

Members' Perception and the Role of Agricultural Credit Cooperatives in Agricultural Finance in Turkey

Harun TANRIVERMIS*, Ahmet BAYANER**

Jel classification: Q130, Q140

Introduction

Agricultural Credit Cooperatives (ACCs) has served as the intermediary between the small farms and the credit institutions serving some 1.4 million farmers. An overview of Turkish agricultural credit system, national economy and agricultural structure are provided to understand the role of Agricultural Credit Cooperatives in agricultural finance. In addition, the paper focused mainly on ACC activities from an institutional point of view, using a survey carried out with managers and member farmers.

1. National Economy and Agriculture

Turkish economy is characterized by frequent business cycles. Following the severe crisis in 2001, the Turkish economy began a recovery process in the first quarter of 2002. Since then reducing inflation, improving the public financial balances, and eliminating the structural problems have continued to be the policy priorities. In 2004, the Turkish economy enjoyed an exceptionally high growth performance rate of 9.9 %, after 5.8 % in 2003 and 7.9 % in 2002. The expected growth rate in 2005 is 5.5 %. Annual average growth rate was 3.9 % over the 1980-2004 periods. This indicates a rather stagnant economy, compared to other lower-income countries.

After declining by 1% in 2003, total employment rose in 2004 and 2005 and is expected to increase in 2006. Current unemployment rate is 10 %. The current account deficit rose from 1.5 billion US dollars in 2002 to 15 billion US dollars in 2005.

Turkey is endowed with rich natural and human resources; however this potential was not realized in last three

Abstract

Agricultural credit system has a dual structure; formal and informal. Formal credit system includes banks and Agricultural Credit Cooperatives (ACCs). ACCs has a role in financing small scale farms in Turkiye. However, ACCs effort is not sufficient enough to modernize agriculture since ACCs has some institutional problems such as social capital, moral hazard, and asymmetric information. The paper includes members' perception of the ACCs.

Résumé

Le système de crédit agricole présente une double structure: formelle et informelle. Le système de crédit formel inclut les banques et les Coopératives de Crédit Agricole (CCA). Les CCA ont un rôle dans le financement des petites exploitations en Turquie. Cependant, les efforts des CCA ne sont pas suffisants pour moderniser l'agriculture du fait que ces Coopératives affichent des problèmes institutionnels tels que le capital social, le risque moral et les informations asymétriques. Cet article présente aussi la perception des CCA de la part de ses membres.

decades. Turkey experienced agricultural-led growth at a fast rate at the beginning of the Republic and at a slower rate for last a couple of decades due to high inefficiencies in the agricultural and rural policies.

Within the Turkish economy as a whole, the agricultural sector is also stagnant. While Turkish GDP has grown at 3.9 percent per year over the 1980-2004 periods, the

growth rate of agriculture has been only 1.2 percent per year. In addition, year to year changes in real agricultural sector fluctuate widely. Growth rate of agricultural sector has largely matched with that of GDP, with some exception. Growth in agricultural sector still depends heavily on wheather conditions.

The share of agricultural sector in GDP was 11 % in 2005. The sector still accounts for a very large share of agricultural employment, though this has fallen considerably due to an increasing urbanisation. The share of agriculture in civilian employment was 29 % in 2005. The number of employment in agriculture was more than 9 million in 1980s. That decreased to around 6.5 million in 2005, of which 3.5 million are female, and 2.7 million females work as unpaid family labor (SIS, 2004). This labor force is characterized by high labor participation rate, high unemployment, and high illiteracy.

The share of agriculture in total export and import is declining. Agricultural export accounted for only 11.2 % of the total export, and import accounted for 5.5 % the total import in 2005. Turkey maintains a trade surplus in agricultural and food products (DTM, 2005).

Total agricultural area of 39 million hectares consists of arable land (24 million hectares), the area used for permanent crops (2.5 million hectares) and permanent meadows and pastures (12.7 million hectares). Fallow land makes up more than 20 % of total arable land. Turkey also has slightly more than 20 million hectares of forested land. The to-

*Assoc. Prof. Ankara University Faculty of Agriculture, Dept. of Agricultural Economics, Ankara.

**Assoc. Prof., Ministry of Agriculture and Rural Affairs of Turkey, Ankara.

tal irrigated area is about 4.5 million hectares, about 19 % of total arable land.

