Marketing Cooperative vs Producer's Agent: The Turkish Dilemma in Modern FFV Market

S. Lemeilleur, C. Bignebat and JM. Cordón
codron@ensam.inra.fr

Paper prepared for presentation at the I Mediterranean Conference of Agro-Food Social Scientists. 103rd EAAE Seminar *'Adding Value to the Agro-Food Supply Chain in the Future Euromediterranean Space'*. Barcelona, Spain, April 23rd - 25th, 2007

MARKETING COOPERATIVE VS PRODUCER'S AGENT: THE TURKISH DILEMMA IN MODERN FFV MARKET.

S. Lemeilleur, C. Bignebat and JM. Codron

MOISA
2 place Viala, 34060 Montpellier, France

Abstract:

Since the rapid expansion of modern retailers in Turkish agro-food market, competent intermediary's forms are required to match up their exigent demand in fresh fruit and vegetables (thereafter FFV) procurement –namely, volume, regularity or quality- with a very fragmented national supply provided by small family farms.

In this context, the aim of this paper is twofold: it first develops a unified theoretical framework that compares the costs incurred by producers when deciding to market their produce through a private agent or through a marketing cooperative. Drawing on marketing cooperatives theories and transaction cost arguments, we put forward that these systems do not prove the same ability to allow for quality upgrading, above all at the producer's level. Second, we analyze on this basis the recent evolution of the FFV sector in Turkey: the Turkish Wholesale Market Law enacted 1995 establishes commission producer's agents on FFV wholesale market halls who effectively collect an atomized supply and guarantee the access of small producers to large scale markets. Moreover, the simultaneous attempt to promote traditional cooperatives as alternative channels turns out to be less successful: small size, lack of funding and skill shortage hampered their development.

However, public authorities recently promote the emergence of new types of marketing cooperatives whose initial endowment in capital and technical skills is high. The latter progressively turn to offensive strategies of quality upgrading and market access to new opportunities, whereby they have to set screening rules marginalizing small and vulnerable producers in order to achieve this goal. In our view, this evolution in the governmental intervention illustrates a determinant trade-off faced by the public authorities: namely, the choice between assuring the inclusion of the major part of producers in the market and boosting productivity and quality upgrading at the production level for more demanding markets.

JEL: D23, D86, L22, Q13.

Key-words: New Institutional Economics, cooperative, producers' agent, fresh fruit and vegetables, Turkey

1) Introduction

The rapid growth of supermarkets in Turkey for the last ten years has led to implement a new pattern of urban food supply and accordingly, to restructure the agro-food system in order to meet with new requirements. The impact of the large retailing on small-scale producers, has been extensively surveyed for the last few years (Reardon and Berdégué, 2002; Weatherspoon and Reardon, 2003; Dries et al. 2004)[1]. Academics have focused on implications and opportunities of large-scale retailing for small-scale producers and best practices in connecting small-scale producers to dynamic markets, and have brought these findings into the wider policy arena.

The Turkish case appears as an interesting case since government intervention which has long been intensive and pervasive in the agriculture and food sector, keeps being very pro-active and decisive for small farmers and collective action. In the FFV sector where supermarkets market share and quality requirements have been growing fastly, government has played a significant role in restructuring traditional marketing channels and creating new forms of organization. In particular, a wholesale Hall law has been set up to enhance small farmers' bargaining power through intermediary regulation and traditional cooperative support while new cooperative statutes have emerged, thus widening the cooperative marketing window.

Most research dealing with small-scale farmers faced with agribusiness requirements, insist on exclusion and organization issues and present cooperation as a useful tool to increase farmers bargaining power and to enhance quality. However there is no further analysis, at least for developing countries, on how marketing cooperatives articulate with other intermediaries in the marketing channel and whether intermediaries are complementary or substitutes of marketing cooperatives. Drawing on marketing cooperative theories and transaction costs arguments, our paper aims at comparing private and cooperative marketing solutions for small-scale FFV growers in the case of Turkey.

Data and observations come from semi-structured interviews that were conducted from October to December 2005 and April to July 2006, with a large number of stakeholders in the FFV marketing channels: supermarkets (4); trade commissioners (12) directors of Wholesale Market Halls (14); farmers (38) and producers' cooperatives (44), as well as officers of governmental institutions at national and local levels. Our study which has been funded by the international research network Regoverning Markets[2], is a first step of a more quantitative approach that will aim to elicit the determinants of FFV small-scale growers marketing choices in Turkey.

We first introduce the Turkish background with a brief presentation of supermarkets development, strategies and constraints to procure FFV from small scale growers and resulting public policies to overcome such constraints. In a second section, drawing from cooperative and transaction cost literature, we establish a conceptual framework to compare individual and cooperative marketing solutions available to small scale farmers. Dealing with FFV, we limit our comparison to the dominant commissioner system which proves to be the more efficient form of intermediation in developing countries. We then apply our conceptual framework to the FFV Turkish case to understand how traditional and modern marketing cooperatives articulate with commissioners and manage to meet with supermarket requirements. We finally discuss and conclude about negative externalities such as small

1 Global Network on Supermarkets and Agricultural Development and Regoverning Markets Project.
2 For further details about the project http://www.regoverningmarkets.org

farmers marginalization and exclusion that could result from new regulation and government support to the development of modern cooperatives.

2) Turkish background

With a GDP of US$ 7400 per capita (2004) and a large share of the population living in urban areas (65% of total population), Turkey has got a strong potential for agro-business development. Supermarkets, supported by Turkish liberalization public policies have been growing fastly during the last decade, expanding throughout the country, diversifying formats and increasing their market share from 21% in 1994 to 45% of total food market in 2004 (ME & SIMSEK, 2003; Codron et al, 2004).

