیار معروف خود توسعه کشاورزی را زیربنای توسعه روستایی و نتیجتاً ملی می‌داند. از دهه‌های گذشته نواحی روستایی و کشاورزی در کشور کماکان مورد توجه بوده و از جمله راهبردهای اجرایی آن واگذاری اراضی ملی و دولتی بویژه بعد از انقلاب اسلامی بوده است. اقدامی که موافقان و مخالفانی داشته است. ناحیه روستایی برآن نیز به‌عنوان یکی از قطب‌های کشاورزی در استان اصفهان، از جمله نواحی است که راهبرد مذکور در آن اجرایی شد. با این وجود تاکنون کمتر به ارزیابی آثار ناشی از آن توجه شده است. در پژوهش حاضر طرح واگذاری‌های مربوط به بخش کشاورزی از دیدگاه توسعه پایدار روستایی مورد ارزیابی واقع گردید. نتایج برای دو گروه نمونه (کشاورزان و کارشناسان) نشان داد که در مجموع تأثیر واگذاری اراضی منابع ملی و دولتی بر شاخص‌های مختلف اقتصادی، اجتماعی و محیطی بسیار ضعیف بوده و تحقق توسعه پایدار روستایی را در پی نداشته است. با این وجود، در برخی زمینه‌ها مانند کاهش فاصله طبقاتی و عدالت اجتماعی، افزایش بهره‌وری و تولید از دیدگاه دو گروه تأثیر مثبت داشته است.

**کلمات کلیدی:** واگذاری اراضی، توسعه پایدار روستایی، دهستان‌های برآن شمالی و جنوبی، اصفهان.

#### تشکر و قدرانی

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