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REPORT ON THE PRODUCTION AND CONSUMPTION OF FRUITS AND FRUITS PRODUCTS IN THE BALKANS

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CONTENT

GENERAL INTRODUCTION

The objective of this report is to give an insight of the Balkan producing fruit industry and their market expectations by presenting the results of a market survey.

This market research on fruit industry was carried out partly on the basis of information obtained in Work Package1 (WP 1). WP1 focussed on preparing a global overview of consumer and market oriented studies and statistical data in the Balkans. This report, together with the other deliverables within WP5, provides inputs for WPs 9 (Consumer quantitative survey), 10 (Training) and 11 (Dissemination of the results).

The present deliverable is composed of two parts.

- You will read about the production and consumption of fruits and fruit products in the Balkans from the Fruit Processors and Authorities perspective in part I .
- Afterwards, part II provides a reflection about the two relevant aspects in markets: production (e.g. competiveness, legislation) and consumption (e.g. socio-demographics, contextual issues).

PART 1

READERS GUIDE PART I

After the summary, the way the market research was carried out is explained in Chapter 2.

Chapter 3 continues with presenting consumption and production of fruit in Western Balkans.

Chapter 4 provides insight in the competitive situation of national fruit sector in Western Balkans.

Chapter 5 describes trends of consumption and policy in Western Balkans.

Chapter 6 provides information about national health policies in Western Balkans.

Part I concludes with expectations and conclusion in Chapter 7.

1. SUMMARY

1.1. Actual National consumption of fruit

- It was noticed in every country that participants are not informed about some topics of this research whether because data do not exist or because they are not familiar with them due to the fact that knowledge is not centralized of one sector in an institution. For that reason the report is based to a high extent on the expert's estimates which are often arbitrary and often vary to a large extent.
- The general level of fruit consumption is certainly higher than it is recorded in the national statistical official data, for two reasons: first the data collection and computing are not entirely reliable, second, the home-consumption is at least underestimated if not absolutely not taken into account.
- Countries of the Western Balkans: Serbia, Slovenia, Croatia, Macedonia, Bosnia and Herzegovina and Montenegro have common tradition of growing fruit on their private properties and making sweet preserves. According to respondents, another thing those countries have in common is poor consumption of these products, as well as poor consumption of fresh fruit. This is mainly a consequence of absence of habit. However, the respondents from all of the countries believe that trend of both fresh and processed fruit consumption is increasing, mainly as a result of raised awareness of healthy diet.
- Everybody agreed that homemade processed fruit is a tradition all over Western Balkans but they stated different opinions about the future of traditional fruit processing whetherit will increase or be replaced with industrial products.
- Some respondents claim that division into heavy and light fruit consumers can not be made while others believe that fruit consumption is determined by some of the following categories: gender, socio-economic class, education level, age, life style and health.

1.2. Production and Processing

- Balkan has all the natural conditions (soil, climate) necessary for growing fruits of high quality, everybody agrees on that. Sorts of fruit grown make these countries different from one another, and these sorts depend on geographical position and development of fruit processing industry. B&H, Macedonia and Montenegro stand out as producers of the largest number of fruit sorts, due to their very favourable geographical position. At the same time, these two countries have the least developed fruit processing industry. Producers from these countries are faced with the problem of poor competitiveness of their products in the domestic market, compared with products from the region. However, they have made some progress recently as well. Countries in the region, which might tentatively be said to have developed fruit processing industry, are Slovenia, Croatia and Serbia. These countries have established production processes and controls of quality, which are standards to be implemented in other countries of the region.
- All respondents, no matter what country they are from and no matter how much they import, mentioned the same strengths of their domestic fruit products: optimal combination of price and quality, trust and recognition among consumers, quality of raw materials and their short transportation to manufacturers.

1.3. Trends of consumption

- Objective of Ministries from all Balkan countries participating in this research is to increase the quality of all products in order to make them as competitive as possible, both on domestic and on foreign markets.
- When discussing factors that have influence on consumption of fruit, respondents considered all of them to have big influence, but a little more influence has been given to consumer nutrition knowledge, health dimension of food in general and economic evolution and little less to public policy and fashion. When evaluating the importance of those factors, all of them got somewhat higher grades. Relying on that, we can conclude that they are important but in reality have smaller influence than they should. Consumer nutrition knowledge, health dimension of food in general and economic evolution got higher marks from both authorities and processors.
- Some respondents believe that it is very difficult to predict the trend of consumption given the existing economic crisis. However, majority of processors and representatives of the Ministries expect future growth of consumption of quality processed fruit and growing market share of such products (mainly due to recovering markets).

1.4. General awareness about healthy and well-balanced diet

- Generally, the respondents from all of the countries believe that trend of both fresh and processed fruit consumption is increasing, mainly as a result of raised awareness of healthy diet.
- Though all respondents agree on lack of knowledge about nutrition and awareness of healthy food – "We should be educated about health benefits of fruit; people are not aware of the effects of some sort of fruit….It's not a part of our culture to think about what we eat."

1.5. National Health Policies

- General estimate is that level of awareness and education among the consumers is still not sufficient, although it is rising. State programs are assessed as unsatisfactory or even non-existing, depending of the countries. The only positive example of inclusion of fruit consumption in the National Health Programme is recorded in Slovenia. Participants expect their states to recognize this need and get more actively involved in promotion of fruit consumption.
- At the same time, producers expect assistance from their states, primarily financial, for the economic and technical development of their sector. They are also hoping that professional associations will be formed and that they will eventually join international associations of producers. Processors stated that institutions need to be formed or the existing ones have to be modernized in order to perform quality controls and do necessary chemical analysis. All respondents, except from those from Slovenia which is already EU-member, hope for EU membership.

2. METHODOLOGY

2.1. IDIs methodology short description

TYPE OF RESEARCH: Qualitative research, in depth interviews, in face to face.

PROCEDURE – TECHNIQUE: In depth interviews are one of the methods of qualitative research. They are facilitated by a trained moderator (psychologist) and last approx. 30 minutes to 1 h. These techniques makes possible deeper understanding of behaviour, attitudes, motives, etc, as well as collection of a big number of information in a relatively short period of time.

Taking into account that participants are selected according to their knowledge of the fruit processing industry, government policies and consumers, opinions expressed in in-depth interviews should be considered typical for that segment of population only.

2.2. Main objectives

These interviews provide the first insights in the issue of fruit consumption and market expectations in Balkan countries. The study has the following objectives:

- Better understanding of consumption of fresh and processed fruits in Balkan countries: motivations and barriers (from the perspective of the Authorities and Processors);

- An insight into the Balkan fruit producing industries and their market expectations.