Family owned farm is the basic unit of agricultural production, and family members provide most of the farm labor. The information on the number and size of holdings are inferred from agricultural censuses (Togan et al, 2005). The picture that emerges from these censuses is the existence of large number of small farms. Agricultural census in 2001 recorded 3 million agricultural holdings. The pattern of land ownership is highly skewed and varies regionally due to differences in incomes and the crops grown. A large number of farmers own and cultivate a small area of the land. About 65 percent of the farms are less than 5 hectares land and 83 percent are less than 10 hectares in size. About 6 percent of the holdings have a size larger than 20 hectares. In the last 15 years, the total number of agricultural holdings decreased by about 20 percent. This is in line with the fall in the agricultural employment. National average size of farm holdings is 6.1 hectares, with an average number of 6 plots.

Mixed cropping-livestock holdings constitute the largest share of all farm types with 25 percent. Field cropping is the second most important specialization (22.9 percent), followed by specialist grazing livestock with 20.9 percent and specialist permanent crops with 13.2 percent. Crops account for about 68 per cent of the production value and livestock products for 27 per cent, forestry 3 per cent and fishery products 3 per cent. Although Turkiye ranks number one in some crops and number five in producing some other crops and considered as an agricultural producer, yields are still low compared with that of EU, implying that there is still a good scope for improvement.

Number of tractors was about one million in 2005. Fertilizer use was 5 million tons in 2005. Pesticide use was around 25 million tons and does not appear to have increased in last two to three decades.

Past agricultural support policies were inefficient and costly; therefore, the Government of Turkey has embarked on a structural adjustment and stabilization program. Unsustainable and distortionary system of input subsidies has been phased out, and fertiliser prices are linked to world market prices. Most state enterprises in agriculture have been privatised. A unified national program of direct income support was introduced.

Strategic objectives, principles, and priorities of agricultural policies to be implemented after the ARIP are set forth in the agricultural policy paper 2006-2010. The objective of this paper is to help policy makers make decisions to develop the sector in accordance with the development plans and strategies, taking into account the process of EU integration.

Increasing urbanization and the share and changing composition of employment in agriculture have set the pace and direction of structural change in Turkish agriculture. Despite structural change in the Turkish economy, agriculture

is still characterized by hidden unemployment, which is an enormous challenge in the economic development. Nevertheless, agriculture is still the most important source of employment in the Turkish economy and by far a more important contributor to total national employment.

There is also an increasing scope for non-agricultural employment, at least on a seasonal basis. Agricultural income accounts for about 59 % of the total income of rural households. The rest is earned from non-agricultural employment (SIS, 2004).

2. Agricultural Finance

Small scale farms basically produce for own consumption. They are not strongly linked to the market. Market forces are not reflected in the farms. Their access to information is limited or they do not demand. They can not benefit from agricultural support policies which disproportionately benefit large farms.

Farms with 0.1-3 hectares of land cannot create sufficient income for their livelihood. Farms having 3.1-20 hectares of land create enough income for family needs. Only farms over 20 hectares can save. Since the majority of farms in Turkiye is small in scale having 6 hectares of land on average, they are not able to save. There is a need therefore, for a mechanism to support the small farms to improve agriculture and to reduce the pressure of heavily populated agricultural sector on economy. Credit, therefore could be an important tool in this regard.

The main problem of small family farms constituting the large part of Turkish farms is lack of sufficient operating capital at proper conditions. Limited capital in agriculture also limits the input supply, technology transfer, and investments. In these conditions, problems about productivity, input supply, saving and capital accumulation in agriculture severely increase, and the income and living standards of rural areas cannot be increased rapidly. The results of socio-economic studies show that operating capital in farms is limited and not evenly distributed, structural problems restricted the income and saving levels, quite a number of enterprises tends to obtain credits from informal credit sources (Ürper, 1990; Demir, 2004; Tanrıvermi_, 2005).

Agricultural credit system has a dual structure; formal and informal (Ülper, 1990; Tanrıvermi_, et al. 1993; Yavuz et al. 2000). Banks and cooperatives constitute formal credit suppliers while lending among individuals are informal and often applied by small farms since their access to formal credit institutions are limited. Tradesman, money brokers, commissioners, wealthy farmers, and money lenders are among the informal credit sources. These sources provide short term credits at a high interest rate and heavy payment conditions. Some studies indicate that depending upon the region, the share of informal sources of credits fluctuates from 10 to 60 percent (Karlı, 1996).

