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An analysis of the horticultural industry in Bulgaria during the transition period - a study in the Plovdiv region

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Abstract

Agriculture is an important sector of the Bulgarian economy and horticulture is a significant part of agriculture. This paper reviews the structural changes in Bulgarian agriculture since 1945 and analyses the situation and dynamic of horticultural farms in the Plovdiv region. During the transition period (1990s), Bulgarian agriculture underwent dramatic reforms including land restitution and privatization. The restructuring of the agricultural sector in Bulgaria took place mainly in the pre-accession period (1999-2007) in order to fulfill the criteria for entry into the EU. EU accession in 2007 has presented new challenges and opportunities for the future development of agriculture in Bulgaria. This research demonstrates that despite the difficult economic environment, horticultural farms have a significant potential due to favorable natural conditions coupled with the traditions of growing horticultural crops.

Keywords: Bulgarian agriculture, Bulgaria, horticulture, horticultural farms, farm marketing

1. Introduction

Agriculture has traditionally been an important sector in the economy of Bulgaria and horticulture is a significant part of agriculture. The total territory of Bulgaria is 11.1 million ha, of which 48.0% is utilised agricultural area (UAA). During the last two decades, the contribution of agriculture and forestry to Gross Domestic Product (GDP) fluctuated substantially, ranging from 17% in 1990 to 26% in 1997. It has been decreasing since then to about 11% in the last few years, reflecting large changes in the activities of other sectors of the economy over this period. In 1990, the workforce employed in agriculture was 19.2% which gradually increased to 26.2% in 2000 and then slightly decreased to 24.9% in 2004 (OECD, 2000; MAF, 2007).

In the last two decades, the agricultural industry has undergone dramatic economic changes as Bulgaria moved from a centrally planned to a free market economy, the European Union (EU) accession process and joining the EU. In the early 1990s, the agricultural sector underwent significant reform including land restitution and privatization which was characterised by inefficient governmental agricultural policies, poor legislation, lack of investment capital and the de-population of rural areas. The EU accession process began in 1999 with the introduction of the Special Accession Programme for Agriculture and Rural Development (SAPARD) which led to membership of the EU in 2007 and the introduction of the Common Agricultural Policy (CAP) in Bulgaria (OECD, 2000; Kostov and Lingard, 2002; MAF, 2002; Doichinova, 2003; Bachev, 2005; Bencheva, 2005, Yanakieva, 2007).

During the period of Communism (1945-1989), agriculture was characterised by large state-controlled and over-specialised Agricultural Industrial Complexes (AICs), centrally determined prices, guaranteed markets and no recognition of market forces. Over that time, the main goals of agricultural policies in Bulgaria were to provide an adequate supply of basic food products, at low prices, to the domestic market (OECD, 2000; Mergos et al., 2001). The over-specialisation of these AICs resulted in decreased gross agricultural output in the middle of the 1980s and the necessity for radical reform that was not introduced prior to 1989 (EC, 1998; OECD, 2000).

In 1989 the transition towards a ‘free market’ economy began in Bulgaria. The reform of the agricultural sector started with the introduction of new regulations and laws that were developed to re-introduce private farming after 45 years of a communist regime. The agricultural reform was characterised by the liquidation of the AICs, development of a private sector, land restitution, privatization and price liberalization. Subsequently agriculture and especially horticulture experienced a deep crisis due to the accumulated problems inherited from the period under communism, the slow pace of reforms, inconsistent agricultural policies, loss of the main export markets and tight fiscal conditions (EC, 1998; MAF, 2000; Georgieva, 2003). The total value of agricultural production declined reaching a low in the mid 1990s, when it dropped to about 60% of the 1990 level (Ivanova et al, 2007). The farming structure that emerged after the liquidation of the AICs was characterized by a large number of small private farms, private co-operatives (average size of about 600 ha) and other legal entities (e.g. limited companies, sole traders and partnerships). The majority of the private farms and co-operatives needed significant improvement and consolidation (FAO, 1999; Georgieva, 2003; MAF, 2007).