This research was conducted in six Balkan countries: Serbia, Croatia, Slovenia, Montenegro, FYR Macedonia and Bosnia and Herzegovina. In each country six persons has been interviewed: four representatives of fruit processing industry and two representatives of authorities responsible of the fruit processing sector and processors of fruit products. Usually participants from Ministries were representatives of Ministry of Agriculture or Ministry of Economy. Slovenia is the only country where representative of Ministry of Health participated. Please check www.focus-balkans.org for more research information from each country by national reports.

Croatia

Company	Short description of activity
Company 1	Factory for processing fruit and vegetables, e.g. stewed fruit
Company 2	Processing of fruits, e.g. juice
Company 3	Processing of fruits, e.g. jam, marmalade
Company 4	Production and sale of indigenous agricultural products, e.g. marmalade, dried fruit

Ministry	Ministry and Respondent function
Ministry of agriculture	Department of Agricultural Information
Ministry of agriculture	Administration for safety and quality of food

13 companies were contacted but most of them were not interested in taking part in this survey. Some of the stated reasons for rejecting were: lack of time, company policy does not allow this kind of interviews, illness, etc. Some simply ignored the e-mails and telephone calls. Regarding Ministries, Ministry of Agriculture, Ministry of Health and Croatian Agricultural Extension Institute were contacted.

Slovenia

Company	Short description of activity
1. company	Specialized company for production of fresh and processed apples. They offer their products on Slovenian and other European developed markets
2. company	Company produces fruit and vegetable products of high quality. Company is oriented towards producing juice, syrup and nectar, jam and alcoholic drinks. They offer their products on Slovenian and other European developed markets
3. company	Company is oriented towards producing concentrated juices for industrial production and natural juices for consumers. They offer their products on Slovenian and other European developed markets
4. company	Company is the leading producer in Slovenia and Balkan region of wide rage of high quality products: fruit juices, syrup, nectar, baby juices, fruit cereal bars, alcoholic beverages and fruit preparation for industry. They offer their products on Slovenian and other Balkan markets

Ministry	Ministry and Respondent function
1. Authority	Ministry of Agriculture, Forestry and Food: - Head of Public Relations and Promotion Office - Sector for safety and quality of food and feed
2. Authority	Ministry of Health: - Sector for health promotion and healthy lifestyle

Companies were chosen from data base “IPIS Marketing Manager” according to requested criteria for this project – **companies that are oriented toward fresh and processed fruit production**. Rejection was generally very low.

Two ministries were contacted – **Ministry of Agriculture, Forestry and Food** and **Ministry of Health**. Each Ministry answered questions from their area. Questions had to be reformulated in such way to ask opinion of Ministry as an institution and not personal opinion of person responsible for fruit industry sector. Ministries are willing and obliged to answer all questions if they are in their jurisdiction. If there are questions that they can't answer they will inform us who can, and direct us to the right address, if they can. For that reason it was quite difficult to get answers to some questions from any ministry institution that was contacted in this research. On every question we received only one answer, from one Ministry. They were all contacted via e-mail.

Serbia

Company	Short description of activity
1. company	One of the largest companies for production of fruit pulp, fruit concentrates and finished products such as refreshing soft drinks, carbonated and non carbonated, fruit nectars, fruit juices, marmalades, rakija, syrups, ajvar and similar products.
2. company	Company involved in manual production of domestic food and specialties based on traditional recipes. This production program includes domestic ajvar, spoon sweets, jams, as well as sour program (circa 50 articles). The program also includes line for packaging fruit and vegetables in mesh bags and cardboard boxes,
3. company	Company involved in export of frozen fruit, production of jams, marmalades and winter preserves.
4. company	Large producer of fruit juices and nectars, under bankruptcy at the moment, but still having production.

Ministry	Ministry and Respondent function
1. Authority	Ministry of Agriculture, Director of Food Safety Sector
2. Authority	Ministry of Agriculture, Sector for Analysis and Agrarian Politics

All 12 companies that meet required criteria were contacted. Directors of these companies did not show high level of motivation to participate in the survey. All of them who refused participation justified their refusal with lack of time due to business meetings and travels, refurbishment of plant, etc.

Since new Law on Safety of Food assigns all powers and competences related to food to Ministry of Agriculture, representatives of other ministries were not adequate respondents. Due to distributed competences in Ministry of Agricultures, employees of the Ministry suggested that leading people from Food Safety Sector and Sector for Analysis and Agrarian Politics should participate in this research. It was necessary to make a certain adjustment of methodology. Namely, one interview was done without audio recording at the request of respondent, while the other one was sent via e mail.

Bosnia and Herzegovina

Company	Short description of activity
1. company	Production of natural spring water and juices with a min. fruit content of 50%
2. company	Production of sweet jams, marmalade, various types of juice and production of pickled vegetables and ajvar.
3. company	cultivation and storage, primary processing of fruits
4. company	Production of fruit juices, syrups, marmalades

Ministry	Ministry and Respondent function
1. Authority	Ministry of Foreign Trade and Economic Affairs B&H; Department for projects of economic reconstruction and development; Agricultural division – head and deputy
2. Authority	Ministry of Agriculture, Forestry and Water Management Republic Srpska - Assistant Minister of Agriculture for Food Industry

In B&H there is no state Ministry of agriculture, so we contacted entity ministries (Federation of B&H and Republic of Srpska), as well as the state B&H Ministry of Foreign Trade and Economic Affairs whose Department for projects of economic reconstruction and development have Agricultural division which is in charge of various agricultural policies and other related issues. At the end, although we have agreed several times, we were not able to meet with anyone from Federal ministry, due to, at first, determining who is responsible, then illness of that expert, and then previous and urgent obligations of next one who could be of help to us, but we interviewed experts from other two ministries.

In total, 32 producers were contacted, but only two answered positively and the remaining two interviews were done using personal connections. All companies were, in some way, involved with fruit processing – different in type of products, size, certificates etc. Most of that number never answered to any of research, some were openly not interested in participating or even understanding benefits that will result for the sector from this research.

Macedonia

Company	Short description of activity
1. company	Biggest association of companies processing fruit and vegetables
2. company	Fresh fruit production and processing of fruit – freezing, compote, canning
3. company	Fresh fruit production and processing of fruit – juices, nectars, drinks, and functional fresh juices
4. company	Nutritive products and processing of fruit – drying, jams, marmalades, canning, juices, organic and functional varieties of products

Ministry	Ministry and Respondent function
1.Ministry of Agriculture, Fisheries, and Forestry	Department for Analysis and Planning, responsible for primary production and state policies regarding fruit and vegetables growing
2. Ministry of Economy	Industry Department, responsible for processing industry as a whole, no existing subdivision for fruit

A substantial number of companies were contacted and very few were unwilling to participate. A total of three companies from the fruit processing sector were interviewed and the fourth interview was conducted with representative of processors' association. The Industry Department at the Ministry of Economy is the only authority that is in charge of the processing industry as a whole, and the interview was finally scheduled. The other interview with authorities was arranged with the Ministry of Agriculture, as requested previously.

