

# **The Agriculture Sector in TRNC: An Examination of Financial Sources and Credit Policies of the Banking System**

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Submitted to the  
Institute of Graduate Studies and Research  
In Partial Fulfilment of the Requirements for the Degree of

Master of Science  
in  
Banking and Finance

Eastern Mediterranean University  
September 2011  
Gazimağusa, North Cyprus

Approval of the Institute of Graduate Studies and Research

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## ABSTRACT

Historical experience shows that for decades, both developed and developing countries have tried to support the development of agricultural sector, a labour intensive sector providing employment and income for millions of farmers in these countries. The agricultural sector is a complementary sector, which supports the development of other sectors. North Cyprus has a developing small island economy and dominated by sectors including public, tourism, education, industry and agriculture sectors. Agriculture is a crucial sector for the North Cyprus economy requiring easy, adequate and low cost accessibility to financial services. Our study shows that the agricultural financing of TRNC are channelled through five banks named as Cyprus Turkish Cooperative Central Bank, T.C. Ziraat Bank, Creditwest Bank, Faisal Islamic Bank, and Development Bank of TRNC out of total 25 operating banks in 2011. The comparative analysis of the credit policies of these 5 banks shows that Cyprus Turkish Cooperative Central Bank as a cooperative bank and T.C. Ziraat Bank as a foreign branch bank are the two main banks contributing to the agriculture sector development by providing primarily agricultural banking products and services. The Development Bank of TRNC as a state bank focuses more on investment and development projects due to the establishment purpose of the bank. Within the Islamic Banking framework, Faisal Islamic Bank offers investment and agricultural loans aimed at promoting the economy. Creditwest Bank as a pure private commercial bank provides agricultural banking with the highest cost of loans in terms of interest rates.

**Keywords:** North Cyprus, agricultural finance, banks, credit policies, economy

## ÖZ

Tarihsel deneyim, on yıllar boyunca, hem gelişmiş ve hem de gelişmekte olan ülkeler tarım sektörünün gelişimini destekleyerek, emeğin yoğun olduğu bir sektör olmasından dolayı bu ülkelerde istihdamın sağlandığını ve milyonlarca çiftçinin gelir elde ettiklerini gösterir. Kuzey Kıbrıs gelişmekte olan küçük bir ada ekonomisine sahip olarak: kamu, turizm, eğitim, sanayi ve tarım sektörlerine hakimdir. Tarım, Kuzey Kıbrıs ekonomisinde finansal hizmetler için yeterli ve kolay erişilebilirliğe ihtiyacı olan anahtar bir sektördür. Bu araştırma 2011 yılında KKTC'nin tarımsal finansmanının, aktif toplam 25 bankanın beşi kanalıyla yapıldığını gösterir ve bu bankaların isimleri şunlardır: Kıbrıs Türk Kooperatif Merkez Bankası, T.C. Ziraat Bankası, Creditwest Bankası , Faisal İslam Bankası ve KKTC Kalkınma Bankası. Bankalar arasında yapılan kredi politikalarının karşılaştırmalı sonuçlarına göre: 5 bankanın 2'si: Kıbrıs Türk Kooperatif Merkez Bankası; kooperatif bir banka ve T.C. Ziraat bankası; yabancı bir şube olarak öncelikle tarımsal bankacılık ürün ve hizmetler sunarak, tarım sektörünün gelişimine katkıda bulunmaktadır. Bir devlet bankası olan KKTC Kalkınma Bankası, kuruluş amacı nedeniyle yatırım ve kalkınma projelerine daha fazla odaklanmaktadır. Faisal İslam Bankası islami bankacılık usulleri çerçevesinde ekonomik teşvik amaçlı tarımsal kredi ve yatırımlar sunar. Özel ticari bir banka olan Creditwest Bankası ise banka kredi faiz oranları açısından en yüksek maliyet ile tarım bankacılığı sağlar.

**Anahtar kelimeler:** Kuzey Kıbrıs, tarımsal finansman, bankalar, kredi politikaları, ekonomi

To My Family

## **ACKNOWLEDGMENTS**

I would like to thank Assoc. Prof. Dr. Cahit Adaođlu for his continuous support and guidance in the preparation of this study. Without his invaluable supervision, all my efforts could have been short sighted.

I owe extremely to my family and my friends Münevver Nizam and Salih Kibar who supported me throughout all my studies. I would like to dedicate this study to them as an indication of their significance in this study as well as in my life.

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## ABBREVIATIONS

TRNC .....	Turkish Republic of Northern Cyprus
GDP .....	Gross Domestic Product
ECJ .....	European Court of Justice
EU .....	European Union
LDCs .....	Less Developed Countries
MDCs .....	More Developed Countries
YAGA (Cyprus Turkish Investment Development Agency) Yatırım Geliştirme Ajansı	
GNP .....	Gross National Product
FAO .....	Food and Agriculture Organization of the United Nations
OECD .....	Organization for Economic Co-operation and Development
SDIF .....	Savings Deposit Insurance Funds
ICBA .....	International Co-operative Banking Association
IMF .....	International Money Fund
ATM .....	Automated Teller Machine
LPG .....	Liquefied Petroleum Gas

# Chapter 1

## INTRODUCTION

North Cyprus is a developing small Mediterranean island with limited natural resources and labour force under political isolations and embargoes. The economy of North Cyprus is dominated by sectors including public, tourism, education, industry and agriculture sectors. Agriculture sector is one of the main economic sectors that plays a crucial role for the economic development of the Turkish Republic of Northern Cyprus (TRNC), and provides employment and income for a considerable part of labour force.

As the agriculture is a crucial sector for economic development and employment in both developed and developing countries, heavy emphasis tends to be put on the agriculture sector by the TRNC government. As is the case in both developed and developing countries, the agriculture sector of TRNC needs contribution and sources of finance for the sectorial development. The sources of finance in TRNC consist of state banks, cooperative banks, foreign branch banks, local banks under commercial status, offshore banks, and government subsidies. Mainly, the sources of agricultural finance in TRNC are institutional credit agencies that include Cyprus Turkish Cooperative Central Bank as a cooperative bank, T.C. Ziraat Bank, Creditwest Bank and Faisal Islamic Bank as foreign and private commercial banks, and Development Bank of TRNC as a state bank, and government subsidies.

This thesis focuses on the sources of finance for the agricultural sector of TRNC channelled through the banking system. The thesis also examines how the TRNC government uses the banking system to subsidize the agriculture sector. The Cyprus Turkish Cooperative Central Bank, T.C. Ziraat Bank, Creditwest Bank, Faisal Islamic Bank and Development Bank of TRNC are the main banks that provide agricultural financing in North Cyprus. In light of these sources of finance in the agricultural sector of TRNC, this thesis aims to contribute to the literature by providing a detailed snapshot analysis of the credit opportunities targeted for the development of the agriculture sector. Specifically, the current agricultural credit policies by commercial banks and cooperatives are investigated, and the structure of financing for the agriculture sector is analyzed.

The results of the thesis show that the Cyprus Turkish Cooperative Central Bank, T.C. Ziraat Bank, Creditwest Bank, Faisal Islamic Bank and Development Bank of TRNC provide agricultural banking services and products, and each of them has unique agricultural credit policies. The analysis focuses on these special and unique credit policies adopted for the agricultural sector. A comparative analysis of the agricultural credit policies between commercial banks and cooperatives is done in the thesis in order to enhance our understanding of agriculture sector financing in North Cyprus. In addition, the government subsidies in agriculture sector of TRNC supplement the agricultural production by providing financial aids to farmers and agribusinesses.

Methodologically, this thesis rests upon a qualitative analysis based on face-to-face structured interviews and the interpretation of primary and secondary sources data from the Cyprus Turkish Cooperative Central Bank, T.C. Ziraat Bank,

Creditwest Bank, Faisal Islamic Bank and Development Bank of TRNC as well as from the official websites of the banks.

The scope of the thesis focuses mainly on the sources of finance in agricultural sector of TRNC without including a comparative analysis of agricultural finance in the European Union. The thesis takes a snapshot picture of the current banking system for the agriculture sector financing in North Cyprus and lays the foundation for a further study how the current banking system can be adopted to the European Union agricultural financing policies. Nevertheless, the analysis time range for the economic performance of agricultural sector in TRNC encompasses the period between 1977 and 2008, and for some parts, 2009 provisional figures are also available. The survey of agricultural credit opportunities in TRNC covers the time range of up to the end of June 2011. The limitation to the research is that TRNC has 25 operating banks and only five banks provide agricultural financing products and services.

The organization of this thesis is as follows. Chapter 2 provides a general and historical economic overview of agricultural sector in TRNC and the agriculture in developing countries related to it. Chapter 3 presents detailed information about the sources of finance in agricultural sector of TRNC. It additionally reviews the government subsidies in agricultural sector. Chapter 4 focuses on the credit policies adopted by the banking system for the agricultural sector and the loan opportunities targeted at those employed in the agricultural sector by commercial banks as well as cooperative banks. In addition, this chapter provides a comparative overview of agricultural financing by co-operatives and commercial banks. Finally, Chapter 5 presents conclusion and recommendations for improving agricultural financing in TRNC.

## **Chapter 2**

# **AGRICULTURE IN A SMALL MEDITERRANEAN ISLAND**

Cyprus is the third largest island in the Mediterranean. It is smaller than Sicily and Sardinia and larger than Corsica and Crete. Cyprus lies at the North-eastern corner of Mediterranean and North Cyprus<sup>1</sup> covers 3,298 square kilometre area of the whole surface area of the island which is 9,251 square kilometre [1]. The population of North Cyprus is around 285,356 in 2010 with 60.3% of the population living in the rural areas, and villagers are mainly engaged in agriculture [2].

Wheat, barley, olives, carobs, citrus, grapes, figs, potatoes and basic vegetables are grown commercially in rural areas. The agricultural land comprises 566,042 hectares, which is 56.71% of the total land area of the country [2]. The climate of North Cyprus is a Mediterranean type, which is mild and rainy winter through December to May, and hot and dry summer [3].

North Cyprus is a developing small island with limited natural resources and labour force accompanied by economic embargoes [4]. The economy of North Cyprus is dominated by sectors including public, tourism, education, industry and agriculture sectors [5]. The developing countries tend to put heavy emphasis on the

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<sup>1</sup> North Cyprus and TRNC (The Turkish Republic of Northern Cyprus) have been used interchangeably throughout the thesis.



agricultural sector for their economic developments because agriculture accounts for a considerable part of national income [6]. Agricultural sector could be one of the main sectors, which support the development of other sectors [6].

A general overview of agricultural sector in TRNC will be addressed in this chapter. The following section starts with defining the agriculture sector of TRNC and those of developing countries. After comparing the agriculture in TRNC with developing countries, the second section will discuss the economic overview of agriculture in TRNC.

## **2.1 Agriculture in North Cyprus**

North Cyprus agricultural land area comprises 56.71% where 60.53% of this area is currently in use for agricultural production and 8% is in use for irrigated farming [8]. Crop production, animal husbandry, forestry and fishing are sub-sectors of agriculture in TRNC [9]. Crop production and livestock are common in the agricultural sector of the country [10]. The crop production falls into two categories as: (1) Intensive irrigated crops (citrus, potatoes, deciduous fruits, grapes, vegetables); and (2) dry land crops (cereals, animal fodders, olives, almonds, wine grapes) [11]. The cultivated land area covers total of 936.980 dönüm with dry land of 867.135 dönüm and irrigated land of 69.845,57 dönüm in 2009 [2].

