

LAND CONSOLIDATION AND ITS ECONOMIC EFFECTS ON THE CITY DISTRICT OF LOUTAK_ZABOL

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Abstract

Being made Over Land, Irregular And Uneven Parts, Lack Of Roads Between Farms And Irrigation And Poor Drainage are major Problems In the way of Agricultural products that are placed in the city of Zabol. In order to increase its production and mechanization, ultimately increasing productivity and improving the economic status of farmers the Land Consolidation use district of Loutak_Zabol started in 1995, and ended in 2005. For this purpose, two Consolidation villages (Loutak and Islamabad) and two non-Consolidation villages (Kalati Mosafer and Varmal) for comparison in the study area, were examined. Methods In this study are descriptive-analytical in the form of adaptive. Information and data obtained through a survey (by land and interview with the operation and relevance to the following organizations), is prepared and collected. The results show that the Land Consolidation, reducing the number of parts, increasing acreage, increasing land values, reduced water consumption, increased use of agricultural machinery, agricultural products and ultimately increase the income of farmers had a significant effect. So there is a direct relationship between the land consolidation and mechanization of the agricultural products.

Keywords:

Land Consolidation , agricultural products, Loutak and Zabol

Introduction

Problem of fragmented land began from the 19th century in the world, (Dillon, 1995: 337) and in the Iranian year 1341. (Ehlers, 2001: 77) scattering and small land area, is one of the structural elements of traditional agriculture. (Shirzad, 2007: 319), the distribution of parts, will be considered a deterrent. (Tavassoli, 1999: 330) land reform in Iran, caused land fragmentation (Mahdavi, 2001: 33), increased low-land farmers (Khosravi, 1997), and respectively. The fragmentation of agricultural lands has been seen more or less in all countries. with regard to problems of land distribution, agricultural planners and politicians recommended integration of land use to solve this problem.(Dijk, 2002: 14). So we decided to study effective Land Consolidation, the yield of crops in the district of our city Loutak_Zabol.

Hypotheses

- 1- there is a direct relationship between The Land Consolidation of agriculture and agricultural products,.
- 2- The Land Consolidation of agriculture and increase farmers' income have a direct relationship.

The study area

Northern city of Zabol is located in Sistan and Baluchestan province in southeastern Iran. Village studied is located in South of the city of Zabol. The climate of this region, is arid desert and agricultural water is supplied by the river Hirmand. Design integration in this

region by Agriculture beginning in 1995 was completed in 2005. In this study, agricultural products, prior to the Land Consolidation, being integrated in 1994 and later, the 2010 is examined.

Methods and procedures

Generally, the study was a descriptive - analytical study of the comparative type. In this study two methods for data collection, library and documentation and survey methodology (field) are used.

Sampling

- In this study, the focus of the planned sampling is used.

Research Background

Integration Of Agricultural Land

In Iranian culture, Agriculture, Integration Means Protection, In Human Geography Of Culture, The Word Is Used In Front Of The Modification And Distribution (Segmentation). (Gutuli, 1986: 155). Consolidation Is Essential For The Compatibility Of Peasant Agriculture With High Levels Of Commercial Agriculture. (Lambert, 1983:31).

Integration of land in the world

Consolidation of several European countries was performed with financial help under the FAO. (Hartingsen; 2006). In 2005, land problems of "Ukraine" were considered. And for expanding the market for rural development, agricultural lands Land Consolidation was on the agenda. (Ashmidi, Halide; 2006). Land Consolidation in "Croatia" was initiated in 2000 with the aim of helping to develop the competitiveness of agriculture and rural development. (2006 Budankopenavic). TCP Project, provided a method for the Consolidation of national programs for land in "Serbia". (Marosan, Soskic, Knezevic; 2006) Privatization of land in "Armenia", which was started in 1991, was based on a combination of both social justice and quality parameters and land. (Vsrdayan, Grigoryan; 2006). Land Consolidation program of land in "Bosnia and Herzegovina" was initiated in the second half of 1985-1981. (Ljusa; 2006). Land reforms in the country, "Romania" occurred with the changes in land ownership structure (of the cooperative and state ownership to private ownership), the agricultural structure of polar (large and small farms) and market development of agricultural lands. (Blenesi, Rusa-senir; 2006). Pruger regional workshop in 2008 on land rent and land banks and the Consolidation was to evaluate its effects. (Frrokja, Gashhi; 2000). the Land Consolidation in "Kosovo" was performed in 1983-89. (Meha, kadi; 2006). Land Consolidation Project "Georgia," was conducted in 1991-98. (Dabrundashvili; 2006 (by: Te. "Albania" of the early 1990s, Land Consolidation began. (Sallaku, Shehu; 2004) Salaku, the role of higher education to recommend rural planning and Land Consolidation to be considered necessary (sallaku, 2006). Land Consolidation Project, "Estonia", began in 1991. (Maasikamae; 2006). In Western Europe, "France", is the first country to collective farming groups formed in 1963, passed and enacted into law. "Italy" is also among the countries, which attempt to establish a collective farm, in the context of farm cooperatives and lower parts, in 1938. In 1963 in "Egypt" for the purchase of small and scattered lands, farmers were forced to agree to exchange their parts. (WWW.FAO.org). State "Avtarprats India" the land Consolidation was carried out in 1954. (Shirzad, 2007: 229-227). The "Canada" process of integration, restructuring and agricultural development after the law passed in 1960 and the Agricultural Development Act was considered in 1965. (Hashemi, 1990: 74). In "Japan" as well as organizing and restructuring the agricultural crop lands began in the seventeenth century. (Honorary, 1996: 271).