Montenegro

Company	Short description of activity
1. company	The biggest producer of wine and table grapes and table peaches. Annual production of wine grapes is approximately 20 million kilograms.
2. company	Company involved in processing of grapes, production of premium red wine and premium grape brandy. Products are made with traditional procedure, from grapes grown on company plantations.
3. company	Company involved in preserving olives, production of ketchup and tomato puree.
4. company	Company involved in production of jam and sweet preservers. They also produce sour preservers.

Ministry	Ministry and Respondent function
1. Authority	The Ministry of Agriculture, counseling service for plant production
2. Authority	The Ministry of Agriculture, orchard-vineyard production of the regional center Nikšić

Prior to contacting companies a list of 8 companies was made, 4 of which being small wineries whose owners would not be quite able to answer the questions competently. The other 4 participated in research.

Due to jurisdiction defined by Law on safety of food, adequate respondents were only representatives of Ministry of Agriculture.

Last but not least, It is important to point out specific issues that were met in each country, while conducting this research. Namely, information available to participants did not completely correspond with those requested in the interview. There are few reasons causing this problem. Firstly, lack of official data on topics related to this research was present in every country. We assume that fruit and consumption of fruit is not analyzed separately but as part of food consumption in general (most often together with vegetables).

Second reason is that even when data exists, not all participants are familiar with them. Processors usually have information about situation in their company and about certain aspects that are relevant to them (for example raw materials) while they are not informed about other, more general aspects such as consumption of fresh fruit, health programs etc. On the other hand, lack of information available to authorities is caused by the fact that responsibility is divided among various ministries or among different sectors in the same ministry. Knowledge about the relevant issues is not centralized in one institution. For this reason representatives of ministries pointed out that some question are not under their jurisdiction so they were not in a position to answer them.

Due to previously mentioned lack of data and the fact that some data are not available to all participants, the report is extensively based on the experts' estimates which are often arbitrary. We assume that this is the main reason why some estimates vary to a great extent

3. CONSUMPTION AND PRODUCTION OF FRUIT IN WESTERN BALKANS

3.1. Actual fruit consumption (Authorities and Processors)

- **Generally, the respondents from all of the countries believe that trend of both fresh and processed fruit consumption is increasing, mainly as a result of raised awareness of healthy diet.**

- **It is necessary to mention that most of processors and some authorities stated their personal opinion and experience, since they are not familiar with any official statistics related to common fruit consumption.**

Serbia:" I think that trend of fresh fruit is generally increasing regardless of economic situation. It is generally increasing at the rate of up to 10% because the price of fruit doesn't vary significantly, it doesn't follow inflation."

- **Two opinions about current level of consumption has been detected**
- **Majority of respondents believe that current fruit consumption is not on necessary level.[1]**

They see main reasons for low consumption in low economic standard and traditional Balkan nutrition. Even when money is not an issue people are not eating enough fruit. It is not a habit – especially among young people – to consume at least one fruit per day and recommendation of the World Health Organization is consumption of at least 150 gram fruit per day.

- **On the other hand some respondents believe that fruit is included more than that in the everyday diet.**

They back up their statement with the argument that fruit is easily available throughout the year and that seasonal varieties have affordable prices due to the favourable climate for growing fruit. They also pointed out that in rural areas almost every house has its own fruit trees.

Macedonia:" Everybody eats fruit, I believe – all kinds of persons. It's in our nature. We are fruit and vegetable eaters, not meat eaters..."

- **In Balkan countries apple is the most consumed fruit (in Slovenia it is perceived as Slovenian "home fruit"), followed by orange and other sorts of fruit such as: cherries, plums and peaches.**

Serbia: "Based on my experience and insight into these data I agree that apple is fruit No1. According to family consumption, I absolutely disagree with this information that fresh plums are not consumed."

1 WHO recommendations

- **It was noticed that due to absence of measurements in the sector of processed fruit, no one can be completely sure about the exact situation and the real ratio of consumption, which are difficult to measure due to home-making traditions that are still very frequent among the population of Balkans countries.**
- **Processors are <u>mainly satisfied</u> with consumption of their products and expect growth in the future.**

They believe that people do eat processed fruit in the form of jams, compote (jarred fruit salad), juices, and spoon sweets [a type of candied whole fruit product very similar to jam - a traditional processed fruit product] and drink fruit juices but they do not dispose with any statistical data so they could not give even approximate percentages.

Those who produce manually processed products expect growth because of raising awareness of healthy diet, and on the other hand those who produce "regular industrial" processed fruit expect growth because people have less time to make those products at home.

Macedonia:"... As from what I know, Macedonians do eat processed...but I am not sure about the percentages, although I tend to believe that we eat more fresh fruits than processed ones."

- **However, minority of respondents are not satisfied and who don't believe it will change on better in future.**

According to these respondents, the main reason for low consumption of processed fruit is rather high price of these products, conditioned by the method of production. This is especially pointed out in countries that do not have developed fruit processing industry, where only few registered fruit processors exist, all of them have small production capacities. By respondents, the consumers chose by the price and they do not see added value of the traditionally made processed fruit.

Montenegro: "It is not industrial production; it is made in a traditional way without any preservatives and supplements, in small packages, like medicines, in jars of 250 gr. But people are not considering the way it is produced or the expenses and work needed to clean blueberries, cook them, pack them…. they choose by the price."

- **Respondents are not informed about concrete data on average fruit consumption in EU but they strongly believe that fruit and fruit products are far more common in nutrition of EU countries than in the Balkans**.

They all agree on the following reasons:

- ✓ <u>low economic standard</u> – "*You'll agree that fruit on Montenegrin markets has become luxury ; it is very expensive when compared with the average salary"*
- ✓ <u>lack of knowledge about nutrition and awareness of healthy food</u> – "*We should be educated about health benefits of fruit; people are not*

aware of the effects of some sort of fruit....It's not a part of our culture to think about what we eat."