The citrus fruit, grape, artichoke and potato are valuable agricultural products of Cyprus [5]. The quantity of agricultural machinery and equipment in TRNC (2009)<sup>2</sup> composed of 4.525 tractors, 10.871 drill machines (harrow, seed cleaner, sweep machine, rotary hoe, track-disk plow, potato planter, manure spreader, drill for sowing and seedling planter), 1.906 harvesting machines (combine harvester,

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<sup>2</sup> The latest available data is up to year 2009 [11].

thresher, hay howler, bailer, hayrack, forage harvester), 6.120 agro-sprayer, and 245 cultivator [11]. Animal husbandry is the main sub-sector in rural areas [12]. Cattle, sheep, goat and the poultry are livestock products of TRNC. The share of the livestock production to gross agricultural output is around % 45,66 in 2009 [11]. The amount of livestock production in TRNC (2009) was composed of 46.534 cattle, 204.546 sheep, 53.256 goat, 7.779.195 chicken, and 13.219 bee [11].

North Cyprus has a developing economy under economic and political embargoes, and the main source of living can be based on agricultural sector but the political isolations have brought many burdens such as the incapability of production in agriculture and industry [13]. The agricultural sector contribution to Gross Domestic Product (GDP) has decreased considerably over the years [10] but it is still one of the main economic sector that has a high growth potential since it still contributes to GDP employment and exports [8]. In North Cyprus, it is noted that there have been considerable declines in GDP over the years, mainly in agriculture sector (see Table 2.1). As it can be seen in Table 2.1, the share of GDP shows a falling trend in agriculture – the GDP rate was 16.4% in 1977 where it decreased to 5.1% in 2008. However, as the table shows, industry stayed around to 10.7%, and construction increased to 7.1% in 2008 compared to 1977, which was 9.7% for industry, and 4.1% for construction respectively [10]. Although the largest falls in GDP is agricultural production from 16.4% in 1977 to 5.1% in 2008, it is still an important sector of Turkish Cypriot economy [7].

**Table 2.1 Sectorial Distribution of Gross Domestic Product (GDP) in %**

<b>SECTORS</b>	<b>1977</b>	<b>1987</b>	<b>1997</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>1. Agriculture</b>	16,4	12,7	7,1	6,9	7,4	8,9	9,4	9,1	7,0	6,3	6,3	5,1
1.1. Crop Production	12,0	8,4	3,3	3,6	3,8	5,4	5,8	5,5	3,7	3,2	3,5	2,7
1.2. Livestock Production	3,7	3,6	3,3	2,8	3,2	3,1	3,3	3,1	2,8	2,7	2,4	2,1
1.3. Forestry	0,1	0,1	..	0,1	..	..	..	..	..	..	..	..
1.4. Fishing	00,6	0,6	0,4	0,4	0,3	0,4	0,3	0,4	0,4	0,3	0,3	0,3
<b>2. Industry</b>	9,7	11,5	13,4	10,5	11,4	11,2	10,2	9,4	9,2	9,5	9,4	10,7
<b>3. Construction</b>	4,1	8,0	4,4	4,5	3,6	4,4	5,0	4,3	5,4	7,9	7,9	7,1
<b>4. Trade-Tourism</b>	21,2	23,5	16,5	16,1	15,4	15,3	16,0	15,9	17,6	15,5	13,7	14,2

Source: TRNC State Planning Organization (2010) [10]

The political isolations and economic embargoes have brought substantial burdens on the agricultural sector in terms of exports [3]. The citrus and Cyprus potato exports have fallen dramatically over the years. The shares of agricultural exports of citrus were 65.7% in 1977 and fell to 24.5% by 2008, and potato was 7.5% in 1977 and 5.5% in 2008 [10]. The embargoes and restrictions on TRNC foreign trade have resulted in uncontrollable barriers on the way of exporting of agricultural products [5]. Citrus and Cyprus potato were the major agricultural products that could be exported to other countries until the European Court of Justice (ECJ) restricted TRNC exports to European Union (EU) markets in 1994 [14]. The livestock

production such as cattle, goat and chicken is the second important part of agriculture in North Cyprus. The share of crop production in GDP was 2.7% and livestock in GDP was 2.1% in 2008 [10].

North Cyprus faces a severe water shortage problem due to the climate conditions [15]. Drought has affected negatively the agricultural production and the decreasing drop in the amount of rainfall during winter and increasing warm temperature in summer have caused deficiency in water reserves. Especially, Güzelyurt area was famous with citrus production but the increasing drought problem and the increasing salt content in the quality of underground water have dried trees over time. Solution to supply of water through pipelines from Turkey is expected to be ready in 2014.

## **2.2 Agriculture in Developing Countries**

World agricultural markets are divided into two, which is the highly efficient agriculture of developed countries, and the inefficient and low productive agriculture of developing countries [16]. Although the agricultural population is higher in the Less Developed Countries (LDCs), agricultural production per capita increases more in the More Developed Countries (MDCs) [18]. Historical experience proves that developed countries such as Western countries have achieved their economic development by emphasizing heavily on agriculture [13].

Agriculture remains crucial to developing countries. It has been observed that Gross Domestic Product (GDP) growth from agriculture benefits the incomes of poor people more than Gross Domestic Product (GDP) growth in the other sectors of the economy [19]. As Katircioglu (2006) shows that for high income, middle income and low-income countries as shown in Table 2.2, value added percent of GDP of

agriculture sector is higher in low-income countries than middle and high-income countries [13].

**Table 2.2 Agricultural indicators in small islands and high-medium-low income countries**

	1960	1970	1980	1990	1995	2000	2001	1960-2001
<i>High income</i>								
Value added (percent of GDP)	-	-	3.97	2.79	2.28	1.86	-	3.58
Raw material exports (percent of merchandise exports)	-	4.9	3.6	2.7	2.4	1.6	1.6	3.7
Raw material imports (percent of merchandise imports)	-	7.4	4.5	3.1	2.9	1.9	1.8	5.3
Value added (annual percent growth)	-	-	-1.9	1.6	-2.1	2.3	-	1.4
<i>Middle income</i>								
Value added (percent of GDP)	-	19.63	15.93	13.94	11.62	9.51	9.82	15.66
Raw material exports (percent of merchandise exports)	-	-	-	4.3	3.3	2.3	2.1	3.9
Raw material imports (percent of merchandise imports)	-	-	2.7	3.6	3.2	2.3	2.2	3.0
Value added (annual percent growth)	-	3.5	2.9	3.6	1.6	1.9	2.9	2.8
<i>Low income</i>								
Value added (percent of GDP)	48.04	43.73	33.69	29.06	26.36	24.74	23.77	35.44
Raw material exports (percent of merchandise exports)	-	23.6	11.8	-	6.1	4.0	-	13.7
Raw material imports (percent of merchandise imports)	-	3.8	2.3	-	4.3	4.2	-	3.4
Value added (annual percent growth)	-	6.2	8.1	3.4	1.8	2.1	3.7	2.5
<i>Small islands</i>								
Value added (percent of GDP)	21.95	21.52	18.78	18.85	17.63	17.37	16.44	18.65
Raw material exports (percent of merchandise exports)	-	6.0	3.7	3.4	1.9	2.2	1.6	4.6
Raw material imports (percent of merchandise imports)	2.1	1.8	1.8	1.8	1.8	1.7	1.6	1.8
Value added (annual percent growth)	-	7.4	1.3	4.3	4.8	2.4	-0.3	2.1
<i>North Cyprus</i>								
Value added (percent of GDP)	-	-	18.6	9.2	10.9	7.9	9.7	12.5
Raw material exports (percent of merchandise exports)	-	-	0.5	0.4	0.6	0.6	-	2.5
Raw material imports (percent of merchandise imports)	-	-	1.9	0.6	0.9	0.8	1.1	0.9
Value added (annual percent growth)	-	-	3.5	-9.8	2.4	-13.2	16.1	2.4
<i>South Cyprus</i>								
Value added (percent of GDP)	-	-	9.59	6.86	-	-	-	8.84
Raw material exports (percent of merchandise exports)	-	1.1	1.1	0.5	0.7	0.7	1.1	1.3
Raw material imports (percent of merchandise imports)	-	1.9	1.6	1.5	1.3	1.0	1.0	1.5
Value added (annual percent growth)	-	-	5.6	0.8	-	-	-	2.1
<i>Malta</i>								
Value added (percent of GDP)	6.91	7.06	3.82	3.48	-	-	-	5.58
Raw material exports (percent of merchandise exports)	-	8.2	0.6	0.1	0.1	0.1	0.1	2.0
Raw material imports (percent of merchandise imports)	-	3.1	2.1	1.0	0.8	0.5	0.7	1.9
Value added (annual percent growth)	-	-	-	-	-	-	-	-

Source: World Bank CD-ROM (2003) and SPO (2002)

Source: Katircioglu (2006) [13]

Guryay et al. (2005) consider agriculture in poor countries as:

The dominance of the agricultural sector in poor countries, it was evident that the capital to finance industrial expansion, at least in the early stages of development, would have to be largely raised from agriculture by

taxation, voluntary transfer (savings) or by encouraging the terms of trade to move against agriculture and in favour of industrial goods (p. 52)[1].

Katircioglu (2006) states that “historical experience has shown that developed countries, in particular Western ones, have obtained their economic development by a transition from agrarian to an industrialized and service based society” (p. 331) [13]. Generally, more developed countries’ (MDCs) main sectors of economical structure are industry, tourism and agriculture. However, developing and less developed countries’ (LDCs) main sectors consist of agriculture and tourism because industrialization needs wealth and capital in the economy [7]. For example, the developing and less developed countries (LDCs) may not have adequate capital stock to contribute to the growth of industrial sector. The agricultural sector is a locomotive sector, which supports the development of industry and tourism sector by expanding the economy.

Owens et al. (2006) conclude that

A rise in agricultural production might be considered as an important component of a strategy for increasing incomes, reducing hunger and contributing to the improvement of other measures of well being in many parts of the developing world (p. 337) [20].

### **2.3 A Historical Economic Overview of the Agricultural Sector in North Cyprus**

The economic performance of the agricultural sector in TRNC shall be discussed in the following section. As Guncavdi and Kucukcifci (2008) state that “North Cyprus deals with economic problems of being a small island with limited natural

resources and a very small domestic market which constitutes insufficient domestic demand that is required for any sectorial development” (p. 2) [4]. The economic developments in the agricultural sector might be overviewed under the economic structure of North Cyprus.

### 2.3.1 Agricultural Sector Contribution to the Gross Domestic Product

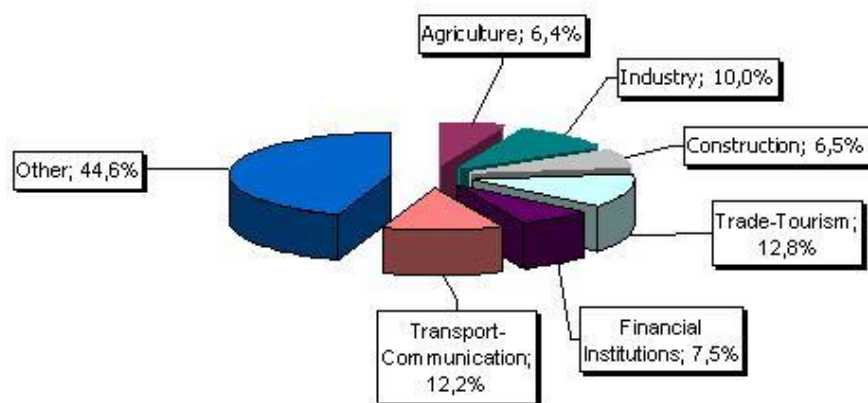
Gross domestic product (GDP) is an indicator of a country's standard of living and market value of all goods and services produced within a country in a given period. Through an analysis of the sectorial distribution of gross domestic product of North Cyprus, agriculture sector follows a considerable falling trend between 1977 and 2008 as shown in Table 2.3.

**Table 2.3 Agricultural Distribution of Gross Domestic Product**

<u>Years</u>	<u>Current Prices, % of GDP</u>
1977	16,4
1987	12,7
1997	7,1
2000	6,9
2001	7,4
2002	8,9
2003	9,4
2004	9,1
2005	7,0
2006	6,3
2007	6,3
2008	5,1

Source: State Planning Organization (2010) [10]

As YAGA (2009) states that although the agricultural sector share in the economy followed a declining trend, it still plays a vital role in supplying very important input for tourism and niche Agricultural – Industry, which is perceived to be one of the primary sectors in Northern Cyprus [8].