In 1998, the agricultural reform in Bulgaria was officially completed. Agricultural policies became more consistent with the long-term goals of developing an efficient, competitive and export-orientated agricultural sector, improving the incomes of those working in agriculture and preparing the country for EU accession. There were still many problems remaining that obstructed the development of agriculture including the lack of official ownership records of the land (granted title deeds), an inefficient land market, low profitability in this sector and difficulties in obtaining credit for purchasing land.

At the end of the 1990s, the Special Accession Programme for Agriculture and Rural Development (SAPARD) was introduced to prepare Bulgaria for EU accession with the two big challenges being an inefficient land market and fragmented land ownership (FAO, 1999; Evtimov, 2006; MAF, 2007). During the pre-accession period (1999-2007), the land market was underdeveloped but improving and there were a large number of small farms that needed to consolidate and a very small number of big commercial farms that would benefit from the introduction of CAP payments. The total value of agricultural production increased in the late 1990s but it was low compared to the 1990 level (about 60%) (Evtimov, 2006; Popov, 2006; Ivanova et al, 2007). The main instruments for supporting farmers were direct subsidy schemes, input subsidies, subsidies for short and long term credit, export subsidies and financial support under the SAPARD programme (Ivanova et al, 2007).

Bulgaria joined the EU in 2007 when the CAP was introduced together with the single area payment system. While agriculture in Bulgaria in the pre-accession period has been studied by various national and international researchers and organizations, the impact of the CAP on Bulgarian agriculture has not yet been evaluated, analysed and discussed (EC, 2000; MAF, 2000; Georgieva, 2003; MAF, 2007). Ivanova et al. (2007) have argued that the economic environment for Bulgarian agriculture would change significantly given the experience of EU accession by the other CEE countries. They also forecasted in their econometric models that the EU accession would have a very positive effect on the crop sector and a negative effect on the livestock sector. Furthermore, the de-coupled payments would positively affect the recent production levels.

This paper discusses the situation and challenges facing horticultural farms of different sizes in the Plovdiv region of Bulgaria during the transition period and is the first comprehensive study of the horticultural sector in Bulgaria. The paper is divided into five sections. The next section reviews the horticultural sector in Bulgaria, the methodology is described in section three while the analysis and discussion of the data is reported in section four. The final section reports the conclusions from the study.

2. Review of Horticulture in Bulgaria

Bulgaria enjoys good natural conditions for horticulture including fertile soils and a mild continental climate. About 4% of the agricultural land in 2004 was used for perennials and less than 3% for vegetables (MAF, 2007). The main horticultural products are wine grapes, potatoes, plums, tomatoes and apples (OECD, 2000; Bencheva, 2005; MAF 2005). Over 14% of the value of total agricultural output in Bulgaria was vegetables in 2004 (MAF, 2007). The Plovdiv region is a major horticultural region of Bulgaria and is situated in the central-south part of the country where the majority of the vegetables are grown.

Before World War II, Bulgaria was one of the main vegetable producers in Europe (SENTER, 2000). During the period under communism, Bulgaria produced a range of horticultural products, most notably wine, vegetables, fruits, arable crops and tobacco and became one of the leading exporters of agri-food products from Central and Eastern Europe (CEE) (OECD, 2000).

Since the economic reform began in Bulgaria at the end of 1989, changes in the horticultural sector have been dynamic. This sector was badly affected by the political, economic and agricultural reforms in Bulgaria over the subsequent two decades. Overall, the area and production of fruit and grapes decreased dramatically due to the changeable weather conditions, the volatile economic and political situation, unfavourable age structure of the trees and vineyards, high production costs, usage of old technologies and machinery and lack of investment capital (FAO, 1999; OECD, 2000; MAF, 2005; MAF 2007). By 2004, fruit output had declined by more than 60% compared to 1990. In 2004, the grape production had more than halved compared to 1990 (SENTER, 2000; MAF, 2005). Vegetables have traditionally been grown in Bulgaria and their production was fairly stable over the last two decades (MAF, 2007).