- ✓ Traditional nutrition / habits – "*People don't have a habit of eating fruit; a good meal is based on meat, if you have guests it is important that you offer them prosciutto, a ham or some other meat, but one would never thought of fruit ."*

3.2. Importance of the family fruit orchards (Authorities)

- **There is no official data regarding family fruit orchards. Estimations that are being made are based on personal opinion of respondents.**

- **According to respondents, family orchards are typical for all of Western Balkan countries. However when talking about this topic, respondents are not able to estimate how big the share of fruit grown this way is.**

Small family orchards are frequent in every Balkan country. Respondents from Macedonia emphasized significant number of this type of orchards in their country, probably due to most favourable climate conditions in West Balkan, and pointed out that huge percentage of the population has at least a couple of fruit trees on their own.

Still, majority of respondents believe that number of people having family orchards will decrease gradually due to changing lifestyle and increased obligations, or even economic evolution in the near future…

Macedonia:" It's in our tradition to have orchards or vineyards of our own, and it is still a trend, though it's going down a bit, but people still practice cultivation on their own."

- **Respondents are making difference between family grown fruit for private use and those grown for the market. Although nobody take into question the quality of family orchard products , respondents pointed out some barriers for more presence of these products on market**

The main problem of family orchards is their size. Due to the fact that they are too small and price of investments and labour needed for this kind of production is relatively high, consequently their prices are substantially higher than competitors' are. Another problem is that they are not able to provide a continuous supply of goods to retailers, which is of high importance to today's retail business.

Cooperation and unification of small fruit orchards is perceived as the main solution to their low competitive status. Through cooperation, producers could lower the price of distribution and production and, subsequently, of their product. Good example for that gave respondents from Montenegro who pointed out that due to lack of industrial orchards in their country, some private orchards has been registered and now are considered professional fruit growers.

Croatia:" "Firstly, people can themselves provide an existence for themselves. Second, we eat more quality fruit."

B&H: "As fruit is a source of life, I consider it a primary product and it should be developed. The Ministry is enacting laws - the Law of food which will regulate legal standards and give people the chance to expand existing production and adopt new, since processing of fruits and vegetables is our cultural heritage; we have continental climate and we have all the conditions to develop it even more."

Slovenia:" The Ministry especially wants to accentuate importance of shortening transportation ways to consumer, care for nature, environment, preserving nutritive value of food etc."

3.3. Importance of homemade processed fruit (Authorities and Processors)

- **Respondents agree that homemade processed fruit is a tradition all over Western Balkans.**
- **However, there is no official record on home made fruit products and therefore no official estimates of the share of this type of production in overall production.**

Montenegro is somewhat different from other countries, since majority (90%) of its processed fruit is homemade due to the lack of industrial facilities.

- **It is noticeable that in almost every country two opposite expectations about the future of homemade processed fruit are detected :**

✓ **One group of respondents believes that, because of reduced free time, people, especially women, will switch from home making fruit products to buying industrially processed fruit.**

Croatia:" Today people have less and less time for food processing. "

✓ **On the other hand, there are those who expect this trend to grow since people will be paying more attention to nutrition and health in general, and homemade food is perceived as healthier. However, relying on respondents' answers we are not able to predict which of these two trends will dominate in the future and how quickly they will develop.**

B&H: "We should not forget that what we do at home, we consider as healthy food, and we are constantly getting information from the world that healthy food is the trend and we accept it."

- **Distinction should be made between homemade processed fruit for personal use and home made products intended for the market.**

According to our respondents, reasons for processing fruit at home are:

- **Tradition**: Homemade processed fruit has been established in the Balkans a long time ago and people do not give up on their tradition that easily.
- **Health**: People perceive homemade food as healthier, since there are no additives in it and because they are familiar with whole process of making and consequently with food ingredients.
- **Abundance of fruit**: This is the reason specially pointed out in Macedonia since the climate is favourable and trend of growing fruit in private orchards or yards is widespread.
- **Lower standard of living**: People believe that homemade fruit products are cheaper than industrial ones (although some processors disagree with that) and also those who cannot consume all the self-grown fruit they have, rather process it than throw it away. At least, home growing fruits require less cash money than fruits bought in the shops. Investments in the orchards are made since a long time and opportunity cost of the work is zero.

- **Concerning home processing of fruit, authorities see great opportunity for those families who are making that kind of products to create additional value and income. Processors on the other hand insist on implementing rules in that segment of production and of implementing standards.**

Processors believe that it interferes in companies' '*healthy life*' by sustaining an unfair competition to the companies, since there are no requests that home processors are obliged to fulfil, while industrial processors have a great amount of requirements to meet, especially when it comes to standards. For example, respondents from Montenegro are concerned about quality of homemade wine and they are afraid that uncontrolled production threatens the branding of Montenegrin wines.

Some authorities expressed their opinion that processors of home made products have to be more educated than they are now in order to make products of high quality. This better quality will help their products become more competitive on the market

Macedonia:" It is not a direct threat to us, but it can be to other companies. You know we have to pay taxes, standards, etc, and home made products can be made anywhere anyhow – that's not fair competition at all."

3.4. Consumer research as information source (Authorities and Processors)

- **In Balkan countries, Ministries do not conduct researches about consumers, especially their habits and attitudes toward fruits.**

Only in Croatia, authority explained that their ministry together with Faculty of Agriculture conducts several researches such as consumer basket, but none of them is exclusively focused on fruit and its consumers.

Croatia:" You have a variety of other studies here, which are made in collaboration with the Faculty of Agronomy in Zagreb, you have a consumer basket, the statistical data..."

- **However, majority of ministry representatives is aware of importance of researches and expresses the opinion that there is a need for relevant reliable data and systematic research solutions to develop policy.**

Montenegro:" From our point of view, it would be interesting to monitor consumption and demand for fresh and processed fruits, so that information is referred to producers to know in which direction to orient their production."

- **Companies that participated in this research can be divided into 3 groups regarding researches they are conducting:**

  - ✓ **First group includes companies that conduct variety of researches.**

These are mainly big companies that have a big share on the processed fruit market. Researches they are conducting are exploring consumers' behaviour, attitudes, testing new products, design etc. They either do it themselves if they have special research department within the company or they hire specialized research agency.

Serbia:" We get just a small number of information from retailers, because we conduct extensive researches on consumers, their wishes, expectations and perception of our business operations. "

Slovenia:" We are trying to be trend setters and not the followers."

  - ✓ **Companies from second group rely on information they are getting on regular (usually weekly) information from retailers.**

This group includes usually rather small companies that cannot afford big research, although majority of them are aware of benefits from such data. According to retailers' information about how much and what type of products has been sold, these companies make their plans. Other strategy they are using is direct communication with consumers during below-the-line advertising activities (promotions in shops, tasting etc...).

B&H: Surely one of the main activities of sales officers is to bring information daily from the field, from the market, what is important and how it passes. We organize our own research and also use retail data obtained from MEMRB [a company in B&H].''