FFV supermarket share remains low as compared to industrial food products sold in supermarkets. Elaborating on data collected by Coudel (2003), we estimate the current FFV market share to about 15-20 per cent of total FFV retail sales at the country level. Yet, there are huge stakes in the FFV sector. On the one hand, FFV are at the basis of the Turkish food diet with 20% of total food expenditure and respectively 100 kg and 230 kg per person of fruit and vegetables consumed every year (Saunier-Nebioglu, 2000). On the other hand, FFV is a key economic agriculture sub sector[3] with high employment (1 farmer out of two grows FFV) and 500 million US dollars export earnings (3,8% of total FFV production is exported) (Tozanli, 2005). As a result, supermarkets place high priority on the FFV department. They try to increase their FFV market share and to differentiate from traditional open markets, by posting a reasonable price and by providing consumers with service, quality, homogeneity and packaging.

Due to perishability and low population income, supermarkets mostly procure from the national market, in particular from five or six regions that are highly specialized in the production of FFV and co-exist with complementary harvest calendars to supply all the year round the national market. Difficulties to procure from these regions with required produce characteristics come from the small size of producers and the lack of standards. For instance, average area per vegetable grower using protected cover is roughly 1 ha (Census of Agriculture 2001, TUIK, 2003) but heterogeneity is very important between the minority of large scale producers growing from 1 to 10 has and the huge majority (90%) of small-scale growers having less than 0.3 ha (Antalya Chamber of commerce and Industry, 2004). Since large producers are, due to fiscal and economic reasons, all export-oriented, most suppliers available in the domestic market are small-scale producers.

Moreover, and as a consequence of small-scale farming, standardization is costly and de facto, still poorly developed in Turkey. While international standards have still low influence on production sold in the domestic market, standards ruling the domestic market remain elementary (size, color, fullness and appearance) and implemented by only a few supermarkets (Codron et al., 2004)[4].

As a consequence, large-scale retailers are left to procure from numerous small scale producers or traditional intermediaries supplying heterogeneous and poorly standardized produce.

Government has perceived the horticulture high potential of added value production and small farmers income leverage. Accordingly, one of his goals in the FFV sector has been to improve small farmers bargaining power and prepare them to market new requirements. By doing so, it pursues more general goals such as avoiding small farmers economic

[3] Available latest data indicates that Turkey produces 14 millions tons of fruits and 24 million tons of vegetables in 2003 (TUIK, 2003)

[4] Such a statement has been confirmed in 2006 by author' interview with FFV marketing manager of a big retail chain.

marginalization and progressive drift from the land, keeping consumer prices at a low level and increasing the national potential for FFV exports.

Major policy measures that have been taken in this perspective, are i) the 1995 Hall law which forces most fresh produce with domestic market as a destination, to be sold through market Halls, regulates Hall based intermediation through the edification of the commissioner status and allows traditional village cooperatives to forward integrate into the commissioner function, ii) cooperation support through increased investment subsidies and credit provision to traditional village cooperatives, iii) creation of a Agriculture Producers Union status as a tool to organize and foster higher productivity within a fresh produce industry at the district/province level, iv) extension to credit cooperatives and Agriculture Producers Unions, of the authorization to bypass the commissioner.

3) A Comparative conceptual framework of marketing cooperatives and commissioners

At the producer level, contracting plays a critical role in coordinating the productive resources of trading parties in agriculture (Sykuta and Cook, 2001). This is particularly true for emerging countries where small farmers face a rapid consolidation in the agri-food sector.

The literature on this issue has focused much attention on the role of marketing cooperatives (from European approaches to American schools). On the other hand, a growing literature based on New Institutional Economics (especially transaction costs theory) analyses the comparative properties of governance forms, such as hierarchy (vertical integration) and contractual forms between independent entities.

However comparative analysis between both collective and private organizational structures remains rare (Sykuta and Cook, 2001). Balbach (1998) proposed an empirical comparison between the efficiency of producers-owned firms and the one of investor-owned firm[5] (thereafter IOF). On this basis, Sykuta and Cook (2001) formulated a comparative conceptual framework "that examines efficiency implications for contracting parties depending on the ownership structure of the contractor". They discussed how differences in property right and value allocation between IOFs, traditional marketing cooperatives and new forms of cooperation, "affect the incentives of the contractual parties and the likely contractual design response".

Drawing on Sykuta and Cook (2001), our paper aims at comparing cooperative and private organizations in the case of FFV marketing channels in Turkey. Given the sectorial, economic and institutional specificities (fresh fruit and vegetables, developing country, history of cooperation in Turkey), we are led to compare marketing cooperatives with commissioners, a dominant form of intermediation in the FFV marketing channel. Indeed, most FFV small farmers of specialized production areas do not sell directly to wholesalers but through an intermediary, that we call commissioner because of the commission he receives from the producer and which is a percentage of the price obtained in the transaction with the wholesaler.

A commissioner does not take ownership of the product and negotiates with wholesalers on behalf of producers. He generates agency costs for the producer since the latter does not attend the negotiation and cannot observe the effort of the former in selling the produce. For instance, a producer cannot say if the price he got from the commissioner is the best one for him. In the FFV sector, agency costs are very high due to high price volatility. Moreover they

[5] Balbach (1998) found that sugar beet producers-owned refiners in U.S. improved both processing efficiency and producer return, relative to investor-owned firm.

have to be added to other transactions costs coming from perishability which may result in hold-up problems and from difficulty to measure some attributes such as freshness, juiciness, acidity, sugar rate, which are costly to measure and/or unstable (Brousseau and Codron, 1998).

In this section, we develop a comparative analytical framework which draws on these transaction cost arguments and refers to some seminal works on marketing cooperatives which discriminate between defensive strategies (Nourse, 1922) and offensive strategies (Shapiro, 1920). The former strategies aim at overcoming market failures by providing input and output market access and increasing bargaining power of small farmers. The latter use economies of scale, reduction of transaction costs and promotion of innovation in order to promote and capture added value.