**Figure 2.1 Gross Domestic Product (GDP) according to sectors (2009)**

Source: YAGA (2009) [8]

According to YAGA (2009), gross domestic product (GDP) highlights that agriculture and industry sectors supply for the services sector and, therefore, as it can be seen in the figure 2.1, they have the greatest proportions in term of sectorial development [8].

Gross National Product (GNP) is the market value of all products and services produced in one year by labour and property supplied by the residents of a country. Unlike Gross Domestic Product (GDP), which defines production based on the geographical location of production, GNP allocates production based on ownership.



**Table 2.4 Share of Agricultural Sector in GNP (1977 Prices, TL)**

<b>YEARS</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2009<sup>3</sup></b>
<b>TOTAL GNP (TL)</b>	6.977	7.457	9.038	13.327	13.682,90
<b>1.Agriculture (TL)</b>	640,00	800,00	714,00	1.179,50	1.020,60
<b>2.Share of Agriculture (%)</b>	9,20	10,90	7,90	8,85	7,46
<b>A. Crop&amp; Livestock Production (%)</b>	8,50	9,20	6,85	8,11	6,87
<b>B. Forestry (%)</b>	0,10	1,10	0,47	0,23	0,13
<b>C. Fishing (%)</b>	0,60	0,60	0,56	0,50	0,46

Source: The TRNC Ministry of Agriculture and Natural Resources Statistic and Planning Division (2010) [3]

As represented above in Table 2.4, GNP of TRNC increased steadily from 6.977 T.L. in 1990 to 13.682,90 TL in 2009. The share of agriculture in GNP decreased from 9,20% in 1990 to 7,46% in 2009. Table 2.4 highlights that crop and livestock production is the biggest contributor of agricultural sector in GNP. Furthermore, the forestry and fishing contribute a very small proportion to the GNP.

### **2.3.2 The Real Growth Rates of Agricultural Sector**

<sup>3</sup> The figures for 2009 are provisional.

The economic crises after 1999 have significantly affected almost all sectors in TRNC [7]. As seen below in Table 2.5, the real growth rates of sectorial value added have considerably fallen between 1978 and 2008 except for the construction sector in 2006. For 2002, a positive real growth rate was expected for all sectors, however, the agricultural sector projected the highest growth rate among all sectors in that year [7]

**Table 2.5 Real Growth Rates of Sectorial Value Added**

Sectors	1978	1988	1998	2000	2002	2004	2006	2008
<b>1. Agriculture</b>	22,3	7,2	5,9	-13,2	18,9	8,5	-3,2	-18,2
1.1. Crop Production	32,0	7,7	18,3	-22,0	30,5	9,4	-6,3	-26,9
1.2. Livestock Production	-4,7	2,8	-5,0	-6,5	4,7	6,0	5,7	-9,2
1.3. Forestry	-14,3	13,6	5,4	7,3	23,6	99,2	-31,8	-21,7
1.4. Fishing	2,4	18,4	0,6	6,9	7,3	-5,5	-23,1	-4,3
<b>2. Industry</b>	16,8	10,4	1,2	4,0	5,0	10,6	20,0	-10,3
<b>3. Construction</b>	4,8	3,2	7,3	18,7	15,9	5,3	68,1	-8,0
<b>4. Trade-Tourism</b>	-1,4	3,9	10,1	-5,4	13,9	25,5	9,5	-2,1
<b>5. Transport-Communication</b>	14,0	13,9	4,0	6,7	3,7	8,8	-0,7	2,2
<b>6. Financial Institutions</b>	17,3	8,9	8,8	-6,8	-10,1	-0,3	8,9	9,6
<b>7. Ownership of Dwellings</b>	1,1	2,2	2,8	2,2	2,0	2,4	20,1	2,7
<b>8. Business and Personal Services</b>	6,0	6,5	3,6	-10,7	0,9	26,0	12,5	4,3
<b>9. Public Services</b>	1,7	1,4	3,5	3,1	-0,5	5,2	2,4	1,2
<b>10. Import Duties</b>	-26,3	57,7	5,1	3,4	6,7	46,8	-0,6	-0,8
<b>11. GDP</b>	5,7	7,5	5,2	..	6,2	14,2	12,7	-2,9
<b>12. Net Factor Income From Abroad</b>	12,9	-17,9	269,3	-74,4	594,1	88,5	34,1	-36,4

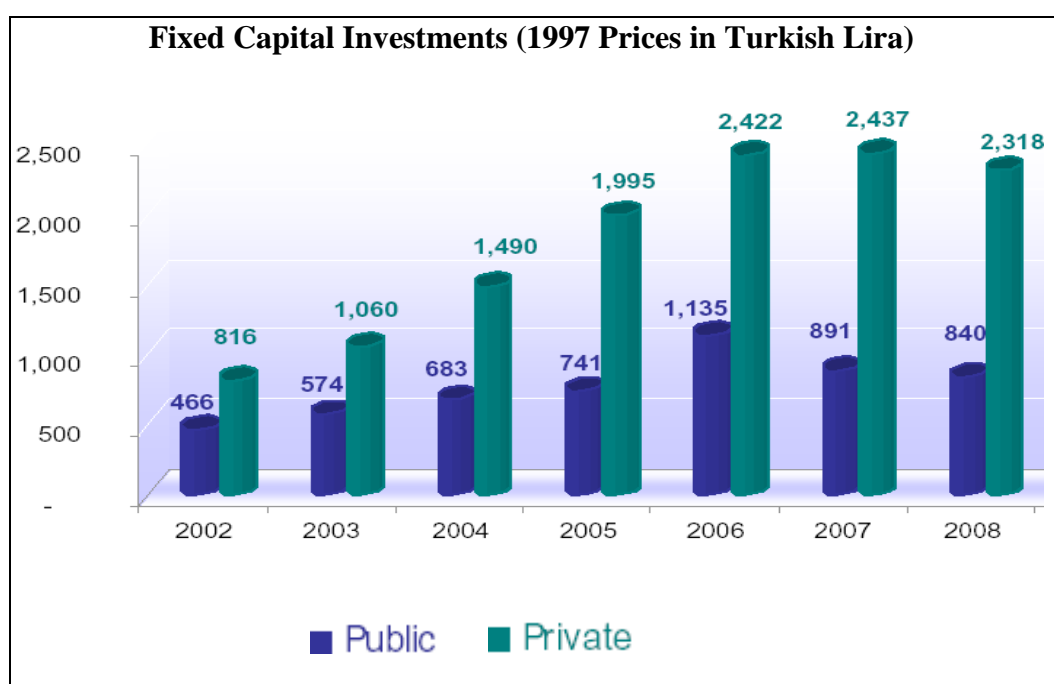
Source: State Planning Organization (2010) [10]

As it can be seen from table above, the real growth rates of agricultural sector dropped heavily in 2008 by -18.2%, accordingly, the sub-sectors of agriculture had also negative growth rates in the same year (Table 2.5). The real growth rate of crop

production was 32% in 1978 where it decreased to -26.9% in 2008. Table 2.5 indicates that the real growth rates of agricultural sector is the lowest among all sectors and the crop production would be leading contributor of that result for 2008. The real growth rate of forestry was -14.3% in 1978, then reached at peak by 99.2% in 2004 and decreased sharply to -21.7% in 2008. Livestock and fishing depicted an unbalanced fall and rise trend from 1978 to 2008.

### 2.3.3 Distribution of TRNC fixed capital investments in Agriculture

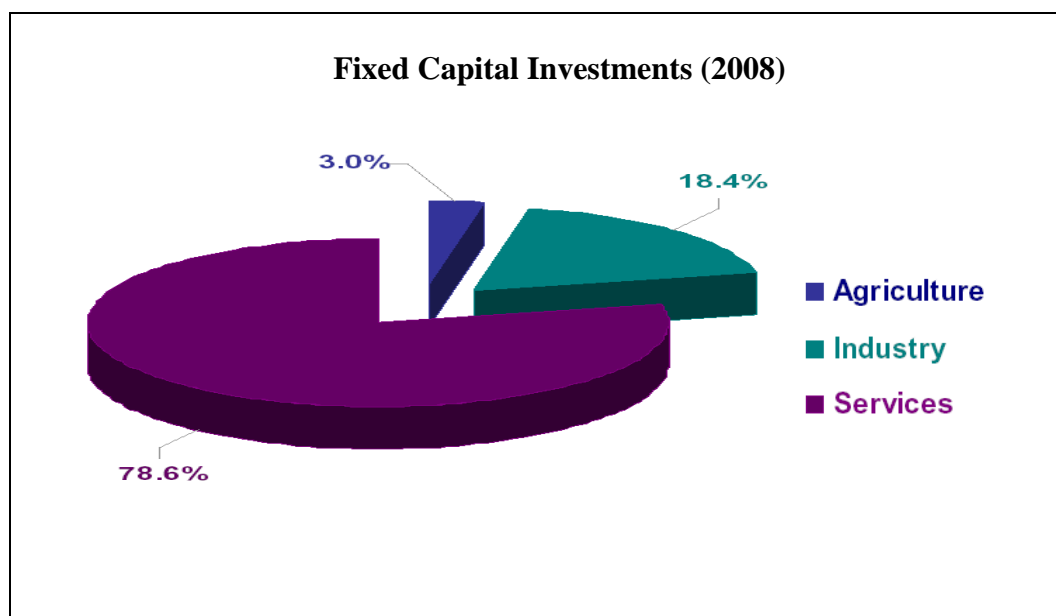
Fixed investment is an investment in fixed capital such as tangible capital goods and distinguishes with investments in labour, ongoing operating expenses, financial assets or the replacement of depreciated capital goods, which have been scrapped. As depicted in Figure 2.2, TRNC private sector accounts much higher for fixed capital investments than the public sector. Financial and technical aids of the Republic of Turkey for such investments have been continuing through the years [10].



**Figure 2.2 Fixed capital investments of public and private sector**

Source: YAGA (2010) [10]

The figure for fixed capital investments in 2008 shows that agricultural sector is the second sector after the big proportion of the services sector, which has a 18.4% of fixed capital investment ratio.



**Figure 2.3 Fixed Capital Investments of Agriculture, Industry and Services**

Source: YAGA (2010) [10]

#### 2.3.4 Composition of Exports of Agricultural Products

The economy of TRNC has the characteristics of a small island economy with limited natural resources and political isolations [21]. The overall economic performance is most likely to be affected by openness to trade in a small open island economy [4]. The volume of foreign trade which was 105.9 million dollars in 1977 rose to 1,764.4 million dollars in 2008 [10]. During this period, the total exports of the TRNC increased from 23.9 million U.S. dollars in 1977 to 83.7 million U.S. dollars in 2008 [10].

As the TRNC Ministry of Foreign Affairs Public Relations Department (2010) mentioned that “TRNC has adopted a liberal trade policy and practices no discrimination against any foreign country and has succeeded in establishing trade relations with more than 60 countries all over the world” (p. 1) [21].

**Table 2.6 TRNC Composition of Agricultural Products Exports (million U.S. \$)**

<b>YEARS</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2009</b>
<b>Total Export</b>	<b>65,50</b>	<b>67,30</b>	<b>50,40</b>	<b>68,10</b>	<b>71,10</b>
<b>Agriculture</b>	29,80	26,90	16,00	24,60	20,90
1. Citrus	24,50	22,10	13,40	20,20	14,00
2. Potatoes	2,40	1,40	0,10	1,00	2,40
3. Live Animal	0,30	0,40	0,30	0,00	0,00
4. Other	2,60	3,00	2,20	3,40	4,50
<b>Processed Agricultural Goods</b>	11,90	11,90	12,20	27,80	32,50

Source: The TRNC Ministry of Agriculture and Natural Resources Statistic and Planning Division (2010) [2]

The citrus products such as oranges, lemons and grape fruits, potatoes and live animals are the important exported agricultural products [13]. From an analysis of the TRNC composition of agricultural products exports data, it emerges that citrus products are the main source of export products which shown a dramatically fallen share of trend from 24,50 million U.S. dollars in 1990 to 14,00 million U.S. dollars in 2009 as listed in Table 2.6. However, the export of processed agricultural products increased from 11,90 million U.S. dollars in 1990 to 32,50 million U.S. dollars in 2009.

