The Market for Fruit & Vegetables in Kosovo and Balkan Regional Market Study

Swiss Project for Horticultural Promotion – Kosovo (SPHP-K)

INTERCOOPERATION

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EXECUTIVE SUMMARY

The background for this study: Intercooperation (IC), a Swiss non-government organisation (NGO), mandated a market study for its Swiss Project for Horticultural Promotion in Kosovo (SPHP-K) which should focus on the Balkan regional market for fruit & vegetables (f&v), and the imports of these commodities into Kosovo. The study was finally contracted to K.horns consulting, a market research and marketing advice company, based in Munich, Germany. The international consultant who – in co-operation with the local SPHP-K team – accomplished the study was Christian FISCHER, an agricultural economist with professional experience in agricultural development in Central and Eastern Europe.

The study goals were "to get a picture of the main markets of the regions surrounding Kosovo, to know how they function, how they interact with other markets abroad, and finally to be able to analyse the chance of the Kosovo fruits & vegetables producers to access these regional markets and to compete against import in their own province" (see attached Terms of Reference (ToR)). As surrounding countries were specified the now independent states of the former Yugoslavia – ie, Slovenia, Croatia, Bosnia-Herzegovina, Federal Republic (FR) of Yugoslavia (Serbia and Montenegro), Macedonia – and the other Balkan countries Albania, Greece and Turkey. For all mentioned countries data on production, consumption, international trade and domestic distribution should be collected and analysed. In addition, production and marketing costs for major f&v in these countries should be assessed. Another research goal was to analyse in detail imports of f&v into Kosovo, and the interactions between primary importers and secondary distributors in order to be able to better understand of how these imports affect local production.

The methodology used for the regional part of the study was the analysis of sector-level data, mainly of international trade flows (ie, exports and imports) but also of national production and consumption of horticultural commodities. For the first part of the study – ie, the Kosovo local one – an interview survey of f&v import companies located in Pristina and other major towns in Kosovo was organised. The obtained primary data was then analysed mainly by using descriptive statistics.

The results from the Kosovo local part: the analysis of the official or otherwise available data on Kosovo's horticultural sector shows that the country is currently heavily import dependent and characterised by subsistence farming, the estimated value of which may even have exceeded official production in 2001. The survey findings confirm that (1) the market for fruit & vegetables in Kosovo and in surrounding areas is a very locally oriented one — ie, focused mainly on Kosovo, Serbia and Macedonia. Albania as a neighbouring country with strong ethnic links to Kosovo, however, does not seem to play a major role at present. (2) Product quality is the most important issues, at least for f&v importers. Although Kosovo's produce is believed to be, in principle, of good quality, there is still much scope for improvement. (3) Market organisation is still very basic in Kosovo, probably given the lack of a functioning legal business framework. Without trust, transaction costs are usually higher. In Kosovo, at the moment, business relationships seem to be very short-term and *ad hoc*, indicating a strong need for improvement of conditions. Overall, it

becomes thus clear that Kosovo's producers are threatened by imports, in particular from its neighbouring countries and by commodities which the country produces by itself, but at a later stage during the season. When the local production comes finally on the market, prices are already low due to the existing surpluses. Nevertheless, there are indications that Kosovo's horticultural commodities could generally compete if production and marketing were managed more effectively.

The results from the Balkan region part: (1) there are clearly demand potentials in the neighbouring Balkan region for pears (US$8.3m annually) and to a certain extent also for apples. With regard to vegetables, the biggest regional demand exists for potatoes ($22.4m), lettuce ($7.3m), garlic ($4.2m) and dried beans ($3.8m), and a limited demand for tomatoes, carrots and potentially onions. Frozen vegetables are in short supply in Greece ($7.3m), Slovenia ($3.9m), Croatia ($3.0m) and Albania ($0.4m). (2) Prices are not the one and only criteria for export success but the analysis shows that Macedonia is most price competitive for both fresh vegetables and fresh fruit, followed by Turkey. Balkan countries which generally are net importers of f&v – ie, countries into which export opportunities exist – are Slovenia, Croatia, Bosnia-Herzegovina and Albania. Greece is a net exporter of fruit but a net importer of vegetables while both Macedonia and Turkey export large surpluses onto the regional market.

A final assessment of Kosovo's real regional competitive advantage as a f&v producer, taking into account issues as broad as climate, geology, geography, water availability etc and human capital related factors such as the current political and economical situation, the state of production assets, field sizes, current trade policy etc suggest that, at present and also very likely in the medium-term future, Kosovo will be having a hard standing to either compete against horticultural imports from neighbouring countries or to export into these markets, although export potentials clearly exist as this study shows.

Recommendations: (1) from a commodity point of view, SPHP-K should focus its activities on those f&v which have been identified in this study as being in short supply (see above). Some of these commodities can be produced during the entire year in glass houses or plastic tunnels (eg, lettuce, tomatoes and carrots). Others, such as dried beans, garlic, onions and pears, cannot, in general, be produced cost-effectively all-year around, but they can be stored and supplied to the market in a more continuous way than it is done at present. (2) It should be assessed in a systematic way whether additional storage facilities are needed and/or how the existing ones could be managed more effectively. This needs not necessarily be undertaken by SPHP-K but at least the project should try to convince stake holders in the ministry or at international donor organisations that both, under-glass production and more effective stock keeping will significantly contribute to stabilise prices and to assure a more continuous market supply from which farmers will benefit through higher incomes and consumers by a better availability of f&v during the year. (3) The building of specialised institutions is another important task which needs to be achieved in order to promote economic development. Apart from government or other 'public' institutions there is also urgent need for private sector institutions and one of it is for example a new wholesale market in Pristina. Kosovo's produce cannot be effectively marketed if there is no or only limited access to

sales channels. The study results confirm that the Pristina wholesale market is most important for the internal distribution of f&v. Therefore, Kosovo's producers must have a better presence at this market. The study results also show that business transactions still mostly occur on an *ad hoc* basis and a better trading infrastructure (with appropriate communication facilities, warehouses, transport agencies, office space etc) would contribute to the building of more trustful and thus lasting business relationships. Therefore, SPHP-K should engage in the design of the planned new wholesale market and should also engage in activities to assure that Kosovo's producers will be accordingly represented on this market. (4) Regional production and marketing co-operations should be promoted. For example, Metodija STOJANOVSKI, executive director of Export Consortium in Skopje, Macedonia, suggested that he could imagine to market Kosovar blueberries into the EU where he is already serving an attractive high-price market segment. For a start, fresh blueberries could be transported to Macedonia and freezing and marketing will take place there. In the medium run, freezing may then also occur in Kosovo. Mr STOJANOVSKI is also a professional business trainer and training sessions could be organised with him. It is therefore recommended that SPHP-K engages in the building of intra-regional marketing networks. (5) Capacity building and the creation of effective extension services is a final activity which seems to be crucial for the development of the horticultural sector in Kosovo. Although the formation of a general extension service is more a government task, SPHP-K, as one of the main foreign protagonists in the horticultural sector, could contribute to this process in providing a network of specialised international consultants which complement existing advisory services. The organisation of periodic expert round tables or workshops, strategy seminars etc could contribute to know-how transfer and information dissemination to and capacity building of local extension services and thus to the promotion of horticultural development in Kosovo. SPHP-K should thus engage directly in building such a network of international advisors and in the (initial) organisation of the just-mentioned events.

* * *

1 INTRODUCTION

Kosovo is the poorest (former and now autonomous) province of the Federal Republic (FR) of Yugoslavia, with a current population of about two million people. Conflict-related damage has hampered economic growth, which is compounded by the poor state of infrastructure, inadequate energy supplies and depleted capital stock. The NATO conflict most severely affected housing, agriculture, and telecommunications. More than 50% of agricultural assets were reportedly damaged or lost. Lack of clear laws governing ownership of agri-processing 'kombinats' has led to slow reconstruction and investment in state-owned enterprises. The lack of credit and financing is a major problem for any agricultural producer. In addition, a regional drought hit the Balkans in 2000, thus making things even worse. (USDA 2001, GAIN report #YU1109). Given the poverty level, subsistence farming – especially of fruit and vegetables – is probably high.

The background for this study is described in detail in the Terms of Reference (ToR) which can be found in the appendix. In short, Intercooperation (IC), a Swiss non-government organisation (NGO), mandated a market study for its Swiss Project for Horticultural Promotion in Kosovo (SPHP-K). After several other studies which had already been accomplished by IC in Kosovo before, this one should now focus on the Balkan regional market for fruit & vegetables (f&v), and the imports of these commodities into Kosovo. The study was finally contracted to K.horns consulting, a market research and marketing advice company, based in Munich, Germany. The international consultant who – in co-operation with the local SPHP-K team – accomplished the study was Christian FISCHER, an agricultural economist with professional experience in agricultural development in Central and Eastern Europe.

The study goals were "to get a picture of the main markets of the regions surrounding Kosovo, to know how they function, how they interact with other markets abroad, and finally to be able to analyse the chance of the Kosovo fruits & vegetables producers to access these regional markets and to compete against import in their own province" (see ToR). As surrounding countries were specified the now independent states of the former Yugoslavia – ie, Slovenia, Croatia, Bosnia-Herzegovina, Serbia, Montenegro, Macedonia – and the other Balkan countries Albania, Greece and Turkey. However, the availability of separate statistical data for Serbia, Montenegro and Kosovo is still limited, since officially these three entities still fall under the Federal Republic (FR) of Yugoslavia. Therefore, in most parts of this report data and analysis refer to FR Yugoslavia instead of its autonomous provinces. For all mentioned countries data on production, consumption, international trade and domestic distribution should be collected and analysed in order to assess whether there exist export opportunities for Kosovo's horticultural commodities. In addition, production and marketing costs for major f&v in these countries should be assessed. Another research goal was to analyse in detail imports of f&v into Kosovo, and the interactions between primary importers and secondary distributors in order to be able to better understand of how these imports affect local production.

The methodology used for the regional part of the study was the analysis of sector-level data, mainly of international trade flows (ie, exports and imports) but also of national production and

consumption of horticultural commodities. For the first part of the study – ie, the Kosovo local one – an interview survey of f&v import companies located in Pristina and other major towns in Kosovo was organised. The obtained primary data was then analysed mainly by using descriptive statistics.

Acknowledgements for their support and inputs to this study need to be made to many local people. The whole SPHP-K project team in Pristina needs to be thanked for their excellent support and co-operation. In particular, Robert BERLIN, chief technical adviser and project leader, Luan HOTI, marketing officer, and Shiqipe SHALA, the office manager, are to be mentioned. In addition, special thanks must go to Vlora MEHMEDI and Alban GERGURI, the two local interviewers who executed the survey. Very useful were also the discussions with Metodija STOJANOVSKI, executive director of Export Consortium in Skopje, Macedonia; Tom THOROGOOD, FAO team leader in Vranje, Serbia; Bisnak KRASNIQI, state secretary, and Stefan BOJNEC, team leader, in the Ministry of Agriculture, Forestry and Rural Development in Pristina; Prof Dr Ramadan-Agim ZAJMI, dean of the faculty of agriculture at the University of Pristina; and Alfred NONNEN, project coordinator at United Nations Interim Mission in Kosovo (UNMIK).

The structure of this report is as follows: first, Kosovo's internal market for fruit & vegetables is described in terms of production, consumption and imports. Then, the discussion of official and otherwise available data is complemented by the presentation of results from an interview survey of f&v importers. These results describe commodity flows into and within Kosovo and the interactions between primary importers and secondary distributors. The second big section of this study analyses first Balkan regional trade of f&v in terms of net trade flows and investigates individual countries' competitiveness for a large number of commodities by presenting export unit values as a proxy for production and marketing costs. Then, f&v market intelligence for each of the above mentioned countries is presented. The final section of the report concludes and gives recommendations.

2 THE MARKET FOR FRUIT & VEGETABLES IN KOSOVO

This section of the report deals with the fruit & vegetable market in Kosovo. Since complete official data about this market is still scarce, primary research was necessary in particular with regard to international trade and domestic distribution of imported produce. Therefore, a survey of f&v importers located mainly in Pristina was organised to answer the questions specified in the ToR for this study.

The "Sub-sector Review: Fruit and Vegetables" as part of the "Kosovo Emergency Farm Reconstruction Project Capacity Building Component" by GFA/stoas, DAFRD and FAO (in a preliminary version) was issued, while this study was in the state of realisation. The sub-sector review provides in-depth analysis of the current problems of Kosovo in general, its agriculture, and in particular its horticultural sector. The massive study provides a detailed assessment of Kosovo's horticultural sector's production potential and of consumption of f&v in Kosovo on the basis of already accomplished studies. For this reason, the following two sub-sections on production and consumption only briefly summarise the findings of the just-mentioned study and focus is given in more detail to international trade (ie, imports) and domestic distribution of f&v in Kosovo.

2.1 Production

Agriculture's contribution to GDP was about US$213m, or about 30% in 1995, according to Kosovo's Ministry of Agriculture, Forestry and Rural Development (MAFRD, June 2002). More recent figures have not been available for this report.

Land use for horticultural production in Kosovo in 2000 was 47,700 hectares, according to MAFRD data. This represents 8.3% of the total agricultural land of 577,000 ha. More specifically, vegetables were grown on 24,000 ha (4.2%), potatoes on 9,300 ha (1.6%), fruits on 11,400 ha (2.0%) and vines on 3,000 ha (0.5%). (MAFRD, April 2002)

Small-scale production on private land is most important for fruit & vegetables. Only about 370 ha for vegetables and about 200 ha of fruit trees are hold by the big socially owned enterprises which in total use 4,601 ha of the total agricultural land – ie, about 10%. (Ibid.)

Production data of the individual vegetables are listed in the following Table 1. As it can be seen the production of peppers was most important as measured by land use, followed by tomatoes and watermelons. However, production in 2001 was significantly down as compared to the 1996 pre-war levels, in particular for cabbages, onions and tomatoes.

Table 1: Production of some selected vegetables in Kosovo, 1996 and 2001

	Peppers	*Tomatoes*	*Onions*	*Cabbages*	*Watermelon*
Area (1,000 ha) – 2001	3,619	1,431	1,397	918	1,505
Area (1,000 ha) – 1996	3,764	2,740	3,008	2,855	1,768
Production (1,000 mt) – 1996	31.0	32.8	14.9	32.8	23.4
Yield (mt/ha) – 1996	8.2	9.0	4.8	11.5	13.2

Source: Statistical office of Kosovo, reproduced in MAFRD (April 2002). *Opportunities of investment in the subsector fruits and vegetables in Kosovo*.

Production of individual fruit can be seen from the following Table 2. More recent data has not been available for this report. Plums were most important in that year, followed by apples and pears.

Table 2: Production of some selected fruits in Kosovo, 1996

	Plums	*Apples*	*Pears*	*Sour cherries*
Bearing trees (million)	1.4	0.7	0.4	0.6
Production (metric tons)	24,000	16,000	7,000	2,800

Source: Statistical office of Kosovo, reproduced in MAFRD (April 2002). *Opportunities of investment in the subsector fruits and vegetables in Kosovo*.

