

## Types of Agricultural Credits Implemented in Turkey and Changes in Agricultural Credits over Time

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**Abstract:** There has always been a problem in terms of establishing resources during the execution of the activities and operating the resources effectively. Agri-businesses, which are variable in quantity and quality over time, require resources for various reasons, such as in other businesses. Loans provided in formal or informal formats to ensure the necessary financing are always the common methods used by agricultural enterprises. In this study, the reasons why agricultural enterprises operating in Turkey need financing and the loans provided in agriculture and the changes in these loans over time are examined. While the average annual growth rate of agricultural loans in Turkey in the period covering 1998-2016 was approximately 24% in Turkey, the average annual increase rate of the total loans was approximately 31%. In this period, total loans and agricultural loans increased at a very high rate.

**Keywords:** Agriculture, Credit, Agricultural Enterprise, Funding.

### INTRODUCTION

Agriculture is as old as human history. Agriculture, which is performed only for vital activities first times, has found a wide application area with the development of the societies and agricultural products have been the subject of commercialization. With the development of inter-community trade and entrepreneurial factors, agricultural enterprises have begun to be established and agriculture has become an important sector in terms of societies. As in every sector, the need for financing has emerged over time in order to sustain and develop the activities in agriculture.

The need for financing in agricultural production is influenced by changes in the nature of the natural conditions and the concept of investment. When production is high due to natural conditions, the need for financing is less, and the need for financing is increasing in terms of the sustainability of activities during periods when production quantities fall for various reasons. In addition, financing needs arise in order to realize the agricultural investment and mechanization activities depending on the developments in the technological field.

In countries with advanced financial markets, financing of the agricultural sector is provided as effectively as it is in every sector. However, in underdeveloped and developing countries there is no such activity on the distribution of the limited financial resources.

A number of developing countries have stressed credit policies to achieve agricultural goals. It is frequently difficult, however, to evaluate their effect because the amount of funds involved has been small or their impact has been masked by other development policies [1].

### The Need for Financing in the Agricultural Sector

As in every sector, the production process in the agricultural sector takes the form of inputs, production activities and output. However, unlike other production areas, agricultural production is more affected by external factors. Elements outside the production factors cause the production to increase or decrease. For this reason, high rates of deviations in input-output ratios in agricultural production can occur. Productivity increases in periods of increased production due to natural conditions, while inefficiency occurs during periods of decreased production. Due to these fluctuations, there are also differences in resource utilization. In the periods when production is low, producers need more resources.

Factors affecting the financing of agriculture and the need for agricultural credits are:

- Agricultural production is largely dependent on weather conditions.
- Income fluctuations due to natural degradation such as drought, disease, flood
- The widespread use of small family businesses in agriculture.

- The existence of an unfavorable cost-price relationship in agricultural products.
- Inadequate information for evaluation of loan demand in agriculture
- The fact that producers in agriculture do not have the necessary discipline to meet the conditions of loan contract
- Political and social reasons
- The inadequacy of the organizations and administrations of the credit institutions financing the agricultural sector.
- Lack of time alignment between income and expenses.
- Transition from closed home economics to production for the market.
- The level of income in agriculture is low and the savings are limited.
- Technology stress and structural problems in agriculture

Finance is critical to increasing efficiency, improving product quality, and raising the productivity and income of value chain actors. Without access to finance, small farmers will continue to make little

investment, have low-return production systems, and be unable to use their farm resources optimally [2].

### Financing Practices and Methods in Agricultural Enterprises

Agricultural enterprises operate in a wide range from small family businesses that may be called micros to large enterprises with large numbers of employees and high agricultural production quantities. Regardless of the nature of production and size, the financing needs of agricultural enterprises are emerging over time as it is in every profit-oriented enterprise. If considered from the sectoral standpoint, it is necessary to disclose the total financing needs of the enterprises and the funds that are provided to meet these needs. The creation of an effective funding system in the agricultural sector contributes to the support and development of agricultural production as needed. These funding sources are generally sought by state incentives in developing countries. However, the loans provided by the state-owned public banks are the same. In Turkey, private sector banks have been funding agricultural areas in recent years. The types of loans used for securing agricultural financing are as follows:



Chart-1: The types of loans used for securing agricultural financing

Source: [3]

It is possible to classify agricultural credit institutions in Turkey as having or not having a specific organization. Organized organizations included in this classification are T.C. Ministry of Agriculture and Rural Affairs, Agricultural Credit Cooperatives, T.C. Ziraat Bankası A.Ş., T. Halk Bankası, T. Vakıflar Bankası T.A.O. and private banks [4]. Short-term, high-interest, non-organized credit resources with heavy payment terms can be defined as relatives, merchants and tradesmen, interest and moneylenders [5].