- ✓ **Third group does not conduct any researches at all.**

They plan production relying on information about how much they had processed and how much products they have stored. There are two types of companies in this group: those that have no funding for organizing such projects and those whose people in charge believe that there is no need for it.

Macedonia:" Our companies are not accustomed to research – it might be the lack of funds they constantly face... or simply lack of 'market culture'..."

Montenegro:" We don't get any feedback, because they don't have it, don't ask for it... they mainly want only to sell and charge products. Only according to orders I see what goes."

3.5. Personification of consumers (Authorities and Processors)

- **In some countries respondents claim that division on heavy and light fruit consumers can not be made.**

They believe that fruit consumption penetrates equally all levels of society and reaches everybody – poor and rich, young and old, men and women.

Macedonia is representative for that type of country. Instead of socio-demographic distribution, they mention differences between regions. As for socio-economic conditions, respondents from Macedonia indicate that there might be certain seasonal differences in the type and number of consumers and that people with lower incomes might be more oriented towards seasonally available fruit, which is cheaper at that period, since there is a bigger offer.

Macedonia:" Traditionally, we are heavy consumers of fruit and vegetables, but there is no particular profile of people to create. It can be anybody."

- **Representatives from other countries express opinion that fruit consumption is determined by some of the following categories: gender, socio-economic class, education level, age, life style and health.**

- **Heavy fruit users are perceived the same as those who buy processed fruit of high quality and light users are the same people who buy lower quality products.**

- **Heavy fruit users/high quality products are mainly: women, people with higher economical status, better education, from urban areas.**

Women are more concerned about healthy living and are the ones who transfer their habits to their family, especially if they have children. Also, some of our respondents claim that women are able to recognize processed fruit of high quality more than men are.

People with higher education are usually more informed about nutrition, healthy food and food ingredients and that is why they consume fresh fruit and processed fruit of high quality more than others do.

Processed fruit products of higher quality have bigger share of fruit and because of their **higher price** mainly people with **better economical status buy them**.

B&H: "As for packaging juice in litre bottles and other sweets, those are certainly women, who have a family and take care of healthy nutrition. They make breakfast, lunch, dinner every day, they want their children to drink healthy and quality juices. Those are certainly families which have higher income, higher education."

Croatia: "Social status is very important. People buy what they can with their financial abilities"

Opinions on **age** of heavy users are somewhat different. Some respondents believe that young consumers take care of their health and for that they consume lots of fruit, but others have opposite opinion. However, they all agree that consumption of fruit is correlated with health of consumers and their concerns. Those who have health problems consume more fruit and usually people older than 30 are those who have health issues and take more care about what they eat.

- **Light users/low quality products are people with lower education and lower income, men, young people (especially teenagers) and pensioners.**

Young people usually do not have the habit to eat fruit. Since they are mainly healthy, they do not find it necessary to pay attention to what they eat.

Respondents believe that the elderly do not buy fresh fruit on regular basis although they should do due to health problems they are faced with. However, that is not a consumer or habit issue, but more a poverty aspect since the main reason is their low incomes. They are not able to buy fresh fruit on regular basis due to their low incomes. However, some processors think that they buy processed fruit, for example jam, because that is a quite cheap meal, cheaper than something else.

Montenegro: "Older people are aware of the fruit impact on their health but they can't afford it in a larger quantity. "

Some processors emphasized that not enough information and not enough education about nutrition are the main factors that cause extensive consumption of processed fruit of low quality[2] (especially fruit juices) and limited consumption of fresh fruit.

[2] Processors consider fruit products with lower percent of fruit containing to be of less quality

4. COMPETITIVE SITUATION OF NATIONAL FRUIT SECTOR IN WESTERN BALKANS

4.1. Importance of domestic and imported processed fruit products (Authorities and Processors)

- **Although there is no official data about amount of imported products, respondents estimated share of those products on the market, relying on their experience.**

- **Those estimations differ among countries. We can approximately create 3 groups of countries regarding how much they import.**

  ✓ **Countries that mainly import processed fruit because of low processing capacity: Macedonia and Montenegro.**

In Macedonia and Montenegro, large amount of grown fruit is mainly of high quality, but it is usually exported either fresh or half processed because there are no adequate conditions to process it.

According to data presented by authorities from Montenegro, more than 90% of processed fruit products that are present in the market are imported, since there is only one factory that produces juices and two manufacturers of sweet program. Situation is opposite on wine market, since only 20% of wine is imported and large amount is exported.

Macedonia: "Domestic – mainly raw or semi-processed fruit for export... very few companies operate in the real sense of the word, so we can't really talk about any comparison at all."

  ✓ **Countries that have developed fruit industry (production) and consequently small share of imported products: Serbia.**

Imported fruit products, according to processors, do not survive on Serbian market mainly because of rather high prices and excellent offer of domestic producers. Products present on the market are those that can not be made in Serbia, such as **dietetic products** usually imported from Western Europe.

Serbia: "There are two or three importers who quickly retreat, because they see that there is no space for them, their prices are much higher. They are far ahead of us in terms of packaging, but this is inevitable. People can buy the product once just to try it if some specific fruit is in question, but this is where the whole thing ends up."

- ✓ **Countries that have sufficient processing capacity but have strong competition in imported products, especially from the region (ex Yugoslav countries): Slovenia, Croatia and Bosnia and Herzegovina.**

Imported processed fruit products are competitive to local products of those countries in terms of price, since imported products are often cheaper than local.

In Slovenia and Croatia processors complain that standards of control for their products are higher than for imported fruit products, which also influences prices of local products.

Croatia: "Same rules do not apply to all the players on the market. I think that it's wrong and that it is a tremendous obstacle for us as manufacturers, by the way, as well as for producers of primary raw materials."

Slovenia: "We produce twice more fruit (apples) than we eat in Slovenia, but apples are still imported and I do not understand why. They always find some cheap rubbish dump where they can buy cheap and transport it to Slovenia"

Respondents from Bosnia and Herzegovina think that signing of regional CEFTA agreement brought benefits only to the neighbouring countries and their producers. According to them, it directly provided much better conditions for imported products, which led to almost total non competitiveness of domestic products, which are more expensive than imported.

B&H: "We have expensive raw materials and technology of production, and this is something that determines the price, that is why we are not competitive with imported products."

Processors from Croatia think that imported fruit products in general are competitive, primarily due to favourable prices. In their opinion imported products are a lot better from the Croatian by design, marketing, packaging, but that content is disastrous. We have to stress that this belief that products from Western Europe are of low quality because they were intentionally made for Eastern markets (and that same product is much better when made for Western markets) is also widespread in Serbia.