2.2 Consumption

Overall total consumption of fruit & vegetables in Kosovo in 2001 has been estimated at about €315m, based on food budget data collected by a survey of private households which was mandated by Intercooperation (see GFA/stoas, DAFRD and FAO 2002, and SPHP-K 2001 for details).

The division of total consumption into fresh and processed fruit & vegetables has been found to be: fresh vegetables (42%), fresh fruit (34%), processed fruit (14%) and processed vegetables (10%). (Ibid.)

The most popular fruit & vegetables are apples (17% of total fresh fruit consumption), followed by bananas (14%) and peaches (8%) for fruits, and tomatoes (17% of fresh vegetable consumption), peppers (16%) and potatoes (10%) for vegetables.[1] (Ibid.)

[1] Consumption levels of individual fruit & vegetables in the above mentioned SPHP-K study were collected in terms of 'quantities of produce purchased per week per household'. Unfortunately, it is not possible to directly transform these figures into 'annual per capita consumption', the measure that is used in the remainder of this report. Therefore, given the lack of comparability no more data are listed here, but see the two studies cited above for more details on Kosovar fruit & vegetables consumption.

2.3 Imports

Official import data into Kosovo is collected by UNMIK and reported on a monthly basis. However, the main problem with these data are that they do not take into account all points of entry. In particular, imports from Serbia are not or not completely included in the official figures. Also, since imports are counted in terms of trucks, the data are not listed by individual commodities but often by combined commodities such as 'apples & onions' etc. All this makes analysis of the official data difficult.

The import situation in 2001 for f&v is nevertheless reported in Table 3. Imports are specified in volume and value terms for all available commodities. In addition, imports for all f&v, all food & drink together and total imports are given. Thus, out of the total imports of about €480m, food & drink items hold a share of about 25% (ie, €119m) and f&v of 3.7% (ie, €18m). These shares vary between a minimum of 1.2% for f&v (6.4% for food & drink) in September and a maximum of 6.1% (20.7%) in June respectively.

The volume data do not contain the month of May, unfortunately. However, in using the other months' volume figures and in comparing them with the import values it is possible to estimate May's volume at about 12,000 metric tons which gives a total of f&v imports of about 84,000 mt in 2001.

Overall, it becomes clear that in 2001 imports of f&v represented only a small proportion (less than 5%) in the overall imports into Kosovo.

Table 3: Imports of different fruit & vegetables into Kosovo, 2001, in value and volume terms

	€uro '000	Metric tons* '000
Fruit & vegetables	7,761.3	34.7
Bananas	3,443.1	12.3
Vegetables	1,697.8	4.8
Fruit	1,017.8	3.6
Watermelons	759.3	5.8
Tomatoes	693.7	1.4
Onions	373.7	1.7
Apples	351.7	2.0
Clementines	281.8	0.8
Peppers	240.1	0.6
[Pepper	204.1	0.2]
Oranges	182.2	0.7
Tomatoes & peppers	142.0	0.3
Potatoes	123.1	1.0
Grapes (squeezed in January)	77.6	0.5
Watermelons & peppers	64.0	0.5
Apples & onions	44.3	0.3
Cucumbers	36.0	0.1
Beans	32.0	-
Lemons	31.8	0.1
Apples & cabbages	19.4	0.2
Watermelons, peppers & tomatoes	14.3	0.1
Cabbages	8.9	0.2
Melons	7.1	0.0
Apples, cabbages & onions	5.4	0.1
Tomatoes & watermelons	5.4	0.0
Cabbages & onions	1.7	0.0
Totals		
All fruit and vegetables	17,619.7	71.9
All food & drinks imports**	119,303.9	270.8
All Imports	481,293.0	1,296.7
Flowers	85.7	0.1
Seeds	269.3	0.9
Shares (%)		
Food & drink** imports in total imports	24.8	-
Fruit & vegetable imports in total imports	3.7	-
Fruit & vegetable imports in food & drink** imports	14.8	-

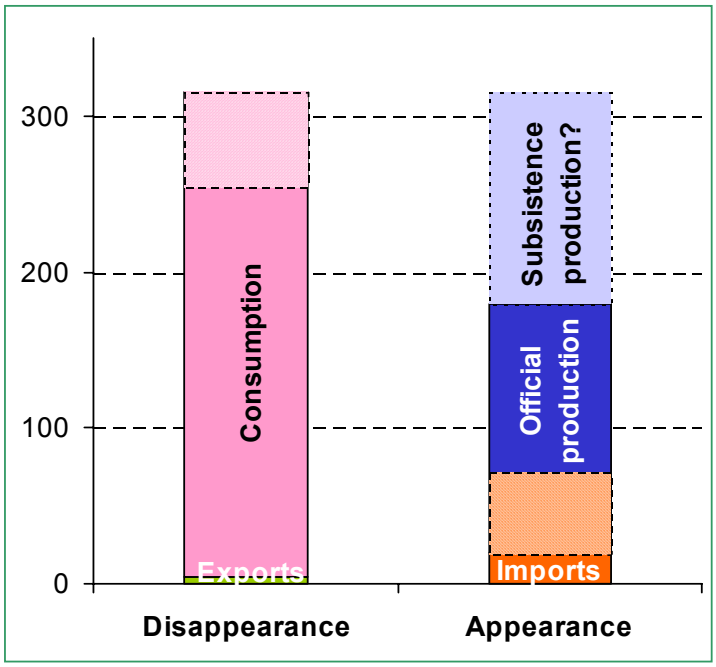
Notes: *excludes data for May which was not available;
** excluding live animals, feed, chewing gum and tobacco

Source: Own calculations based on UNMIK CUSTOMS SERVICE, Import statistics, January - December 2001

2.4 The overall picture

Kosovo's horticultural sector can be summarised by the following findings: (1) on the produce disappearance side, consumption of about €315m seems quite high – it may therefore be appropriate to allow for a smaller total amount, maybe in the scale of up to €50m. (2) Also on the disappearance side, exports seem not to have occurred in 2001, despite the fact that Kosovo had traditionally been a net exporter of at least some horticultural commodities, such as apples, peppers, potatoes etc. But even if any exports occured, they were certainly small. (3) On the produce appearance side, official imports of about €17m seem to be too small, as argued above. As for the consumption level, it may therefore be justified to allow for a higher figure, maybe as high as double the official one, in taking imports from Serbia and other unregistered commodity flows into account. (4) The size of the official horticultural production can only be estimated by taking the above mentioned figure on agriculture's contribution to GDP as a base. A US$213m in 1995 may then translate into something like €200m in 2001, taking war damage (degreasing effect) and inflation (increasing effect) into consideration. Since horticultural commodities are, in general, high-value goods, and given the traditional overall significance of this agricultural sub-sector, it may be justified to estimate the official annual horticultural output at up to €100m. (5) The rest, which makes up the difference between total appearance and disappearance,[2] can then only be subsistence production – ie, private household production for own personal consumption. This activity may have accounted for between €60m and €120m in Kosovo in 2001. The overall situation is visualised in Figure 1.

Figure 1: The horticultural sector in Kosovo (€m), 2001



Source: Intercooperation, official statistical data, estimates

In summary it becomes clear that Kosovo's horticultural sector is currently heavily import dependent and characterised by subsistence farming, the estimated value of which may even have exceeded official production in 2001.

[2] It is abstracted here from potentially existing stocks (inventories) of horticultural commodities due to the lack of available data. Also, because many horticultural commodities are perishable, stocks can generally be assumed as low in relation to production and consumption.

2.5 The survey

The aim of the survey was, according to the ToR for this study, to obtain a clearer picture about commodity flows of fruit & vegetables into and within Kosovo, due to the absence of detailed official data on imports and exports. Therefore a questionnaire was designed, aiming at identifying the main importers, the overall size of the imports for individual f&v and the main import origins for these commodities. Although it was clear from the very start that a survey of importers cannot reproduce what continuos official statistical data collection fails to do, it was at least hoped to obtain some indications about last year's commodity flows. However, in order to not miss this opportunity of 'polling' industry experts, opinion-based questions were also included in the questionnaire, not specifically demanded in the ToR, but which aimed at obtaining a complementary view on the competitiveness of Kosovo's horticultural production.

The questionnaire was presented to the SPHP-K team leader in Pristina and modified lightly, mainly with regard to the different fruit & vegetables to include. Then, the questionnaire was translated into Albanian. After discussing the questionnaire with the two local interviewers, it was decided to move the 'opinion-based' questions to the very start of the questionnaire in order to 'break the ice' and to give interviewees the opportunity to 'chat' a bit before the more technical questions would follow. (A copy of the English version of the questionnaire is provided in the appendix.)

A main problem for the survey was the non-availability of any information on the size of the population – ie, how many fruit & vegetable importers currently exist in Kosovo, due the absence of Yellow Pages or other company directories. A list of importers operating at the Pristina wholesale market proofed as unreliable since it included not only f&v importers but all kind of traders with no indication given in what products exactly they specialise. And, although Pristina is the main location for f&v importers, there are also several other towns in Kosovo where importers may be located and about which the list did not give any information. Therefore, it was decided, while the survey took place in Pristina, to also extend it into other bigger towns.

Another big problem became clear during the survey: since there is no record-keeping obligation for Kosovo's businesses at present, the surveyed companies were not able to provide exact financial data or imported or sold quantities. Also, it was discovered that the presence of traders on the Pristina wholesale market changes during the year (ie, according to season), and in particular that main Turkish suppliers, which come with their trucks and sell directly on the market, had just finished their activities due to the end of the season in their country. All this makes thus that in particular the results from the questions aiming at collecting 'hard' statistical data must be interpreted with caution.

The evaluation methodology applied was descriptive statistics only. Counts of answers, percentage distributions and, for some questions, means and standard errors are presented in the following. Inductive statistics or multivariate statistical analysis was not employed, given the type of information which was aimed at to collect, and the quality of data obtained.

2.5.1 The key importers

A ranking of Kosovo's major f&v importers ordered by 2001 import volume in descending order is provided in the following Table 4. This list gives also key information on all survey companies.

Table 4: The most important fruit & vegetable import companies in Kosovo, 2002

No	Company name	Type of business	Address *street & no. and town*		Owner/ manager	Phone	Size (*no. of staff)*	Total imports **2001** (*mt*)
1	Femi Comerc	Import		Pristina	Remzi Makolli	63611403	-	15,000
2	Skenda	Import		Pristina	Skender Hyseni	44137341	-	10,000
3	Bleri Commerc	Import		Mitrovice	Blerim Pllana	063 8310 23	2	10,000
4	Agro fruit	Import		Prizren	Faton Morina	44119095	5	8,400
5	Loris	Import		Pristina	Habib Muharremi	44189877	1	5,400
6	-	Import		Mitrovice	Lulzim Sylejmani		2	3,500
7	Braha-Commerc	Import		Prizren	Adnan Braha	44119768	4	2,000
8	ABI-Elif -19/Ex Progres	Import		Prizren	Irfan Fusha	44,005	160	2,000
9	Arbeni Commerc	Import		Pristina	Agim Ejupi	63850087	5	1,825
10	Kushtrimi Comerc	Imp/Exp		Pristina	Mexhid Beqiri	44208530	3	1,000
11	Naimi	Import		Pristina	Mustafe Bulliqi	44112774	2	1,000
12	Intercont	Import	Prapa Pallatit	Pristina	Halim Jashari		7	1,000
13		Import		Prizren	Besim Delia		4	800
14	Rrepi Company	Import		Vushtrri	Ferid Gerxhaliu	44265326	2	700
15	Nexhi-Com	Import		Prizren	Nexhmedin Gashi	44,175,678	2	700
16	Xhaviti-Com	Import		Peje	Xhavit Nushi	44,145,984	1	600
17	Titi Com	Import		Pristina	Besnik Shala		3	500-600
18	Temi -Commerc	Import	Vellezerit Fazliu 1025	Pristina	Remzi Makolli	63611403; 044111925	2	Over 500
19	Lluqani Commerc	Import		Bujanovc	Afrim Krasniqi		3	400
20	Gafurri M	Import	Green market	Peje	Isuf Mekaj	44,146,182	2	300
21	Arbana	Import	Green market	Peje	Besim Kuqi	44142678	2	300
22	Bleta Company	Import		Gjilan	Bedri Ismajli	28,050,403	4	300
23	Germova	Import		Mitrovice	Haki Germova	44176318	4	250
24		Import		Pristina	Arben Shabani	638171149	3	200
25	Besi Company	Import	F&V Market	Pristina	Osman Fejza	44167784	3	200
26	Daci Com	Import		Podujeva	Avni Thaqi	44252741	2	200
27	Cet Llapi	Import		Podujeva	Isuf Hajrizi	44174122	3	200
28	Bradashi	Import		Pristina	Nexhmi Hoti	44202909	2	200
29	Oskar	Import		Pristina	Azem Kaqiu		4	200
30	Engjulli Com	Import	Green market	Pristina	Defrim Rexha		2	170
31	Mani Commerc	Imp/Ret		Podujeva	Osman Hajdari	044 170 534	3	150
32	-	Import		Podujeva	Elmi Stublla	63792476	2	100
33	Daja Zeqe	Import	Str.Sitnica	Vushtrri	Naim Mazaqi	44146445	2	100
34	-	Import		Peje	Nexhat Kelmendi		6	40-50
35	Alfa Market	Retail		Pristina	Xhevat Jusufi	38223698	42	36
36	Geli Commerc	Imp/Exp	Jasaliu	Pristina	Agim Asllani	237784; 0638413536	4	30
37	Graniti Com	Import		Pristina	Blerim Goxhufi	638195413	2	-
38	Karadaku	Import		Pristina	Shkelzen Kameri		3	-
39	Trimi Commerc	Import		Pristina	Remzi Uka	44160117	2	-
40	Ardi	Retail	Pallati I Rinise	Pristina	Arben Talla	44114686	35	-
41	Agri Neks	Imp/Exp/ Retail		Pristina	Sabedin Kadriu	38570219	Family	-
42	Enisi	Retail	Qafe	Pristina	Enis Kameri	44158996	3	-
43	Zeqiri Impex	Import		Pristina	Rrahman Zeqiri	44120207	4	-
44	-	Import		Peje	Abedin Morina		1	-
45	Sinani	Import		Krusha e Madhe	Agim Sejfullahu	44160002	1& relatives	-
46	-	Import		Mitrovice	Sejdi Morina		2	-

Source: Survey data

A note of caution needs to be made with regard to the above given data: the list does probably not include all of the most important f&v importers, since as mentioned above, no complete company directory was available to identify the most important companies in the industry. In addition, since the total number of f&v importers in Kosovo is not known either, it is difficult to assess the representativeness of the sample (but see the next section on overall imports). Finally, there are some discrepancies in the data between the size as measured by staff number and by import volumes which should correlate but do not.