When the farmer faces a credit constraint, additional credit supply can raise input use, investment, and hence output. This is the liquidity effect of credit. But credit has another role to play. In most developing countries where agriculture still remains a risky activity, better credit facilities can help farmers smooth out

consumption and, therefore, increase the willingness of risk-averse farmers to take risks and make agricultural investments. This is the consumption smoothing effect of credit [3]. Smallholder farmers lack assets which can be collateralised, partly because valuation and liquidation of rural assets, especially land, can be frustrated by lack of effective legal/registration systems and missing markets for such assets [7].

Başaran, Güngör and Atik have presented a chart in their study of the types of agricultural credits provided by public and private lenders operating in Turkey. The chart on loan types has been updated as of December 2017 and is presented below. In the past, agricultural credits have been largely given by state banks, while private banks have been largely in agriculture among the credit products in recent years.

**Chart-2: The types of agricultural credits provided by public and private lenders**

Banks & Loans	Ziraat Bankası	İş Bankası	Garanti Bankası	Akbank	Halkbank	Vakıfbank	Yapı Kredi Bankası	Denizbank	T.E.B.	Şekerbank	QNB Finansbank	Anadolubank	Agricultural Credit Cooperatives
Herbal production oriented	*		*			*					*		*
For animal production	*		*			*	*		*		*	*	*
Organic farming	*		*			*		*	*	*	*		
Greenhouse			*	*	*	*	*			*	*	*	
Contract Manufacturing	*					*			*		*	*	
Irrigation				*	*		*				*		
Family Farming										*			
Soilless Agriculture					*								
Agricultural Business	*	*	*	*	*	*	*	*	*	*	*	*	*
Land Acquisition	*			*	*	*		*			*	*	
Agricultural Equipment & Tractor	*	*	*	*	*	*	*			*	*	*	*
Commercial Vehicle Poultry	*		*	*		*	*				*		
Orcharding											*		
Good Agricultural Practices	*		*						*				
Seafood	*		*						*	*	*		
Remodeling & Modernization			*										
Special Loans		*						*		*	*		*
IPARD Proj. Loan&Letter of Intent	*		*		*		*		*				
IPARD Grant Support			*		*								
Agricultural Investment			*				*	*		*	*		*
Agricultural Project								*			*		
Agricultural Insurance	*	*	*	*	*	*	*	*		*	*	*	
Harvest and Marketing	*		*						*				
Production Support	*		*				*						
Licensed Warehousing Investm.	*		*										
Young Farmer's Credit	*							*					*
Beekeeping Loan			*						*		*	*	
Livestock			*			*	*		*	*	*	*	*
Poultry									*	*	*		
Soil Crops Office Receipt Bill Percentage Credits	*	*	*	*	*	*	*	*					

**Development of Credits in Agricultural Sector**

The use of technology and the use of modern equipment in the realization of agricultural activities cause a marked increase in production. It is necessary for the producers to provide necessary funding so that they can access the necessary technology and equipment. The level of development of the borrowing capacities and therefore of the financing system in the agricultural sector is important for the producers who cannot do so with their own resources [8].

Financing problems are minimal in countries with developed financial systems. As a result, the provision of the necessary funds and transfer of production leads to the increase of the productivity and

efficiency in the production because of the provision of high technology machinery and equipment, modernization of production and adequate supply of necessary inputs. As a result of the supply of outputs that can be obtained from an efficient production system, the prices of agricultural products decrease and the needs of the society are eliminated.

A feature of successful government agricultural extension organizations in several countries was the free flow of knowledge between researchers in different disciplines, extension agents and farmers. This made it possible to develop solutions for farmers' problems by integrating knowledge from different sources [9].