1) Marketing access and bargaining power

Weak bargaining power and market failures both in the input and the output markets are common problems faced by small-scale farmers, especially in developing countries.

Small volumes to be sold through a limited number of intermediaries result in individual farmer's weak bargaining power. Bargaining power is even weaker when dealing with fresh produce, due to high agency and transaction costs as seen previously. In the case of remote production areas, with high transportation costs to the nearest market place, private intermediation may also prove unattractive and leave small producers without any bargaining power at all. Farmers are then given strong incentives to integrate forward in the collecting and assembling function by creating a marketing cooperative (Staatz, 1987).

Small scale farmers face identical problems of bargaining power and market access, when purchasing inputs, in particular when asking for short term credit to cover their running costs. Indeed, farmers are denied loans by the traditional banking system for two reasons I) the returns of their activity is partly unobservable to the bank and difficult to predict; ii) collateral that farmers can rely on to guarantee their credit is low or even zero. In these conditions, credit mostly remains informal, provided by neighbours, moneylenders or output intermediaries (Bardhan, 1989).

NEI gives insights on how coops and commissioners manage to overcome these problems of market access and bargaining power and gives arguments to conclude about their respective efficiency from the small farmer's point of view.

There are two main reasons why small farmers sell through a commissioner. First, the commissioner, as a producer's agent**,** can provide small farmers with easy and efficient access to output market. Specialized in assembling small and heterogeneous volumes of fresh produce that fit in with wholesalers demand, they have experience and marketing skills that allow them to clear out the market at a good price for the producer.

Second, the commissioner can also provide small farmers with cheap short term credit market to cover their running costs. He can act as a credit intermediary between various sources of financial capital and the demand of multiple small producers (Smith and al., 1999). In addition, he provides credit at low or even zero interest rate in exchange of exclusiveness for output sales. This interlinked transaction at a cheap credit rate allows the commissioner to secure business quantities and to ensure seller's loyalty (Hariss, 1981; Smith and al., 1999). Moreover, repeated transactions with the farmer, allow the intermediary to improve his knowledge about producer behaviour and performance and consequently, to make credit provision much less risky.

Selling performance and credit access have to be balanced against the agency costs implied by this intermediation system (as seen previously) and the switching costs for the producer to turn to an alternative source of credit provision: most farmers cannot rely on other funding sources or have a level of indebtedness which leaves them trapped in the credit intermediation system, foregoing any chance to sell through an alternative marketing channel (Bardhan, 1989).

Marketing cooperatives have developed as an efficient way to reduce private intermediation agency costs (Bontems and Fulton, 2005) for two reasons. First, there is less information asymmetry among members of a cooperative than in a transaction between a producer and a marketing private firm. Thus, cooperatives can more easily contract with a producer (owner-member) than would an investor-owned firm (Sykuta and Cook, 2001). Second, marketing cooperatives with a large number of members and high volumes of sales increase farmers' information access and bargaining power.

However, when no value is added to the product, using such a bargaining power by selling directly or through a commissioner, may prove difficult. Selling directly to wholesalers may prove unprofitable since cooperative members have no marketing skills and will have to hire a sales manager while selling through the commissioner and trying to extract a price premium may prove difficult since commissioners cannot obtain a higher price from wholesalers and will prefer to sell on behalf on individual farmers and keep all the profit rather than to share their profit with cooperative members.

Another drawback of traditional cooperatives is the lack of selective rules to efficiently allocate short term credit among members (Cook, 1995). As a result, funding resources are more difficult to obtain from the banking system, even though marketing cooperatives may be provided by the government with some subsidized credit[6].

To conclude, as far as there is no value added on fresh produce, most traditional cooperatives develop not as an alternative but as a complement to the commissioner system. While commissioners prove to be more efficient in selling to wholesalers and in providing farmers with short term credit, cooperatives can play a significant role in helping small FFV growers to benefit from economies of scale in the purchase of inputs and to get access to market places in the case of remote production areas. Conflicting issues develop when cooperatives aim at building a bargaining power in the face of commissioners and at supplying farmers with an alternative funding source that enables them to break the exclusive sales condition imposed by commissioners. Switching costs incurred in changing from a commissioner system to a cooperative one may then become very high and represent a barrier for collective action (Platteau et Gaspart, 2005; Lemeilleur et al., 2005). In the Nourse approach, such cooperative strategies may be qualified as defensive as far as the goal is not to add value but to capture a commercial rent. Such strategies provide farmers with a competitive yardstick and force commissioner to be more competitive.

2) Adding value to the product

Enhancing quality to meet with supermarkets requirements may involve post-harvest investment such as grading and packing equipment and/or technical skills and production planning at the production level.

[6] cooperatives have often beneficiated from subsidies, grants or other funding supports from government because there are generally considered as the better form to support agricultural sector and family farms. However these kind of funding support tend to disappear in numerous developing countries because of the so often public budget restriction.

A commissioner may be willing to realize himself post-harvest investments insofar as he can freely decide the rate of the commission. On the other hand and because of high agency costs, a producer selling through a commissioner cannot be given the right incentives to realize pre-harvest investments at the optimal level. Therefore, as soon as there is some potential for value adding at the production level, a strong rationale exists for farmers to vertically integrate downstream into the sales function. This rationale is even stronger since profit levels are usually higher at more advanced levels of processing and distribution (Egerstrom, Bos, and Van Dijk, 1996).

To integrate forward into the sales function and thus bypass the commissioner, small farmers must organize in marketing cooperatives and recruit a sales manager. Moreover, FFV being capital intensive activities, quantities should exceed the minimum volume required by such investments to benefit from economies of scale (Sexton and Iskow, 1988). As a consequence, there is need to increase the size of the marketing cooperative.