**Table 2.7 Share of Agricultural Export in Total Export (%)**

<b>YEARS</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2009</b>
<b>Agriculture</b>	45,50	40,00	31,74	36,10	29,40
<b>1. Citrus</b>	37,40	32,80	26,58	29,60	19,70
<b>2. Potatoes</b>	3,70	2,10	0,20	1,50	3,40
<b>3. Lived Animal</b>	0,40	0,60	0,58	0,00	0,00
<b>4. Other</b>	4,00	4,50	4,36	5,00	6,30
<b>Processed Agricultural Goods</b>	18,10	17,70	24,21	40,80	45,70

Source: TRNC The Ministry of Agriculture and Natural Resources Statistic and Planning Division (2010) [2]

Table 2.7 shows that the share of agricultural export in TRNC decreased from 45,50 % in 1990 to 29,40 % in 2009. As depicted in Table 2.7, the share of citrus exports declined considerably from 37.40% in 1990 to 19.70% in 2009. The share of potato exports shown a downward trend by 3.70% in 1990 to 0.20% in 2000, and with little progress increased to 3.40% in 2009. The share of lived animal exports has no contribution to agricultural export of TRNC between the years of 2005 and 2009. Processed agricultural goods followed an upward trend in the share of export by increasing from 18.10% in 1990 to 45.70% in 2009. Guncavdi and Kucukcifci (2008) defines the reasons behind the fall in the exports of agricultural products as “the economic and political embargoes seem to be the main disadvantage of the economy, restricting its ability to access the international markets, particularly to the European Union market” (p. 23) [4].

### **2.3.5 Agricultural Employment**

Employment is one of the basic indicators for the economy of any country [7]. Agriculture is the only job opportunity in the rural areas of TRNC [22]. Total employment had been increasing with a parallel of increasing population of North Cyprus within a period of 1990 and 2009. As shown below in Table 2.8, the number of working person in agricultural sector declined considerably from 19.094 person which was a 26,70 % of total employment in 1990 to 4.432 person and this was a 4,80 % of total employment in 2009. The decline in an agricultural employment of TRNC is a shrunk decline within an analyzed period from 1990 to 2009. According to Todaro Model (2008) [18], the reasons behind the decline in agricultural employment would be the migration to urban sector because of the “probability of successfully obtaining employment in the urban sector and the actual urban and rural wage differential” [22]. However, the main reason for decline in agricultural development of TRNC would be both the migration to urban sector and lowest agricultural production due to restricted ability to access the international markets.

**Table 2.8 Population of TRNC, Working Population and Number of Working Person in Agricultural Sector**

<b>YEARS</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2009</b>
<b>Total Population</b>	171.469	181.363	208.886	220.289	283.730
<b>Total Employment</b>	71.525	76.454	89.327	109.090	91.550
<b>Agricultural Employment</b>	19.094	17.383	15.236	13.077	4.432
<b>Share of Agricultural Employment ( % )</b>	26,70	22,74	17,10	12,00	4,80

Source: The TRNC Ministry of Agriculture and Natural Resources Statistic and Planning Division (2010) [2]



## **Chapter 3**

### **AGRICULTURAL FINANCING IN TRNC**

Finance is a provision of fund when and where needed, and none of business enterprises can survive without the existence of adequate funds [24]. In the Desjardins Development International Agricultural Position (2005) paper, it is stated that:

Agricultural finance should be integrated as much as possible into an overall development approach based on support for the agricultural production, the marketing of agricultural products, the improvement in management capacity, the protection of the environment and risk management (p. 2) [25].

The Food and Agriculture Organization of the United Nations (FAO, 2011) states that agricultural finance is a part of rural finance, which is dedicated to financing the agricultural related activities [26]. The organization further cites agricultural value chain finance that links processes from farm to consumer in accordance with microfinance, which provides smaller loans and financial services.

As mentioned in Chapter 2, North Cyprus has a developing economy and agriculture is a complementary sector of the economy, which requires easy and adequate accessibility to financial services. However, the macroeconomic stability has not been achieved in North Cyprus. Duval (2003) states that, the sustainable

finance and credit systems thrive under the conditions of macroeconomic stability [23]. Duval continues to note, “In the agricultural sector, macroeconomic stability strengthens confidence and predictability for producers and facilitates risk assessment for lenders” (p. 106) [23].

The agricultural finance is a source of financing for building better living conditions by promoting agricultural growth with superior access to agricultural credit. The agricultural credit is a type of productive credit with adequate payment capacity through the investment made possible by the access to agricultural finance [25]. The Organization for Economic Co-operation and Development (OECD) suggests no one-size-fits all approach is feasible for agricultural credit and finance infrastructure [27]. This approach depicts that agricultural finance and credit would be tailored to the needs of specific clients [23].

The sources of agricultural credit are broadly classified into two categories: (1) Non-institutional Credit Agencies or Informal Sources (trade and commission agents, property owners, and moneylenders) and (2) Institutional Credit Agencies or Formal Sources (government, cooperative credit societies, commercial banks, regional rural banks, and micro financing) [28]. Specifically, the sources of agricultural credits in North Cyprus are institutional credit agencies or formal sources that only cover commercial banks, cooperatives and government.

This chapter will provide detailed information about the sources of finance in agricultural sector of TRNC. The agricultural commercial banking, Cyprus Turkish cooperatives and government subsidies on agriculture are analyzed orderly.

### **3.1 The Sources of Finance in Agricultural Sector of TRNC**

For the purpose of this thesis, borrowing opportunities and government subsidies on agricultural sector of TRNC shall be discussed in the following sections. As mentioned above, the sources of finance in agricultural sector of TRNC are institutional credit agencies or formal sources.

### **3.1.1 Agricultural Commercial Banking**

The commercial banking has undergone a significant transformation by forming numerous mergers and acquisitions resulting in larger banks due to technological advances, globalization of financial markets, changing demand for bank services and geographic deregulation [29]. Bard et al. (2000) describes the agricultural lending process by commercial banks as:

A commercial bank first identifies its optimal asset mix based on the objectives of its stockholders. In doing so, it decides how much to invest in agricultural loans at the bank or holding company level. The loan officers then consider whether or not to make individual loans (p. 18) [29].

Commercial banks are the largest source of institutional credit to agriculture [28]. As shown below in Table 3.1, North Cyprus banking sector is composed of a public, private, foreign, development and investment banks. However, banks under the control of savings deposit insurance funds (SDIF) and under liquidation banks are also exist in the banking sector of TRNC [30]. Table 3.1 highlights that the largest number of North Cyprus banks is categorized as private banks. The banks operating in North Cyprus consist of 2 state banks, 2 cooperative banks, 7 foreign branch banks and 14 local banks under commercial status [30]. Furthermore, the TRNC hosts 28

offshore banks that provide certain financial advantages located outside the country of residence of the depositor [31].

North Cyprus Online (2011) states that the Central Bank of the TRNC takes responsibility for monetary, credit and exchange policy, and acts as a banker to the government [30][31]. Furthermore, Gungor (2005) notes that North Cyprus banks heavily channelled their assets in the capital markets of Turkey, especially bonds and bills of the Republic of Turkey, and the banks in North Cyprus did not extend credits in the domestic credit market [32]. He continues to state that “ Turkish Treasury in Turkey being the largest credit customer of the local banks in North Cyprus crowded out the local credit customers” (p. 6) [32].

**Table 3.1 List of North Cyprus Banks**

<b>BANKS</b>	
<b>Name of Banks</b>	
<b>PUBLIC BANK</b>	<b>PRIVATE BANKS</b>
1) Cyprus Vakıflar Bank Ltd.	1) Cyprus Turkish Cooperative Central Bank Ltd.
<b>FOREIGN BANK BRANCHES</b>	2) Turkish Bank Ltd.
1) T.C. Ziraat Bankası	3) Limassol Turkish Cooperative Bank Ltd.
2) Türkiye Halk Bankası A.Ş.	4) Asbank Ltd.
3) HSBC Bank A.Ş.	5) Cyprus Economy Bank Ltd.
4) Türkiye İş Bankası A.Ş.	6) Artam Bank Ltd.
5) Ing Bank A.Ş.	7) Creditwest Bank Ltd.
6) Türkiye Garanti Bankası A.Ş.	8) DenizBank Ltd.
7) Türk Ekonomi Bankası A.Ş.	9) Near East Bank Ltd.
<b>DEVELOPMENT AND INVESTMENT BANKS (PUBLIC)</b>	10) Şekerbank (Kıbrıs) Ltd.
1) Development Bank of the TRNC	11) Akfinans Bank Ltd.
<b>BANKS UNDER THE CONTROL OF SAVINGS DEPOSIT INSURANCE FUND (SDIF)</b>	12) Yeşilada Bank Ltd.
1) Cyprus Commercial Bank Ltd.	13) Universal Bank Ltd.
2) Yasa Bank Ltd.	14) Kıbrıs Continental Bank Ltd.
3) Tilmo Bank Ltd.	15) Viyabank Ltd.
4) Asia Bank Ltd.	16) Faisal Islamic Bank of Kıbrıs Ltd.
5) Industrial Bank of Kıbrıs Ltd.	
6) Erbank Ltd.	
7) Rumeli Bank Ltd.	
<b>BANKS UNDER LIQUIDATION</b>	
1) Cyprus Credit Bank Ltd.	
2) Cyprus Liberal Bank Ltd.	
3) Everest Bank Ltd.	
4) Kıbrıs Yurt Bank Ltd.	

**Source:** Central Bank of the TRNC (2010) [30]

Although there are 24 banks operating as private, public and foreign bank branches as shown in Table 3.1, only 4 banks named as T.C. Ziraat Bank, Creditwest Bank and Faisal Islamic Bank provides agricultural banking under commercial status and Development Bank of TRNC as a state bank. T.C. Ziraat Bank has also improved the offerings of loans and credit facilities where agriculture and agro-based projects are concerned. Especially, Cyprus Turkish Cooperative Central Bank and T.C. Ziraat Bank focus mainly on financing and banking in agriculture areas within North Cyprus.

T.C. Ziraat Bank and Creditwest Bank provide agricultural commercial banking that mainly includes agricultural credit, tractor and agricultural machinery and equipment financing credit, and grain board credit products in the agricultural banking business line. The Development Bank of the TRNC provides institutional credit to agriculture only to target sectors of fish farming, water products and greenhouse. Faisal Islamic Bank of TRNC is the first foreign investor of the country and follows its operation under the Islamic Banking principles. Faisal Islamic Bank provides agricultural banking under the investment of funds category and divides the credits into two segments named as:

- 1) Salem Sales - “for agricultural crops payment now for agricultural products to be delivered at a specified time in future, with the price being agreed now”; and
- 2) Muzara’a – “the sharing contract applied to farming and can be called as share-cropping” [33].

### **3.1.2 Cyprus Turkish Cooperatives**

International Co-operative Banking Association (ICBA, 2011) states that cooperative bank is a financial entity generally providing their members with a wide range of banking and financial services (loans, deposits, banking accounts etc.) which are often created by persons belonging to the same local or professional community with a common interest [34]. The Association further notes that co-operative banks differ from stockholders banks by their organization, goals, values and governance depending on countries supervision and control by banking authorities. However, ICBA (2011) stresses that:

Co-operative banks are involved in local development and contribute to the sustainable development of their communities, as their members and management board usually belong to the communities in which they exercise their activities. By increasing banking access in areas or markets where other banks are less present, farmers in rural areas, middle or low-income households in urban areas - co-operative banks reduce banking exclusion and foster the economic ability of millions of people (p. 1) [34]

In the International Money Fund (IMF) working paper, Hesse and Cihak (2007) cite that cooperative banks are an important and mounting part of many financial systems [35]. They further note that “cooperative banks are more stable than commercial banks due to lower volatility of cooperative banks’ returns which more than offsets their lower profitability and capitalization” (p. 1) [35]. The European Association of Co-Operative Banks (2010) also highlights that “co-operative banks are key driving force to the economic recovery” (p. 1) [36].