Funding sources and institutional credit institutions are inadequate in countries where their financial systems are not developed as competently. As a result, borrowing costs are high because producers generally use loans with high interest rates from non-institutional sources. Due to this, production costs and

product prices are high, so the needs cannot be solved. In addition, production efficiency and productivity problems arise and an unbalanced market is formed. Information on agricultural loans and total loans used in Turkey between 1998 and 2016 are presented in the following chart.

**Chart-2: Agricultural loans and total loans used in Turkey between 1998 and 2016**

Years	Agricultural Loans (Thousand TL)	Change Ratio (%)	Total Loans (Thousand TL)	Change Ratio (%)	The Proportion of Agricultural Loans (%)
1998	1.170.731	-	14.122.355	-	8,29
1999	2.009.867	71,7	21.714.974	53,8	9,26
2000	3.281.895	63,3	34.205.860	57,5	9,59
2001	2.714.552	-17,3	37.085.766	8,4	7,32
2002	2.439.787	-10,1	52.631.490	41,9	4,64
2003	3.216.133	31,8	69.002.124	31,1	4,66
2004	3.847.082	19,6	102.481.789	48,5	3,75
2005	5.276.964	37,2	152.294.560	48,6	3,46
2006	5.978.681	13,3	217.308.644	42,7	2,75
2007	7.480.838	25,1	278.997.612	28,4	2,68
2008	9.834.008	31,5	363.860.979	30,4	2,70
2009	11.490.009	16,8	379.404.761	4,3	3,03
2010	17.726.816	54,3	506.994.403	33,6	3,50
2011	24.527.567	38,4	660.883.993	30,4	3,71
2012	24.867.583	1,4	764.196.779	15,6	3,25
2013	26.552.042	6,8	1.009.762.855	32,1	2,63
2014	34.367.368	29,4	1.201.696.256	19,0	2,86
2015	45.583.284	32,6	1.448.467.334	20,5	3,15
2016	56.897.699	24,8	1.704.762.209	17,7	3,34

Source: Turkish Banks Association [10]

During the period, both total and agricultural loans show an increase in terms of quantity. In the period of economic crises experienced in Turkey at the beginning of the 2000s, the total loans decreased slightly while the agricultural loans decreased. However, over the years, the share of agricultural loans in total loans has tended to decrease. The agricultural credit / total credit ratio, which was around 9% in the first years, has dropped to about 3% in the last year. When the last year was reached in this period, total loans increased about 121 times compared to the first year. On the other hand, agricultural credits increased about 49 times compared to the first year when the last year was reached. However, proportionally, agricultural loans did not increase at the level of total loans. This situation shows that the amounts in the agricultural loans are then shifted to non-agricultural areas.

**RESULTS**

The economic concepts and applications that apply to all enterprises, which are the areas where production factors are combined and produced, are also valid for agricultural enterprises. Businesses whose primary purpose is to profit are operating in the economic market and try to maintain their continuity according to the results of these activities. Within the vital cycles of enterprises, there are various reasons for

financing needs. Agricultural enterprises need financing by reason of providing agricultural modernization, mechanization, and new land investments, getting rid of the input structure or debt situation. In order to meet financing needs, equity or foreign sources can be used. If the businesses cannot provide the necessary financing with their own resources, they go to the borrowing route. There are references to resources with or without an institutional structure for funding. Funds obtained from non-institutional sources are short-term and high interest and cannot meet the financing needs at the desired level and can be difficult to operate. But the same thing cannot be said about the loans provided from institutional organizations. If the funds to be obtained from these organizations providing long term and low interest loans are used according to the purposes of financial management, they create advantageous situations in terms of businesses by creating financial leverage effect. Whatever the variety, funds from foreign sources need to be used effectively by businesses. When used according to the purpose of the loans, productivity and efficiency in production are ensured and production costs are reduced. Otherwise, the existing production system will suffer from hunger, increased production costs and incapacity to earn income and businesses may be in a difficult situation.

Considering the situation of the agricultural credits given in Turkey for years, it is seen that large increases in the amount have occurred. It is envisaged that the funds transferred to agriculture will be transformed into investments and used effectively and sectoral basis will be developed and there will be an increase in added value in agriculture sector.

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