Subsistence and semi-subsistence farms mainly specialising in labour intensive crops (vegetables, fruits and vineyards) accounted for almost 90% of agricultural employment. The lack of investment in machinery resulted in increased use of manual labour and in consequence low labour productivity (MAF, 2007).

In 1997, agricultural products accounted for 14% of total exports compared to 8.8% of total imports. The principal exported commodities were tobacco, wine, processed fruit and vegetables and animal products (mainly dairy products). In 2004, agricultural products accounted for 10% of total exports of which wine, processed and fresh fruits were the key horticultural products. Prior to the transition, more than half of the agricultural trade was with CMEA (Council for Mutual Economic Assistance – ex-Communist) countries. Trade with the EU countries has developed significantly during the transition period. Agricultural exports to the EU increased from 6% of total exports in 1989 to 23% in 1997. In 2004, the key horticultural markets for Bulgaria were EU-25, the Balkan countries and Russia. Bulgaria mainly imports processed agri-food products with high added value, while exporting largely raw materials and by-products (MAF, 2000; MAF, 2007).

3. Methodology

In this research based on a survey of horticultural farms in the Plovdir region, horticulture includes fruits, vegetables (including melon and watermelon) and wine grapes. Some of the farms in the survey were not solely horticultural as they also cultivated agricultural crops such as cereals, herbs, tobacco, etc. Primary data collection was undertaken during 2001/02. The research method used was structured face-to-face interviews as this took account of the farmers' lack of experience with research interviews and the innovative nature of this study. Purposive sampling was employed due to the lack of an accurate and up-to-date list of the horticultural farms in the Plovdiv region in 2001/02. The main advantage of this sampling technique is that it can provide critical, extensive and vital information for achieving the research targets, while the principal weakness is that the sample might not be representative and the results can not directly be generalized. A total of 108 farmers were interviewed in their work places.

A literature review suggested that farm size is a very important factor as it has a strong influence on farm business performance and strategic development (FAO, 1999; OECD, 2000; Kostov and Lingard, 2002; Georgieva, 2003; Popov, 2006). In this study, the farms in the survey were divided into the following groups: 'small' farms – less than 2 ha (mainly subsistence farms); 'medium size' farms – between 2 and 10 ha; and 'big' farms – more than 10 ha[1]. Over half of the sample (54%) were 'medium size" farms and 23% equally were farms under 2 ha and farms over 10 ha.

The questionnaire included both closed and open questions (based on free elicitation) and a range of quantitative and qualitative data was collected. It was not appropriate to undertake statistical testing because of the small sample size.

4. Main Results

4.1 Product structure of the farms

More than half of the interviewees (53%) were cultivating **fruit** (Table 1), the most common being apples, plums and cherries. The Plovdiv region is the major apple producer and second biggest producer of plums in Bulgaria (SENTER, 2000). The respondents cultivated fruit because they acquired their orchard(s) as part of the land restitution process. They also stated that fruit growing was profitable during the transition period and had been traditionally grown in the Plovdiv region. The results (Table 1) also revealed that the majority of the 'big' farms (76%) had fruit, whereas 60% of the 'small' farms did not cultivate any fruit due to high start up costs and delayed returns.

Grapes (table and wine) were cultivated by 45% of the respondents (Table 1). According to the interviewees, the rationale for cultivating grapes was very similar to those for fruits, which

1 There is no certain way of grouping the farms in Bulgaria in terms of size, however, research undertaken by the EU, FAO, MAF, OECD, and various researchers provided guidelines for the division of farms by size (EC, 1998; FAO, 1999; Mishev et al. 1999; MAF, 2000; OECD, 2000; Kostov and Lingard, 2002).

were: the vineyards were inherited after the land restitution, profitability and increased demand from the increased number of private wineries. Grape production was largely stable in the Plovdiv region, which is the second biggest in terms of area of vineyards after the Bourgas region (near the Black Sea) (MAF, 2002). One of the traditional varieties of wine grapes in Bulgaria 'Mavrud' is specific to the Plovdiv region and is a very popular crop for cultivation. The data indicates there was no difference between the grape orientation of farms with different size (Table 1).