Sample company characteristics are: out of the 46 interviewed companies 23 (50%) are from Pristina, 5 from Prizren, 5 from Peje, 4 from Mitrovice, 4 from Podujeva, 2 from Vushtrri, 1 from Bujanovc, 1 from Gjilan, and 1 from Krusha e Madhe.

2.5.2 The overall size of the imports and origins

The overall import volume given by the sample companies listed in Table 4 is about 68,000 metric tons in 2001 (not including any figure for those companies which didn't give any answer on this question). Thus the sample companies' imports represent about 80% of the estimated 84,000 mt of total fruit & vegetable imports as reported by UNMIK (see page 11).

Overall import values given by the sample companies add up to about €7.0m which is about 40% of the total fresh f&v import value of about €18m in 2001 reported by UNMIK (see Table 3, page 11).[3] Table 5 lists the local distribution of the survey data. As it becomes clear, Pristina is the most important import location followed by Prizren, Mitrovice and Peje.

Table 5: Distribution of fruit & vegetable import volumes and values by location, Kosovo 2002

	Market location					
	Pristina	Prizren	Mitrovice	Peje	Gjilan	**Total**
Metric tons	38,762	13,900	13,750	1,245	700	**68,357**
% of total	*56.7*	*20.3*	*20.1*	*1.8*	*1.1*	***100.0***
€uros '000	6,646	352	-	31	-	**7,029**
% of total	*94.6*	*5.0*	*-*	*0.4*	*-*	***100.0***

Source: Survey data (*n*=46)

Types of products imported (see Question 12 in the questionnaire) are for most companies fruit & vegetables only. Not more than three companies import also other foods, and two also non-foods. One company imports f&v, other foods and non-foods. With this question correlates strongly the share of f&v in overall company turnover (Question 14) which accounts to 100% for all except for five companies. For these five companies the share varies between 5 and 90%.

Imports of individual fruit & vegetables have also been enquired by the survey (Question 17). However, since, at present, there is no record-keeping obligation in Kosovo, the respondents

[3] Financial data has been collected in the survey in DM terms but to ease (international) comparison the data has been transformed into €uros using the official exchange rate €1 = DM1.959.

provided only *ad hoc* answers, if they were able to give any answer at all. Therefore the data obtained by this question is not reliable. Nevertheless, the following Table 6 lists the obtained results.

Table 6: Imports of various fruit & vegetables into Kosovo, 2001, and expected changes (volume) for 2002

	Tons	No. of answers	€uro	*No. of answers*	*% change expected in 2002*	*No. of answers*
Vegetables						
Potatoes	3,480	*21*	156,684	*11*	-32.5	26
Tomatoes	39,533	*27*	195,918	*12*	-28.6	32
Sweat peppers	2,892	*23*	101,327	*9*	-22.5	28
Hot peppers	225	*11*	17,857	*4*	-23.9	23
Cucumbers	1,910	*22*	80,612	*7*	-35.7	27
Cabbages	1,660	*13*	20,918	*3*	-46.3	16
Carrots	76	*6*	3,316	*2*	-26.0	5
Onions	607	*5*	18,163	*3*	-40.0	8
Garlic	2	*2*	0	*0*	-22.9	7
Leeks	1	*1*	0	*0*	-35.0	2
Lettuce	1	*1*	0	*0*	-40.0	1
Spinach	51	*2*	0	*0*	-35.0	2
Peas	121	*2*	0	*0*	-40.0	1
White beans	2	*1*	20,408	*1*	-37.5	2
String beans	51	*2*	0	*0*	-30.0	2
Cauliflower	1	*1*	0	*0*	-35.0	2
Broccoli	0	*0*	0	*0*	-35.0	2
Beetroots	0	*0*	0	*0*	-40.0	1
Celery	0	*0*	0	*0*	-	0
Celeriac	0	*0*	0	*0*	-40.0	1
Parsley	1	*1*	0	*0*	-30.0	2
Fruits						
Apples	3,364	*26*	426,031	*13*	-28.7	27
Pears	1,409	*15*	39,796	*6*	-35.0	26
Peaches	541	*10*	8,291	*3*	-33.6	18
Apricots	111	*7*	1,020	*1*	-38.1	16
Watermelons*	3,600	*22*	69,898	*5*	-23.3	24
Other melons*	51	*5*	204	*1*	-39.6	12
Strawberries	71	*5*	306	*1*	-37.9	12
Grapes	210	*5*	31,133	*3*	-32.7	11
Plums	390	*8*	1,046	*2*	-36.3	12
Cherries	58	*4*	255	*1*	-41.9	8
Others	0	*0*	0	*0*	-30.0	1

Note*:* *Watermelons and other melons are treated as fruit in the remainder of this report.

Source: Survey data

Expected changes in imports for 2002 are interesting to note: even if the magnitude of this change may not be reliable, so it is still safe to assume that the trend is realistic – ie, that imports of f&v into Kosovo in 2002 are likely to be smaller than last years. Yet, there is also the possibility that during this year there operate more traders (maybe as a consequence of the €uro introduction) and that consequently overall imports must be divided by more companies, thus leaving "a smaller piece of the pie" for each single one, even if total imports may have increased.

Main import origins for individual fruit & vegetables are listed in the following Table 7. The table gives the number of survey companies which import a particular commodity from the given origin. Although Albania, Bosnia and Croatia were also included in the question (see Question 19 in the questionnaire), none of the companies said it would import from these origins.

Table 7: Import origins of various fruit & vegetables into Kosovo, 2001 (no. of answers)

	Serbia	Montenegro	Macedonia	*Greece*	*Turkey*	*Other countries*
Vegetables						
Potatoes	6	0	25	2	0	0
Tomatoes	4	0	33	5	6	0
Sweat peppers	2	0	31	4	5	0
Hot peppers	2	0	29	3	2	0
Cucumbers	2	0	26	5	0	0
Cabbages	2	0	16	2	0	0
Carrots	4	0	10	2	0	0
Onions	1	0	9	2	0	0
Garlic	2	0	8	2	2	2 (China)
Leeks	1	0	5	2	1	0
Lettuce	0	0	3	1	0	0
Spinach	0	0	2	1	0	0
Peas	1	0	2	2	0	0
White beans	1	0	0	1	1	0
String beans	0	0	3	2	1	0
Cauliflower	0	0	2	0	0	1
Broccoli	1	0	2	1	0	0
Beetroots	1	0	1	0	0	0
Celery	0	0	0	0	0	0
Celeriac	0	0	0	1	0	0
Parsley	0	0	3	2	0	0
Other vegetables	0	0	0	1	0	0
Fruits						
Apples	5	0	26	4	1	2 (Italy)
Pears	4	1	21	5	1	1 (Italy)
Peaches	11	2	6	7	1	0
Apricots	11	0	5	6	1	0
Watermelons	5	3	28	7	0	0
Other melons	4	0	16	3	0	0
Strawberries	8	0	8	5	0	0
Grapes	4	2	11	5	0	2 (Italy)
Plums	9	0	5	4	0	0
Cherries	9	0	4	4	0	0
Other fruits	2	0	1	3	0	0

Note: Colour coding – the darker the shadowing the more important the country is as an import origin.

Source: Survey data

As a result it becomes clear that Macedonia is the most important import origin for most vegetables except for celeriac and other vegetables not listed above for which Greece is a more important source country. For many fruits, Macedonia is also most important but Serbia is more significant for peaches, apricots, strawberries, plums and cherries, while Greece is for other fruits not listed above.

2.5.3 Interaction between primary importers and secondary distributors

In this section focus is given to the interactions of primary importers of fruit & vegetables and secondary distributors in order to obtain a first impression of how transactions between market actors commonly are handled at present in Kosovo.

The customer structure of the sample f&v importers is provided in the following Table 9. As it can be seen, wholesalers at about 80% are the most significant customer group, followed by retailers (17%) and restaurants (2%). On average, sample f&v importers deal with about 60 wholesale, 100 retail and 10 restaurant customers each, which seem to be quite high figures.

Table 9: Customer structure of f&v importers in Kosovo, 2001

	Share in total customers (%)	Average no. of customers
Wholesalers	80.5	60
Retailers	17.2	100
Restaurants	2.3	10
Processors	0.0	0
Consumers	0.0	-
Others	0.0	-
Total	100.0	-

Source: Survey data

The most important wholesalers and retailers in Kosovo are listed in Table 8. As expected, most of them are located in Pristina, followed by Mitrovica and Peja.

Table 8: The most important wholesale and retail customers of Kosovar f&v importers, 2002

Wholesalers		Retailers	
Name	Location	Name	Location
Afrimi	Pristina	Ardi-minimarket	Pristina
Alfa Market	Pristina	Elvisi-minimarket	Pristina
Arsimi	Pristina	Inter minex	Pristina
Axhi impex	Pristina	Minimarket	Pristina
Burim Pllana	Pristina	Shpeta	Pristina
Ekremi	Pristina	Baka	Peja
Esati	Pristina	Bardhoshi	Peja
Feridi	Pristina	Xeni-Minimarket	Peja
Hasan	Pristina	Minimarkets	Gjakova
Hysni Musliu	Pristina	Alfa-market	Ex-Germia
Hysria	Pristina		
Kemajli	Pristina		
Remi	Pristina		
Sejdia	Pristina		
Shaban Bajrami	Pristina		
Alia	Mitrovica		
Bashkim	Mitrovica		
Berat	Mitrovica		
Fesi Comerc	Mitrovica		
Murat	Mitrovica		
Nushi-Commerc	Mitrovica		
Avni	Peja		
Blerimi	Peja		
Mustafa	Peja		
Sabiti	Peja		
Urimi	Peja		
Besimi	Ferizaj		
Hajrushi	Ferizaj		
Malushi	Ferizaj		
Smajli	Ferizaj		
Arsimi	Gjakova		
Islam Rexha	Gjakova		
Masur Rexha	Gjakova		
Faruku	Klina		
Istrefi	Klina		
Smajli	Klina		
Bingo market	Prizren		
Lirimi-Com	Prizren		
Salihu	Podujevo		
Milaim	Malishevo		
Spahia-Com	Malishevo		

Source: Survey data

Terms of trade between primary f&v importers and secondary distributors have been enquired in Question 22 in the questionnaire. With this question it was intended to gain understanding of current transactions and in particular of the degree of trust between market participants. Well-functioning markets are characterised by high degrees of trust without which sustainable business relationships cannot work. In Kosovo's horticultural sector *orders via phone or fax* are currently only possible at 25.5% of the sample companies. *Transport* is commonly organised by customers

(in 89.4% of the sample companies), while 8.5% of these companies take over by themselves organisation of transport. Only in one case (ie, 2.1%), both possibilities exist. The *mode of payment* is for 95.7% of the sample companies cash only. None of these firms operate on an invoice system basis, however, 2 (ie, 4.3%) companies say that it is at least possible. (The observation base for all these results is *n*=46 – ie, all sample companies provided answers on these questions.) All these results show that in Kosovo there is still a long way to go in order to reach a better functioning market organisation. This malfunctioning is very likely caused by a missing or insufficient legal business framework. This view is also supported by the non-existence of a record-keeping system, as already discussed above.

2.5.4 Opinion questions

In this section the results from the opinion-based questions (Questions 7 to 10, and Question 23) are presented and discussed. In contrast to the above mentioned issues, which aimed at collecting "hard" data, the information obtained here reflect personal views. Although being – by character – more "soft" it may nevertheless be useful for obtaining a more complete picture of the competitiveness of the horticultural sector in Kosovo.

Can Kosovar fruit & vegetables compete in the medium run? Out of the 46 sample companies, 83% (ie, 38 enterprises) said yes, while the entire rest said no (17%). Interviewees could give up to three reasons for their opinions, which are summarised in the following Table 11 (YES-group) and Table 10 (NO-group). As it can be seen, opinions are sometimes contradictory but the vast majority of f&v importers agree that Kosovo produce is, in general, of better quality, cheaper, and that production conditions are favourable. Also, non-rational but patriotic reasons are given. Overall, these results should make Kosovo producers thinking positively about their competitiveness.

Table 10: Reasons why Kosovo's produce CANNOT compete with imported f&v

	No. of answers*	% of total
Worse production conditions	**4**	**50.0**
Unfavourable climate	3	
People don't work seriously	1	
Lower quality	**3**	**37.5**
Bad packaging	**1**	**12.5**

Note: *multiple answers possible
Source: Survey data

Table 11: Reasons why Kosovo's produce CAN compete with imported f&v

	No. of answers*	% of total
Better produce	**47**	**54.7**
Better quality	29	
Fresher produce	17	
Better packaging	1	
Cheaper produce	**26**	**30.2**
No transport costs & customs duties	16	
Lower prices	10	
Better production	**9**	**10.5**
Good climate	5	
Productive land	3	
Good workers	1	
It is our land/production	**4**	**4.6**

Note: *multiple answers possible
Source: Survey data

Most important attributes of locally produced f&v in order to compete with imported produce? In this question (Question 8) the interviewees were asked which attributes they would think are most important for Kosovo produced fruit & vegetables in order to be able to effectively compete with imported produce. Although a ranking scale of one to five was offered, only numbers between one and three were actually used. Nevertheless, quality was ranked as the most important attribute, followed by price and packaging (see Table 13). (The attributes 'off-seasonal availability' of the products and 'others' were not ranked by any interviewee.) Despite quality being the most important attribute, it is at the same time also the most controversial one (ie, the one with the highest degree of differing rankings), as it can be seen by the given standard errors, the highest one among the three attributes.

Table 13: Most important attributes for locally produced f&v in Kosovo, 2002

	Mean	Standard error (%)
Quality	1.4	41.7
Price	2.0	38.1
Packaging	2.5	25.8
Off-seasonal availability	-	-
Others	-	-

Note: *n*=46 for all attributes; 1=most important, ..., 5=least important.
Source: Survey data

Table 12: Most competitive f&v in Kosovo

	No. of answers*	% of total
Vegetables		
Peppers	34	22.2
Tomatoes	32	20.9
Cucumbers	25	16.3
Potatoes	21	13.7
Cabbages	7	4.6
Fruit		
Watermelons	9	5.9
Apples	5	3.3
Grapes	5	3.3
Plums	3	2.0
Other f&v	12	7.8

Note: *multiple answers possible
Source: Survey data

Which locally produced f&v could compete best with imported produce? Out of the 46 sample companies 45 provided answers on this question (Question 9 in the questionnaire). The interviewees could name up to three commodities. Table 12 lists the most competitive fruit & vegetables in the opinion of the importers. As it can be seen, generally vegetables are thought to be more competitive. In particular, peppers (22% of all answers), tomatoes (21%) and cucumbers (16%) are given best chances. With regard to fruit, watermelons (6%), apples (3%) and grapes (3%) are believed to be able to compete best with imported produce.

Which countries are the most important competitors for f&v?

Interviewees could name up to three countries.