For the purpose of this thesis, Cyprus Turkish Cooperatives' contribution in the agricultural financing shall be discussed. The first credit cooperative of Cyprus established on 22 October 1909 by villagers because of the lower socio-economic conditions [37]. The Cooperative Central Bank was established in 1937 and when the Republic of Cyprus gained its independence and was founded by Turkish and Greek Cypriot communities in 1959, the Cyprus Cooperative Central Bank was divided into two separate parts as Turkish and Greek Cooperatives [38].

Cyprus Turkish Cooperatives are established to provide finance requirements of its member cooperative societies and to support the agricultural development under the Co-operative society law and rules. Furthermore, Turkish Cypriot Cooperatives provide savings and loan services targeted at farmers and villagers through the office of the registrar of cooperative societies [39]. Development, credit, savings and consumption are the categories of a Cyprus Turkish Cooperative [40]. Agricultural credit cooperatives have an essential role of significance in the agricultural sector of TRNC [41]. Safakli (2003) states that agricultural cooperative numbers are 168 with 33,135 members of people in North Cyprus as of 2002 [41].

Cyprus Turkish Cooperative Central Bank Ltd. takes place at the centre of the co-operative credit system of the TRNC [38]. Cyprus Turkish Cooperative Central Bank (2011) cites their objectives as:

To provide credit requirements of its member cooperative societies, a comprehensive range of retail, corporate and foreign banking services are also provided through 13 branches and ATM network around the island and its numerous correspondents abroad (p. 1) [38].

Furthermore, it stresses its aim as to provide supportive agricultural financing in order to support the efficient use of agricultural inputs and to obtain superior outputs accompanied with increased agricultural revenues. Cyprus Turkish Cooperative Central Bank (2011) notes that agricultural and animal husbandry financing takes place under three categories as:

(1) Agriculture and animal husbandry loan products (i.e., credits for purchasing agricultural chemicals, seeds and animal fodder from cooperative enterprises);

(2) Agricultural vehicle - equipment loans (i.e., loans for purchasing agricultural vehicles such as tractor, baler, combines and agricultural equipments); and

(3) Agriculture and animal husbandry project loans (i.e., project loans divided into two as; (a) fund sourced or state incentives loans to agricultural projects at certain periods and are fixed by the state; and (b) bank sourced loans for projects to be used in agriculture and animal husbandry) [38].

The bank also has three wholly owned subsidiaries, which contribute to agricultural development named as Coop Dairy, Animal Fodder–Carob Kernels and LPG Production and Marketing Ltd., and Agricultural Requisites, Supplies, Machinery and Foods Co-operative Ltd [38]. The Coop Bank Board of Directors’ statement dated 13 May 2011 cites that “harvest preparatory period credits are ready to be provided with 15,000 Turkish Lira (TL) limit to grain producers” (p. 1) [38]. As mentioned above, Cyprus Turkish Cooperative Central Bank Ltd. is a leading cooperative bank for financing in the agricultural sector of TRNC [41] .

### **3.1.3 Distribution of Bank Loans to Agricultural Sector**



The economic and financial crises have caused a decline in the number of banks located in TRNC from 37 in 1999 to 25 in 2010 [41]. However, as depicted in Table 3.2, the distribution of bank loans increased considerably for all sectors of TRNC between the years of 1977 and 2008<sup>4</sup>.

**Table 3.2 TRNC Sectorial Distribution of Bank Loans**

<b>YEARS</b>	<b>1977</b>	<b>1987</b>	<b>1997</b>	<b>2000</b>	<b>2007</b>	<b>2008</b>
<b><u>SECTORS</u></b>			<b>(1000 TL)</b>	<b>(1000 TL)</b>	<b>(1000 TL)</b>	<b>(1000 TL)</b>
<b>1.</b> <b>Public Enterprises and Institutions</b>	335,7	11.354,6	58.100,8	327.886	889.522,4	1.134.577
<b>2.</b> <b>Agriculture</b>	177,8	9.306,8	2.501,7	8.367,9	12.361,5	15.030
<b>3.</b> <b>Manufacturing</b>	42,5	2.601,1	930,9	5.478,3	7.460,3	9.369,7
<b>4.</b> <b>Transportation</b>	20,0	274,1	338,5	1.921,7	13.738,4	16.482,7
<b>5.</b> <b>Foreign and Domestic Trade</b>	262,4	27.984,1	31.620,8	90.246	553.678,3	573.456
<b>6.</b> <b>Building and Construction</b>	91,0	2.103,2	1.492,5	9.858,2	118.170,1	112.794,3
<b>7.</b> <b>Tourism</b>	23,3	589,2	1.533,5	4.438	19.450,9	16.219,7

Source: State Planning Organization (2010) [10]

<sup>4</sup>The latest available data is up to year 2008 [10].

The agricultural distributions of bank loans (see Table 3.2) are not at satisfactory level for the agriculture sector development when compared to other sectors. Table 3.2 shows the distribution of bank loans in agricultural sector of TRNC increased from 8.367,944 (1000 T.L.) in 2000 to 15.030,044 (1000 T.L.) in 2008. The amount of bank loans for agriculture is increased to 18.871,144 (1000 T.L.) in 2009 also [11].

**Table 3.3 TRNC - Share of Agricultural Bank Loans**

<b>Share of Agricultural Bank Loans</b>	
<b>Years</b>	<b>Share of Agriculture (%)</b>
1990	12,18
1992	16,83
1994	2,17
1996	2,49
1998	1,63
2000	1,59
2002	1,32
2004	0,64
2006	0,53
2008	0,44
2009 <sup>5</sup>	0,47

Source: Agricultural Structure and Production Book (2010) [11]

By using the data in Table 3.2, the share of agricultural bank loans in total bank loans is calculated and the share of agricultural bank loans has decreased significantly from 12,18% in 1990 to 0,47% in 2009 (See Table 3.3). Even though there is a nominal increase in the amount of agricultural bank loans, the share of agriculture in bank loans decreased noticeably until 2009. Table 3.3 highlights that the share of agriculture in bank loans is not sufficient to finance the agriculture sector in TRNC.

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<sup>5</sup> The latest available data is up to year 2009[11].

### **3.2 Government Subsidies in Agriculture**

Swain (2009) defines agricultural subsidies as:

The most effective mechanism for accelerating the growth of agricultural sector. It is paid to the farmers and the agribusinesses to supplement their income, manage the supply of agricultural commodities, and influence the cost and supply of such commodities in international markets. Agricultural subsidies are designed to minimize the costs of production by providing fertilizers, seeds and pesticides at lower price than the market price (p. 225) [42].

He continues to state that almost each country plays heavy emphasis on the agricultural subsidies but developing countries still needs more financial contribution from the government in order to compete globally [42].

Edwards (2009) lists the types of agricultural subsidies as:

- (1) Direct Payments - cash subsidies to agricultural production;
- (2) Marketing Loans - short-term agricultural loans to farmers;
- (3) Countercyclical Payments - payments tied to historical performance in agriculture;
- (4) Insurance – yield and revenue insurance payments to prevent farmers against unpleasant weather, pests and low market prices;
- (5) Disaster aid - payments to farmers in case of disaster;
- (6) Export Subsidies - aids in agriculture for foreign sales;

(7) Agricultural Research and Statistics - funds for agricultural research and development programs [43].

Katircioglu (2006) notes that “since 1974, agriculture is heavily subsidized by the North Cyprus government due to the bad climatic conditions, drought problems and embargoes in foreign trade” (p. 156) [13]. In TRNC, the subsidies paid to agricultural sector are provided within 4 categories as: (1) Real Sector Account; (2) Other Enterprise Expenses; (3) Direct Income Support Fund; and (4) General Agricultural Insurance Fund (See Table 3.4).

**Table 3.4 Subsidies paid to agricultural sector in 2009 (Turkish Lira)**

	%	Amount ( T.L. )
<b>1.Real Sector Account</b>		
a) TRNC Development Bank Credits for Project of Improvement of Agriculture		59.023,43
b) Cold Chain Project (Donation)		62.000,00
c) Cooperative Central Bank Improvement of Agricultural Sector		1.092.000,00
d) Support for Agricultural Mechanization Project		44.000,00
<b>TOTAL</b>	<b>1.24</b>	<b>1.257.023,43</b>
<b>2.Other Enterprise Expenses</b>		
a) Marketing of Milk		22.035.744,31
b) Subsidies given to Citrus Export		7.627.156,73
c) Subsidies given to Potato Production and Export		6.853,38
d) Barley and Wheat Price Difference		9.833.290,42
e) Subsidies given to Milk Products Export		15.120.793,41
f) Other Expenses		1.024.516,15
<b>TOTAL</b>	<b>54.99</b>	<b>55.648.354,40</b>
<b>3.Direct Income Support Fund</b>		
a) Direct Income Support Fund for Producers		35.068.308,25
b) Fuel oil Subsidies for use in Agriculture		8.145.725,00
c) Subsidy to the Producers who Engage in Varieties of Changes and Rejuvenating Trimming in Citrus Land		682.272,40
d) Transaction Costs for Fuel-oil Card Holders		1.716,01
e) Price Difference of Crops Sales		19.667,50
<b>TOTAL</b>	<b>43.40</b>	<b>43.917.689,16</b>
<b>4.General Agricultural Insurance Fund</b>		
For Animals:		
a) Abortions		362.460,00
b) Infectious Disease		5.850,00
<b>TOTAL</b>	<b>0.36</b>	<b>368.310,00</b>

**TOTAL SUBSIDIES PAID TO AGRICULTURAL SECTOR****101.191.376,99**

Source: Agricultural Structure and Production Book (2010) [11]

Table 3.4 shows that the highest amount of subsidies is given to agricultural producers from the Direct Income Support Fund. The second highest subsidy is given to marketing of milk in 2009 (Table 3.4). According to the share of subsidies paid to agricultural sector in 2009 shows that the highest as 54.99% by Other Enterprise Expenses and the lowest subsidy supplied to General Agricultural Insurance Fund by 0.36%. The share of subsidies paid to Direct Income Support Fund was 43.40% and the biggest contributor for the share was Direct Income Support Fund for Producers. As it can be seen from Table 3.4, the subsidies paid to Real Sector Account were smallest share for total by %1,24.

**Table 3.5 Subsidies Paid to Agricultural Sector for Natural Disaster Losses**

<b>Subsidies Paid for Area under Losses by 2009</b>		
	<b>Area Under Losses (acre)</b>	<b>Amount of Subsidies (TL)</b>
<b>Drought Losses</b>	367.632,75	8.407.128,82
<b>Hail Losses</b>	19	8.640,00
<b>TOTAL</b>	367.651,75	8.415.768,82

Source: Agricultural Structure and Production Book (2010) [11]

Drought is a biggest problem for agriculture in TRNC .As it can be seen from Table 3.5 above, drought losses are heavily subsidized by TRNC government. However, the government subsidies may not be responding to the needs of agricultural producers. Katircioglu (2006) states that starting from the year of 1974,

North Cyprus had received aids by the Republic of Turkey governments but the inefficient use of aids could not improve the sectors such as agriculture [13].