Table 1. Crop cultivation on farms of different sizes

	SIZE OF FARMS						**Total**	
	Small		**Medium**		**Big**			
Fruits	Count	%	Count	%	Count	%	Count	%
Yes	10	40	28	48	**19**	**76**	**57**	**53**
No	**15**	**60**	**30**	**52**	6	24	51	47
Total	25	100	58	100	25	100	108	100
Grapes								
Yes	**13**	**52**	25	43	11	44	49	45
No	12	48	**33**	**57**	**14**	**56**	**59**	**55**
Total	25	100	58	100	25	100	108	100
Vegetables								
Yes	**20**	**80**	**44**	**76**	**18**	**72**	**82**	**76**
No	5	20	14	24	7	28	26	24
Total	25	100	58	100	25	100	108	100
Other crops								
Yes	**15**	**60**	**46**	**79**	**22**	**88**	**83**	**77**
No	10	40	12	21	3	12	25	23
Total	25	100	58	100	25	100	108	100

The favourable natural conditions in the Plovdiv region, on the Thracian plain around the river Maritsa, has historically provided a sound basis for the development of the horticulture and for growing vegetables in particular (MAF, 2002). This was confirmed by the respondents as the majority of them (76%) cultivated **vegetables** (Table 1). The reasons, according to the respondents, were that vegetables are annual crops that do not need big or long-term investments, they have traditionally been grown in the Plovdiv region and they were profitable and they had maintained relatively high prices during the economic transition and the years leading to EU accession. The most frequently grown vegetables by the surveyed farmers were tomatoes, peppers and potatoes. Farm size did not appear to be a factor in terms of the vegetable orientation of the enterprises investigated (Table 1).

A range of other agricultural crops, were grown by some farmers in the sample, including arable crops, herbs, tobacco, etc. The majority of the farmers who participated in this study (77%) cultivated, together with their horticultural crops, some of these ‘other’ crops. The main reasons for combining horticultural products with ‘other’ crops were: better use of resources such as land, machinery and labour, profitability and the necessity for crop rotation. The results indicated that there was no reliable evidence that farms of different size differed in relation to the frequency of ‘other’ crops grown (Table 1).

The cropping programmes, especially possible growth in perennial products, might change significantly with the introduction of the CAP and the single area payment system in Bulgaria, which could be a subject for further studies.

4.2 Market structure

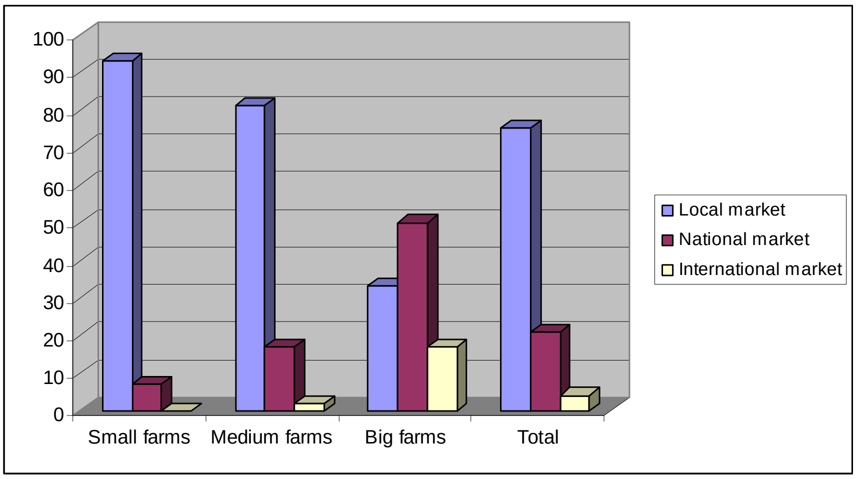
Prior to 1989, Bulgaria was a major exporter of agri-food products to the former USSR and other communist countries. Since then the country has had difficulties finding new markets due to low competitive power, poor quality of products and increased competition from the EU and other countries (OECD, 2000; MAF, 2002, Bachev, 2005). Furthermore, the agricultural market structure in Bulgaria, including horticulture was poor due to reduced domestic purchasing power, the slow process of privatization of the agri-food processing industry, lack of marketing skills among farmers and limited marketing support by the Government (SENTER, 2000; EC, 2002; Bachev, 2005).