Table 14: Most important competitor countries

	No. of answers*	% of total
Macedonia	45	29.8
Serbia	35	23.2
Turkey	32	21.2
Greece	23	15.2
Montenegro	9	6.0
Italy	5	3.3
Bulgaria	2	1.3

Note: *multiple answers possible
Source: Survey data

According to the 46 sample fruit & vegetable importers (see Table 14), Macedonia is the most significant competitor country (30% of the answers) for locally produced commodities, followed by Serbia (23%) and Turkey (21%). Greece, Montenegro, Italy and Bulgaria play only minor roles. These results go hand in hand with the actual import statistic (see Table 7) in which Macedonia and Serbia are in fact the most important import origins.

Recommendations for Kosovo f&v producers. This last question aimed at inquiring what fruit & vegetable importers would recommend their producer compatriots. As it can be seen from Table 15 the quality aspect is most important (36% of the answers), followed by producing more quantity (21%) and working harder (14%). These results confirm the ones from Tables 8 and 7 in so far as although importers think that in general Kosovo can produce high quality produce, this is not the case at the moment. That is, although they think there clearly is a quality potential, it is not yet completely exhausted.

Table 15: Recommendations for Kosovo's fruit & vegetable producers

	No. of answers*	% of total
Improve quality	23	39.7
Produce more continuously	20	34.5
Increase production efficiency	6	10.3
Obtain protection from government	5	8.6
Have more suitable prices	4	6.9

Note: *multiple answers possible
Source: Survey data

2.6 Implications

The analysis of the official or otherwise available data on Kosovo's horticultural sector showed that the country is currently heavily import dependent and characterised by subsistence farming, the estimated value of which may even have exceeded official production in 2001.

The survey findings confirm that (1) the market for fruit & vegetables in Kosovo and in surrounding areas is a very locally oriented one — ie, focused mainly on Kosovo, Serbia and Macedonia. Albania as a neighbouring country with strong ethnic links to Kosovo, however, does not seem to play any role at present. (2) Quality is the most important issues, at least for fruit & vegetable importers. Although Kosovo's produce is believed to be, in principle, of good quality, there is still much scope for improvement. (3) Market organisation is still very basic in Kosovo, probably given the lack of a functioning legal business framework. Without trust, transaction costs are usually higher. In Kosovo, at the moment, business relationships seem to be very short-term and *ad hoc* indicating a strong need for improvement of conditions.

Overall, it becomes thus clear that Kosovo's producers are threatened by imports, in particular from its neighbouring countries and by commodities which the country produces by itself, but at a later stage during the season. When the local production comes finally on the market, prices are already low due to the existing surpluses. Nevertheless, there are indications that Kosovo's horticultural commodities could generally compete if production and marketing were managed more effectively.

3 THE BALKAN REGIONAL MARKET FOR FRUIT & VEGETABLES

This section of the report analyses the Balkan regional market for fruit & vegetables. In particular, Slovenia, Bosnia-Herzegovina, Croatia, Federal Republic (FR) of Yugoslavia (Serbia, Montenegro and Kosovo), Macedonia, and the surrounding countries Albania, Greece and Turkey are included in the analysis. Bulgaria and Romania, as the other two important neighbour states, are however not treated.[4] First, a regional trade analysis is performed in order to identify potential demand for Kosovar producers. The second part reports market intelligence for each of the above mentioned countries separately, following two purposes: (i) to obtain a better understanding of potential export destinations for Kosovo, and (ii) to gain knowledge of the functioning of these fruit & vegetable markets and to check in which way these market organisations could serve as a model for the Kosovo market. The individual country sections list data on production (including costs and input supply situation), consumption, international trade and domestic distribution and gives implications for Kosovo's horticultural sector.[5]

3.1 Regional trade

The analysis of trade flows has the distinct advantage that it takes supply and demand simultaneously into account. This is in particular true if net trade flows (ie, exports – imports) are calculated which give an indication whether a country consumes more than it produces of a particular commodity (ie, the country is a net importer) or vice versa, in which case it is a net exporter. However, since trade in horticultural products can be highly volatile, the figure of one single year may be misleading. This problem can be solved in calculating averages for several years. In the following Table 16 to Table 18 five year means (1996-2000) of net trade flows for the above mentioned countries and several fruit & vegetables are listed.

Table 16: Net trade (exports-imports) of fruit & vegetables in selected Balkan countries, US$m, 1996-2000 annual averages

	Fruit & vegetables	Fruit fresh nes	Fruit prep nes	Veg. prep or pres	Vegetables fresh nes	Vegetables frozen	Vegetables prep nes
Slovenia	-110.1	-0.9	-7.4	-0.2	-0.7	-3.2	-3.9
Croatia	-121.5	-1.0	-6.2	-0.2	-0.8	-2.5	-3.0
Bosnia-Herzegovina	-26.1	-0.3	1.3	-	-1.2	-0	-2.4
FR Yugoslavia	4.1	-0.8	82.0	0.2	-4.5	5.2	1.8
Macedonia	18.4	-	-2.6	0.2	6.2	1.3	0.8
Albania	-29.0	-0.1	-0.3	-0	-0	-0.4	-0.4
Greece	749.8	-0.2	268.7	0	-1.3	-7.3	7.8
Turkey	2,035.9	2.2	106.1	2.0	1.3	22.2	12.0
All above countries*	2,521.6	-1.2	441.6	2.0	-1.1	15.3	12.6

[4] The selection of this countries derives from the Terms of Reference for this report.

[5] The reported information follows public availability of data. That is, due to time restrictions almost no primary research was possible. The sources are always clearly indicated and it is recommended to also have a look through the source documents in order to obtain a more complete picture of the respective fruit & vegetable country market.

Notes: nes = not elsewhere specified, prep = prepared, pres = preserved. 0 = <±US$100,000. * Differences possible due to rounding. Shadowed cells indicate net imports – ie, demand potentials.
Source: Own calculations based on FAOSTAT data: www.fao.org

Overall it becomes clear from Table 16 that the Balkan region is a net exporter of annually about US$2.5bn of fruit & vegetables (1 column), indicating a competitive advantage[6] for this agricultural activity. However, having a closer look at the different countries reveals that only Turkey, Greece, Macedonia and to a far lesser extent FR Yugoslavia are net exporters, while Croatia, Slovenia, Albania, and Bosnia-Herzegovina consume more f&v than they produce by themselves. Thus the huge export surplus is mainly generated by Turkey and Greece and the exports of these two countries could easily cover the demand of the other neighbouring Balkan countries. However, in particular Greece and Turkey also export heavily into the EU and other world markets, were higher prices can be achieved, thus making it less clear whether there exists regional demand which is not yet met. Therefore it is necessary to look at individual commodities. The remainder of Table 16 lists other more or less aggregated produce groups, and as it becomes clear there is demand of about $1.2m annually in the region for fresh fruit nes (ie, not elsewhere specified including eg, exotic and tropical fruits such as elderberry, rose hips, litchi or pawpaw) in almost all countries except for Turkey and of $1.1m of fresh vegetables nes (eg, chards, celery, fennel, parsley, rhubarb etc.) except for Macedonia and Turkey. There seems also to be a limited demand for frozen vegetables in Greece ($7.3m), Slovenia ($3.9m), Croatia ($3.0m) and Albania ($0.4m), since much of the Turkish surplus is probably exported elsewhere as mentioned above.

Regional demand for specific fruits exists according to Table 17 only for pears (US$8.3m annually) in all analysed countries apart from Turkey and FR Yugoslavia and for apples in all countries except for Turkey, Macedonia and Slovenia. (Here once again it is assumed that Turkish surpluses are at least partly marketed in other, higher-priced, markets than on the Balkans.) For all other fruits, production in the region exceeds consumption by far, thus reducing success chances for new orchards unless the crops can be sold outside the local Balkan area. Looking at the country total (last column) it becomes clear that there are three major fruit suppliers in the region: Greece, Turkey and Macedonia. All other countries are net importers of fruits.

Table 17: Net trade (exports-imports) of some fruits in selected Balkan countries, US$m, 1996-2000 annual averages

	Apples	Pears	Cherries	Plums	Grapes	Peaches, nectarines	Apricots	Straw-berries	Rasp-berries	Water-melons	Total*
Slovenia	1.1	-0.6	-0.2	-0.1	-5.2	-2.1	-2.0	-0.4	0	-1.8	-11.3
Croatia	-3.9	-2.0	-0.3	-0.5	-4.9	-4.0	-1.1	-0.8	-	-1.6	-19.1
Bosnia-Herzegovina	-3.2	-0.4	-	0.3	-1.0	-0.5	-	-	-	-0.5	-5.5
FR Yugoslavia	-1.0	0.3	-	0.1	-2.8	0.2	-0	-0	1.0	-2.8	-4.9
Macedonia	9.8	-0	-0	0	4.2	-0.5	0	0	0	1.4	14.9
Albania	-5.3	-0.3	-0	-0	-1.4	-2.3	-0	-0	-	-0.2	-9.5

[6] *Competitive advantage* refers to production *and* marketing capacities and not just to the former to which commonly is referred to as "comparative advantage".

Greece	-2.6	-8.8	8.7	-0.3	113.1	30.6	6.7	-0.3	0	30.8	177.7
Turkey	15.8	3.6	26.5	1.9	22.0	2.5	1.2	1.5	-	2.5	77.6
All above countries*	10.7	-8.3	34.6	1.3	123.9	24.0	4.9	0	1.1	27.8	

Notes: 0 = <±US$100,000. * Differences possible due to rounding. Shadowed cells indicate net imports – ie, demand potentials.

Source: Own calculations based on FAOSTAT data: www.fao.org

Regional demand for specific vegetables is larger than that for fruits, since Greece is also a significant net importer together with all other countries except for Turkey and Macedonia (see last column of Table 18). On the individual commodity level, the biggest regional demand exists for potatoes (US$22.4m annually), lettuce ($7.3m), garlic ($4.2m) and dried beans ($3.8m) for which regional consumption exceeds production. Taking once again into account that Turkey may prefer to not sell all of its surplus on the Balkans, there seems also limited demand for tomatoes, carrots and potentially onions.

Table 18: Net trade (exports-imports) of some vegetables in selected Balkan countries, US$m, 1996-2000 annual averages

	Pota-toes	Cab-bages	Toma-toes	Pep-pers	Carrots	Onions	Cucu-mbers	Garlic	Lettuce	Peas, green	Beans, green	Beans, dry	Total*
Slovenia	-3.5	-1.1	-7.4	-2.0	-1.2	-2.8	-0.8	-1.4	-5.3	0	-0.2	-2.0	-27.7
Croatia	-3.9	-0	-4.4	-1.4	-1.2	-2.0	-0.5	-0.8	-1.4	0	-0.3	-1.4	-17.3
Bosnia-Herzegovina	-2.3	-	-2.6	-	-	-0.8	-	-	-	-	-	-2.1	-7.8
FR Yugoslavia	-0.8	-1.4	-6.8	-	-0	-1.3	-4.2	-0.2	-0	0	-0.2	-3.2	-18.2
Macedonia	-1.7	2.1	5.0	0.8	0	0	3.9	0	-0	0.1	0	0	10.5
Albania	-2.3	-0.1	-1.6	-0	-0	-0.4	-0.4	-0	0	-0	0.6	0.3	-4.1
Greece	-27.4	-0.5	-2.3	1.6	0	-1.1	12.8	-2.4	-0.7	-0	-0.1	-12.0	-32.0
Turkey	19.4	1.0	41.6	22.4	2.4	20.1	5.2	0.6	0.1	0	0.3	16.7	130.0
All above countries*	-22.4	-0	21.6	21.4	0	11.8	16.0	-4.2	-7.3	0	0.1	-3.8	

Notes: 0 = <±US$100,000. * Differences possible due to rounding. Shadowed cells indicate net imports – ie, demand potentials.

Source: Own calculations based on FAOSTAT data: www.fao.org

One note of caution must be made when interpreting the above presented figures: although the data are quite structural, since they are averages for several years, demand can change quickly. In general, national aggregated demand is a function of a population's available budget (or income), product own and substitute products cross-prices and population preferences. All of the explanatory variables can change and with higher incomes, changes in relative prices or in preferences, the above specified demand will change too. Thus, there is never a fix potential. In addition, the composition of supplier countries can change as well. Once new market entrants can deliver better quality, lower prices, better customer service, a more convenient packaging, etc, market shares can erode quickly. Thus, not only the overall size of the economic "pie" can grow or shrink, but also the size of the individual pieces for each supplier country can change rapidly. It makes therefore good sense to compare the conditions with which individual countries offer similar products on the world market. Since information on quality, service or packaging is hard to find, only prices can be analysed. This is done in the following Table 19 to Table 21.

Export unit values are calculated in dividing export value (usually fob [free on board] valued) by export quantity. The obtained figures give a kind of average export price, thus including production and marketing costs up to border warehouse or to export zones. Thus, this unit value reflect competitive advantage in international markets. However, since this figures are averages they can only accurately be compared for homogenous products. For bundle items such as fresh fruit & vegetables nes, prepared, preserved or frozen etc, a comparison is less possible since the value depends of the actual composition of the bundle. Furthermore, it generally makes no big sense to compare the prices among countries which are no significant exporters of a particular commodity, since, although many countries may export little quantities of a certain commodity at certain times, these exports may be marketed at special conditions which cannot be compared to the supply of big world market players. Therefore the following discussion will focus on net exporters only.[7]

Overall, for all fruit & vegetables it becomes clear that Macedonia seems to be the lowest cost producer or at least that it exports the lowest priced f&v, ahead of Greece, Turkey and Yugoslavia.[8] Yet, for frozen vegetables, Macedonia is among the high-price supplies of the listed countries. In general, however, all these aggregates are not really comparable as discussed above. Therefore focus should be given to individual commodities.

Table 19: Export unit values (US cent per kg) of fruit & vegetables in selected Balkan countries 1996-2000 annual averages

	Fruit & vegetables	Fruit fresh nes	Fruit prep nes	Veg. prep or pres	Vegetables fresh nes	Vegetables frozen	Vegetables prep nes
Slovenia	65.3	30.4	102.3	134.9	40.1	73.5	170.1
Croatia	82.5	100.9	146.1	92.0	89.3	102.8	159.6
Bosnia-Herzegovina	111.4	40.7	93.7	-	-	129.3	54.0
FR Yugoslavia	106.8	55.8	103.8	51.8	32.7	85.0	78.5
Macedonia	45.2	-	124.5	85.3	48.2	121.5	143.5
Albania	45.1	-	34.3	12.5	4.5	129.3	13.2
Greece	68.8	65.5	66.8	186.2	126.1	165.0	132.7
Turkey	91.6	68.2	155.6	92.5	41.8	63.7	135.7
Average for above countries	77.1	60.3	103.4	93.6	54.7	108.8	110.9

Notes: nes = not elsewhere specified, prep = prepared, pres = preserved. Shadowed cells indicate that net exports have existed during the last 5 years based on the information presented in the tables above.