However, the benefits of larger organizations need to be balanced against the costs and difficulties associated with organizing large numbers of members (Stockbridge et al., 2003). Besides the costs inherent to large and heterogeneous groups in general (Olson, 1982), there are costs specific to traditional marketing cooperatives. In traditional cooperatives, characterized by open membership with property rights that are not clearly individually assigned (Cook, 1995), organization is costly due to the ownership-control rights structure (one person, one vote system and open membership). Moreover, since benefits are distributed among members in proportion to patronage and not in proportion to their capital contribution in the association, members may try to limit their own contributions and "free-ride" on others' investments and still retain patronage privileges. This leads to under investment among members (Sexton and Iskow, 1988). This insider free-riding problem, which must be added to the horizon[7] and portfolio[8] problems implied by members heterogeneity (Porter and Scully, 1987; Cook, 1995), is a major difficulty for traditional cooperatives.

New cooperative models tend to overcome these problems, by implementing a new property rights (control rights + residual claim) structure. First they close membership by implementing screening rules for member entrance. For instance, cooperatives require from their members that they meet specific criteria such as farm size, crop specialisation, productivity. Reducing member heterogeneity often leads to higher individual investment levels (Cook and Iliopoulos, 2000). Second, they adopt payment schemes that favour quality improvement and give incentives for individual investment at the production level. Finally, they drastically increase delegation of authority to managers and make possible value-adding activities such as production planning, technical control and post-harvest collective or individual grading or packing. Higher quality and regularity resulting from such activities have proved to be a critical factor in establishing a marketing network (Sexton and Iskow, 1988). Moreover, as long as organization gets more efficient, more credit resources at better rates of interest accrue to the cooperative and its members.

In brief, new generation cooperatives which allow for reduction of both agency costs and organization costs, are more adequate than commissioners and traditional cooperatives to set the right incentives to farmers and to implement and capture the added value generated by quality investments.

Obviously there is need for institutional and economic government support to promote and develop new cooperative models. On the other hand, by letting new cooperatives develop a closed membership rationale, government must be aware of an increased likeliness of

[7] horizon problems: when members differ according short-sighted or long-term perspectives
[8] portfolio problems**:** when members differ according to their risk aversion.

exclusion and marginalization of small farmers that do not comply with the requirements of such offensive strategies.

From producer point of view :	Commissioner	Traditional cooperative	New generation cooperative
Credit market access	++	-	+++
Bargaining power	-	+	++
Marketing efficiency	++	+	+++
standard output market access	++	+++	-
Promoting Added value (product and process level)	-	-	++
High quality ouput market access	-	-	++

In the light of this comparative analysis framework, we are going to examine the Turkish FFV marketing organization and its recent evolution.

4) Organizational forms for Fresh Fruit and Vegetables marketing in Turkey

This section describes how the advantages and drawbacks of the above presented various organizational marketing forms evolved with the requirements of restructured markets in Turkey. We show how the traditional system of Turkish intermediary, namely commissioners, and traditional cooperatives has been overtaken by modern marketing cooperatives that emerged recently. However, we put thereby forwards the force of commissioners.

4.1) Commissioners as a dominant form of intermediation on traditional FFV markets

The Wholesale Markets Law (law 80 decree 552) restructured deeply the FFV market in Turkey. According to it, FFV growers have to pass through wholesale markets to deliver their produce. On the one hand, it established commissioners on these markets, that act as brokers and facilitate the transaction on behalf of farmers. On the other hand, it exempted some operators of this legal obligation, in particular, marketing cooperatives. In this context, the role of commissioners remained however determinant.

4.1.1) The prosperity of commissioners

In 1995, the national law (80 decree 552) instituted commissioners as compulsory intermediaries. Farmers that deliver their produce by their intermediation obtain an invoice that is required by administrative authorities in case of control. In fact, taxes and fees are levied during the process: wholesale market's agents can receive legally at most 8% of the sale's total amount, and national and local authorities levy taxes on this sale (see Appendix 1 for further details). The total amount paid in the produce marketing reaches more than 14% of the transaction's total amount.
The system aimed at increasing market transparency as prices are easily posted on these located markets and as invoices name the contractants and enumerate the volumes that are contacted. Moreover, this organisation can provide producers with information on existing standards and on the evolution of markets' requirements.

Since the establishment of the law, the number of wholesale markets increased considerably. These markets gather products from 10 to 1000 producers per commissioner. They thus provide small-scale producers with a physical access to large markets. Producers delegate the transaction to commissioners: the latter rely on their trading skills and on their networks as to find a buyer, and negotiate the price: producers benefit thus from the bargaining power that brokers enjoy. Furthermore, commissioners enjoy a very strong position in the FFV marketing organisation as they procure short term credit to farmers. In fact, producers are denied loans from the traditional banking system, as they don't own enough capital to use it as a collateral. Even credit cooperatives require this type of security in the case the loan is not repaid. Contrarily, commissioners propose interlinked contracts whereby they procure farmers a cash advance for the farmer's production. He thus secures his procurement, and set credible incentives to enforce informal arrangements.

However, as attributes are difficult to measure by FFV, transaction costs and agency costs are high in the Turkish case. First, transaction costs generated by the potential opportunist behavior adopted by the commissioner derive from the highly time-specific nature of the produce. Attributes evolve rapidly when time is running and stocking of goods is hardly possible. Second, and above all, agency costs incurred by the producer are extremely high in the Turkish FFV market. They derive from the heterogeneity of the produce whereby its quality is not easily measurable. Furthermore, as prices are volatile, the time at which the produce was effectively sold matters to the producer as it partly determines his pay-off. These costs are not easy to reduce because competition among commissioners is soft. Their number is fixed and not high: the fact that they receive the highest level of fees the law allows them to get, namely whatever their effort level, stands for a proof of monopoly.
Moreover, the number of wholesale markets is limited and thereby sometimes far from some production areas, so that producers may depend on a further intermediary in order to market their produce on the wholesale markets, namely merchants that collect products in villages and procure wholesale markets[9]. In fact, the decision to create a wholesale market devolves on central authorities, upon municipal request and mostly depends on the demography rather than on the production level. In consequence, the differences among regions are wide: the decision to establish small-scale wholesale markets that account for less than 50 commissioners (mostly located in production areas) and/or to establish large-scale ones that gather between 50 and 150 ones mainly in consumption areas differ according to location. Moreover the dispersion of those markets on the territory is not even. And, as farmers who turn to merchants incur far higher transportation costs that those who directly sell to a commissioner, the centralisation of the production marketing on wholesale markets favours some producers.
Last, as we demonstrated in section 3, commissioners don't assign a sorting and packaging activity to producers, as they don't have the possibility to set the incentives related to this higher effort level. Consequently, in order to serve the market's requirements, we observe the emergence of enterprises located outside the wholesale markets, that are often owned by commissioners, but independent from their broker activity: by this way, as managers of these enterprises, commissioners capture the total amount of the value added by the process of sorting and packing.