Since 1989 the distribution channels in Bulgaria have been under continuous development but are still not well developed. The large state monopolies in marketing and distribution in Bulgaria were dismantled at the end of the communist period, the wholesale and retail channels were privatized and that process resulted in the emergence of a large numbers of new private agents (suppliers, processors, intermediaries) (FAO, 1999; SENTER, 2000).

Both before and after 1989, the farmers in the Plovdiv region had an advantage in terms of ‘selling’ their products because one of the three established wholesale markets in Bulgaria is located in the Plovdiv region. This advantage was present before 1989 and has continued since. However, according to FAO (1999) and Bachev (2005), the existing wholesale markets have functioned ineffectively and need significant improvement and modernisation.

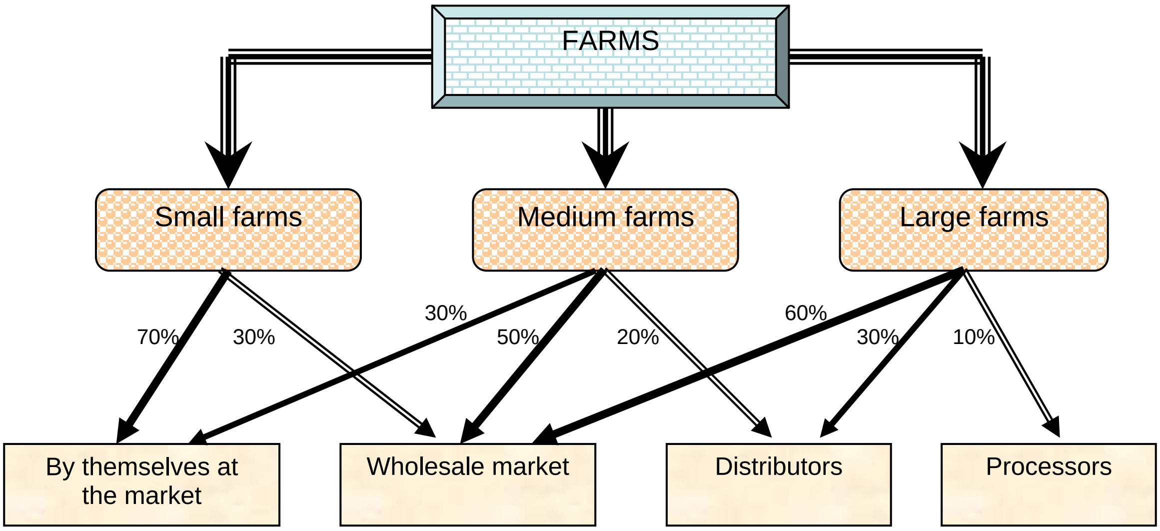
Given this troubled background, 75% of the farms in the survey sold their production locally during the pre-accession period. The national market was supplied by 21% of the farms and only 4% of them had international markets (Figure 1). Within these broad percentages, the results revealed that 50% of the farms of more than 10ha sold their production nationally. In comparison, the vast majority of the 'small' and 'medium size' farms (93% and 81%) were orientated towards their local market (Figure 1) due to their small production capacity.

Figure 1. Markets for farms of different sizes (volume)



In the years leading to EU accession, approximately half of the respondents used a wholesale market to sell their products. The farms of less than 2ha kept some of their production for self-consumption and sold the rest through the 'local' retail market. The 'medium' farms mainly sold their produce in the wholesale market (50%). The large farms, cultivating over 10ha, mostly used wholesale markets and due to their higher capacity also sold to distributors and processors (Figure 2).

Figure 2. The distribution channels for farms of different sizes



Both, the secondary sources and the primary data suggested that the practice of growing under contract did not appear to be widely used by the respondents. However, a few commercial farms marketed relatively large amount of products through contracts with national or international companies.