Source: Own calculations based on FAOSTAT data: www.fao.org

[7] This argumentation is only justified for small and comparatively equally sized countries as it is the case in this analysis. However, for big countries such as the US or the EU it is of course possible that, although they may be net importers for a single commodity, their export supply is still competitive. For this reason all export unit values are reported in the above tables.

[8] FR Yugoslavia is a special case here since it appears as net exporter for all f&v as reported in Table 16, but is a net importer for all listed fruit & vegetables in Table 17 and Table 18. However, the country is also a huge net exporter of prepared fruit nes (such as jams and nut flour etc) which causes that the overall balance turns out to be positive.

Export unit values for fruits reveal that, in general, Macedonia is most competitive in the international markets, at least for the items listed in the following Table 20. The next most competitive fruit supplier is Turkey, followed by Greece. However, there are also differences among different commodities. For example, for apples Slovenia is the lowest-cost producer, whereas Yugoslavia is most competitive for pears, plums and raspberries.

Table 20: Export unit values (US cent per kg) of some fruits in selected Balkan countries, 1996-2000 annual averages

	Apples	Pears	Cherries	Plums	Grapes	Peaches, nectarines	Apricots	Straw-berries	Rasp-berries	Water-melons	Country average
Slovenia	28.4	54.0	76.8	27.9	31.3	57.9	39.2	114.3	65.6	12.5	50.8
Croatia	22.4	91.4	75.5	118.5	89.9	154.0	100.0	294.1	-	22.0	107.5
Bosnia-Herzegovina	25.6	39.9	-	32.1	-	-	-	-	-	-	32.5
FR Yugoslavia	21.0	35.1		20.7	25.6	42.1	30.5	66.7	75.4	5.9	35.9
Macedonia	32.5	33.9	72.9	20.0	46.7	24.6	60.6	147.6	87.8	12.4	53.9
Albania	-	18.2	-	-	33.3	-	-	-	-	21.0	24.2
Greece	32.1	43.0	166.2	64.9	115.5	47.0	93.8	179.3	331.7	19.6	109.3
Turkey	54.9	45.7	163.6	75.7	48.5	38.3	79.4	38.7	200.0	18.2	76.3
Average for above countries	31.0	45.1	111.0	51.4	55.8	60.7	67.3	140.1	152.1	16.0	

Note*:* Shadowed cells indicate that net exports have existed during the last 5 years based on the information presented in the tables above.

Source: Own calculations based on FAOSTAT data: www.fao.org

Export unit values for vegetables in general (see last column of the following Table 21) reveal that Turkey and Macedonia as the major vegetable suppliers in the region are almost similarly cost-effective. However, while Macedonia is more competitive for cabbages, peppers, and cucumbers, Turkey produces cheaper tomatoes and dried beans, the latter compared to Albania.

Table 21: Export unit values (US cent per kg) of some vegetables in selected Balkan countries, 1996-2000 annual averages

	Pota-toes	Cab-bages	Toma-toes	Pep-pers	Carrots	Onions	Cucu-mbers	Garlic	Lettuce	Peas, green	Beans, green	Beans, dry	Country average
Slovenia	9.7	18.9	37.6	32.4	11.0	26.4	31.3	74.9	38.2	41.1	50.0	71.4	36.9
Croatia	21.6	53.3	65.3	44.8	103.1	71.3	49.1	172.5	78.5	41.6	107.9	153.6	80.2
Bosnia-Herzegovina	-	-	-	-	-	-	-	-	-	-	-	-	-
Yugoslavia	20.0	14.5	27.6		22.9	26.3	40.2	49.7	10.9	-	76.6	96.7	38.5
Macedonia	21.3	13.1	54.0	42.0	25.3	18.3	39.3	45.9	11.1	159.7	64.6	75.3	47.5
Albania	18.2	-	84.8	-	-	50.0	-	-	181.8	81.8	80.5	98.3	85.1
Greece	24.5	26.9	39.7	70.5	18.3	23.1	88.3	134.8	106.8	150.0	137.9	104.2	77.1
Turkey	18.2	28.7	34.3	72.7	18.3	15.0	52.0	52.7	62.3	83.2	83.4	72.3	49.4
Average for above countries	19.1	25.9	49.1	52.5	33.2	32.9	50.0	88.4	70.0	92.9	85.8	96.0	

Note: Shadowed cells indicate that net exports have existed during the last 5 years based on the information presented in the tables above. *Source*: Own calculations based on FAO STAT data. www.fao.org

Implications for Kosovo are twofold: (1) there are clearly demand potentials in the neighbouring Balkan region for pears (US$8.3m annually) and to a certain extent also for apples. With regard to vegetables, the biggest regional demand exists for potatoes ($22.4m), lettuce ($7.3m), garlic ($4.2m) and dried beans ($3.8m) and a limited demand for tomatoes, carrots and potentially onions. Frozen vegetables are in short supply in Greece ($7.3m), Slovenia ($3.9m), Croatia ($3.0m) and Albania ($0.4m). (2) Despite these potentials it must be stressed that these markets may only be entered when Kosovo's horticulture sector can sell in a competitive way – ie, that it can deliver better quality, lower prices, better customer service, a more convenient packaging, etc than the other countries. Prices are not the one and only criteria – the data presented above shows clearly that at least in some cases significant price differences exist among the net exporters – but the 'package' as a whole must be attractive for potential buyers.

3.2 Slovenia

3.2.1 Production

Vegetable production in 2000 occurred on a surface of 3,810 ha and yielded 106,000 metric tons of produce. Potatoes, cabbages and dried beans were the most important domestically produced vegetables. Table 22 lists production data for the most common vegetables in Slovenia. (FAOSTAT)

Table 22: Production of some selected vegetables in Slovenia, 2000

	Potatoes	*Cabbages*	*Beans, dry*	*Onions*	*Tomatoes*	*Carrots*	*Garlic*
Area (1,000 ha)	9.1	1.9	1.1	0.7	0.6	0.4	0.3
Production (1,000 mt)	191.0	64.0	2.7	14.5	15.0	8.4	2.6
Yield (mt/ha)	20.9	34.6	2.5	20.7	27.3	20.5	8.7

Source: FAOSTAT data: www.fao.org.

Fruit production in 2000 yielded 296,416 metric tons on a total production area of 38,532 ha. The most important domestically produced fruits were grapes, apples and pears. Table 23 lists production data for the most important fruits. (Ibid.)

Table 23: Production of some selected fruits in Slovenia, 2000

	Grapes	*Apples*	*Pears*	*Peaches*	*Plums*	*Cherries*	*Sour cherries*
Area (1,000 ha)	15.3	15.0	4.0	2.0	1.3	0.5	0.2
Production (1,000 mt)	126.7	129.7	15.4	12.1	5.8	3.3	0.5
Yield (mt/ha)	8.3	8.6	3.8	6.1	4.5	7.3	2.7

Source: FAOSTAT data: www.fao.org.

3.2.2 Consumption

Overall vegetable consumption in 2000 was about 90 kg per capita. In addition, 63 kg of potatoes were consumed. Table 24 lists per capita consumption data for other vegetables. (FAOSTAT)

Table 24: Total per capita consumption* of selected vegetables in Slovenia, 2000

	All vegetables	*Potatoes*	*Tomatoes*	*Onions*	*Beans*	*Peas*	*Other vegetables*
Kg per capita	89.4	63.0	10.8	13.6	1.5	0.9	65.0

Note: *Data includes consumption of fresh and processed, preserved, dried vegetables etc.

Source: FAOSTAT, Food Balance Sheet: www.fao.org.

Total fruit consumption was about 128 kg per capita in 2000. Most important were citrus fruits followed by apples and bananas. Detailed data is provided in the following Table 25. (Ibid.)

Table 25: Total per capita consumption* of selected fruits in Slovenia, 2000

	All fruit	*Citrus fruit*	*Apples*	*Bananas*	*Grapes*	*Other fruits*
Kg per capita	128.1	37.1	28.1	21.4	14.3	27.1

Note: *Data includes consumption of fresh and processed, preserved, dried fruit etc.
Source: FAOSTAT, Food Balance Sheet: www.fao.org.

3.2.3 International trade and domestic distribution

Slovenia is net importer of fruit & vegetables as well as of other food and live animals. Fruit & vegetables account for less than one percent of the total Slovene exports and about 1.7% of the total imports. (Bonjec 2000).

Import countries of origins and export destinations for fresh fruit & vegetables are the neighbouring CEFTA (Central European Free Trade Agreement) countries (Czech Republic, Hungary, Poland, Slovak Republic and Romania). In 1996 these countries accounted for 5.8% and 2.7% of vegetables and fruit imports respectively and for 10.7% and 5.9% of vegetables and fruit exports. (Ibid.)

Domestic distribution of food in general can be characterised by two distinctive retail types: (1) modern super- and hypermarkets and (2) traditional "mum-and-pop" shops. While the former type is growing, the significance of the latter is declining. Nevertheless, it is estimated that even in the longer run a significant number of these little independent grocery shops will survive. The most important supermarket chains – which most of them engage also in importing and wholesaling – in 1999 were Mercator (US$600m sales and 397 outlets), Spar ($88m, 13), Zivila Kranj ($81m, 68), Emona Merkur ($79m, 70), Emona ($30m, 6), Engrouts ($26m, 8) and Delikatesa ($15m, 6). (USDA 2000, GAIN Report #SI0004).

3.2.4 Implications

With a population of about 2 million Slovenia is comparable to Kosovo. However, in terms of economic development it is more advanced. The country is a net importer of all here analysed fruit & vegetables except for apples. Overall, the country seems to be a potential export market for Kosovar horticultural produce.

3.3 Croatia

3.3.1 Production

Agriculture is a significant component of the Croatian economy, accounting for about 10.5% of its GDP, while the food processing industry covers about 7.5%. The total land area comprises 56,538 km², with 3,181,107 hectares of agricultural land, two thirds of it is arable land while the rest are pastures. The arable land includes 55,000 ha of vineyards and 68,667 ha of orchards. In 1999, vegetables were grown on 134,451 ha. At 0.42 ha per capita, the area of cultivable land exceeds the average for Western Europe. (USDA 2000, GAIN Report #HR0012). The average holding size in Croatia is 2.7 ha, consisting usually of 5 plots (Juracak and Kovcic, 2001).

The production structure is built on the same entities as in the other republics of former Yugoslavia: *agrokombinats* and family farms. Today it is estimated that in Croatia about 40 *agrokombinats* still exist, which face low profitability, excess capacity, over-employment, old debts and difficulties adapting to market conditions. In addition, most of this entities are still majority state-owned and only with new management policies, organisational structures, and investments they can become profitable businesses. (USDA 2000, GAIN Report #HR0012).

Croatian fruit production is located in two distinctive production areas: the continental part, and the Mediterranean area. This enables the cultivation of a wide range of continental and subtropical fruits. Of the total area under orchards only about 6% may be classified as modern. The main fruit crops in the continental part traditionally are plums, apples, peaches, cherries, pears, strawberries, hazelnuts, and walnuts. The Mediterranean area is characterised by subtropicals such as figs, olives, almonds, Maraschino cherry, clementine and olive. Other fruit such as oranges, lemons, kiwifruit, carob and pomegranate are of minor significance, and are produced along the Adriatic coast. Table 26 lists production data on some of the most common Croatian fruits.

Table 26: Production of some selected fruits in Croatia, 1999

	Plums	*Apples*	*Pears*	*Sour cherries*	*Clementine*	*Peaches*	*Cherries*	*Fig*	*Apricot*
Bearing trees (million)	5.75	3.75	1.03*	1.01	0.76	0.69*	0.58	0.58	0.15
Production (metric tons)	38,030	66,752	10,027	8,453	18,210	8,813*	6,370	6,042	1,399

Note: *1998

Source: Croatian State Statistical Bureau, reproduced in USDA (2000), GAIN Report #HR0012

In order to improve the current production situation, the government has decided to start implementing orchard establishment subsidies starting in 2000, which range from €890 to €3,500 per hectare. (Ibid.)

Grape production amounted to 350,000 mt in 1999, which were primarily processed into wine (about 2,300,000 hl). Usually, out of the total annual wine production, half enters the international market and the rest is domestically consumed. Table grape production in Croatia is minimal.

Similar to fruit production, vineyards are largely family owned (91%) and extensive (only 15% are modern plantation vineyards). Three types of subsidies have been offered by the government for vineyards: (1) €317/ha for existing vineyards on certain Adriatic islands and coastal areas; (2) a one-time subsidy of €4,880/ha for establishment of new vineyards in these same areas. (3) In the continental part of Croatia the subsidy for newly established vineyards is €3,418/ha. Besides, the government subsidises production of planting material with €0.12 per vine graft. (Ibid.)

Vegetable production in 1999 were on 118,000 ha of which 64,000 ha for potatoes. Production of potatoes was 517,000 mt and 505,000 mt of other vegetables. Vegetable production is also mainly derived from small private farms. The main production areas are central Croatia with around 42%, Slovonia and Baranya regions with 25%, around 10% in the Gorski Kotar region and the rest mainly being situated along the Adriatic coast. Besides potatoes, the leading vegetables are cabbage (about 16% of total area under vegetables), onions (11%), beans (11%) and tomatoes (11%). Table 27 lists production data on some of the most common Croatian vegetables. (The production of watermelon including other melons in 1999 was 53.4 metric tons). (Ibid.)

Table 27: Production of some selected vegetables in Croatia, 1999

	Pota-toes	*Cabbage*	*Beans*	*Onions*	*Toma-toes*	*Carrots*	*Garlic*	*Peas*	*Peppers*	*Cucum-bers*
Area (1,000 ha)	64.0	9.70	9.23*	6.80	6.41	-	-	-	-	-
Production (1,000 mt)	517	144	22.3	55.6	70.8	29.9	10.3	11.5	36.8	37.9

Note: *1998

Source: Croatian State Statistical Bureau, reproduced in USDA (2000), GAIN Report #HR0012

Production incentives and subsidies have not been paid for vegetable production. However, a total subsidy of about €5m (3.87% of all incentives and subsidies) were paid in 1999 for certified seeds. (Ibid.)

Horticultural production inputs: the use of certified seeds was about 14-15% for potatoes and imports of seeds in 1999 valued about €1.8m in 1999. In that year, roughly 600 plant protectants based on approximately 260 active ingredients were registered in Croatia. Out of this, 195 were herbicides, 192 fungicides, and 193 insecticides and other pesticides. Out of this total number, 12% was used on vegetable protection, 9% on fruits, and 14% on wine grapes. There is only one fertiliser plant (Petrokemija-Kutina) in Croatia with a production in 1999 of 1,138,771 mt of which 60% was exported to neighbouring countries (from existing information it is not clear whether this plant still operates, since the Croatian government stopped paying subsidies on fertiliser production in 1999). Agricultural machinery is scarce due to losses during the war and most tractors being older than 20 years, implying a low level of mechanisation. However, in 1999 the first co-operative machinery pooling system was created, thus helping to give poor farmers access to necessary machinery. (Ibid.)