[9] According to our observation, when the distance between village and wholesale market is more than 30 km, the producer sells to a merchant, if the produce is not collected by a coop. Commissioner never provide a transportation service to the producers. It is important to note that merchant selling share is a major part of FFV market, but this informal market is not the issue of our paper.

When delivering their produce to the commissioners, farmers are thus not incited to invest in upgrading the quality of their products. This situation keep them in a trap in which they can't capture the value added in the chain. The law cares for it and give the opportunity to organize themselves and avoid the commissioner.

4.1.2) The difficulties of traditional village cooperatives

The Wholesale Market Law from 1995 also allows exporters, industries, but in particular cooperatives to bypass the commissioners, and thus save the 8% commission they impose. If requested at the Ministry of Trade and Industry, marketing cooperatives which gather at least 50 members, obtain a "Producers' Union certificate" whereby they are given authorization to directly market their production. Producers Unions thus act as intermediating agents, an alternative to brokers. Until 2005, only Agricultural Development Cooperatives (thereafter ADC) and FFV Marketing Cooperatives were eligible to receive this Certificate (Appendix 2 and 3).

Agricultural Development Cooperatives are administratively defined at the village level, and a village can lodge no more than one cooperative. Their status was implemented in 1969[10] but their existence dates back to the 1930s. They should count more than 7 members, and they originally aimed at collectively purchasing inputs associated to diverse productions. However, since the 1990s, incentives were set by the government (i) to invest in more productive capital, like greenhouses and packing houses, with the aid of subsidized low interest rate loans (ii) and to directly sell their production to retailers by bypassing the commissioners. However, this promotion was barely successful: on the one hand, only few cooperatives specialized, especially in FFV production (85 out of 1704), and consequently were disposed to invest in highly specialized equipment (24 cooperatives asked to benefit from financial backing to build greenhouses). On the other hand, cooperatives are eligible for the "Producers' Unions Certificate" only if they include more than 50 members: but this requisite is scarcely met at the village level (only 5 cooperatives obtained a Certificate).
FFV marketing cooperatives, established by the same general cooperative status, were also founded at the village level. They were instituted in 1998, and they particularly fit the demand of villages where a ADC was already established, but not specialized in FFV. These marketing cooperatives are more inclined to respond to governmental incentives, and avoid the commissioner. 34 FFV cooperatives were created, but less than half of them have a Certificate.

In consequence, the incentives that the Wholesale Market law set in order to promote direct sales from cooperatives to retailers are weak, as only 20 cooperatives (5 ADC and 15 FFV cooperatives) among 120 village cooperatives concerned by FFV production (85 ADC and 34 FFV cooperatives)[11] . We should point out several reasons for this statement: first, considering the small size of villages, it unlikely that a cooperative can gather more than 50 members, and in consequence, it is not eligible to get a Certificate. Moreover, as the farms' size is on average very low, the production is often diversified and the cooperatives' members are heterogeneous: this generates a portfolio problem, and members do not agree on the

[10] General Turkish Cooperative law (implemented in 1969, according to the international principles that support cooperatives)
[11] To our knowledge, there is no official statistics about cooperative FFV market share. A rough estimate based on the number of cooperatives, the average number of members per cooperative and the number of FFV growers is that cooperative FFV market share is less than 1% of national FFV commercial production.

decisions they should adopt in matter of marketing. In any case, the quality of the produce is low and the profits farmers can expect from investing in upgrading quality are low and highly uncertain, as noted above. Next, the yields generated by the production, when specialized in FFV, are not high enough to afford employing a sales manager whose skills would allow farmers to do without a commissioner. Last, since these cooperatives are struggling to gather financial capital, the commissioner is also needed for his financial facilities: the advance payments are essential to farmers (Lemeilleur, 2005).

We may conclude that the reasons why traditional cooperatives still operate consist in the bargaining power they represent for their members against traditional operators, like input suppliers, merchants and commissioners. We should furthermore underline the importance of marketing cooperatives in collecting the produce and transporting it to the commissioner, particularly for regions distant from the wholesale markets. Therefore, the aim of producers who are organizing collectively in order to market their produce, is first of all to recover a part of the rent when trading with the commissioner, and not to bypass him. They thus don't add value to the produce they sell: this behaviour may reflect a defensive strategy, as defined by Nourse.

4.2) Organizational innovations

However, since 2004, new tools have been developed by central authorities to promote a successful and more dynamic collective organization of small producers: in particular, the rules that founded Agricultural Credit Cooperatives were modified and allow them to market FFV. Moreover, a new type of organization was established, namely the Agricultural Producers Unions; the latter favours a large-scale production, and thus economies of scales.

4.2.1) Agricultural Credit Cooperatives: softening the financial constraint

The emergence of Agricultural Credit Cooperatives dates back to the 1930's: their rationale was then to subsidize inputs and provide seasonal credit to small producers. They must gather at least 30 producers and their sphere of action is the district. This administrative unit comprises 10 villages on average, so that Credit Cooperatives encompass, on average, by far 750 members who are engaged in a diversified production.