## **Chapter 4**

# **SURVEY OF AGRICULTURAL CREDIT OPPORTUNITIES IN TRNC**

Development in any sector of a country mainly requires accessibility to financial services. Access to sufficient and low cost credit is a key factor in promoting the development of agricultural sector in North Cyprus. The sources of finance in agricultural sector can be divided into two parts as: (1) Banks (commercial and co-operative); and (2) government subsidies. Additionally, the Republic of Turkey provides subsidies through the channels of several banks. Cyprus Turkish Cooperatives considerably contribute to the financing of the agricultural sector. In addition, T.C. Ziraat Bank in North Cyprus has developed a dynamic financial environment to support the agricultural sector with better access to agricultural financing opportunities. Overall, the agricultural sector financing is carried out through five banks named as: (1) Cyprus Turkish Cooperative Central Bank, (2) T.C. Ziraat Bank, (3) Creditwest Bank, (4) Faisal Islamic Bank, and (5) Development Bank of TRNC.

### **4.1 Data and Survey Methodology**

This chapter aims to investigate the credit policies adopted by the banking system for the agricultural sector in North Cyprus. The loan opportunities targeted at those

employed in the agricultural sector by commercial banks as well as cooperative banks will be investigated. The data and survey methodology rests upon a qualitative analysis based on face-to-face interviews and the interpretation of primary and secondary sources collection of data retrieved from the cooperative and commercial banks of North Cyprus as well as from the official websites of the banks.

The information on the agricultural banking of TRNC was compiled by face-to-face interviews with respondents in the credit departments of cooperative and commercial banks. These officials are Mehmet Oksuzogullari (Credit and Loans Manager of Cyprus Turkish Cooperative Central Bank), Saban Sonmezer (Senior Internal Executive of T.C. Ziraat Bank), Hakan Kasif (Credit Investment Manager of TRNC Development Bank), Serife Kara Dinsev (Loans Department Deputy Director of Creditwest Bank), and Oktay R. Koprululer (Nicosia Central Branch Manager of Faisal Islamic Bank). For the purpose of this thesis, the types of agricultural credits with lender requirements and payment methods are addressed with questions to the respondents (officials) in the targeted banks (See Appendix A for the list of survey questions). Microsoft Excel software program was used to graphically interpret and analyze the data. The timeline for the collection of data extends to year 2011.

This chapter begins with an investigation of agricultural credits given by Cyprus Turkish Cooperative Bank. It continues to explore the agricultural credit opportunities by commercial banks of TRNC. The chapter concludes with a comparative overview of agricultural financing by co-operatives and commercial banks.

## **4.2 Agricultural Credits given by Commercial Banks and Cooperatives**



The commercial and cooperative banks of North Cyprus function under supervision and regulation of TRNC Central Bank. Cyprus Turkish Cooperative Central Bank and T.C. Ziraat Bank were established to provide financing mainly in agriculture. Creditwest Bank and Faisal Islamic Bank perform regular commercial banking functions like retail loans and deposits. Development Bank of TRNC is a state bank, which offers finance products and services in order to contribute development of investors and economy. Additionally, they offer agricultural banking services. The agricultural credits differ in terms of credit policies from bank to bank. Every bank, which provides agricultural financing, has unique categories of agricultural credits accompanied by unique requirements from borrowers.

#### **4.2.1 The Agricultural Credit Policies by Cyprus Turkish Cooperatives**

Cyprus Turkish Cooperative Central Bank Ltd. is one of the leading cooperative banks for financing the agricultural sector of TRNC [41]. Table 4.1 lists the services of Cyprus Turkish Cooperative Central Bank that provides to cooperative members.

**Table 4.1 Cyprus Turkish Cooperative Central Bank Services (2011)**

**Cyprus Turkish Cooperative Central Bank provides the following services:**

- It acts as the central banker to the local cooperative societies by giving loans to those societies in need and accepting deposits from those with surplus funds.
- It is the lender of last resort for cooperative societies involved in banking activities.
- **To assist the agricultural development, it provides government-subsidized loans directly to the farmers. These loans are usually long-term and at low rates of interest.**
- **Through its subsidiaries, it provides a whole range of agricultural requisites including fertilizers, insecticides, machinery and equipment for farmers through the local cooperative societies, usually on credit basis until the in gathering of the crop.**
- As part of its strategy to build an integrated financial services group, the bank has established Şeker Insurance Ltd. as a subsidiary to provide insurance services.
- **Financing of farmers for land development and land levelling**
- Financing the local authorities and the state for several requisites and for renewing the country's telecommunication infrastructure.

Source: Cyprus Turkish Cooperative Central Bank (2011) [38]

As stated in Table 4.1, the main aim of Cyprus Turkish Cooperative Central Bank is to provide sources of finance for the agricultural sector of TRNC. The agricultural credits of Cyprus Turkish Cooperative Central Bank are categorized as:

- **Agriculture and Animal Husbandry Loan Products** – credits supplied to cooperative members for to be used in agriculture and animal husbandry inputs such as purchasing of agricultural chemicals, fertilizers, all types of seeds and animal fodder. The agriculture and animal husbandry loan products are given in Turkish Lira and Great Britain Pound with a one-year term credit.
- **Agricultural Vehicle and Equipment Loan** – credits provided for to be used in purchasing of all types of agricultural equipments (for animal husbandry) and vehicles such as tractor, combine, baler, and harvester. The agricultural vehicle and equipment loan is provided in Turkish Lira and Great Britain Pound with up to five years term credit.
- **Agriculture and Animal Husbandry Project Loan** – loans are divided into two as fund and bank sourced credits. The fund sourced loans (or state incentives) are credit funds supplied by government to be used in agriculture and animal husbandry projects at certain periods. The bank sourced loans provide financing to farmers and animal breeders when they need finance for their project. Cyprus Turkish Cooperative Central Bank (2011) states that both of the project loans provide financing for the eligible fields as: “building of a sheep pen and its modernization, installation of cold chain and milking systems, purchase and installation of different machines and supplies used in agriculture and animal breeding, establishing electricity infrastructure for water wells to be used for agriculture and animal husbandry purposes, purchase of fishing boat and equipment, and working capital credit for greenhouse activities” (p. 1) [38]. The agriculture and animal husbandry project loan is given in Turkish Lira with up to a five-year term credit. The loan amount is directly given to the supplier or seller enterprise upon invoice presentation.

- **Harvest Preparatory Period Loan** – credits provided to grain producers with a limit of 15,000 Turkish Lira during the harvest preparatory period. Cyprus Turkish Cooperative Central Bank (2011) mentions that for the year 2011, maturity of loans that will be closed on 31 December 2011 at the latest [38].
- **Low interest Loan to Dairy Producers** – provides bank sourced loans provided directly to the dairy producers. The dairy producer loan is provided in Turkish Lira and foreign currency with up to five years term credit.

The agricultural loans must be applied by affiliation to a cooperative or individually with required either document as: (1) loan application form, (2) livestock or farmer certificate, (3) cooperative member certificate, (4) identity card, and (5) electricity, telephone or water bill submitted to applicants home address. The credit application evaluations and approval stage take at least two weeks. The Cyprus Turkish Cooperative Central Bank issues agricultural loans (except of low interest loan to dairy producers) to cooperative society with the required conditions as: (1) The value of collateral must be twice of the loan value, and (2) two guarantors with acceptable income as deemed sufficient by the bank. The exceptional low interest loan to dairy producers requires conditions of only two guarantors with acceptable income. Furthermore, the income of dairy producer must be diverted to Cyprus Turkish Cooperative Central Bank account in order to issue a low interest loan. The Cyprus Turkish Cooperative Central Bank evaluates the cooperative member credibility rates and validity of required term conditions. The cooperative member can issue the needed loan after the verification of evaluation process.

All of the agricultural credits of Cyprus Turkish Cooperative Central Bank except for the Harvest Preparatory Period Loan and the Low Interest Loan to Dairy Producers provide financing without any limit in the amount of credit. As stated

before, the Harvest Preparatory Period loan is provided with 15,000 Turkish Lira limit to grain producers. The dairy producer loan provides an amount of credit that equals to the value of monthly milk production.

Table 4.2 shows the interest rates of Cyprus Turkish Cooperative Central Bank agricultural credits in 2011 as divided into two accounts as: (a) Current Account – requires interest payments every three months with a limit in the current account, and (b) Loan Account – requires yearly interest payments with monthly instalments. The dairy producers can finance through low interest rate loans by using current account at 15,50% borrowing rate in Turkish Lira and 8% borrowing rate in Great Britain Pound (£), and loan account at 16% in Turkish Lira and 8% in Great Britain Pound (£). The harvest preparatory period loan offers only credit with yearly interest rate of 16% in Turkish Lira.

**Table 4.2 Interest rates of Cyprus Turkish Cooperative Central Bank Agricultural Credits in 2011**

Interest Rates	Current Account		Loan Account	
	Turkish Lira	Foreign Currency	Turkish Lira	Foreign Currency
(1) Agriculture and Animal Husbandry Loan Products	-	-	15%	8,50%
(2) Agricultural Vehicle and Equipment Loan	-	-	15%	8,50%
(3) Agriculture and Animal Husbandry Project Loan	-	-	15%	8,50%
(4) Harvest Preparatory Period Loan	-	-	16%	-
(5) Low interest Loan to Dairy Producers	15,50%	8%	16%	8,50%

Source: Cyprus Turkish Cooperative Central Bank (2011) [38]

Table 4.3 shows the sample repayment of agricultural vehicle and equipment loan to cooperative bank up to five years term credit in Turkish Lira (T.L.) and Great

Britain Pound (£). As depicted in Table 4.3, the monthly payment amount of credit increases as maturity date increases.

**Table 4.3 Sample payment plan of agricultural vehicle and equipment loan**

Maturity	12 MONTHS		36 MONTHS		60 MONTHS	
	Monthly Payment Amount	Total Payment Amount	Monthly Payment Amount	Total Payment Amount	Monthly Payment Amount	Total Payment Amount
	T.L.	T.L.	T.L.	T.L.	T.L.	T.L.
<b>10.000 T.L.</b>	901	10.812	346	12.456	237	14.220
<b>20.000 T.L.</b>	1.800	21.600	689	24.804	472	28.320
<b>30.000 T.L.</b>	2.698	32.376	1.033	37.188	706	42.360
	£	£	£	£	£	£
<b>10.000 £</b>	875	10.500	318	11.448	207	12.420
<b>20.000 £</b>	1.750	21.000	633	22.788	412	24.720
<b>30.000 £</b>	2.620	31.440	948	34.128	616	36.960

Source: Cyprus Turkish Cooperative Central Bank (2011) [38]

Cyprus Turkish Cooperative Central Bank provides exceptional low interest loans to dairy producers. The payment plan for low interest loan to dairy producers is shown in Table 4.4.

**Table 4.4 Sample payment plan for low interest loan to dairy producers**

Maturity	12 MONTHS		36 MONTHS		60 MONTHS	
	Monthly Payment Amount	Total Payment Amount	Monthly Payment Amount	Total Payment Amount	Monthly Payment Amount	Total Payment Amount
	T.L.	T.L.	T.L.	T.L.	T.L.	T.L.
<b>10.000 T.L.</b>	905	10.860	350	12.600	242	14.520
<b>20.000 T.L.</b>	1.810	21.720	698	25.128	481	28.860
<b>30.000 T.L.</b>	2.710	32.520	1.045	37.620	720	43.200
	£	£	£	£	£	£
<b>10.000 £</b>	875	10.500	318	11.448	207	12.420
<b>20.000 £</b>	1.750	21.000	633	22.788	412	24.720
<b>30.000 £</b>	2.620	31.440	948	34.128	616	36.960

Source: Cyprus Turkish Cooperative Central Bank (2011) [38]

Oksuzogullari as a Credit and Loans Manager of Cyprus Turkish Cooperative Central Bank (2011) states that every loan has a default risk, and legal procedures are followed in case of a loan default. He continues to state that Cyprus Turkish

Cooperative Central Bank agricultural loans are secured loans closely monitored by the dedicated monitoring of bank personnel. Alp (2011) notes that “With all its personnel, with the institutional awareness, and with the objective of increasing the quality of its services day by day as Cyprus Turkish Cooperative Central Bank, we will carry on our efforts in order to sustain the confidence entrusted in our bank and to carry our bank forward by our activities” (p. 1) [38].