Costs and returns for selected fruit & vegetable crops are given in the following Table 28. The data is based on a family farm survey. The gross margin for one crop per year serves to compensate farmer's labour and capital inputs. In addition, investments have to be financed from this money.

Table 28: Average economic results in crop production on family farms in Croatia, 1998 (Survey, n=892)

	Potato	*Cabbage*	*Pepper*	*Tomato*	*Apple*	*Strawberry*	*Wine grape*
Occurences	218	42	66	72	53	49	475
Used area (ha)	0.87	0.72	0.37	0.12	0.52	0.06	0.22
Yield (kg)	20,551	26,438	12,650	34,973	13,681	23,478	8,889
Sales (kg)	19,549	23,472	15,802	36,265	9,203	19,165	3,805
Farm consump. (kg)	1,973	1,865	700	13	2,686	0	6,751
Home consump. (kg)	518	192	126	617	191	306	154
Sales (US$)	2,602	3,991	4,903	-	3,645	18,020	-
Home consump. (US$)	81	50	44	-	100	239	-
Subsidies	32	0	1,051	-	0	0	-
Other revenues	6	0	194	-	0	0	-
Total revenues	2,721	4,041	6,192	-	3,745	18,260	-
Bought seed	710	166	462	-	31	5,069	-
Fertiliser	333	173	323	-	184	1,138	-
Crop protection	400	154	214	-	1001	823	-
Services paid	14	58	31	-	168	1,265	-
Other inputs	87	109	277	-	1,114	3,279	-
Total direct costs	1,545	659	1,307	-	2,498	11,575	-
Gross margin	1,176	3,382	4,885	-	1,247	6,685	-
Direct costs per kg (US$)	0.78	0.03	0.08	-	0.27	0.60	-
Gross margin per kg (US$)	0.13	0.14	0.31	-	0.14	0.35	-

Source: Based on "Farm Survey Project", Institute of Agricultural Economics at the Faculty of Agriculture, Zagreb, 1999. Reproduced in Juracak and Kovcic (2001).

3.3.2 Consumption

Fresh fruit household consumption was about 52 kg per capita in 1999. Total fruit consumption is estimated to be 5-10% higher. Consumption patterns seem to be changing in favour of Mediterranean and subtropical fruits (about 45% of fruit consumption). Average expenditures for fruits is about €55 per capita annually or about 6% of total expenditures for food. The biggest expenditures are for fresh fruit (87%). Table 29 lists consumption data for various fruits. (USDA 2001, GAIN Report #HR1010)

Table 29: Household consumption of fresh fruit in Croatia, 1999

	Tropical fruit	*Apples*	*Bananas*	*Other fresh fruit*	*Stone fruit*	*Grapes*	*Pears*	*Dried fruit, nuts*	*Berry fruit*	*Processed fruit*
Kg per capita	13.5	13.3	9.6	6.1	4.9	2.6	1.5	1.4	0.9	0.5

Source: Croatian State Statistical Bureau survey data, reproduced in USDA (2001), GAIN Report #HR1010

Vegetable consumption (without frozen and dried vegetables) was slightly higher than fruit consumption at about 55 kg per person in 1999 and potatoes was about 43 kg. Average expenditures for vegetables is about €90 per capita annually or about 11% of total food expenditures. Table 30 lists consumption data for various vegetables. (Ibid.)

Table 30: Household consumption of fresh vegetables in Croatia, 1999

	Potatoes	*Root vegetables*	*Cabbage, broccoli*	*Frozen vegetables*	*Fruit vegetables*	*Tuber vegetables*	*Processed vegetables*	*Dried vegetables*
Kg per capita	43.1	19.1	13.9	12.5	9.7	7.3	5.3	1.3

Source: Croatian State Statistical Bureau survey data, reproduced in USDA (2001), GAIN Report #HR1010

Purchasing behaviour for fruit & vegetables: Most consumers purchase fruit & vegetables at city markets. More than half of them make purchases several times a week, and most often on Fridays and Saturdays. Variety, prices, quality and freshness of products are the main motives for going to city markets (in this order). The main criterion for a specific product choice is freshness, followed by quality, organic and domestic production. Less important for buyers is information about products they buy. (Ibid.)

Four types of fruit & vegetables customers exist: (1) Patrons of city markets are generally older consumers and spend the highest amount of money for fruit & vegetables. Retirees dominate this segment. Compared with other consumers, they find organic production, domestic origin and information about fruit and vegetables important. This group accounts for 31% of consumer sales. (2) Practical buyers prefer "modern" foods. Product appearance and an attractive presentation are important for them as well as price. They visit city markets less often than other buyers and prefer buying at retail shops. This segment counts for 20% of the market. (3) Traditional buyers consider quality of fruit & vegetables more important than other buyers. They prefer traditionally produced, domestic fruit & vegetables and have negative attitude towards imported products. Fruit & vegetables are an important part of their diet. Most of these consumers are employed and buy fruit & vegetables in the afternoon hours. This is the youngest segment representing 23% of sales. (4) Indifferent buyers prefer meat in their diet and fruit & vegetables are not considered as very important. Therefore they spend less money for fruit & vegetables compared with other consumers. Freshness and quality are the most important product characteristics for these consumers. Organic production, domestic origin and information about fruit & vegetables are unimportant to them. Indifferent buyers represent 26% of the market. (Ibid.)

3.3.3 International trade and domestic distribution

Croatia is a net importer of fresh fruit (including melon and citrus rind) (imports of €61m in 1999, versus exports of €3.6m) due to the extensive nature of production, lack of modern storage facilities and market outlets, and fruit production far from being satisfactory. The major origins are Italy, Spain, Austria, Slovenia and Hungary. Of the total fresh fruit imports in 1999, bananas (about 40%) and oranges (16%) are most important. (USDA 2000, GAIN Report #HR0012)

Regarding wine trade, in most years the major suppliers of imported wines are Slovenia (38%), Bosnia-Herzegovina (25%) and Italy (13%). The main export markets for Croatian wines are Germany (36%), Bosnia-Herzegovina (35%) and Slovenia (4%). (Ibid.)

Vegetables (including edible tubers and roots) were imported at a value of €32.2 in 1999, with exports being €2,7m, thus making the country also a net vegetable importer. Processed fruit & vegetable products were imported at a value of €39,9m and exported at a value of €11,9m in 1999. (Ibid.)

The most important distribution channels for fruit & vegetables in Croatia, on wholesale level, are so-called "green markets", which are primitive forms of auctions. In 2001, six wholesale markets operated – in Zagreb, Rijeka, Split, Osijek, Zadar and Metkoviÿ. The dominant selling method is private contracts. "Green markets" do not have wholesale facilities for storage and handling nor do they have refrigerated warehouses. An alternative form of selling is through distribution centres, in which closed storage-selling spaces are leased. Some bigger producers, especially those who have storage space, sell directly their produce to caterers, larger consumers and retailers. National wholesale prices of fruit & vegetables are established in the "green markets". City markets are the dominant retail sales channel for fruit & vegetables large supermarket chains are quickly increasing, and becoming more competitive. According to current regulations city markets consist of outdoor areas and buildings where people trade food and other goods. An outdoor area is allowed to sell agricultural products: fruit & vegetables, diary products from private production, eggs, and flowers. City markets are usually located in city centres or in each district in larger cities. They are open daily in the morning and early afternoon. This sales channel usually has the best fruit & vegetables supply at the retail level in Croatia. Tradesmen dominate at city markets. Retail prices for fruit & vegetables are mainly established at these markets. Retail prices are about 30% higher than wholesale prices. Of all fruit sold at the retail level, city markets sold about 45%, and retail shops 28%. About 4% by large consumers and the rest 23% is sold through direct sales. The structure of the vegetable market is: 64% city markets, 16% retail shops, 4% large consumers and about 16% other selling channels. (USDA 2001, GAIN Report #HR1010)

The current shopping situation is characterised by the return of tourism to the Dalmatian coast and rebounding consumer demand in urban areas, thus fuelling demand for consumer foods. There is also a growing appreciation for convenient, one-stop shopping and consumers remain price sensitive. Two years ago only 18% of households shopped at supermarkets, whereas in 2002 37% do most of their food shopping there. Because of competition from domestic and foreign-owned supermarkets, small retail food stores lost one quarter of their market share between 2000 and mid 2002 and many are expected to close in the coming years. Similarly, shopping in nearby countries (mostly Slovenia, Austria and Italy) fell from €360m to €83m. To combat competition from supermarkets, traditional food retailers are organising to combine purchasing power. For example, 800 smaller shops representing 15 retail chains recently merged their purchasing departments into one. (USDA 2002, GAIN Report #HR2008)

Future developments in the fruit & vegetables market include: (1) Expect more product differentiation according to product quality and labelling (e.g., origin, organic production, or brand). (2) Higher prices for some vendors will be achieved through more consistent product quality and an increasing supply of organic and "domestic" products. (3) Further market

liberalisation will increase competitiveness. (4) The f&v trade in city markets will decrease. (5) The market share of supermarket food chains will increase. (6) Demand for organic and "domestic" products will increase. (USDA 2001, GAIN Report #HR1010)

3.3.4 Implications

Croatia is certainly more advanced than Kosovo in terms of agricultural development. However, fruit & vegetable production is far too small in order to achieve full self-sufficiency. As a consequence, Croatia seems to be a possible market for Kosovo produce. Also, purchasing power is comparatively high (also due to international tourists), thus making Croatia a higher value market. Fruit & vegetable distribution seems however to take over the western model, thus setting higher standards in quality, packaging, service and marketing. In short, given also comparatively short transport ways and historical ties, Kosovar fruit & vegetable producers would surely be able to enter and develop this market in the short and medium term.

3.4 Bosnia-Herzegovina

3.4.1 Production

Bosnia-Herzegovina covers 51,129 km² of which are 2.5m ha agricultural land. 89,113 ha is used for vegetable production. Orchards cover 93,000 ha and vineyards 6,000 ha. The average per capita cultivable land is 0.41 ha per person and exceeds the average for Western Europe. However, in 2000 only about 60% of the land available for field crops and vegetables was actually planted. Average farms size averages 2-3 ha in 5-7 plots. The production of fruit & vegetables, besides animal products, are the main sources of cash income. (USDA 2001, GAIN Report #BK1003).

Vegetable production. While Bosnia has good climatic conditions for the growing of vegetables, it has the lowest average yield of all European countries. The main reasons are low input use (fertilizers, chemicals, certified seeds), lack of knowledge regarding crop rotation, poor irrigation facilities and other crop management practices that hinder ideal production capacity. Early vegetables are grown mainly in Mediterranean region (Central and West Herzegovina), while the most important vegetables, such as potatoes, are grown in mountain regions. The order of vegetables according to importance is potatoes, beans, cabbage, onions, tomatoes, peppers, garlic, carrot, and peas. Table 31 lists production data for the most important corps. (Ibid.)

Table 31: Production of some selected vegetables in Bosnia-Herzegovina, 2000

	Potatoes	*Beans*	*Cabbage*	*Onions*	*Tomatoes*	*Peppers*	*Garlic*	*Carrots*	*Peas*
Area (1,000 ha)	43.7	9.6	7.1	4.9	4.5	4.1	1.9	1.8	1.6
Production (1,000 mt)	282.8	5.8	68.5	21.6	29.6	28.8	4.0	5.6	2.0
Yield (mt/ha)	6.5	0.6	9.5	4.4	6.6	7.1	2.1	3.2	1.2

Source: National Statistical Bulletins, reproduced in USDA (2001), GAIN Report #BK1003.

Fruit production. Main characteristics of fruit production are: low input use and older fruit varieties. There are limited possibilities for new modern orchards. Domestic fruit production is used as raw material basis of the processing industry, or for family farm processing. Cool storage capacity is limited so fruit must be consumed at harvest. This complicates the marketing process making the farmer a price taker rather than a price maker. Berry production is continuing to increase in importance. Favourable climatic conditions in north-eastern Bosnia, a long berry planting tradition, existing processing capacities ("Vegafruit" in Brijesnica, "Fruti" in Celici), and great export chances to West European countries enable further expansion. Table 32 lists production data for the most important fruits. (Ibid.)

Table 32: Production of some selected fruits in Bosnia-Herzegovina, 2000

	Plums	*Apples*	*Pears*	*Cherries*	*Peaches*	*Sour Cherries*	*Apricots*
Bearing trees (1,000)	4,347	1,012	673	302	237	121	35
Production (1,000 mt)	26.8	14.4	8.1	4.7	3.6	1.0	0.5
Yield (kg/tree)	6.1	14.2	12.0	15.4	15.0	8.3	14.0

Source: National Statistical Bulletins, reproduced in USDA (2001), GAIN Report #BK1003.

Grape production. Currently only one third of the pre-war production capacities exists. The number of bearing grape-vines in 2000 were about 6.5m. Grape production in that year was 13.3 thousand metric tons which gives an average yield of 2.05 kg/grape-vine. The main grape variety for wine production is the "Zliavka" variety for white wine, and "Blatina" for red wine. (Ibid.)

Agricultural Inputs. Most agricultural inputs are purchased from Croatia, Serbia, Hungary, the Czech Republic or the EU: The average retail price per kg of fertiliser in 2000 was about €0.18 per kg. The average monthly wage rate in that year was about €180 in 2000, which is about €9 per day. (Ibid.)

3.4.2 Consumption

Average per capita consumption of vegetables is about 80 kg according to trade sources. Average consumption per capita of potatoes is between 65 and 70 kg. (USDA 2001, GAIN Report #BK1003).

Overall vegetable consumption in 2000 was about 154 kg per capita. In addition, 56 kg of potatoes were consumed. Table 33 lists per capita consumption data for other vegetables.

Table 33: Total per capita consumption* of selected vegetables in Bosnia-Herzegovina, 2000

	All vegetables	*Potatoes*	*Tomatoes*	*Onions*	*Beans*	*Peas*	*Other vegetables*
Kg per capita	154.2	56.2	8.6	7.2	1.8	0.5	138.5

Note: *Data includes consumption of fresh and processed, preserved, dried vegetables etc.

Source: FAOSTAT, Food Balance Sheet: www.fao.org.

Total fruit consumption was about 27 kg per capita in 2000. Most important were citrus fruits followed by apples and grapes. More detailed data is provided in the following Table 34.

Table 34: Total per capita consumption* of selected fruits in Bosnia-Herzegovina, 2000

	All fruit	*Citrus fruit*	*Apples*	*Grapes*	*Bananas*	*Other fruits*
Kg per capita	26.9	7.4	5.4	2.3	0.1	11.7

Note: *Data includes consumption of fresh and processed, preserved, dried fruit etc.
Source: FAOSTAT, Food Balance Sheet: www.fao.org.

3.4.3 International trade and domestic distribution

Import sources for vegetable include Hungary, Croatia and the former Yugoslavia. The main origins of fruit imports are: Italy, Turkey, Greece, Spain and Hungary. (USDA 2001, GAIN Report #BK1003).