Following the liberalisation of the late 1990s, Agricultural Credit Cooperatives evolved towards financial and management autonomy. In May 2005, the Ministry of Agricultural and Rural Activities modified their internal rules, and they are since then eligible for "Producers' Union Certificates". Among the 1964 Agricultural Credit Cooperatives that are active on the whole Turkish territory, almost 300 are now registered. However, few of them are effectively marketing produce in these times.
Nevertheless, these cooperatives seem to be one of the most promising structure: they dispose over a high level of human and financial capital. On the one hand, they are sustained by agricultural engineers for technical advice. On the other hand, they demonstrate a high capacity to get loans from the traditional banking system, and then lend money to their members and consider thereby selectivity criteria that are softer than those of regular banks. Moreover, we notice that Credit Cooperatives decided to gather in the form of Producers' Unions those of their members who were specialised in FFV and whose production process was efficient. Last, the Producers' Unions accommodated by Credit Cooperatives select the

first quality products only. As there is no exclusivity of delivery for members, they can then direct the second quality towards traditional channels.

However, this last observation already points out the limits of the system. Producers face, in fact, difficulties when they try to sell lots composed of second quality products only, as commissioners are not disposed to take it, but prefer first or mixed quality. Moreover, the screening rules established by Credit Cooperatives tend to alter their design into a closed membership organization. Whereas this choice allows them to meet more easily the supermarkets' requirements, it leads also to the potential exclusion of the smallest producers.

4.2.2) Agricultural Producers' Unions : betting on large producers

New opportunities arose also with the creation of Agricultural Producers' Unions in January 2005 (Ministry of Agricultural and Rural Affairs, law 5200). The latter were designed in order to promote production planning and quality standards diffusion. They are devoted to one product, or one type of product and not legally eligible for subsidies. Actually, the spirit of the law didn't assign marketing activities to Agricultural Producers' Unions: however, it didn't prevent them for adopting a wider range of activities than production planning. Anyway, a new decree is being adopted in those days by the Ministry of Trade and Industry and allows Agricultural Producers' Unions to get a Certificate and sell products, insofar as they gather more than 50 members.
Agricultural Producers' Union are defined on an administrative basis than is wider than for any other producers' organization in Turkey; namely the sub-province. Furthermore, at most one Agricultural Producers' Union can be established in this area for each product type. A minimum size is also set by the law: the organization should include at least 16 members – juridical, artificial or physical persons- and account for sometimes more than 10% of the sub-provincial production area or volume for the considered product, according to the provincial rule[12].

Until now, around 100 Agricultural Producers' Unions were registered by the Ministry of Agricultural and Rural Affairs, among them 50% are dealing with FFV. However, none of them applied yet to afford a Producers' Union Certificate by the Ministry of Trade and Industry, mostly because they are beginning their activity by laying the foundations for their future development, and trying to fight against the rules of minimum size set by the provinces.

We observe that Agricultural Producers' Unions are often created by large producers that enjoy an easy access to the traditional credit system: in particular, large producers who were originally rather export-oriented, find the opportunity to turn their production to the domestic market. They use these organizations to bypass the commissioner so that the incentive to market their products on the domestic market increases. Moreover, they overcome the scale problem faced by village cooperatives as they are established at the province level: they are more likely to find 50 members to obtain the Certificate. However, the minimal coverage of the members' land relatively to the total sub-province's size represents a major constraint: for instance, 10% of the total land area can represent on average 1000 farmers. The subsequent organizational costs are very high. This problem is even more accurate that Agricultural

[12] The rule is set at the provincial level and differ across provinces.

Producers' Unions use membership screening rules, such as a minimal volume requirement, and quality requirements, or even product certification.

The rapid increase of the number of Credit Cooperatives and Agricultural Producers' Unions that obtained a Certificate contrasts with the sluggish and limited development of traditional rural cooperatives. However, this attractiveness collocates with screening rules that exclude the smallest and most vulnerable producers.

Conclusion

Drawing on marketing cooperatives theories and transaction cost arguments, we have identified the main transaction and organization costs that small farmers must take into account when deciding to market their produce through a private agent or through a marketing cooperative. We have emphasized that when dealing with FFV, transaction costs are pretty much higher because of extreme price volatility, time-specificity and instability of some produce characteristics. Moreover, we have restricted our comparison to a specific type of agent, namely commissioner, which is actually the most frequent form of intermediation in FFV far distance marketing channels of most rich and poor countries, including Turkey. In this country, commissioners have a legal status and are ruled by the State, in particular since the 1995 Hall Law which make them a necessary intermediary for most FFV wholesale transactions.

By applying such a conceptual framework to the Turkish case, we have showed that commissioners are still the dominant and most efficient form of intermediation. Only a minority of small FFV growers (less than 1%) are organized in traditional cooperatives (development and FFV cooperatives) at the village level. One hundred and twenty cooperatives have a significant activity of FFV production but only 20 of them have taken advantage of the exemption clause of the Hall Law, allowing them to bypass the Commissioner and accordingly not pay their commission. Indeed the great majority of the 120 cooperatives are still marketing their produce through a commissioner. Actually they only aim to increase the farmer bargaining power when purchasing inputs and to avoid selling through a local merchant. Their marketing function is to collect, assemble and deliver a consolidated volume of small parcels to a commissioner. Such cooperatives develop in particular in remote production areas lying within a far distance from Hall markets. Reasons for such a failure of the Law are two. First, many village cooperatives have not the minimum number of members (50) required to obtain a Certificate. Second, most cooperative production has not been upgraded and consequently economic surplus is too low to afford a sales manager's wage. Moreover, organization remains costly due to the one man one vote decision making and does not provide strong incentives for quality upgrading.