- **All respondents, no matter what country they are from, mentioned the same strengths of their domestic fruit products: optimal combination of price and quality, trust (safety orientation) and recognition among**

consumers, quality of raw materials and their short transportation to manufacturers.

Domestic fruit products	**Imported fruit products**
Strengths • Ideal natural conditions for production • Quality of raw materials and the way it is growing- less pesticides use • The optimal combination of price and quality, • National / domestic product • Product did not suffer major transportation, • Trust, • Recognition among consumers, • Mature fruit with more vitamins • Tradition in production • It protects domestic production and domestic jobs	**Strengths** • Established and internationally known brands • Greater variety of choice in product range, innovations and new combinations • Quantities • Standardisation at an advanced level • Very good at promotion and marketing • Advanced packaging and design solutions • country of origin • Fruit that cannot be produced here • Wider offer • Stereotype ''foreign is good'' • Lower price (in some countries)
Weaknesses • Lack of uniformity of products • Small amount (in some countries) • Unstable quality • No adequate and attractive packaging, • Non-competitive prices (in some countries) • If a season is bad, apples are replaced with citron fruit • High prices • Small /no advertising budgets • Lack of smart branding • Narrow assortment • Prejudices of low quality domestic production	**Weaknesses** • Usually more expensive because of transport and customs expenses • Suspicions in declared amounts of fruit and its origin (mentioned particularly in case of juices) • not always accompanied by quality • Exotic fruit is of lower quality because of long transportation • Long transportation influences quality of fruit • Doubts in supervision and inspection of fruit • Lower proportion of fruit in these products

4.2. General situation in the fruit processing sector (Authorities and Processors)

- **As previously mentioned: there are countries with relatively big fruit processing industry: Croatia, Serbia, Slovenia and Bosnia and Herzegovina and two small countries that do not have this part of food industry developed: Montenegro and Macedonia.**

In Macedonia, juice production companies have emerged and developed in the recent years, but still a lot of juice producers operate on the basis of filling stations, or bottlers and their operations only involve mixing and filling in bottles. By respondents opinion this situation in fruit industry is product of former Yugoslav strategy. Namely previously production of fresh fruit was concentrated in regions of Yugoslavia with best climate condition (such as Macedonia), while processors' factories were spread all over the territory of ex-Yugoslavia, now different countries.

Macedonia:" This is a very tiny sector, figures say it clearly, and it is very difficult to discuss it at higher scale. We have juice producers of course, but they are mainly bottlers, not real processors."

In Montenegro, production is small and limited, mainly focused on domestic market. For some processors limitation in amount comes as a result of the method of production. Majority of interviewed companies produce the amount they can easily sell. There is however an exception: there is one company that exports more than half of its fruit production (wine).

<u>Raw materials</u>

- **Balkan has all conditions necessary for growing great fruit, everybody agrees on that. Fruit as raw material is usually of high quality, but some processors are still faced with problems (mainly too long transportation, lack of classification, lack of quality control...)**

- **Everybody imports fruits that can not be grown in this part of the world, such as bananas, lemon etc. and there are no complains about that, but the issue is import of raw materials that are locally produced.**

Transportation of those products is usually too long, which can affect their quality (for that reason some of it is imported frozen or semi processed) and it is also extremely expensive.

Montenegro:" There are not enough olives for canning produced in Montenegro and not a good quality. "

B&H:" There are usually no problems. First, we use local capacities, and then import mostly from Serbia and Macedonia. Sometimes the problem is transportation costs. Almost 10% of the value of one trucks transporting raw material are costs of transport, and that is really expensive."

- **Some processors from Montenegro are faced with difficulties in the process of product packaging, because packs must be imported since there are no packaging producers in Montenegro.**

This problem is not detected in the rest of the countries.

Montenegro: "All of the jars, bottles, labels to bottle corks I have to import and it all takes time and costs a lot."

- **When it comes to locally grown raw material, majority of processors are satisfied.**

- **Still, in every country, some respondents showed dissatisfaction with some of the following: quality, quantity, variety of products and distribution.**

In some countries, Serbia for example, processors complain that there is no classification of products according to their quality, so one pays same price for fruit of different quality plus being hard to control quality of final product. As one respondent noticed "if you have bad raw material, there is nothing you can do in processing that can make good product of it".

Serbia: "The most painful thing for us is absence of organization in terms of uniting producers. If you have to buy one and the same raw material in three different places, then it's a problem. Plums from Vojvodina are not the same as plums from Šumadija and so on. This market is not regulated and there is no stock market. There are many small producers who set the terms. Our plum spoon sweet is made of fresh fruit only. Plums are available ten days a year and if they are not purchased during that time, there is no production. "

Some processors expressed opinion that some of domestic products are sometimes of questionable quality due to outdated agriculture methods and inconsistent in quality.

Croatia: "There are problems in the availability of the raw materials, insufficient amounts, quality can sometimes be questionable."

- **When importing raw materials processors are faced with problem of its quality control.**

Those fruits are usually not controlled enough but have lower price and for that reason represent a threat to local fruit production which was especially pointed out in Slovenia.

- **Majority of authorities are not aware of problems processors are faced with regarding raw materials.**

They all stated that Balkan countries have the tastiest fruit, much tastier than any other European country, and for that reason there cannot be any problems regarding raw materials.

<u>Quality of products</u>

- **Every processor believes that quality of their products is constant and standard, since majority of these products have high concentration of fruit.**

Croatia: "The quality of our products are really the highest possible."

- **However, they agree that processed fruit of questionable quality is present on the market because of insufficient quality control.**

Representatives of fruit industry from B&H suggested establishing of Food Agency that would provide international quality certificate. At the moment when such agency does not exist yet, company cannot validate its product quality outside B&H.

B&H:" Major problem is absence of state Food agency, which would have to check quality and would be recognized by the International Institute and then our Validation certificates would be valid anywhere in the world."

Macedonian processors are facing specific problems due to quality control. According to their statements, customs procedures do not inspect for example fruit content if it is stated on the product itself that it contains more than 51% fruit. If reality works like this, according to some of Macedonian processors, it leaves opportunity for foreign juice producers to declare more fruit content which does not exist in the product. Representatives from Croatia, Slovenia and Montenegro did not express any similar concerns.

<u>Innovations</u>

- **This aspect of fruit processing is strongly related to size of company and its financial situation.**

- **Majority of processors are aware that innovations are necessary and they are trying to keep up the pace, but not all of them have enough money to make some big change.**

- **In Macedonia and Montenegro not many innovations are made, since there are no big fruit processing companies.**

Montenegro :"Everything has been standard and unchanged for years."