Average import tariffs for horticultural products (*ad valorem*) in 2000 was for tomatoes (10%), onions (5-10%), all other vegetables (5%), fruits (10%) with the exception of berries (5%). Bosnia-Herzegovina had therefore lower import protection in place than its neighbour countries and the EU. (Ibid.) Table 35 lists data on average import tariffs for different countries. (Ibid.)

Table 35: Average import tariffs for horticultural products (*ad valorem*) in Bosnia-Herzegovina and some European countries, 2000

	EU	*Slovenia*	*Croatia*	*Bosnia-Herzegovina*
Vegetables	15.0	16.8	18.4	4.8
Fruits	14.0	11.0	15.5	5.4
Processed f&v	24.5	20.3	17.0	10.1

Source: National Statistical Bulletins, reproduced in USDA (2001), GAIN Report #BK1003.

Domestic distribution of fruit & vegetables is divided in the classical two-stage system: wholesalers and retailers. The wholesale system in not yet professionally established but the main market for fruit & vegetables is the Arizona market which operates inter-regionally. According to trader estimations up to 60% of the overall Bosnia-Herzegovina's f&v volume are traded on this market. About 50 to 60 wholesalers sell fruit & vegetables from their trucks on this market. There are no warehouses nor stalls. The majority of the traders sell imported produce, in particular fruits from Italy, Spain and the surrounding Balkan countries. However, most of the traded vegetables come from local production. From Arizona, produce is distributed to all major cities, including Sarajevo. Apart from Arizona there is a wholesale centre in Travnik on the way to Sarajevo which comprises several wholesalers. One of the biggest distribution enterprise of the country is Vocepromet in Tresanj which delivers to up to 300 retailers. The company is also supplier for the supermarket chain Wisa. Apart from Vocepromet there are 2 to 3 other bigger importers for fruit & vegetables while the remainder of the traders are rather small and medium-sized companies. Among the importers and wholesalers there seems to be no big interest in locally produced fruit & vegetables. Packaging, quality and price are the main reasons given for the preference of imported

produce. Another problem is the missing domestic distribution system, implying high logistics efforts since traders have to deal with many individual producers. Thus there is a big interest in a centralised distribution centre for domestic produce. On the retail level, green markets are the main outlets for fruit & vegetables. According to estimates these markets account for 70-80% of all sold fresh fruit & vegetables. On these markets producers sell directly to consumers. Often these markets also provide a wholesale facility in which retailers are offered larger quantities. Green markets are predicted to also play a significant role in the future. Another retail category are supermarkets which account for 10-15% of national fruit & vegetable turnover. The most important supermarket chains are Wisa (5 outlets), Mercator (2), Interex (2), Bingo and Omega. (DEZA – GTZ 2002)

3.4.4 Implications

Bosnia-Herzegovina is a heavily fruit & vegetable import dependent economy (with the exception of plums) which low entry barriers (tariffs). Therefore it appears to be a potentially good export market for Kosovar horticultural produce.

3.5 FR Yugoslavia[9]

3.5.1 Production

Vegetable production in 2000 occurred on a surface of 132,268 ha and yielded 1,105,624 metric tons of produce. Potatoes, dried beans and cabbages were the most important domestically produced vegetables. Table 36 lists production data for the most common vegetables in Yugoslavia. (FAOSTAT).

Table 36: Production of some selected vegetables in FR Yugoslavia, 2000

	Potatoes	*Beans, dry*	*Cabbages*	*Tomatoes*	*Peppers*	*Onions*	*Garlic*	*Carrots*	*Cucumbers*
Area (1,000 ha)	104.5	56.0	24.7	22.0	20.0	20.0	10.0	7.3	4.5
Production (1,000 mt)	690.5	33.9	285.3	176.6	121.0	120.0	36.5	55.0	34.8
Yield (mt/ha)	6.6	0.6	11.5	8.0	6.6	6.0	3.7	7.5	7.7

Source: FAOSTAT data: www.fao.org.

Fruit production in 2000 yielded 1,124,378 metric tons on a total production area of 288,563 ha. The most important domestically produced fruits were plums, grapes, and apples. Table 37 lists production data for the most important fruits. (Ibid.)

Table 37: Production of some selected fruits in FR Yugoslavia, 2000

	Plums	*Grapes*	*Apples*	*Sour cherries*	*Water melons*	*Rasp-berries*	*Pears*	*Straw-berries*	*Peaches*
Area (1,000 ha)	125.0	60.0	27.0	21.2	19.4	13.5	12.9	8.7	8.7
Production (1,000 mt)	370.0	362.6	98.0	58.8	244.4	56.1	70.0	25.1	41.6
Yield (mt/ha)	3.0	6.0	3.7	2.8	12.6	4.1	5.4	2.9	4.8

Source: FAOSTAT data: www.fao.org.

3.5.2 Consumption

Overall vegetable consumption in 2000 was about 95 kg per capita. In addition, 38 kg of potatoes were consumed. Table 38 lists per capita consumption data for other vegetables. (FAOSTAT)

Table 38: Total per capita consumption* of selected vegetables in FR Yugoslavia, 2000

	All vegetables	*Potatoes*	*Tomatoes*	*Onions*	*Beans*	*Peas*	*Other vegetables*
Kg per capita	94.7	37.9	16.0	11.2	3.4	2.0	67.5

Note: *Data includes consumption of fresh and processed, preserved, dried vegetables etc.

[9] As mentioned already on page 23, the Federal Republic (FR) of Yugoslavia comprises Serbia and Montenegro. In the here listed data, Kosovo is also still included, since the data is from 2000.

Source: FAOSTAT, Food Balance Sheet: www.fao.org.

Total fruit consumption was about 61 kg per capita in 2000. Most important were apples followed by citrus fruits and bananas. Detailed data is provided in the following Table 39. (Ibid.)

Table 39: Total per capita consumption* of selected fruits in FR Yugoslavia, 2000

	All fruit	*Apples*	*Citrus fruit*	*Bananas*	*Grapes*	*Other fruits*
Kg per capita	61.2	7.8	4.4	3.2	1.1	44.8

Note: *Data includes consumption of fresh and processed, preserved, dried fruit etc.
Source: FAOSTAT, Food Balance Sheet: www.fao.org.

3.5.3 Implications

FR Yugoslavia is a net importer of most vegetables and most fruits except for pears, plums and peaches. However, the country is net exporter of prepared and preserved fruit & vegetables. Therefore there are significant processing activities which necessitate a steady supply of horticultural input. Given the geographical proximity, Kosovo could be a significant supplying country, once political problems are solved and borders are reopened. Thus, the country clearly seems to be a potential export market for Kosovar horticultural produce.

3.6 Macedonia

3.6.1 Production

Vegetable production is one of the most important activities of Macedonian agriculture. In 1999, over 600,000 tons of vegetables were produced on a total area of 57,000 ha, out of which 250 ha in heated glass houses. The average farm size is 2.5 ha of which on average 1 ha is used for vegetable production. Inputs for vegetable production such as seeds and plant protection materials are usually imported, mostly from Holland, Israel, Yugoslavia, Bulgaria and Greece. Only fertiliser comes from Macedonian production. Table 40 lists production data for the most common vegetables in Macedonia. (GTZ, AGRO PROMOTION)

Table 40: Production and retail prices of some selected vegetables in Macedonia, 2000

	Beans, green	*Potatoes*	*Peppers*	*Tomatoes*	*Onions*	*Cabbage*	*Garlic*	*Cucumbers*	*Peas*
Area (1,000 ha)	19.4	13.0	7.7	6.9	4.0	3.6	1.3	1.1	1.1
Production (1,000 mt)	17.8	164.0	109.0	134.7	36.3	70.4	4.1	22.0	2.5
Yield (mt/ha)	0.9	12.6	14.2	19.6	9.1	19.6	3.2	20.0	2.3
Retail price (US$/kg)*			0.6	0.6				0.6	

Source: FAOSTAT data: www.fao.org; GTZ, AGRO PROMOTION.

Fruit production in 2000 yielded 412,760 metric tons on a total production area of 44,402 ha. Table 41 lists production data for the most important fruits, showing that grapes and apples, followed by watermelons, were most important in 2000.

Table 41: Production of some selected fruits in Macedonia, 2000

	Grapes	*Apples*	*Water-melon*	*Plums*	*Pears*	*Peaches*	*Sour cherries*	*Straw-berries*	*Apricots*
Area (1,000 ha)	26.5	8.9	8.3	3.0	1.4	1.3	1.2	0.6	0.3
Production (1,000 mt)	264.3	84.3	120.0	23.4	8.9	9.5	4.3	5.2	4.2
Yield (mt/ha)	9.9	9.5	14.5	7.8	6.4	7.3	5.1	8.7	14.0

Source: FAOSTAT data: www.fao.org.

The retail price for watermelons in 1999 were US$0.1 per kg (GTZ, AGRO PROMOTION).

3.6.2 Consumption

Vegetable consumption in 1998 was according to official statistical data: 200,000 tons (eg, 40% of the domestic production) were consumed fresh domestically, 110,000 tons were exported fresh (although there is doubt since this figure seems very low), 21,500 tons were processed by the domestic processing industry. There remains an amount of 175,000 tons which account for losses in production and post-harvest management, unregistered trade and private household processing. (GTZ, AGRO PROMOTION). Table 42 lists data on the consumption of some selected vegetables.

Table 42: Total per capita consumption* of selected vegetables in Macedonia, 2000

	All vegetables	*Tomatoes*	*Potatoes*	*Onions*	*Beans*	*Peas*	*Other vegetables*
Kg per capita	209.4	60.8	49.1	16.0	4.5	1.4	132.6

Note: *Data includes consumption of fresh and processed, preserved, dried vegetables etc.

Source: FAOSTAT, Food Balance Sheet: www.fao.org.

Fruit consumption data is presented in the following Table 43. The mostly consumed fruits were grapes followed by apples and citrus fruits.

Table 43: Total per capita consumption* of selected fruits in Macedonia, 2000

	All fruit	*Grapes*	*Apples*	*Citrus fruit*	*Bananas*	*Other fruits*
Kg per capita	125.3	42.5	24.6	22.0	2.3	33.8

Note: *Data includes consumption of fresh and processed, preserved, dried fruit etc.

Source: FAOSTAT, Food Balance Sheet: www.fao.org.

3.6.3 International trade and domestic distribution

The traditional export destinations of fresh fruit & vegetables are the neighbouring countries (Greece, Bulgaria, FR Yugoslavia, Albania) and in particular the former Yugoslav republics (Croatia, Bosnia-Herzegovina and Slovenia). (GTZ, AGRO PROMOTION)

Domestic distribution occurs mostly in green markets, retail shops and supermarkets. There is one wholesale market in Skopje and one in Stumica. (Ibid.)

3.6.4 Implications

Macedonia is a strong horticultural exporter on the Balkans which large net exports except for fruit preparations, peaches and potatoes. Climatic conditions seem to be more favourable as compared to Kosovo. At presence, much of the imported fruit & vegetables in Kosovo come from this country which is about 5 years ahead in its economic development. All these reasons make it unlikely that Kosovo horticultural produce could gain a significant market share in this country in the short run.

3.7 Albania[10]

3.7.1 Production

Vegetable production (including melons) in 2000 occurred on a surface of 34,520 ha and yielded 653,000 metric tons of produce. Tomatoes, special vegetables, and dried beans were the most important domestically produced vegetables. Table 44 lists production data for the most common vegetables in Albania. (FAOSTAT)

Table 44: Production of some selected vegetables in Albania, 2000

	Tomatoes	*Vegetables fresh, nes*	*Beans, dry*	*Potatoes*	*Beans, green*
Area (1,000 ha)	162.0	29.0	27.3	12.5	0.1
Production (1,000 mt)	5.4	250.0	30.0	180.0	1.0
Yield (mt/ha)	30.0	8.6	1.1	14.4	8.3

Notes: nes = 'not elsewhere specified' and includes eg, chards, celery, capers, fennel, parsley, cardoons etc.
Source: FAOSTAT data: www.fao.org.

Fruit production in 2000 yielded 132,400 metric tons on a total production area of 26,310 ha. The most important domestically produced fruits were watermelons, apples, and grapes. Table 45 lists production data for the most important fruits. (Ibid.)

Table 45: Production of some selected fruits in Albania, 2000

	Watermelons	*Apples*	*Grapes*	*Sour cherries*	*Plums*	*Cherries*	*Pears*	*Oranges*
Area (1,000 ha)	-	12.0	5.7	3.0	2.4	1.2	1.0	0.5
Production (1,000 mt)	240,0	2.4	75.0	8.3	12.5	4.5	2.4	2.2
Yield (mt/ha)	-	51.1	13.2	2.8	5.2	3.8	2.4	4.6

Source: FAOSTAT data: www.fao.org.

3.7.2 Consumption

Overall vegetable consumption in 2000 was about 205 kg per capita. In addition, 31 kg of potatoes were consumed. Table 46 lists per capita consumption data for other vegetables. (FAOSTAT)

Table 46: Total per capita consumption* of selected vegetables in Albania, 2000

	All vegetables	*Tomatoes*	*Potatoes*	*Onions*	*Beans*	*Peas*	*Other vegetables*
Kg per capita	204.8	46.1	30.8	1.8	4.8	0.0	156.9

Note: *Data includes consumption of fresh and processed, preserved, dried vegetables etc.

[10] Published information about Albanian agriculture in general and the horticultural sub-sector in particular is scarce. Therefore only production and consumption can be treated in this section. However, net trade and export unit values for Albania are discussed at the beginning in Section 13.1 starting at page 23.

Source: FAOSTAT, Food Balance Sheet: www.fao.org.

Total fruit consumption was about 74 kg per capita in 2000. Most important were citrus fruits followed by apples and bananas. More detailed data is provided in the following Table 47. (Ibid.)

Table 47: Total per capita consumption* of selected fruits in Albania, 2000

	All fruit	*Grapes*	*Apples*	*Citrus fruit*	*Bananas*	*Other fruits*
Kg per capita	74.3	21.2	11.6	10.2	4.4	25.7

Note: *Data includes consumption of fresh and processed, preserved, dried fruit etc.
Source: FAOSTAT, Food Balance Sheet: www.fao.org.

3.7.3 Implications

Albania is net horticultural importer except for beans. On the other hand, climatic conditions seem to be much more favourable as compared to Kosovo. Also, Albania has a naturally good trade position due to its seaside location. In the short run, Albania could be potential export market for Kosovar producers, albeit one with little purchasing power. In the longer run, Albania could develop its horticultural potential and become a serious net exporter of horticultural products itself.

