

Tropentag 2013 Stuttgart-Hohenheim, September 17 – 19, 2013

Conference on International Agricultural Research for Development

Land Consolidation and Agricultural Sustainability in Turkey

Kemal Sulhi GUNDOGDU^{a*}, S.Tulin AKKAYA ASLAN^a, Müge KIRMIKIL^a, Serkan GURLUK^b

^aUludağ University Agricultural Faculty, Biosystems Engineering Department, Bursa, Turkey

^bUludağ University Agricultural Faculty, Agricultural Economics Department, Bursa, Turkey

Introduction

Rural population in Turkey decreases rapidly. In the last twenty years rural population has decreased from %40's to %24 of the total population. This ratio is known to be around %10 in developed countries. Thus, this decrease is interpreted as favorable. However since the population that still resides in rural areas are mostly senior citizens, it can be deducted that in the coming years there may be a sudden decrease in rural population. In Turkey, where there is not a strong business structure for lands, future farms will perish as a result of this. In this instance many lands that are idle will be put up for sale.

Through consolidation, betterment of the shapes of land parcels that are agricultural production environment and integrating scattered land parcels are achieved. In Turkey, there has not been a significant progress in consolidation practices. To the present only %10 of all agricultural lands has been consolidated. Consolidation practices are carried out by General Directorate of Agrarian Reform in Turkey. According to the target that has been declared by the Directorate, every year 1 million ha of land is intended to be consolidated. However this target necessitates taking precautions that will ensure the sustainability of farms and agricultural structure.

In this study, the conditions and the statue of farms that have gone through consolidation years after implementation.

Material and Methods

Villages in Bursa-Karacabey Plain have been used as study material. The Bursa-Karacabey Plain covers an area of 16,683 ha and includes 17 villages(Anonymous, 2004). The Land Consolidation Projects (LCPs) ¹started in 1987 within the plain and were carried out in

^{*}Corresponding Author E-mail: kemalg@uludag.edu.tr

groups, which were completed in different years. The Land Consolidation and irrigation system has been com²pleted and came into use in the first village group in 1990. The selected villages in the Karacabey Plain for case study were given in Table 1.

Village Name	LCPs date	start	and	finish	Landholding Numbers	Number of Surveys		
Yenisaribey		1997-	2000		105	50		
Beylik		1993-	1996		122	56		
Ismetpasa	1990-1992				94	46		

Table 1. The selected villages for case study

A survey was carried out in 2012 in order to determine the opinions of the farmers about the conditions after post land consolidation. There were 321 landholdings in the study area (3 villages). Populations of villages were given in the Table 2.

Year	Yenisa Popula	ribey Vill tion	age	Beylik Village Population			Ismetpasa Village Population		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
2000	257	248	505	462	478	940	432	396	828
2010			425			800			825
2011	186	171	357	378	359	737	330	317	647
2012	179	164	343	374	359	733	321	316	637

Table 2. Populations of Villages (http://www.yerelnet.org.tr/koyler/)

The number of owners to be surveyed in each village was determined by a graduated random sampling method (Hays and Winkler, 1971). In the survey, there were 32 questions to determine the landowners' view.

Results and Discussion

A statistically significant difference has not been detected among the surveyed villages. Thus the results of the surveys have been evaluated jointly. In the area that was studied farms

maintain agricultural production on 5 pieces of land parcels on average and average parcel size is 8 ha. Farms that have had their lands divided after consolidation are %28 of total farms. The land the %79 of participants in the survey cultivates is not registered as owner in the land deed. %51 of the survey participators cultivates lands that are registered to their fathers. The ratio of determining the heir that will take over the farm, for ensuring the continuity of the farm, while the farm owner is healthy is around %4. Through consolidation, the problem of having too many shares on one land parcel has not been solved.

Yavuz ve Gurbuz (2001) conducted a survey to determine farmers' adoption level of LC in Bursa-Karacabey. They found that 76.7% of respondents adopted consolidation willingly.

According to survey results some of the reasons for having too many shares on one land parcel that have been put forward are alive parents, disputes between the heirs, high costs of land deed transactions. Half of the farms participated in the survey cultivates land that is single shared, %17 percent have two shares and %14 has three shares. %25 of the participants has answered the question "Do you invest in parcels that have more than one share?" in the affirmative. As reasons for not investing enough, participants put forward elderly family members (land deed owners), financial difficulties, share owners that does not practice in agriculture

According to the survey %67 of the participants does not plan for long term investments in their own lands. When the reasons for this is questioned the answers include problems such as not having a say in decisions because elderly family members (land deed owners) are alive, small farm lands, not being able to generate sufficient income in agriculture, not being able to sell their product for its real value and financial constraint. In the villages that have participated in the survey farms that have bought new lands in the last ten years is %27.6.

Conclusions and Outlook

The main purpose of land consolidation is rural development. However in Turkey, because of not being able to implement monitoring and evaluation practices after consolidation, the information about whether the expected impacts are realized or not cannot be obtained. By monitoring and evaluating projects after consolidation, effects that have occurred after the project can be determined more precisely, this also will ensure taking more tangible precautions.

According to the survey results in the study area;

- Sizes of most farms are inadequate and the production costs cannot be reduced.
- Uncertainties in ownership structure continue. It is not clear who will take over the farms in the future. For this reason, a sense of ownership of land holdings is weaker.
- Unrests among heirs rise, and since there is not enough financial resources no heir can buy the land on their own.

- Capital owners whose main practice is not agriculture buy lands, starts agricultural activities.
- In the future it is possible for many farms to be transferred to large corporates.
- Professionalization trends have not developed in farms.
- Farm incomes have not increased sufficiently. There is a high tendency to sell lands when needed.
- Input prices are increasing ever year in proportion to inflation rate, however product prices show a more stable structure.
- The tendency to planning production in accordance with neighbor farms and with the same product is high.
- Until the agricultural population fall below %10 level, agricultural sector (especially small farms) will continue to suffer losses.

Consequently uniting scattered lands and improving their shapes by consolidation is not considered as the only effect on farm continuity. In addition to this, the farm sizes need to be enlarged. Regulations in inheritance that will prevent the lands to be split need to be made. Production plans, annually and for future, should be made nationwide and subsidies should be realized according to these plans. If needed subsidies in product and area levels should be offered. Legal problems that obstruct the betterment of farm incomes that occur in creation and management of cooperatives and unions should be eliminated. Subsidies should be used as incentives for establishing union and cooperative structures. (OECD, 2013) say that the government should also cover new ground and transform state trading enterprises and agricultural sales co-operatives into real commercial ventures.

References

Anonymous, 2004. Turkiye'de arazi parcaliligi, tarimsal isletme durumlari ve arazi toplulastirma calismalari, T.C. Tarim ve Koyisleri Bakanligi Koy Hizmetleri Genel Mudurlugu Sulama Dairesi Baskanligi, Ankara. [In Turkish].

OECD 2013. OECD Yearbook 2013, The plot thickens, by Dimitris Diakosavvas.

Hays W.I., Winkler R.L., 1971. Statistics, Probability, Inference and decision. Holt, Rinehart and Winston, Ny, USA.

Yavuz O., Gurbuz I.B., 2001. Bursa ili Karacabey ilcesinde arazi toplulastirmasi yapilan koylerde sosyo-ekonomik yapi ve yeniliklerin benimsenmesi. Uludag Universitesi Bilimsel Arastirmalar ve Incelemeler Serisi, No: 24, Bursa. [In Turkish].