4.3 Land ownership patterns of the farms

More than half the farmers (56%) cultivated their own restituted land, about one third of them (34%) had a mixture of owned and leased land or leased land only and 10% of them were co-operatives (Table 2).

Table 2: Land ownership patterns for farms with different size

Land ownership	SIZE OF FARMS							
	Small		Medium		Big		Total	
	Count	%	Count	%	Count	%	Count	%
Own farms	**23**	**92**	**36**	**62**	1	4	**60**	**56**
Mixed/leased farms	2	8	22	38	**13**	**52**	37	34
Co-operatives	0	0	0	0	11	44	11	10
Total	25	100	58	100	25	100	108	100

The results show that 92% of the ‘small’ and 62% of the ‘medium size’ farms cultivated only their own land, whereas 52% of the big farms leased land and 44% of them were co-operatives (Table 2). The process of land restitution fragmented the agricultural land because many owners inherited a plot of land (FAO, 1999; OECD, 2000; MAF, 2002). Consequently, farm consolidation was possible only by leasing or buying neighbouring land. However, leasing land was perceived as a risky activity because the land legislation was poor and the land market was inactive in Bulgaria during the transition and in the years leading to EU accession (FAO, 1999; OECD, 2000). MAF (2006) believes that some land consolidation has taken place. However, after joining the EU land ownership remains fragmented and the land market is still inactive in Bulgaria.

4.4 Vision of the Farmers

The respondents were asked to describe their ideal vision for their farm business during the years leading to the EU accession. More than half of the interviewees (57%) stated that they wished to have a **modern farm** (Table 3). The main weaknesses of the farms were obsolete machinery and old technologies inherited from the large AICs that were not necessarily suitable for small-scale farming (OECD, 2000; SENTER, 2000; MAF, 2002; Bencheva, 2005). These aspects, combined with the lack of finance for buying new machinery, or to support research and development, help to explain the difficulties the respondents had in modernizing their farms.

Table 3. The visions of the farmers managing different sized farms

Visions*	**SIZE OF FARMS**						**Total**	
	Small		**Medium**		**Big**			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Modern farm	10	40	**41**	**71**	**11**	**44**	**62**	**57**
Farm expansion	**14**	**56**	21	36	7	28	43	40
Having perennial crops	2	8	18	31	**11**	**44**	31	29
Effective marketing	2	8	3	5	**11**	**44**	16	15
Diversified activities	0	0	7	12	5	20	12	11
No dreams	5	20	5	9	2	8	12	11
Total of cases	25	100	58	100	25	100	108	100

Note: * This table includes only the top six answers given by the respondents. Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

The first steps towards achieving economic stability in Bulgaria after 1997, and the beginning of the EU accession process, influenced the farmers' vision and they began to consider the idea of becoming bigger and stronger in economic terms. Therefore, their second vision was

farm expansion (40%) (Table 3). At the same time, the official completion of land restitution, the improvement of land legislation, the establishment of long-term agricultural policies, the start of the SAPARD programme, and the EU accession process provided a basis for business growth. However, there were also some obstacles such as an inefficient land market, limited capital for investments and turbulent political, technological and economic changes (SENTER, 2000; MAF, 2007).

The results revealed that 29% of the farmers had a vision to **grow perennial crops** (fruits and grapes) (Table 3). MAF (2000), OECD (2000) and MAF (2006) have argued that fruits and grapes were the most profitable crops during the transition period and the years leading to EU accession due to strong market demand. This was confirmed by the respondents who identified perennial crops as providing capital for running the existing business as well as for business expansion. They also stated that the lack of finance for investments, limited governmental support, complicated loan procedures and the slow development of long-term leasing arrangements made the establishment of new orchards and vineyards very difficult.

Only 15% of the respondents sought an **effective market structure** (Table 3). They suggested that a market information database or establishing new wholesale markets (Western type auctions) would improve the marketing system in the country. Various national and international reports have argued that the market structure has been poor in Bulgaria during the transition period (FAO, 1999; OECD, 2000; MAF, 2002,) and several market support initiatives for farmers were introduced during the pre-accession period. However the marketing problems are still to be solved (MAF, 2007).