Recent reform of Agriculture Credit Cooperatives and creation of Agricultural Producers' Unions allow for quality upgrading. Both cooperatives and unions have been authorized to obtain a Certificate and thus to benefit from the cooperative exemption clause. Established at a district or province level, they easily comply with all requirements including the minimum membership condition and are fastly entering into direct selling with supermarkets. Success is due to a dynamic quality upgrading and selective screening rules. The flipside of such a marketing strategy is that it strongly discriminates between performant and non performant growers, promoting large-scale thus far export-oriented growers and leaving aside a majority of small scale growers.

Further analysis would be needed to evaluate the impact of the Hall Law and cooperative reform at the macro level. Drawing on our findings, we can call into question the goals and coherency of such a government policy. The 1995 Hall Law was most likely aiming both at lowering prices at the consumer level and protecting small farmers by increasing their bargaining power and by fostering price transparency and wholesale market competitiveness. It was also aiming at facilitating the direct access of marketing cooperatives to wholesalers or supermarkets. Results are ambiguous. While government has been successful in getting markets more transparent, intermediaries less numerous and small growers more powerful, it failed in his attempt to promote true marketing cooperatives selling directly to supermarkets and to design a commissioner system able to provide growers with quality incentives.

Recent policy measures, regarding Credit Cooperatives and Producers Unions can be interpreted as an adjustment to the previous ones, aiming at fostering productivity and quality upgrading at the production level and providing supermarkets with the possibility to withdraw from the packing function which they have been thus far carrying out for 70% of their volume. By letting large-scale producers enter into Producers Unions, government is aiming at having small farmers benefit from large scale experience as exporters on more demanding markets. However, small farmers are at risk of exclusion or marginalization from such Growers Associations since more and more selective rules tend to be implemented to meet with fast growing supermarkets requirements. Accordingly, additional measures have to be taken by the government to support small farmers upgrading needs and turn current Credit Cooperatives and Producers Unions into true development tools for small farmers.

Bibliography

Balbach, J.K. (1998) The Effect of Ownership on Contract Structure, Costs, and Quality: The Case of the US Beet Sugar Industry. The Industrialization of Agriculture: Vertical Coordination in the US Food System. J.S.Royer and R.T. Rogers, eds, pp 155-184, Aldershot, England: Ashgate Publishing.

Bardhan, P. (1989) The Economic Theory of Agrarian Institutions, Oxford (GBR), Oxford University Press, New-York, U.S.

Bontems, P., and M. Fulton. (2005). Organizational structure and the endogeneity of cost: cooperatives, for-profit firms and the cost of procurement. Working paper.

Codron, J.-M., Bouhsina, Z., Fort, F., Coudel, E., & Puech, A. (2004). Supermakets in Low-income Mediterranean Countries: Impacts on Horticulture Systems. Development Policy Review, 22(5), 587-602.

Cook, M. L. (1995) "The Future of U.S. Agricultural Cooperatives: A Neo-Institutional Approach", American Journal of Agricultural Economics, Vol. 77, No. 5, 1153-59.

Cook, M.L., and Iliopoulos, C., (2000). Ill-defined Property Rights in Collective Action: the case of US Agricultural Cooperatives. Institutions, Contracts and Organizations: Perspectives from New Institutional Economics. C. Menard, ed. Cheltenham: Edward Elgar.

Coudel, E. (2003). What Role do Supermarkets have in the Definition of New Standards for Fresh Fruit and Vegetables in Turkey? Study of Tomato Procurement Systems. Mémoire de DEA, Ecole Nationale Supérieure d'Agronomie de Montpellier, Montpellier.

Dries, L. T., Reardon, T., & Swinnen, J. F. M. (2004). The Rapid Rise of Supermarkets in Central and Eastern Europe: Implications for the Agrifood Sector and Rural Development. Development Policy Review

Egerstrom, L., Pieter B., and Van Dijk, P. (1996). Seizing Control: The International Market

Power of Cooperatives, Lone Oak Press, 1996.
Harriss, B. (1981) Transitional Trade and Rural Development: the Nature and Role of Agricultural Trade in a South Indian District. New Delhi, Vikas Publishing House Pvt Ltd.
Lemeilleur S., (2005). Third year Ecoponics report: Chapitre 5. Mimeo December 2005.
Lemeilleur, S., Codron, J.M., & Fares, M. (2005). Interlocking Transactions: Do they restrain the emergence of rice producers' organizations in Cambodia? ISNIE Conference "The Institutions of Market Exchange".Barcelona, September 22-24, 2005.
ME & SIMSEK K.(2003). La distribution moderne en Turquie (Alimentaire). Tech. Rept. DREE/MAE.
Nourse, E. (1922) The Outlook for Cooperative Marketing. Journal of Farm Economics 4, no. 2: 80-88.
Olson M. J., 1982, The rise and decline of nations. Economic growth, stagflation and social rigidities. Yale University Press
Platteau, J.P. and F. Gaspart (2005) Heterogeneity and Collective Action for Effort Regulation: Lessons from the Senegalese Small-Scale Fisheries, in : J.M. Baland, P. Bardhan and S. Bowles, (eds), Inequality, Cooperation and Environmental Sustainability, Princeton University Press.
Porter, P. and Scully, G. (1987) Economic Efficiency in Cooperatives. Journal of Law and Economics, 30:2:489–512.
Reardon, T., & Berdegué, J. A. (2002). The Rapid Rise of Supermakets in Latin America: Challenges and Opportunities for Development. Development Policy Review, 20(4), 371-388.
Saunier-Nebioglu (2000). Consommation alimentaire en Turquie. In Alimentation et nourritures autour de la Méditerranée. Ed Karthala, Economie du développement.
Sexton, R.J. and Iskow, J. (1988) Factors Critical to the Success or Failure of Emerging Agricultural Cooperatives. Dept. of Agri. And Resource Economics, Univ. California, Davis, Giannini Foundation Information Series, N°88-3.
Shapiro, A. (1920) Co-operative Marketing. American Farm Bureau Federation.
Smith, L., Stockbridge, M. and Lohano, H.R. (1999) Facilitating the Provision of Farm Credit: the Role of Interlocking Transactions Between Traders and Zamindars in Crop Marketing Systems in Sindh. World Development, 27(2), pp.403-418.
Staatz, J. M. (1987) Farmers' Incentives to Take Collective Action via Cooperatives: A Transaction Cost Approach, ed. J. S. Royer, Cooperative Management Division, Agricultural Cooperative Service, Report 18. U.S. Department of Agriculture., pp. 87-107.
Stockbridge, M., Dorward, A., Kydd, J., Morrison, J., Poole N. (2003). Farmer organization for market access: International review. Briefing paper. Centre for Development and Poverty Reduction, Imperial College London.
Sykuta, M.E. and Cook, M.L. (2001) A New Institutional Economics Approach to Contracts and Cooperatives. American Journal of Agricultural Economics, 83, N°5: 1273-1279.
Tozanli, S. (2005). Third year Ecoponics report: Chapitre 4. Mimeo December 2005.
TUIK, (2003) Agricultural Structure (Production, Price and Value). Electronic Record, Ankara.
Weatherspoon, D. D., & Reardon, T. (2003). The Rise of Supermarkets in Africa: Implications for Agrifood Systems and the Rural Poor. Development Policy Review, 21(3), 333-355.
Regoverning markets, www. regoverningmarkets.org