- **In the rest of the countries, big companies that have budgets for researches and innovation are launching new products, new packages, etc. relying on research data.**

Majority of processors say they are trying to create products that consumers need and for that reason research is more than useful. Some respondents even gave examples of how some of their products failed in the market even with their great quality, and all because research was not conducted before launching.

Croatia: "We work as the market dictates. "

- **Small companies, due to lack of money, make innovations unsystematically, if making any.**

Opposite to big companies that are trying to be trend developers, small companies are trend followers. Some of them are trying to input innovations that are already been made in Western European markets. Majority of them are trying to make their products healthier, using less sugar etc since they perceive that as trend in Western countries.

B&H: "We are a company that is inclined to innovations, but it seems to me spontaneously and without any real plan, especially without a plan for what would be different from other similar companies."

Serbia: "Regarding innovations, we keep trying to find the way to produce healthier products, with less sugar and with other additives instead of sugar."

Financial possibilities

- **Generally, financial possibilities are related to size of company and its share on market.**

It depends on the company how it divides its' budget and what it wants to achieve. If a company wants to be a trend developer and not a follower, it invests more in research and development.

- **At the moment, all companies are dealing with some financial issues due to world economic crises and it influences their innovation funds.**

<u>**Supermarkets**</u>

- **Several processors from the Balkans have certain issues regarding cooperation with big chains of supermarkets.**

These complaints are heard from smaller companies in each country. Representatives' point of view is that it is hard to enter those chains since there is already a great number of brands sold there, especially very well known ones and it is hard to compete with them. Some respondents even mentioned certain entry fee they need to pay to enter these chains.

When they enter a supermarket, small producers are faced with problems with competition. Since their products are less known and usually with higher price, it is hard to compete with well known brands, and company has to sell certain amount of products in order to keep products in the supermarket chain. Processors also mention being faced with unfair competition in the form of labels and brands developed by supermarkets due to their lower prices. Processors from some countries pointed out that some supermarket chains are at the same time distributors or representatives of certain producers and because of that their products are in some way protected.

To summarize, coordination between actors could be improved so there is a need for a supply chain approach.

B&H: If we want to enter a chain, price is 5000 € for inclusion of our products in their stores, so we can either pay or we can settle and produce for them products of lower quality. *There is unfavourable law limitation of domestic production, import lobby and low marketing 'intelligence', and only few big processors can respond positively to such high and unfair demands. "*

- **Supermarket chains require that products are sold quickly.**

According to processors, future of their products is in hands of retailers because supermarkets have the possibility to remove products from their shelves if they are not being sold quickly enough. And if retailer decides to remove one's products from shelves, that one will have to cancel the production line. In order to sell quickly and a lot, companies have to frequently promote their products, and they use price offers as marketing tool (they offer lower prices, in order to stimulate consumers to consumption and purchase).

- **Also, there is a trend of supermarkets developing their own private label brands.**

By opinion of majority of producers, those products are of lower quality but also much lower price and because of that they represent competition that is hard to struggle with.

- **It is easy only for the biggest companies to enter supermarket chains.**

Representatives of big companies from Serbia, Slovenia and Croatia pointed out that their companies have good cooperation with supermarket chains. Some of them even started producing more in order to respond to demands of supermarkets chains.

- **Majority of authorities are either not aware of problems producers are faced with regarding cooperation with supermarket chains or they see different reasons for their bad cooperation.**

In their opinion, crucial reason is the amount that processors are not able to provide. This is especially pointed out in Macedonia and Montenegro where domestic fruit industry is not developed.

Montenegro:" They need a ton or two for their stores and they turn to other bigger manufacturers."

Slovenia: "Supermarkets require constant supply of fruit or at least during seasons."

<u>**Prices as compared with foreign companies' prices**</u>

- **Processors from Serbia and Macedonia are the only ones who claim their products are cheaper than imported ones.**
- **Croatian and Montenegrin products have equal prices as foreign ones, according to our respondents.**
- **Slovenian and B&H products are more expensive than imported processed fruit.**

Smaller Slovenian companies are strongly oriented towards European markets because Slovenian market is too small and prices are too high; especially when well established brands compete with them on retailer shelves.

- **Authorities usually do not share producers' opinion regarding prices.**

Authorities from Montenegro believe that imported products are cheaper than domestic. On the other hand, Croatian authorities expressed opinion that products made in their country are cheaper than foreign ones.

<u>**Prices for consumers**</u>

- **As previously mentioned, majority of companies included in this research produce products of high quality and higher prices.**
- **They all believe their products have ultimate quality/price ratio.**

- **Croatia:" Considering the quality and care that I have mentioned prices for consumers are somewhat higher. Of course that is a consequence of premium quality we provide to our customers."**

- **Representatives of the Ministry share the opinion that prices might be lower.**
- *In general, authorities expressed more optimistic perception of current situation in this part of industry.*
- **They are not aware of complaints processors share.**

They all stated how Balkan a good place is for growing food and that raw materials are of great quality. Consequently, final products are also very good.

Most of them think that fruit processing has improved in last 5 years and is going to be even better in the future.

- **In Serbia authorities stressed that in last 5 years most of companies were sold to private owners and results of this process are different. Some companies are in bankruptcy while others are growing. That is why it is hard to give one general conclusion.**

Serbia:" *Depending on type of product, we have different situations."*

- **In Montenegro, with its small undeveloped fruit procession sector, authorities are satisfied how things are changing.**
-

They believe that, although still small scale, significant progress has been made both in quantity and in quality of fruit products. Although raw material has always been of high quality, increase in quantity is noticed and presentation of products has been changed. Now, they believe that a large number of primary manufacturers turned fruit growing from a hobby into a profession.

4.3. Analysis of the fruit industry sector in the country (Authorities)

Strengths	**Weaknesses**
• Way of growing and processing; traditional way - healthy food • Favourable agronomic and environmental conditions: Climate conditions for development of fruit • High income per unit area • Increased demand for food processing industry • Increased demand for locally produced	• Big share of those who are technologically lagging behind • Poor visibility of sector rules • Weak knowledge transmission and access to knowledge for some fruit types • Rigid legislation • Irrational use of public funds • There is no suitable plant protection