Only 11% of the interviewees had a vision related to **farm diversification** (agri-food processing units, plant nursery, agri-tourism, etc.) (Table 3). Again, lack of finance was the major obstacle for developing alternative economic activities. However, the respondents hoped that joining the EU would present better opportunities for farm diversification. Eleven percent of respondents did **not have a vision** regarding their farm business due either to their advanced age (over 60 years) or their difficult lives in a fast changing economic and business environment (Table 3).

There were some minor differences in the visions of the respondents with different sized farms. More than half of the interviewees with ‘small’ farms (56%) stated that their main vision was farm expansion. They believed this was essential if they wanted to stay in agriculture/horticulture, and be competitive, after Bulgaria joined the EU. The managers of the ‘big’ production units placed equal emphasis (44%) upon farm modernization, better marketing and cultivating perennial crops based on the potentially bigger profits that would enable them to invest in these activities. A relatively high percentage of farmers with ‘small’ enterprises declared that they did not have visions for their farms (Table 3). That could be because they were subsistence farms, and the farmers were over 60 years old.

4.5 Policy issues – critics and advice

The literature showed that the agricultural industry in Bulgaria has been in a critical situation over the last two decades. The OECD (2000) and SENTER (2000) stated that during the first 10 years of economic transition the agricultural and rural development policies have been unclear as some regulations contradicted each other or essential policy activities had been postponed. Therefore, the farmers in the sample who were the ‘main actors’ in agriculture/horticulture were asked to give advice about the economic development of this sector in the Plovdiv region of Bulgaria. This innovative ‘bottom up’ approach was novel for the respondents as prior to 1990 they were given no choice but to follow Government directions. For many of them being asked to give advice to the authorities was perceived as a ‘new’ positive experience.

In terms of advice they identified a range of activities that the Government needed to consider carefully and they were pleased to express their vision in regard to agriculture/horticulture. However, they did not believe that their advice would be followed by the government and the policy makers, consequently they considered this question as a ‘waste of time’.

The majority of the farmers who responded (73%) stated that they needed *financial support* in terms of grants and/or an improved credit system (Table 4). The agriculture/horticulture sector was regarded as having been primitive over the period (1989-2000) by SENTER (2000) and Mihailova (2000) and for the development of this sector there needed to be finance for buying new machinery, implementing modern technologies and research for introducing new crop varieties.

Table 4. Advice of the farmers to the Bulgarian Government

Advice*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Financial support	14	56	45	78	20	80	79	73
Marketing support	14	56	18	31	12	48	44	41
Better import/export regulations	10	40	22	38	11	44	43	40
Incentives to stay in the agriculture	8	32	19	33	3	12	30	28
Total of cases	25	100	58	100	25	100	108	100

Note: * This table includes only the top five answers. Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

During the transition period, the banks considered advancing loans for agricultural activities to be very risky. Therefore it was very difficult for farmers to borrow. Another obstacle to borrowing was that agricultural land was not accepted as a good security, which made the procedure very complicated and time consuming. An agricultural credit association was established in the Plovdiv region but its lending capacity was below the demand for loans (OECD, 2000). The farm business required low interest rates and long-term loans. The respondents claimed that offering grants to farmers for buying machinery would increase the efficiency and the competitiveness of horticultural enterprises.

Various national and international reports have identified that the market structure has been poor in Bulgaria since 1989 (FAO, 1999; MAF, 2000; OECD, 2000). Fortyone percent of the farmers confirmed this fact and suggested that the Government should improve the *marketing system* (Table 4). The farmers' proposals included: the establishment of Western type auctions; developing a market network for farmers and distributors; supporting the agri-food processing industry, which had used huge quantities of agricultural products as raw materials, prior to 1989.

It was also reported in the studies made by SENTER (2000) and EC (2001) that Bulgarian farmers were not prepared for the sudden change from a centrally planned economy to a free market and joining the EU, which demanded a commercial approach to farming.