Agricultural Sales Cooperatives, Sugar Beet Farmers' Production Cooperatives and Tea Production Cooperatives

provide rural credit to its members. All these cooperatives mainly provide credit in kind but also limited amount in the form of cash (TSKB, 2003). However, the Bank of Agriculture and ACCs had been the principal actors in the agricultural credit market until 2002. They were channelling treasury-supplied credit to farmers. After the Bank was restructured, it reduced its agricultural loans. ACCs, intended as the retailing arm of the Bank for small scale farmers, serves a number of small scale farmers.

Agricultural Bank is the largest bank and extended more than 90 percent of agricultural credit. Agricultural Bank has operated as a joint stock company with all shares belonging to the Turkish Treasury. The Bank was also used as financial intermediary in government support policies, extending short term loans to agricultural sales cooperatives for commodity price support. Agricultural policy reform in 2000 had important implications for the sector's access to credit (Oskam et al, 2004).

The Agricultural Bank provides loans to farmers through several channels. One and the most important channel is the Agricultural Credit Cooperatives (ACCs). ACCs are the most common credit institution throughout the country. As of the end of 2005, there are 1983 Coops serving member farmers who can use credit up to a pre-defined ceiling of 30 000 YTL, uniform for all members. Agricultural credit was given 80 percent in kind, mostly as fertilizer until 2002. The Bank also provides credit to individual farmers directly, mainly medium to long term nature. Although the client of the Bank is small farms by law, the Bank's loan requirements restrict these credits to farmers who own agricultural land or have other properties needed as collateral. In practice, the Bank's direct lending activities have focused mainly on larger farms and state-owned enterprises (Oskam et al, 2004). As a result, ACCs role in credit market in Turkiye concerning the small farmers are crucial.

Credit provision to the agricultural sector has declined significantly since 2001 with the restructuring of agricultural policies. As part of the agricultural reform program, credit subsidies were phased out in 2002. Treasury in addition ceased supplying credit to the Bank and the ACCs. The new banking law prevents the Bank from providing funds to ACCs with outstanding debts. Since flows of credit resources from the Treasury have discontinued, the Bank and ACCs, two main agricultural sector lenders, have reduced their loan portfolio.

According to the results of 2001 Agricultural Census, number of farms benefited from the formal credit organizations is 452.261 and ratio of it in the total was 14,75. Among the producer benefited from formal credit organizations, 51,7% used credits from ACCs, 42,0% of Agricultural Bank, 5,1% of the other co-operatives and 1,2% of the other public banks (SIS, 2001). Based on these results, most of the farms do not use any credit or use the credits from informal sources.

Though the formal sector in Turkiye has had an annual

average agricultural credit portfolio of about 5.4 billion US dollar over the last decade. This loan however, dropped to an annual level of only about 2 billion US dollar in last half decade. The ratio of formal agricultural credit lending to agricultural GDP was about 14 percent which is below both the Turkish lending average for the economy as a whole and international comparator levels for agricultural credit (Lundell et al, 2004).

Cheap and abundant credit, because it was subsidies heavily, discouraged credit discipline in the agricultural sector and contributed greatly to unprofitability of farm lending and the Bank and ACC insolvency. There has also been a tendency towards credit delinquency since 1994-95, both in the credit provided by the Bank and ACC system. In fact, the increase in credit delinquency corresponds to another recent trend in the rural credit market, namely that of frequent debt rescheduling schemes involving implicit write-offs to farmers. This with high interest rate and lower productivity of agriculture prompted by the 2000 reforms worsened the financial viability of Ziraat Bank and the ACCs (Lundell et al, 2004).

The formal sector agricultural portfolio contracted quickly in the reform period from the time real interest rates were introduced. The Bank of Agriculture and ACCs, have reduced their exposure as flows of credit resources from the Treasury have been discontinued. Delinquency by agricultural borrowers has increased for three reasons: a) reduction in agricultural income, b) high real interest rate, and c) expectations by farmers for partial debt forgiveness. Given the increasing problems with delinquency in farming sector, the Bank diversified its lending out of agriculture. ACCs have reduced loanable funds due to this loan delinquency.