Land consolidation In Iran

More researching the field of Consolidation of agricultural lands of Iran, on subjects such as: causes, dispersion, compared to agricultural land sandis consolidation and dispersed. "Bakhshode and Najafi", the distribution of agricultural land, with the use of modern inputs(Bakhshode and Najafi, 1998), "Taleb", factors affecting agricultural land and the necessary Land Consolidation Segmentation floor operation on it(Taleb, 1988:26),"Sharafi"problem frequency and distribution of land owned by each farmer(Sharafi,2007:10-11),"Akbari fara and Tavakoli. Land consolidation of agriculture roduction area sand FalavarjanLenjan Isfahan(Tavakoli and Akbari fard, 1995: 34-328), "Mansour Vosoughi and others" preliminary Report: Of economic problems - social, traditional agriculture due to scattering in single fillet city of Arak (Mansour Vosoughi and others, 1364), "Sohail K." Agricultural land fragmentation effects on economic productivity (Sohail, 1992: 10-14), " Shahbazi "Consolidation and reduction in land distribution, rural development priorities (Pour Heydari, 2006: 255-254)," Bafekr H. et al, "distribution agricultural lands in the villages covered by the Agricultural Development Project lie basin (Bafekr, et al, 1987)," "Khorrami," "Land Consolidation effects on the development of agricultural lands agricultural province, rural village of Hassan Abad Ravansar (Khorrami, 2006: 54)," "Mosayebi" "problems of Land consolidation and the role of agriculture extension methods (Mosayebi, 1992: 19) "Ephtekhari" of agricultural development, concepts, principles, methods, planning the Consolidation of agricultural land (Ephtekhari,2003: 62),"HasaniMoghadam," Economic Comparison of rice production in Land consolidation and villages scattered Samskandeh city of Sari (HasaniMoghadam, 1995: 73-47), "Asefi," Application of GIS systems in rural development (Land consolidation agriculture (Asefi, 2003: 64-62), and "open" attitude to the Land consolidation of the paddy farmers in Mazandaran (case study of village and city Glyr joybar); (overt, 2006: 32), were studied.

Land Consolidation in the study area

Land consolidation use in the study area, only has been done in two villages. Total land under cultivation Loutak districts 4285ha, of this amount, 3452hectares, has been Land consolidation. The range studied, to evaluate and compare integrated village(Loutak & Islamabad) and two non-Land consolidation village(Varmal and Mosafer kalaty) explains.

Effects of Land consolidation Plan

1 –Reduce the number of parts

Table (1); mean pieces of land and extent of utilization before and after Land consolidation, to the villages of Haktar

Name of village	Number of Owner	Project Area	The average size of each beneficiary	Number of parts per beneficiary		The average size of each piece	
				Before the Project	After the Project	Before the Project	After the Project
Loutak	173	201	1/6	293	69	0/68	2/9
Eslam Abad	127	144/2	1/3	137	94	1	1/5
Varmal	372	448	1/2	370	370	1/2	1/2
MosaferKalati	93	140	1/5	51	51	2/7	2/7

Source: Field Data

2 - to expand acreage

Table (2) crop acreage, before and after the integration of acres of land in sample villages

Name of village	The total arable land and water	Area covered by plan	Of integrated land	Acreage before integration			The percent age change s	Acreage after integration			The percent age change s
				Whe at	Gra in	Su m		Whe at	Gra in	Su m	
Loutak	201	201	100	102	33	135	67/16	143	59	193	96/01
Eslam Abad	144/2	144/2	100	92	23	115	69/75	106	34	140	97/08
Varmal	448	448	-	241	198	439	98	237	192	429	95/75
MosaferK alati	140	140	-	83	52	135	96/42	76	44	120	85/14