Consequently, Bulgarian farmers did not have enough business and marketing skills and proposed that the Government should initiate more training courses to improve producers' skills in these areas (SENTER, 2000; EC, 2001).

It has to be acknowledged that the Government did take some actions towards improving the market system during the pre-accession period such as running a project for the establishment of wholesale markets (supported by the German Government), building an advisory and network information system and trying to find markets for agri-food products (MAF, 2000; SENTER, 2000; MAF, 2007).

According to 40% of the interviewees, *import/export regulations* were unfavourable to farmers (Table 4). On one side, with the collapse of the Communist regime in 1989, Bulgaria lost its main international markets (other CEE countries and the former USSR) which were not replaced. Therefore agricultural exports fell dramatically. On the other hand, Bulgarian farmers faced increased competition from Western European countries, which was new for them and they did not have the skills to deal with it. The competition was amplified because of the various agreements for low tariff barriers with CEFTA and EU (OECD, 2000; SENTER, 2000; Mihailova, 2000).

At the same time farmers were under pressure from illegal imports at low prices from neighbouring countries, for example Macedonia and Turkey. Respondents suggested changing the import/export regulations by implementing a stable and clear trade policy that would protect local producers and would support the export of Bulgarian agricultural produce. Farmers sought increased import taxes to protect domestic agricultural producers.

Twentyeight percent of the respondents sought *incentives to stay in agriculture/horticulture* (Table 4). Addressing the problems of the rural areas by improving the infrastructure and the social environment, reducing the level of bureaucracy, supporting small and medium businesses, as well as younger farmers, were the main suggestions that interviewees proposed.

During the pre-accession period, some EU programmes (*e.g.* SAPARD) introduced measures to tackle the problems of the rural areas. The measures aimed to support young farmers, provide adequate training programmes (*e.g.* diversified economic activities) and improve the infrastructure in the rural areas (OECD, 2000; EC, 2000). The national strategy plan for rural development (2007-2013) addresses the problems of rural areas and provides a plan for solving them (MAF, 2007).

5. Conclusions

Horticulture is an emerging field of research in Bulgaria. This research found that small-scale (often subsistence) farms (less than 2ha) were involved primarily in vegetable production, which farmers sold at the local market. The 'medium' farms (2-10ha) were transitional and were working under pressure for either survival or expansion under the EU conditions. They produced mainly annual crops (vegetables and other agricultural crops) for the local wholesale markets. The 'big' farms (over 10 ha) were commercial and focused on efficiency and profitability. They grew annual crops and some perennials (fruits and grapes) (Garnevska et al, 2008).

The economic reforms in 1989, the process of land restitution and the development of the private farming found farmers unprepared for running commercial farms, not having the skills to run businesses in a free market economy.

During the transition period, lack of capital for investment, lack of, or uncertain markets, illegal imports and loss of the main export markets were the key obstacles hindering horticultural producers identified in this research. The farmers in the Plovdiv region suggested that for the successful development of Bulgarian agriculture and horticulture there needed to be from government more financial support, marketing support and more favourable import/export regulations.

Considering the problems of the horticultural sector and the difficult financial situation in Bulgaria during the years leading to EU accession, the farmers' visions were for modern farms or larger farms to be more competitive. Perennial crops, like fruit and grapes, were widely acknowledged to be the most profitable products during the transition and pre-accession periods. Bulgaria joined the EU in 2007 and the visions of the farmers might now be very different but this requires further research.

This study demonstrated that despite the difficult economic and dynamic environment in Bulgaria, horticultural farms have significant potential due to favourable natural conditions coupled with the tradition of growing horticultural crops that has existed for centuries. During the transition period (1990s), Bulgarian agriculture underwent dramatic changes and reforms such as land restitution and privatization. In the pre-accession period (1999-2007) the agricultural sector in Bulgaria was restructured to fulfill the criteria for joining the CAP and entry into the EU. Equally, joining the EU in 2007 has presented new challenges and opportunities for farm businesses in Bulgaria.

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