3. ACCs Role in the Agricultural Input Sector

Featuring a three-tier organizational structure, and serving some 1.5 million farmer members organized in 1983 primary cooperatives countrywide, the Agricultural Credit Cooperatives is one of the pivotal organizations for the agricultural sector in Turkey. The roots of agricultural credit in Turkey date back to 1863. However, ACC was established in 1935 as a separate entity. It has since evolved into a multipurpose credit and service entity. However, until 1972 ACC formally remained a Government Sponsored Entity operating under the general auspices and funding provisions of the Agriculture Bank of Turkey. ACC acquired its independent three-tier organization structure in 1972, and has ever since developed as an increasingly autonomous non-budget agency. Currently, the top two tiers of the ACC system operate as a nationwide NGO, while the cooperatives function as cooperative service entities in the traditional sense.

The overall objective of the ACC system as defined in the related law is to protect the economic interest and satisfy

the financial and professional requirements of its farmer members. The ACC network operates through a three-tier structure consisting of the Central Union (CU), 16 regional Unions and primary ACCs. As of the end of September 2005, the ACC system had 1,983 primary cooperatives with some 1.5 million registered members.

ACC is a multi-purpose integrated service organization. ACC's market consists of credit, inputs, consumables, insurance services, marketing services, production (via newly legislated Producers' Association status accorded to the ACC), and miscellaneous farm services. ACCs function in both the production and selling end of the goods and services. The full range of ACC's operations, each of which may in fact correspond to a distinct coop category, is shown in Tables 1 and 2.

The aim of ACC is to provide short and medium term credits to its members. While ACC provides credits up to YTL 10,000 based on the terms of common individual limits, the limits for private individuals has been raised to YTL 20,000 and YTL 30,000 for contract producers operating under contractual arrangements with the Regional Unions. Attempts are made to first cover the credit needs through ACC's own sources. However, when there is a shortage of funds to meet the credit demanded, ACC secures funds from banks. The structure of credit allocation has changed since 2000. Between 2000 and 2004, while the financing share of Agricultural Bank in credits used through the

Table 1. Agricultural Credit Cooperatives Operations

Activity Areas	Inter-Linkages
Credit	Most of the inputs and service costs are covered as credit in-kind. In-cash credit is limited.
Inputs	Seed, fertilizer, chemicals, and fuel.
Consumables	Groceries such as cooking oil, canned olives, bagged dry foods soap and coal.
Insurance	Insurance sold through the ACC unit cooperatives.
Marketing	Crop purchase program which involves cereals (wheat, barley, corn). Some ACCs are involved in the marketing of animal purchase and perishable farm produce.
Production	This is a new area. Individual coops may be accredited as Producers' Associations. Additionally, some of the RUs are already in the business of producing certified seed.
Other Services	Agricultural Insurance provided through a subsidiary and extension. There is a large scope for expanding the market in this category.
Credit	Most of the inputs and service costs are covered as credit in-kind. In-cash credit is limited.

Source: R. Zander, S. Satana, K.Kutlutürk, O. Solmaz. 2006.

Table 2. Fund Allocation by Agricultural Bank and ACC's Own Sources (Million US\$)

Credit Source	2000	2002	2004
Credits Utilized by ACC Members	652.28	685.64	578.87
Credit Funds Received from Agricultural Bank	570.34	226.72	61.07
ACC's Equity Funds	81.94	458.92	517.80
Share of Agricultural Bank Funds (%)	87	33	11
Share of Equity Funds (%)	13	67	89

Source: ACC, 2004. ACC Statistics

ACCs declined from 87% to 11%, the share of ACC's internal resources expanded from 13% to 89%.

ACCs typically provides two types of credit. The first type is short term operating credits. The second is the medium term investment credits. Short term operating credits are destined to sustain the agricultural activities and utilized to meet the needs for seed, fertilizer, pesticides, herbicides and gasoline. The maturity of the operating credits is up to one year. Medium term investment credits are utilized to provide inventories of an agricultural farm such as agricultural machinery and equipment and as well as livestock investments. These types of credits are furnished by the ACC as in-kind credits. Their maturity is longer than a year but they must be repaid within three years.

More than 90% of the credit allocation is utilized for short term operating credits between 2000 and 2004. As for the variation between 2000 and 2004 in US\$ terms, it is witnessed that while the amount of operating credits declined by 12%, investment credits increased by 11%.

Type of operating credits provided by ACC can be listed as all-purpose (or consumption) credits, seed, fertilizer, petroleum products, livestock, chemicals and other operating credits (Table 3).