5) APPENDIX

Appendix 1: The relative cost of the commissioners and cooperatives

Hall commissioner fee	8 % (15 % for income taxes and 0,1 % for retirement funds)
Municipality tax	2 % (to pay running costs)
Excise tax (stoppage tax on benefits)	2 %
Social insurance fund	0,1 % (for producer)
VAT	2 %
TOTAL	**14,1 %**

Cooperative's fees	3-6 %*
Hall commissioner's fees	-
Municipality tax	(2 %)**
Excise tax (stoppage tax on benefits)	2 %
Social insurance fund	0,1 %
VAT	2 %
TOTAL	**7,1 to 12,1 %**

* *Each cooperative is free to fix this commission fee that helps the cooperative to cover its running costs. According to our survey, it is generally fixed between 3 and 6 %of the total value of the marketed produce.*

** *For agricultural cooperatives, there is no legal obligation to pay this tax, but actually they pay it if they rent an office within the Wholesale Market Hall*

Appendix 2 : Laws, objectives and activities according to cooperative types.

MINISTRY	MINISTRY OF AGRICULTURE AND RURAL AFFAIRS			MINISTRY OF INDUSTRY AND TRADE
Type of producers' organizations	Agricultural Credit Cooperative *(Tarim kredi Kooperaifi)*	Agricultural Development Cooperative *(Tarim kalkinma Kooperatifi)*	Agricultural Producers Union *(Tarim üretici biligi)*	Fresh fruit and vegetable marketing Cooperative *(Yas sebze ve meyve pazarlama kooperatifi)*
Law/ Date	*Law 1581⇒law 5530 (May 2005)*	*Law 1163 (May 1969)*	*Law 5200 (January 2005)*	*Law 1163 (May 1969)*
Objective & activity	*-Sells low price inputs and equipment* *-Manages government loans for members* *-Greenhouse insurance* *-Since 2005:sells fresh fruit and vegetables*	*-Insures and maintains economic interests and needs for members, by mutual assistance of services and solidarity* *-Buys collectively inputs* *-(sells agricultural production collected from members)*	*-establishes production planning* *-improves quality and standards for domestic and international marke* *-(unofficially) sells fresh fruit and vegetables*	*-insures and maintains economic interests and needs for members, by mutual assistance of services and solidarity* *-sells FFV production collected from members*
Specificity	*-Members are not all FFV producers* *-sale of all kind of FFV* *- still strongly linked to the state*	*-Can get government credit for large collective investment but no more subsidies* *-sale of all kind of FFV*	***-(Nowadays) no financial support from the government*** ***-1 kind of FFV per union***	***-*** *(officially) Can get government credit for large collective investment (but no observation)* *-sale of all kind of FFV*

Producers Union Certificate *(Uretici Biligi)* from the MINISTRY OF INDUSTRY AND TRADE

- *Law 80 decree 552(1995)⇒ new law forthcoming 2006 ?*
- *Objective: Protects small producers by hall commissioners and support producers' organization by exemption of hall commissioner fees.*
- *But no financial support*

Appendix 3 Internal rules according to cooperative types and administrative level

MINISTRY	MINISTRY OF AGRICULTURE AND RURAL AFFAIRS			MINISTRY OF INDUSTRY AND TRADE
Type of producers' organizations	Agricultural Credit Cooperative *(Tarim kredi Kooperaifi)*	Agricultural Development Cooperative *(Tarim kalkinma Kooperatifi)*	Agricultural Producers Union *(Tarim üretici biligi)*	Fresh fruit and vegetable marketing Cooperative *(Yas sebze ve meyve pazarlama kooperatifi)*
Village		*1 unit cooperative per village >7 members*		*1 unit cooperative per village >7 members*
District (Kasaba)	*Unit Cooperative >30 members*		*1 unit APU per product per sub-province >16 members* ***(physical, artificial or juridical person)*** *>10% of cultivated land for this product*	
Sub-province				
Province		*Cooperatives Union >7 cooperatives*		*Cooperatives' Union >7 cooperatives*
(region)	*Cooperatives' Union >30 cooperatives*			
National	*1 National Union*	*1 National Union >7 Cooperatives' Union*	*1 national Union per product*	*1 National Union >7 cooperatives' Unions*
	Agricultural Cooperative Federation			

Registered by MIT to get the producer union certificate

- Producers Union Certificate
  >at least 50 members
- *Can get an office in the wholesale market*