#### **4.2.2 The Agricultural Credit Policies by Commercial Banks**

As stated before, T.C. Ziraat Bank, Creditwest Bank, and Faisal Islamic Bank are commercial banks, which provide agricultural banking in TRNC. Development Bank of TRNC also provides agricultural loans in order to contribute to sectorial development of country. The agricultural credit policies by commercial banks will be investigated in an order that written above.

##### **4.2.2.1 T.C. Ziraat Bank**

T.C. Ziraat Bank is a crucial commercial bank for financing the agricultural sector of TRNC. The bank was established in the Republic of Turkey in 1863 and started their services by supplying agricultural loans limited by 20 Liras per person with three to twelve months maturity [44]. T.C. Ziraat Bank opened branches in North Cyprus in 1975. T.C. Ziraat Bank (2011) states their mission as:

To support non-financial sector giving priority to agricultural sector, to deliver a broad range of suitably-priced products to retail customers with the highest speed through our extensive branch network, and to contribute to the economy and the development of the banking industry by supplying services in

keeping with our sense of social responsibility and commitment to the rules of banking ethics (p. 1) [44].

T.C. Ziraat Bank grants loans to agricultural sector and acts as an intermediary for financing the agricultural operations of TRNC. The agricultural loans of T.C. Ziraat Bank are categorized as follows:

- **Investment Loans** – credits provided for to be used in financing of agricultural enterprises that aims to enlarge, reinvest and modernize the current enterprise. The bank issues loans for financing of fixed capital investments of agricultural enterprise such as purchasing of animal, building of sheep pen, installation of milking systems, purchasing of agricultural vehicle and equipment, setting up of irrigation systems and greenhouse activities and all kinds of agricultural investment projects. The investment loans are provided in Turkish Lira, Euro and United States Dollar with five to six years variable term credit.
- **Operating Loans** – credits provided to agro-industrial enterprises for to be used in the short term financing of agricultural inputs and working capital needs in order to process and output agricultural products. The operating loans are provided in Turkish Lira, Euro and United States Dollar with maximum five years term credit.
- **Subsidized Loans** – credit funds subsidized by government for to be used in the financing of agriculture and animal husbandry inputs such as purchasing of seed, fertilizer, animal fodder and livestock, and installation of irrigation system. Generally, the subsidized loans cost of lower interest rate is split into two as 50% by government and 50% by bank. The bank issues subsidized loan for installation of irrigation system with up to a 500.000 Turkish Lira account limit. The



subsidized loans are provided in Turkish Lira and flexible term credit, which are determined by government policy.

T.C. Ziraat Bank agricultural loans can be applied by individually or legal persons from agro-industrial enterprises. The individually application requires documents such as agricultural loan application form, livestock or farmer certificate, documents verifying the operation of agricultural business (land registration, lease, vehicle license certificate), and documents related to the loan guarantees. The agro-industrial enterprises apply to agricultural loans by legal persons with all documents supporting the agricultural enterprise and loan application forms. Afterwards, the evaluation and verification of application would be concluded within 15 days. The agricultural loans required conditions vary depending on amount of credit provided by bank. Assets are taken as collateral for loan. T.C. Ziraat Bank (2011) states that “against the possible risks the bank insures livestock, fixed assets, movable and immovable assets of agricultural businesses” (p. 1) [44]. The bank follows legal procedures in case of a loan default.

T.C. Ziraat Bank issues agricultural loans directly to the seller or supplier enterprise upon invoice presentation. All types of T.C. Ziraat Bank agricultural loans provided with two accounts as: (1) Cash Account and (2) Non-Cash Account. The Cash and Non-Cash account also divided into two sub-parts as: (a) Overdraft Account – requires yearly interest payments, which the rate of interest determined by bank related with amount and maturity term of issued credit. (b) Instalment Account – after a certain period of time, the bank requires monthly or yearly instalment payments with flexible interest rates depending on amount and maturity term of issued credit. As mentioned above, the investment and operating loans have an elastic interest rates determined by bank related with amount and maturity term of

the credit. Sonmezer (2011) states that the interest payments for investment and operating loans are determined between borrowers, which is T.C. Ziraat Bank and lender at the time of transaction for credit terms [44]. However, the subsidized loan requires payment of monthly instalments starts after 6 months from issued date and with 1% monthly interest rate for animal husbandry and 0% interest rate for installation of irrigation system.

Sonmezer (2011) states that T.C. Ziraat bank currently issued widespread amounts of subsidized agricultural loans to agricultural sector of TRNC [44]. He also notes that the subsidized loans credit policies fluctuates and improves with the contribution of TRNC government. Furthermore, he states that T.C. Ziraat Bank will be the leading commercial bank for financing the agricultural sector of North Cyprus and Republic of Turkey in the future.

#### **4.2.2.2 Development Bank of TRNC**

Development Bank of TRNC, which is a state bank, aims to contribute the economic growth of country with sustainable finance and credit systems in TRNC. The Bank (2011) states their mission as:

To contribute to country development by providing low interest, long-term financing to investment projects, guiding investments towards country needs, promoting employment and helping scarce resources to be transformed into feasible and environment-friendly investments, and to operate with democratic and active contribution of employees towards meeting investors' needs and expectations (p. 1) [45].

As shown in Table 4.5, Development Bank of North Cyprus provides financial services to 17 target sectors.

**Table 4.5 List of Development Bank Target Sectors**

<b><u>Target Sectors:</u></b>	
<b>Social Activity Centre</b>	<b>Tourism</b>
<b>Fish Farm</b>	<b>Education</b>
<b>Greenhouse</b>	<b>Health</b>
<b>Auto Technicians and Electricians</b>	<b>Maritime</b>
<b>Special Interest Tourism</b>	<b>Travel Agencies</b>
<b>Chill Store</b>	<b>Special Projects</b>
<b>Water and Sea Products and Fishing</b>	<b>Media and Press</b>
<b>Manufacturing</b>	<b>Computer Software</b>
<b>Renovation of the existing restaurants</b>	

Source: TRNC Development Bank (2011) [45]

Table 4.5 highlights that Development Bank provides financing for the agricultural subsectors, which are fishing and crop production. Furthermore, the agricultural credits of Development Bank categorized as:

- **Fisheries Loans** – credits provided for to be used in purchasing and modernizing of all types of fishing equipments with a limit up to a 80.000 United States Dollar or 120.000 Turkish Lira and four years of maturity term.
- **Crop Production Loans** – credits supplied to farmers for to be used in growing of seedlings and greenhouse process with a limit up to a 100.000 United States Dollar and four years of maturity term.

The agricultural loans would be applied with documents as: (1) Loan application form, and (2) farmer or fisheries certificates. The evaluation of application documents requires fifteen days. After the approval process, the bank requires loan conditions as: (1) Guarantors with income 10% higher than minimum wage, and (2) The value of collateral must be equal to the loan value.

Development Bank issues fisheries and crop production loans with either credit categories: (1) Investment Credits (for agricultural investment projects with one year period without repayment of loan and after instalment payment in every 6 month until maturity date), and (2) Operational Credits (for agricultural input projects with 6 months period without repayment of loan and the loan amount would be paid in equal instalments during 6 months). Table 4.6 shows the interest rates for investment and operational credits in 2011. As depicted in Table 4.6, the investment credit offers agricultural loans with lower interest rates than operational credit.

**Table 4.6 The interest rates of investment and operational credits in 2011**

	<b>Euro / U.S. Dollar</b>	<b>Pound</b>	<b>Turkish Lira</b>
<b>Investment Credits</b>	4%	5%	10%
<b>Operational Credits</b>	5%	6%	12%

Source: TRNC Development Bank (2011) [45]

The unpaid loan instalments within 15 days require 0,4% added interest rate in default loan repayment. Legal procedures would be followed after one month of unpaid loan instalment.

#### **4.2.2.3 Creditwest Bank**

Creditwest Bank is a commercial bank established in 1994 with the name of “Altınbaş Bank” and provides a variety of retail and business banking products and services all around North Cyprus [46]. The bank has 13 branches and 2 subsidiaries named as Creditwest Insurance and Creditwest Finance. The Creditwest Bank (2011)

states its bank mission as “to become the best bank in the Eastern Mediterranean and Black Sea regions” with its banking strategy as noted below:

Improve our market share especially in retail banking through a widespread branch network, offering personalized services from expert employees; transfer our experience abroad and spread our activities to other countries with growth potential to include the Middle East, the Balkan countries, and the Black Sea Region (p. 1) [46].

The Creditwest banking strategy highlights that the main aim and duty of the bank is to be a leader in the retail banking services of North Cyprus and abroad. For the purpose of this thesis, agricultural banking services of Creditwest bank in North Cyprus are analyzed. Creditwest Bank offers agricultural loans in a single category as:

- **Agricultural Credit** – credit provided to people engaged in agriculture during the harvest preparatory period with maximum 20.000 Turkish Lira limit up to a 6 month maturity term in Turkish Lira, and purchasing of agricultural vehicle with up to a 5 year maturity term in foreign currency and Turkish Lira.

The application of agricultural credit by Creditwest Bank requires loan application form with personal identity card and farmer certificate. Afterwards, the evaluation and verification of application would be concluded within 5 days. Real Estate with %50 more than loan value and two guarantors with adequate income would be taken as collateral for agricultural credit. Creditwest Bank issues agricultural credit as a commercial loan account, which requires instalment payments at agreed dates. The loan for harvest preparatory period involves without repayment until the date agreed

for selling harvested stock. Table 4.7 depicts the interest rates and maturity terms of Creditwest Bank agricultural credits.

**Table 4.7 Interest rates of Creditwest Bank Agricultural Credit in 2011**

Interest Rates	Commercial Loan Account	
	Turkish Lira	Euro
(1) Harvest Loan - 3 Month Maturity	23%	---
(2) Harvest Loan - 6 Month Maturity	25%	---
(3) Agricultural Vehicle Loan – 60 Month Maturity	23,88%	12%

Source: Creditwest Bank (2011) [46]

As the maturity term of harvest loan decreases, the interest rate also decreases (See Table 4.7). Agricultural vehicle loan offers long term financing with lower interest rates in Turkish Lira and Euro. In case of a loan default, the bank follows a legal procedure, which is same as for all commercial banks in TRNC.

#### **4.2.2.4 Faisal Islamic Bank**

Faisal Islamic Bank (TRNC) was established in 1982 to promote Turkish Cypriot economy and to foster the development of the country increasing the welfare of the individuals [47]. It (2011) states their distinctive characteristic from all other banks as services provided under “Islamic Banking Principles”. Jenkins and Ghith (2010) state that “Islamic Banking is a microeconomic tool for the Islamic economy and the main principle of the Islamic banking system” [33]. They further note the duties of Faisal Islamic Bank as:

Islamic banking and finance institutions would neither pay interest nor earn interest. Bank – depositor relation would be

based on the depositor sharing the profit accruing as a result of the bank profitable use of the deposits pooled together. On the asset side a number of ways were tried to earn profits including partnership and profit sharing (p. 23) [33].

Faisal Islamic Bank differs from other commercial banks of North Cyprus with the wholly independent Islamic principles and services that offer to all citizens without discrimination. The bank issues 4 types of investment of funds for TRNC as: (1) Modaraba (limited partnership), (2) Musharaka (free partnership), and (3) Morabaha Sales (cost plus), and (4) Salem Sales (future contract). Salem sales are a method of investment for financing the agricultural sector of TRNC by Faisal Islamic Bank. The Salem sale (future contract) is a loan provided by bank for agricultural production in order to purchase agricultural inputs such as all types of seed, fertilizer and chemical by Turkish Lira or foreign currency (Euro, United State Dollar, Great Britain Pound). Faisal Islamic bank issues agricultural loan without maturity term but payment would be delivered at a specific time in future with the price being agreed now.