Main obstacles to access the credits are 1) lack of adequate collateral for rural people, 2) lack of adequate credit facilities with reasonable conditions, and 3) distance to credit facilities. Due to high rural population (29.5%) compared to rural population (around 5%) in Europe and low productivity, low income and therefore low or no savings, many Turkish farmers in rural areas do not have adequate collateral to get credits from commercial banks. In addition, many commercial banks do not have branches in many

Table 3. Type of Operating Credits by Years (%)

Type of Operating Credits	2000	2002	2004
All Purpose	41	11	19
Seed Credits	5	6	6
Fertilizer Credits	22	44	39
Petroleum Products	17	24	19
Livestock Credits	3	5	7
Chemicals Credit	9	4	1
Other Operating Credits	2	6	9
Total	100	100	100

Source: ACC, 2004. ACC Statistics

rural areas and do not offer credits to rural people. On the other hand, those offering credits charge high interest rates that rural people cannot afford. Agricultural Credits Cooperatives in this regard has an advantage since there are 1983 unit cooperatives all over Turkey, even at small villages where there is no bank. Hence, they can reach and provide credits for small and mid-size farms. This, of course, ease up the access to the credit facilities for rural people. On the other hand Bank of Agriculture mostly provides credits for large size farms (Yavuz, 2005).

4. Members' Perception of ACCs and Credit Use

A survey was carried out to evaluate the perception of managers and member farmers of ACCs' on the credit, cooperatives, and their activities. A total of 320 managers and 320 members from 20 unit cooperatives, of which 10 are financially viable, were selected on a random sampling base.

Managers indicate that the problems of co-operatives vary with the regions. About 60 % of managers stated that procuring the finance for the credit is the main problem. Credit limit provided to the members of unit co-operatives are determined by the central union without taking into account on the farmers needs which vary among farmers and generally insufficient. Credit requirements are tight and difficult to meet. Managers also stated that ACCs have to obtain low-cost credit from private banks, which is made possible with the new Law enacted in 2005.

Managers perceived that unit cooperatives lack sufficient sources for credit, cannot provide farmers with inputs at low prices and process members' crops. Members' attitude towards paying the loans when due, and expectations that the debt to cooperatives can be restructured basically due to political reasons, hinder the system. In addition, over employment and lack of well trained staff on regulations, marketing, human relations, and cooperatives are stated as the problems of cooperatives.

Credit conditions are not attractive, and credit is tried to be returned with strong enforcements. ACCs should supply credits at a lower rate than that of private financial situations and other banks rather than Agricultural Bank in accordance with law number 5330 enforced in 2005. On the other hand, according to 78.1 % of members, credit amounts should be increased and sufficient short and long-term credits should be provided to members on time.

Farmers are aging, and illiteracy is high. One third of the cooperative members are above 50 years old. Slightly more than half is at the age of 31-50 years old. About 80 % is primary and secondary school graduate. Only 1.2 % is university graduate, pointing to a human capital problem.

Asymmetric information is commonly evident in cooperative-member relationship. Farmers apply for membership to cooperatives on the advice of leader farmers. Eighty five per cent of the farmers did not read the main contract of the cooperatives before the membership.

Most did not know the bodies of the cooperatives nor did they attend the general council meeting. Members lack information about the cooperatives, activities and roles cooperatives can have. Therefore cooperatives are managed by a small group of members.

Half of the members requires that cooperatives should provide help in securing goods and services cooperatives actually provide. Most of the members claim that cooperatives are under the control of managers and members have no role at all. Yet, in large consultation meetings farmers do not bring up this apparent lack of democratization as a problem. This may be partly due to a general lack of awareness that they really own the ACCs, and all the capital build-up is a result of their own contributions.

Slightly less than half of the member claim they are not provided the amount of credit they require. The reason is that cooperatives do not have a sustainable source of credit nor do their own resources are enough. This results in more that one membership from the same family. Therefore, a farm holding can get required amount of credit, creating a moral hazard problem in the relationship.

Less than a quarter of the members indicate that they can make some profit, of which half is used in agriculture. Profitability is low in agriculture because the cost of production is high, natural disaster reduced the production, and farmers lack information about the agricultural technologies.

Members indicate that for a successful credit cooperative there should be a cooperative bank. Members also expressed that managers should be well trained. Cooperatives and managers should be free of political influences.

Common perception among the majority of cooperative members and the public is that cooperatives are inefficient and old-fashioned organizations in which operations are sponsored and controlled by state bodies, and members' interest are overwhelmed by government bureaucracy-oriented managers.