3.8 Greece

3.8.1 Production

Vegetable production (including melons) in 2000 occurred on a surface of 143,600 ha and yielded about 4.3m metric tons of produce. Potatoes, tomatoes and dried beans were the most important domestically produced vegetables. Table 48 lists production data for the most common vegetables in Greece. (FAOSTAT)

Table 48: Production of some selected vegetables in Greece, 2000

	Potatoes	*Tomatoes*	*Beans, dry*	*Cabbages*	*Beans, green*	*Onions*	*Peppers*	*Cucumbers*	*Garlic*	*Carrots*
Area (1,000 ha)	46.6	44.0	11.8	9.9	8.6	8.5	3.9	2.0	2.0	1.1
Production (1,000 mt)	883.0	2,057.2	23.6	210.0	70.0	175.0	103.7	160.9	17.2	34.4
Yield (mt/ha)	18.9	46.8	2.0	21.2	81.4	20.6	26.6	80.5	8.6	31.3

Source: FAOSTAT data: www.fao.org.

Fruit production in 2000 yielded about 4.2m metric tons on a total production area of 316,000 ha. The most important domestically produced fruits were grapes, peaches and oranges. Table 49 lists production data for the most important fruits. (Ibid.)

Table 49: Production of some selected fruits in Greece, 2000

	Grapes	*Peaches*	*Oranges*	*Watermelons*	*Figs*	*Apples*	*Pears*	*Cherries*	*Mandarins etc*	*Apricots*
Area (1,000 ha)	124.0	52.5	38.6	18.6	15.0	14.9	9.8	9.8	6.0	4.7
Production (1,000 mt)	1,200.0	920.3	1,068.4	662.8	80.0	285.0	96.5	50.3	84.0	82.0
Yield (mt/ha)	9.7	17.5	27.7	35.6	5.3	19.1	9.9	5.2	14.1	17.5

Source: FAOSTAT data: www.fao.org.

3.8.2 Consumption

Overall vegetable consumption in 2000 was about 293 kg per capita. In addition, 71 kg of potatoes were consumed. The following Table 50 lists per capita consumption data for other vegetables. (FAOSTAT)

Table 50: Total per capita consumption* of selected vegetables in Greece, 2000

	All vegetables	*Tomatoes*	*Potatoes*	*Onions*	*Beans*	*Peas*	*Other vegetables*
Kg per capita	293.1	141.2	70.6	16.5	3.1	0.0	135.4

Note: *Data includes consumption of fresh and processed, preserved, dried vegetables etc.

Source: FAOSTAT, Food Balance Sheet: www.fao.org.

Total fruit consumption was about 162 kg per capita in 2000. Most important were citrus fruits followed by grapes and apples. More detailed data is provided in the following Table 55. (Ibid.)

Table 51: Total per capita consumption* of selected fruits in Greece, 2000

	All fruit	*Citrus fruit*	*Grapes*	*Apples*	*Bananas*	*Other fruits*
Kg per capita	162.1	67.3	21.0	20.7	5.1	48.4

Note: *Data includes consumption of fresh and processed, preserved, dried fruit etc.
Source: FAOSTAT, Food Balance Sheet: www.fao.org.

3.8.3 Domestic distribution

In 1999 there were about 2,740 supermarkets including 180 discount shops belonging to supermarket chains. In addition, there were about 22,000 small and mostly independent grocery shops ("mum-and-pop stores") and 14,000 kiosks. In the overall food and beverages food sales of US$16.4bn in 1998, fruit & vegetables had a share of 21.8% ($3.5bn). Frozen vegetables are reportedly one of the fastest growing retail food market segments in Greece, with about 30% of Greek households now owning freezers and microwave ovens.

3.8.4 Implications

Greece is a significant and very competitive net fruit exporter in the region. However, it is short of apples and pears. In addition, it is a net importer for almost all analysed vegetables (except for peppers and cucumbers) and in particular frozen vegetables. Therefore, in theory, there seems to be some export potential but Turkey is certainly a big competitor.

3.9 Turkey

3.9.1 Production

Horticulture production conditions are generally very favourable in Turkey. In particular, the mild climate makes that Turkish produce arrives very early in the year on the markets thus securing good prices. As a result, and also because horticultural products are more profitable than field crops, there has been an significant growth of this industry, which holds now a share of almost 15% of total agricultural land in Turkey, up from 9% 60 years ago. The Turkish government is well aware of the importance of the horticultural sector for the national economy and is investing heavily into further expansion of this activity (eg, the massive South-eastern Anatolian Development Project – GAP). On the other hand, there are already over-capacities for some commodities such as hazelnut, and field crops such as tea, tobacco and sugar beet for which crop substitutions programs have been introduced. (Akkaya 2000 and EU Commission 2000)

Vegetable production (including melons) in 2000 occurred on a surface of 924,503 ha and yielded about 22m metric tons of produce. Potatoes, dried beans and tomatoes were the most important domestically produced vegetables. Table 52 lists production data for the most common vegetables in Turkey. (FAOSTAT)

Table 52: Production of some selected vegetables in Turkey, 2000

	Potatoes	*Beans, dry*	*Tomatoes*	*Onions*	*Peppers*	*Beans, green*	*Cucumbers*	*Cabbages*	*Garlic*	*Carrots*
Area (1,000 ha)	211.0	176.0	160.0	110.0	70.0	54.0	54.0	32.0	14.0	12.0
Production (1,000 mt)	5,350.0	247.0	6,800.0	2,200.0	1,400.0	450.0	1,550.0	732.0	110.0	240.0
Yield (mt/ha)	25.4	1.4	42.5	20.0	20.0	8.3	28.7	22.9	7.9	20.0

Source: FAOSTAT data: www.fao.org.

Fruit production in 2000 yielded about 10.5m metric tons on a total production area of 1.1m ha. The most important domestically produced fruits were grapes, watermelons, and apples. Table 53 lists production data for the most important fruits. (Ibid.)

Table 53: Production of some selected fruits in Turkey, 2000

	Grapes	*Watermelons*	*Apples*	*Apricots*	*Figs*	*Oranges*	*Pears*	*Mandarins etc*	*Peaches*	*Cherries*
Area (1,000 ha)	535.0	137.0	106.6	62.5	60.0	38,6	36.6	27.1	24.0	22.8
Production (1,000 mt)	3,550.0	4,000.0	2,300.0	500.0	260.0	1,035.0	380.0	560.0	430.0	200.0
Yield (mt/ha)	66.4	29.2	21.6	8,0	4.3	26.8	10.4	20.6	17.9	8.7

Source: FAOSTAT data: www.fao.org.

3.9.2 Consumption

Overall vegetable consumption in 2000 was about 210 kg per capita. In addition, 64 kg of potatoes were consumed. Table 54 lists per capita consumption data for other vegetables. (FAOSTAT)

Table 54: Total per capita consumption* of selected vegetables in Turkey, 2000

	All vegetables	*Potatoes*	*Tomatoes*	*Onions*	*Beans*	*Peas*	*Other vegetables*
Kg per capita	210.1	63.7	60.8	26.4	3.3	0.1	122.9

Note: *Data includes consumption of fresh and processed, preserved, dried vegetables etc.
Source: FAOSTAT, Food Balance Sheet: www.fao.org.

According to official Turkish statistical data per capita consumption of *fresh* vegetables (ie, without processed produce which is included in the figures above) in 1996 was: tomatoes 81 kg, potatoes 60 kg, onions 22 kg, cucumber 25 kg, peppers 13 kg. (Akkaya 2000)

Total fruit consumption was about 108 kg per capita in 2000. Most important were apples followed by grapes and citrus fruits. More detailed data is provided in the following Table 55. (Ibid.)

Table 55: Total per capita consumption* of selected fruits in Turkey, 2000

	All fruit	*Apples*	*Grapes*	*Citrus fruit*	*Bananas*	*Other fruits*
Kg per capita	108.2	31.6	27.5	23.3	1.6	24.3

Note: *Data includes consumption of fresh and processed, preserved, dried fruit etc.
Source: FAOSTAT, Food Balance Sheet: www.fao.org.

According to official Turkish statistical data per capita consumption of *fresh* fruits (ie, without processed produce which is included in the figures above) in 1996 was: grape 40 kg, watermelon 34 kg, apples 33 kg, melon 21 kg, orange 11 kg, mandarins 8 kg, lemons 6 kg, and cherries 2 kg. (Akkaya 2000)

3.9.3 International trade

Export ratios (ie, exports as a percentage of production) are still comparatively low, albeit increasing, despite the huge annual production of fruit & vegetables in Turkey. The main reason for this is that national demand for f&v is also enormous. Thus, in 1996 the export ratio for f&v as a whole was 3.2%. However, depending of the individual commodity this ratio varies varied between 28.0% for mandarins and 0.4% for melons. For vegetables the ratios were: potatoes 4.9%, tomatoes 1.4%, onion 10.3%, cucumber 1.0%, pepper 2.1%. For other fruits: grape 0.8%, apple 2.6%, orange 9.4%, lemons 27.4%, cherries 8.0%, and watermelons 0.7%. (Akkaya 2000)

Major export destinations for Turkish horticultural crops are Europe, the Middle East and since recently the Central Asian Republics. (Akkaya 2000)

3.9.4 Implications

Turkey is the biggest fruit & vegetable producer in the region and certainly the biggest threat to Kosovo's horticultural future given that production conditions are very favourable in Turkey, and the horticultural sector is actively promoted by the national government. Nevertheless, a large share of the Turkish production certainly goes to more high-price markets, such as the EU, thus leaving regional market potential for Kosovar f&v produce.

4 CONCLUSIONS AND RECOMMENDATIONS

A final assessment of Kosovo's real regional competitive advantage as a fruit & vegetable producer is complex. As it looks like, the country has neither significant climatic nor geologic advantages. Kosovo is geographically located in the north of Turkey, Greece and Macedonia, thus causing crops to ripen only later during the year. Also, in contrast to for example Albania or Croatia, Kosovo cannot benefit from Mediterranean climate which is more favourable for f&v production. However, Kosovo seems to have sufficient water supplies and irrigation systems (even if some of them were damaged during the war) which is certainly an asset with regard to horticultural production (see GFA/stoas, DAFRD and FAO 2002). Another 'natural' disadvantage is that Kosovo is a landlocked country, thus it is cut off from main (in particular maritime) trade routes. On the human capital side, Kosovo faces the same problems than the other now independent states of the former Yugoslavia: privatisation of formerly socially owned production assets, urgently needed modernisation of these assets and a population which has to cope in a now 'free' market environment without, in general, having been trained to do so. Another problem is the lack of specialised institutions such as professional associations, market monitoring and analysis bodies, marketing organisations, extension and other advisory services etc which 'free' markets need in order to function effectively. Even worse, Kosovo, as one of the latest former Yugoslav provinces which has taken the way to independence, is probably still five years or so behind of it neighbours such as Macedonia or Croatia, and in particular Greece and Turkey do not have, or to a much lesser extent, such problems. Moreover, Kosovo's field sizes are small and fragmented and land reform is needed in order to reach 'critical' plot sizes which allow for large-scale production in order to realise economies of scale. Finally, Kosovo farmers, at present, are not only unprotected against cheap horticultural imports by means of import tariffs or duties, they are also disadvantaged by the fact that agricultural inputs, which need to be imported into Kosovo due to a lack of locally produced supplies, are taxed. (For this report it was not possible to obtain reliable information to what extent customs policy will change in the near future.) Taking all these facts together, it must clearly be acknowledged that, at present and also very likely in the medium-term future, Kosovo will be having a hard standing to either compete against horticultural imports from neighbouring countries or to export into these markets, although in particular export potentials clearly exist as this study has shown.

The following recommendations are given, which are directed to SPHP-K and which take into account its status of a non-government organisation and its limited budget and project length. However, it must also be noted that important problems exist at all levels in the horticultural sector and actions are urgently needed at the policy-making level as well as by the individual farmers themselves who need to actively take their own future into their hands without too much hoping on external support.

1) From a commodity point of view, SPHP-K should focus its activities on those fruit & vegetables which have been identified in this study as being in short supply – ie, potatoes, garlic, lettuce, dried beans, and pears. As it has been shown, there is also, limited, regional demand for tomatoes, carrots and onions. Some of these commodities can be produced during the entire year in glass houses or plastic tunnels (eg, lettuce, tomatoes and carrots). Others, such as

dried beans, garlic, onions and pears, cannot, in general, be produced cost-effectively all-year around, but they can be stored and supplied to the market in a more continuous way than it is done at present.

2) Information should be collected, or another study should be undertaken, to assess current storage facilities and their state of functionality. It should be analysed in a systematic way whether additional warehouse capacity for f&v in Kosovo is needed and/or how the existing ones could be managed more effectively. This study needs not necessarily be undertaken by SPHP-K but at least the project should try to convince stake holders in the ministry or at international donor organisations that both, under-glass production and more effective stock keeping will significantly contribute to stabilise prices and to assure a more continuous market supply from which farmers will benefit through higher incomes and consumers by a better availability of f&v during the year.

3) The building of specialised institutions is another important task which needs to be achieved in order to promote economic development. SPHP-K cannot engage in the design and implementation of government or other 'public' institutions such as national horticultural marketing boards, export promotion bodies, agricultural banks etc. However, there is also urgent need for private sector institutions and one of it is for example a new wholesale market in Pristina. Kosovo's produce can hardly be effectively marketed if there is no or only limited access to sales channels. The study results have confirmed that the Pristina wholesale market is most important for the internal distribution of fruit & vegetables. Therefore, Kosovo's producers must have a better presence at this market. The study results have also shown that business transactions still mostly occur on an *ad hoc* basis and a better trading infrastructure (with appropriate communication facilities, warehouses, transport agencies, office space etc) would contribute to the building of more trustful and thus lasting business relationships. Therefore, SPHP-K should engage in the design of the planned new wholesale market and should also engage in activities to assure that Kosovo's producers will be accordingly represented at this market.

4) Regional production and marketing co-operations should be promoted. Despite all ethnical conflicts and the move to individual states, the newly created countries are probably much too small in order that they could become sustainable economic entities without close intra-regional co-operation and mutual trade relationships. Although this is clearly a matter of politics and policy-making, SPHP-K could contribute in promoting business relationships in the horticultural industry. For example, Metodija STOJANOVSKI, executive director of Export Consortium in Skopje, Macedonia, suggested that he could imagine to market Kosovar blueberries into the EU where he is already serving an attractive high-price market segment. For a start, fresh blueberries could be transported to Macedonia and freezing and marketing will take place there. In the medium run, freezing may then occur in Kosovo. Mr STOJANOVSKI is also a professional business trainer and training sessions could be organised with him. It is therefore recommended that SPHP-K engages in the building of intra-regional marketing networks.

5) Capacity building and the creation of effective extension services is a final activity which seems to be crucial for the development of the horticultural sector in Kosovo. Although the formation

of a general extension service is more a government task, SPHP-K, as one of the main foreign protagonists in the horticultural sector, could contribute to this process in providing a network of specialised international consultants which complement existing advisory services. The organisation of periodic expert round tables or workshops, strategy seminars etc could contribute to know-how transfer and information dissemination to and capacity building of local extension services and thus to the promotion of horticultural development in Kosovo. SPHP-K should thus engage directly in building such a network of international advisors and in the (initial) organisation of the just-mentioned events.

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