Source: Field Data

3 – The application of agricultural machinery and equipment

Table (3); percent of agricultural machinery, agricultural products in various stages

Product Name	The use of machinery before the land consolidation of			After land consolidation of the use of machinery			
	Land preparation	Planting	Had	Land preparation	Planting	Had	Removal
Wheat	85	40	2/1	90	50	62	85
Grain	80	40	2	89	50	60	80

Source: Field Data

4 - Changes in water consumption

Perhaps the most important land use plan of Land consolidation, in terms of nature, is releasing water in different sectors of agriculture. If they use it, enhance groundwater resources, and if necessary increase in land use will be. The string of the land area of Zabol and the need for soil amendments, drainage of underground feel, so the plan prepared by Incom Pars Consulting Engineers, on 07/26/1995, to convey the soil and water engineering services company, and then was carried out. (Department of Water and Soil city of Zabol, 2006). The above description of the water and agricultural water supply for the whole region Zabol said irrigation methods, before and after the Land consolidation of river flooding and River Hirmand is provided. And after the drought in the region, as well as drilling wells, helped to irrigate agricultural lands.

5 - The value of land

Table (4): - the distribution of price changes of agricultural land, before and after land consolidation

In the sample villages (thousand Rials)

Name of village	Before Land consolidation in a hectare of land	After Land consolidation in a hectare of land	Percent change
Loutak	420	4000	9/52
Eslam Abad	368	3500	9/51
Varmal	300	1500	5
MosaferKalati	350	1800	5/14

Source: Field data.

6 - Crop yield in the sample villages

Table (5) crop yields, in the before and after Land consolidation, in the sample villages.

Product Name	Yield (kg)		
	Before Land consolidation	After Land consolidation	The percentage changes
Wheat	3000	4000	% 133
Grain	2850	3250	% 114

Source: Field data.

7 - Crop production costs

Table(6) compares the costs of Land consolidation and scattered in different stages of cultivation (thousand Rials)

Type of Operation	Land consolidation		Underlying non-Land consolidation	
	outlay	Percent	outlay	Percent
Land preparation	735	24/7	1370	26/2
Planting	1031	34/7	883	16/9
Had	255	8/6	1976/5	37/8
Removal	950	32	1000	19/1
The total	2971	100	5229/5	100

Source: Field data.

8 - Income from agricultural products

Table (7), comparing costs and revenues of various agricultural products produced

Product Name	Land consolidation					The non-Land consolidation				
	Efficiency (Kg)	Price per kg (Rials)	Gross income	outlay	Net Income	Efficiency (Kg)	Price per kg (Rials)	Gross income	outlay	Net Income
Wheat	4000	3250	1300000	265400	10345600	3000	2470	741000	3159800	4250200
Grain	3250	2600	8450000	1391670	7058330	2810	2000	562000	153000	409000

Source: Field data.

Hypotheses testing

First hypothesis:

There is a direct relationship between Land consolidation agriculture and agricultural products. The table number (7-1) observed that the underlying performance of Land consolidation agriculture is much higher than the yields of the underlying distribution. It can be concluded that there is a direct relationship between the Land consolidation of agricultural land is a factor in increasing the yield of agricultural products, namely the Land consolidation of agriculture and agricultural products,.

Second hypothesis:

Land consolidation between agriculture and increase farmers' income have a direct relationship.

According to Table (6, 7, 8), which is observed; lands that have been Land consolidation, the income from their crops, the land is scattered. It can be said that, there is a direct relationship between the Land consolidation of agriculture and farmers' income.

In general we can say:

According to information presented in tables, the first hypothesis and second hypotheses are confirmed.

Conclusion:

Grvl Research; Tivary; nylon and research conducted above are, Land consolidation, reduced component count, increased cultivation, increased use of agricultural machinery; increase income farmers, reduce production costs, changes in land structure, changes in farming; dynamics of rural economy and agricultural development. That the rural development and ultimately lead to the development of a country.

Suggestions

- 1- To ensure the purchase of agriculture products grown and give hope to the farmers.
- 2- The granting of credit facilities required by the government.
- 3- certainly any of land audit is essential to integrate requires aerial photos and maps are recommended to cadastre In order to expedite projects through land consolidation of existing facilities (satellite imagery and mapping of land), is attempting to obtain property and cadastre.
- 4- Land consolidation of land should be considered in the framework of general policies of rural development and agriculture, because it is an essential tool for achieving sustainable development in rural areas.
- 5- Saving water and using drip irrigation.

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