5. Conclusions

Although the main role of ACCs is to provide credit to its members they also provide inputs, i.e., fertilizer, chemicals, seeds and purchase agricultural products, and also provide groceries. They, in addition, have processing plants. They engage in insurance in agriculture, traffic, and health not only to their members but also to other non members. They are operating in a wide range of areas. They act more like a firm. On the other hand, considering the agricultural structure in Turkey, ACC has a role in agricultural finance for the modernization of agriculture.

Despite the apparent utility of the organization, lately the ACC system has suffered from both endemic and external threats. These consist of (a) mounting competition on the market and duplication of effort and (b) politically motivated debt forgiveness resulting in huge financial losses for ACC.

Farm holdings in Turkey are small and fragmented. ACCs seem to have a role in agricultural finance, however, con-

sidering the agricultural structure, the limitations and institutional environment of ACCs, it is unlikely that ACCs can help modernize Turkish agriculture. ACC system includes some institutional problems such as, asymmetric information, lack of social capital, and moral hazard. In addition, credit provided to member farmers is not sufficient enough to employ modern agricultural techniques. This system of financing could only sustain the current situation of agriculture and poverty level of households in small size farms.

plementation Plan. Ankara.

References

- ACC, 2004. Agricultural Credit Cooperatives Statistics. Ankara.
- Demir, E., 2004. Tarım Kredi Kooperatiflerinin Kooperatif İletmeciliği Yönünden Analizi, Türk Kooperatifçilik Kurumu Yayın No:96, Ankara.
- DTM, 2005. <http://www.dth.gov.tr>
- Karlı, B, 1996, "Türkiye'de Tarımsal Kredinin Organizasyonu ve Kredi Kullanımındaki Gelişmeler", Türkiye 2. Tarım Ekonomisi Kongresi, Adana.
- Lundell, M., Lampietty, J., Pertev, R., Pohlmeier, L., Akder, H., Ocek, E., and Jha, S. 2004. Turkey: A Review of the Impact of the Reform of Agricultural Sector Subsidization. The World Bank. Washington, D.C.
- Oskam A., Burrel, A., Temel, T., van Berkum, S., Longworth, N., and Vilchez, I. M., 2004. Turkey in the European Union: Consequences for Agriculture, Food, Rural Areas and Structural Policy. Wageningen University, Netherland.
- SIS, 2004. Summary of Agricultural Statistics: 1985-2004. State Institute of Statistics.
- TSKB, 2003. Tarım Pamuk Tarım Satış Kooperatifleri Birliği, 2001/2002 Faaliyet Raporu 53. Is Yılı, Çeşitli Sayfalar, İzmir.
- Tanrıvermiş, H., Gündoğmuş, E. and Kılıç, O., 1993. Türkiye Tarım İletmelerinin Sermaye Yapısı, Kredi Kullanımı ve Kooperatif Kredilerinin Rolü ve Önemi, Türk Kooperatifçilik Kurumu, Kooperatifçilik Sayı: 99:5-17, Ankara.
- Tanrıvermiş, H., 2005. Karadeniz Bölgesi'nde Tarımsal Yapı, Gelişme Eğilimleri, Sorunlar ve Yapısal Dönüşüm Olanakları, Türkiye 3. Milli Fındık Surası, 10-14 Ekim 2004, Giresun (In Press).
- Togan, S., Bayaner, A., and Nash, J. 2005. Analysis of the Impact of EU Enlargement on the Agricultural Markets and Incomes of Turkey. In B.M. Hoekman and S. Togan (eds) Turkey: Economic Reforms and Accession to the European Union. Center for Economic Policy Research and the World Bank.
- Ürper, Y., 1990. Türkiye'de Organize Olmamış Tarımsal Krediler ve Kooperatiflerin Küçük Üreticiler Üzerindeki Etkileri E.A.Ü.I.I.B.F. Dergisi, Cilt:VII, sayı:2, p.123-129.
- Yavuz, F. 2005. Rural Vitality Report. Agro Economic Policy Analysis of the New Member States, the Candidate States and the Countries of the Western Balkan. CEEC AGRI POLICY.
- Yavuz, O., Duman, S. and Turhan, S., 2000. Kırsal Alanda Mikro-Tesebbüsler ve Mikro-Finans, Türkiye IV. Tarım Ekonomisi Kongresi, 6-8 Eylül 2000, Tekirdağ.
- Zander, R., Satana, S., Kutlutürk, K. and Solmaz, G. 2006. Restructuring and Institutional Strengthening Strategy for Agricultural Credit Cooperatives. Mission and Strategy Report and Im-