The agricultural loans must be applied by individually with required documents as: (1) Loan application form, (2) farmer certificate, (3) identity card, (4) income statements of applicant and guarantor, and (5) electricity, telephone or water bill submitted to applicant home address. The credit application evaluations and approval stage take 5 days. The Faisal Islamic Bank issues agricultural loan named as “Salem Sale” with the required conditions as: (1) The value of collateral must be twice of the loan value, and (2) two guarantors with adequate income statements.

The Salem sale is an agricultural loan issued directly to the supplier or seller enterprise of agricultural product upon invoice presentation with a Faisal Islamic

Bank cheque. The bank requires repayment in agreed instalments after 6 months or a year from agricultural production starts to generate outputs. Faisal Islamic Bank also follows legal procedures in case of a loan default within 3 months.

### **4.3 Comparative Analysis of Agricultural Financing of TRNC by Commercial Banks and Cooperatives**

As the analysis above focuses on credit policies adopted for the agricultural sector of TRNC, a comparison between agricultural credit policies by commercial banks and cooperatives will enhance our understanding for the purpose of this thesis.

The Cyprus Turkish Cooperative Central Bank offers a wide range of agricultural loans when compared with commercial banks such as T.C. Ziraat Bank, Creditwest Bank, and Faisal Islamic Bank and the Development Bank of TRNC, which is a state owned bank. T.C. Ziraat Bank supports the agricultural sector of TRNC by providing agricultural loans that are tailored towards the needs of customers. The Development Bank of TRNC provides agricultural finance only for fishing and crop production. Creditwest Bank offers agricultural *short-term* financing for harvest period and *long-term* financing for agricultural vehicle loan. Faisal Islamic Bank follows Islamic Banking Principles, and provides financing only for agricultural production.

The application process for agricultural loans requires similar documents for all commercial banks except for Cyprus Turkish Cooperative Central Bank, which also requires cooperative member certificate.

Table 4.8 lists the interest rates and maturity for similar agricultural bank loans in 2011. The comparison for agricultural loans provided by banks will take place on similar credits such as:



- **Agriculture and Animal Husbandry Loan** - Cyprus Turkish Cooperative Central Bank, T.C. Ziraat Bank and Faisal Islamic Bank are issuers of the agriculture and animal husbandry loan. Cyprus Turkish Cooperative Central Bank offers the lowest maturity term as 1 year in Turkish Lira with a yearly 15% interest rate and in Great Britain Pound with a yearly 8.5% interest rate. T.C. Ziraat Bank provides a maximum 5 years maturity credit in Turkish Lira, Euro and United States Dollar, and provides the subsidized animal husbandry loan up to 500.000 Turkish Lira account limit accompanied with the lowest interest rate as %1. Faisal Islamic Bank offers loan in Turkish Lira, Euro, United State Dollar, and Great Britain Pound without any specific maturity but the payment would be delivered at a specific time in future with the price being agreed now.
- **Agricultural Vehicle and Equipment Loan** - Cyprus Turkish Cooperative Central Bank and Creditwest Bank are the issuers of this type of loan. Cyprus Turkish Cooperative Central Bank offers loan with a 5 years maturity term in Turkish Lira with the lowest 15% yearly interest rate and in Great Britain Pound with 8.5% yearly interest rate. Creditwest Bank also issues loan with a 5 years maturity term but charges the highest yearly interest rate as 23.88% for Turkish Lira loan and 12% for Euro loan.
- **Agriculture and Animal Husbandry Project Loan** - Cyprus Turkish Cooperative Central Bank and T.C. Ziraat Bank are the issuers of the agriculture and animal husbandry project loan. Cyprus Turkish Cooperative Central Bank issues the loan with a 5 years maturity term in Turkish Lira with a 15% yearly interest rate and in Great Britain Pound

with an 8.5% yearly interest rate. T.C. Ziraat Bank issues the loan with 5 to 6 years of maturity term in Turkish Lira, Euro, United State Dollar, and Great Britain Pound but the amount of interest rate is flexible related with amount and maturity term of the issued credit.

- **Harvest Preparatory Period Loan** - Cyprus Turkish Cooperative Central Bank and Creditwest Bank are the issuers of this type of loan. Cyprus Turkish Cooperative Central Bank offers the loan with the lowest interest rate as 16% for Turkish Lira with maturity stated for 2011 as the date of latest 31 December 2011. Creditwest Bank issues loan with the highest interest rate as 23% for Turkish Lira with 3 months of maturity term and 25% for Turkish Lira with 6 months of maturity term.

**Table 4.8 List of credit terms for similar agricultural bank loans in TRNC (2011)**

	<b>Cyprus Turkish Cooperative Central Bank</b>	<b>T.C. Ziraat Bank</b>	<b>Creditwest Bank</b>	<b>Faisal Islamic Bank</b>
	<b>Interest Rate Maturity</b>	<b>Interest Rate Maturity</b>	<b>Interest Rate Maturity</b>	<b>Interest Rate Maturity</b>
<b>(1) Agriculture and Animal Husbandry Loan</b>	15% (TL) 8,5% (GBP) 1 YEAR	1%(TL) 5 YEAR		-- AGREED DATE
<b>(2) Agricultural Vehicle and Equipment Loan</b>	15% (TL) 8,5%(GBP) 5 YEAR	Variable 5-6 YEAR	23,8%(TL) 12%(EURO) 5 YEAR	
<b>(3) Agriculture and Animal Husbandry Project Loan</b>	15%(TL) 8,5%(GBP) 5 YEAR	Variable 5-6 YEAR		
<b>(4) Harvest Preparatory Period Loan</b>	16%(TL) 6 MONTH		23%(TL) 3 MONTH	
			25% (TL) 6 MONTH	

The comparative analysis of agricultural financing of TRNC proves that Cyprus Turkish Cooperative Central Bank is a best agriculture bank with wide variety of agricultural loans. Cyprus Turkish Cooperative Central Bank offers optimal agricultural banking products and services by providing medium to long term with lower interest rate policy loans. T.C. Ziraat Bank has proven itself as the second optimal choice for agricultural financing due to the availability of agricultural subsidized loans. Creditwest Bank would be the least attractive bank for agricultural financing according to the loans which has the highest cost in terms of interest rates. In addition, Faisal Islamic Bank provides agricultural loans with the wholly independent Islamic principles and services.

## **Chapter 5**

### **CONCLUSIONS AND RECOMMENDATIONS**

This thesis analyzes and gives a snapshot of credit opportunities for the agricultural sector of TRNC targeted for the development of this sector. The historical economic overview of the agricultural sector in TRNC shows the trend over the years and the importance of this sector for TRNC. The agricultural credit policies by commercial banks and cooperatives are investigated, and the system of financing for the agriculture sector is analyzed. The research data rests upon a qualitative analysis based on structured face-to-face interviews and interpretation of primary and secondary sources data from the cooperative and commercial banks of North Cyprus as well as from the official websites of the banks.

As the developing countries tend to put heavy emphasis on agriculture sector in order to promote the economy, North Cyprus also has to support the development of this sector. Although the political isolations, economic embargoes and drought problems, the source of living in TRNC can be based on agricultural sector by increasing the efficiency and comparative advantages of production in agriculture. The economic overview of the agricultural sector has shown that the agricultural distribution of gross domestic product of North Cyprus follows a considerable decreasing trend during the period of 1977-2008 and the share of agriculture in gross national product also decreased during the period of 1990-2009. The economic crisis

after 1999 caused a decline in the real growth rates of among all sectors including the agriculture sector but the fixed capital investments in 2008 shows that agricultural sector is the second highest sector in investments following the services sector. Furthermore, the economic and political embargoes affected negatively the ability to access the international markets and consequently, the agricultural products exports have fallen during the period of 1990-2009. The agricultural employment rates of TRNC also declined during the period of 1990-2009.

The decline in the economic data as stated above for the agricultural sector of TRNC would be improved by supporting the sector with sustainable agricultural finance and credit systems because low-cost financing opportunities would contribute to the sectorial and economic development of the country. The sources of finance in the agricultural sector of TRNC are institutional credit agencies or formal sources, which are banks. The banks operating in North Cyprus consist of 2 state banks, 2 cooperative banks, 7 foreign branch banks, 14 local banks under commercial status and 28 offshore banks. Our research shows that the agricultural credit opportunities in TRNC are channelled through 5 banks named as Cyprus Turkish Cooperative Central Bank, T.C. Ziraat Bank, Creditwest Bank, Faisal Islamic Bank, and Development Bank of TRNC out of total 25 operating banks in 2011. The Cyprus Turkish Cooperative Central Bank has a crucial role of significance in the agricultural sector of TRNC. The economic and financial crises in 1999 have caused a decrease in the number of banks located in TRNC. However, the distribution of bank loans increased considerably for all sectors of TRNC between the years of 1977 and 2008. However, the increase in the agricultural distributions of bank loans is not at a satisfactory level for the agriculture sector development when compared to other sectors during the period of 1977-2008. The North Cyprus

government heavily subsidizes the agriculture sector due to the bad climatic conditions, drought problems and embargoes in foreign trade. The highest amount of subsidies is given to agricultural producers from the Direct Income Support Fund and marketing of milk from Other Enterprise Expense Fund in 2009.

Research shows that Cyprus Turkish Cooperative Central Bank as a cooperative bank and T.C. Ziraat Bank as a foreign branch bank mainly contributes to the agriculture sector development by providing primarily agricultural banking products and services. Development Bank of TRNC as a state bank focuses more on investment and development projects due to the establishment purpose of the bank, and only fishing and crop production loans are offered for investment and development basis. Within the Islamic Banking framework, Faisal Islamic Bank offers investment and agricultural loans aimed at promoting the economy by supporting the agriculture sector development. Creditwest Bank as a pure private commercial bank provides agricultural banking with retail banking services and products and naturally, the loans have the highest cost in terms of interest rates.

Thesis comparative analysis of credit policies among the banks shows that the Cyprus Turkish Cooperative Central Bank is still the leading bank for agricultural financing but T.C. Ziraat Bank has proven itself as the second best agriculture bank and is determined to be the leader in the future. Research shows that TRNC and Republic of Turkey work in cooperation with the Cyprus Turkish Cooperative Central Bank and T.C. Ziraat Bank in order to improve the availability of agricultural *subsidized* loans. All kinds of agricultural investment projects are financed through the five banks stated above according to the unique credit categories meeting the expectations and needs of the borrower.

The development of the agricultural sector in North Cyprus can be promoted by sufficient and low cost credit opportunities provided by banks and government. Out of 25 banks established in TRNC, the contribution of only 5 banks to financing of agricultural sector is not adequate for the sectorial development and more improvement in agricultural banking is required. The banks should provide agricultural credit opportunities that are tailored towards to fit the expectations of agricultural investors. Furthermore, the banks need to improve the agricultural banking products and services by providing timely and easily accessed medium to long term with lower interest policy and supervised credit facilities. The agricultural banks have to provide a credit system that is responsive to the needs of every potential agricultural credit user. The banks should change their agricultural credit system policies by requiring less collateral for loans also. The availability of agricultural subsidized loans by banks needs to be increased in order to provide credit system with lower interest policy to agricultural investors. Taking into account the current political, economic and the banking system environment, subsidized and closely monitored agricultural loans financed partly by TRNC and Republic of Turkey governments would be the most effective mechanism for improving the agricultural financing.





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## **APPENDIX**



## **APPENDIX A**

### **Survey Questions**

- Q1) What is the mission of the bank?
- Q2) What are the services provided by the bank?
- Q3) What are the agricultural banking services and products provided to customers?
- Q4) Can you categorize, name and define agricultural loans offered to customers?
- Q5) What are the amounts of interest rates and maturity terms on agricultural credits?
- Q6) Who and how can be applied for agricultural loans?
- Q7) How long does the evaluation of application takes?
- Q8) What are the required conditions for to borrow agricultural credit?
- Q9) How is the lending process of agricultural loan by bank?
- Q9) What is the repayment plan of agricultural credits by borrower?
- Q10) What is the procedure followed in case of loan default?