fresh food • Human resources – expertise and seasonal work team potentials • Low labour costs • Prices of some products are competitive • Penetration of environmentally sound production methods • Increase in the area of organic production • Membership in CEFTA • Strong foreign direct investments in some sectors of food industry **Unique for Montenegro and Macedonia:** • Poor competition among domestic producers meaning that one who wants to buy domestic product does not have much choice; • Size of the market - a small distance - reduced transportation costs	products for other fruit sorts • Low level of price competition • Limited access to commercial credits • Excessive reliance on seasonal sales • Lack of financial support for production/unfavourable crediting • Small volume compared with world competitors, particularly in the area of ready made food • Poor organization in small and medium companies • Limited capacities for monitoring safety of food products • Limited perceived added value by supermarkets of the WBC fruit products **Unique for Montenegro and Macedonia:** • Quality is not constant • Quality standards are not adopted • No marketing • A small amount - there is no constant supply. Difficult to satisfy big markets • Not well organized fruit purchase • Absence of associations of fruit producers on a larger scale • Packaging • Very low investment in market research, reaching for new markets and promotions • Downsizing of primary production capacities due to negative economic trends (short term planning based on performances in the previous year only) **Unique for B&H** • Low level of mechanization • Lack of knowledge about growing, harvesting, and business methods • Insufficient horizontal and vertical integration • Limited number of processing facilities • Low competitiveness of existing

	processing facilities • Lack of cold storage or warehouses that have atmospheric control • Poor institutional framework and underdeveloped legal system
Opportunities • Further growth in exports • Increase of demand for organic products • Large areas suitable for establishment of orchards • Increase in primary production • Availability of EU and government support for production and rural development • Opportunities for development of local production and processing facilities • Finding alternatives for integrated production • Introduction of fruit in schools • Creating brands and value added products **Unique for Montenegro and Macedonia:** • Production capacity - we could have all kinds of fruit production in Montenegro of the earliest to the latest fruit sorts • Replace imports on the domestic market • Increased demand as a result of tourism development	**Threats** • Concentration of retailers and development of large distributors which will rapidly reduce the number of retail outlets and increase the demand for wholesale quantities and quality products that small producers can not meet • Competitive pressure of well-organized producers from other EU countries • Lack of financial investment • Neglecting environmental issues • Blocked utilization of favourable loans. • No competition with the surrounding countries • Lack of appropriate plant protection products for fruit sorts • Changeable policies and unstable economic relations • Lack of organization in the product chain – segmented approach • Unsolved gap between education and industry (both primary and processing), no practical experience • Membership in STO might present a serious threat for some sectors and for farmers **Unique for B&H** • Lack of coordination between the entity policies and support for the sector • Present and future trade agreements will increase the level of competitiveness in domestic and export markets too quickly, so that BiH producers will not have time to become competitive;

	• High level of informal economy; • The effect of slow alignment with international standards of protection of plant health and production standards and insufficient entry into export markets and influence on availability of EU support for the sector.

5. TRENDS OF CONSUMPTION AND POLICY IN WESTERN BALKANS

5.1. Governmental objectives, perception and actions to help the sector (Authorities)

- **Objective of Ministries from all Balkan countries participating in this research is increase of quality of all products in order to make them as competitive as possible, both in domestic and in foreign markets.**

Every country is planning to increase surface of orchards, both home and production. Achieving this goal will be enabled by giving subsidies to cooperatives and associations for new fruit plantations. For example in Montenegro state provides 5000 Euros for those who found an orchard.

Other goals regarding growing fruit are updating of fruit assortment, updating of technology and updating of transportation resources.

Regarding fruit processing sector, objectives include the following:

- Introduction of contemporary equipment and machinery for fruit processing;
- Adaptation of present and building of new capacities for fruit processing;
- Improvement of placement of fruit in domestic and foreign markets, through participation of domestic producers in domestic and international agricultural fairs and supporting participation of processor at other international significant events;
- Support for evolutionary, experimental and research activities;
- Education and training of farmers-producers about new technologies for fruit production and about using of modern equipment and machinery, which would provide bigger yield by surface unit and better product quality;
- In those countries that still do not apply international standards for fruit quality, both in primary production (OECD\UNECE), and in fruit processing (HCCP, GLOBAL-GAP) goal is introduction of those standards which will standardize quality control;
- Serbia joining international trends and organizations engaged in food quality and safety (OECD, EFSA) etc.;
- To build well known brands in those countries that do not have developed fruit processing industry (Macedonia and Montenegro).

Macedonia:" The Directorate for Food was only recently formed, it was 2005 I think, in accordance with the Law on food safety, but it plays and important role in controlling the production and the necessary standards that a product must have, no matter what type of food product we talk about..."

Montenegro: "We give 5000 Euro to those who found an orchard. .....We co-finance capacity building projects with the sum of up to 30% of the total.....To get the product in the first year.... nets against hail ... ... introducing new fruit."

B&H: "We need general strengthening of competitiveness. We need to adopt certain EU standards, capacity building, strengthening standards of information systems to support specific agricultural producer subsidies and measures."

Croatia: "We should produce what we can produce in our country for our purposes, it is the primary goal, number one. Furthermore, with regard to our comparative advantage and through our finished products, we should export our raw materials."

5.2. Main factors of change in future (medium-long term: 10 years) related to food consumption in the country (Authorities and Processors)

5.2.1. Spontaneous answers on the main factors of change in the country related to food consumption

- **All participants in this research mentioned some of the following factors: awareness, affordability, standard of living, health management and life style.**

It is a common statement that everything depends on financial situation. Everybody believes that with increasing living standard, growing number of citizens will be able to afford higher quality products, with higher fruit content, and more fresh fruit. This would be also stimulated by increasing **orientation towards healthy diet, fresh fruits and vegetables, organic products** since this trend has been detected and is expected to be growing.

However, some participants believe that low standard of living is not the only reason why fruit consumption is low. According to them, **awareness is not well developed and citizens need to be educated about healthy nutrition and food**.

Serbia: "Healthy food will be stronger, organic food as well. We are lagging behind the world for ten years, in that area. Attitude is more important than financial moment is. Awareness is definitely growing, but it will reflect in practice together with growth of financial power. "

Croatia: "With a greater purchasing power you can think about healthy food and organic food, unconventional food".

Macedonia: "Capitalism and new faster and busier lifestyle influence food consumption in general. Due to lack of time and increased number of obligations, processed food consumption will increase even more..."

B&H : "I think it will go to healthy foods, the organic branch. We traditionally like domestic products - they are ours, and therefore healthy. I always like to buy all that seems like some granny made. I think we will go in that direction. We may be able to position ourselves as manufacturers of healthy food.''

5.2.2. Influence of factors (on a scale from 1 to 5) on consumption of processed fruit

Influence of factors (1 – very negative, 5 – very positive)	**1.Serbia**	**2.Slovenia**	**3.Croatia**	**4.B&H**	**5.Montenegro**	**6.FYR Macedonia**	**Mean Processors**	**1.Serbia**	**2.Slovenia**	**3.Croatia**	**4.B&H**	**5.Montenegro**	**6.FYR Macedonia**	**Mean Authorities**
Consumer nutritional knowledge	4.25	4.8	4.0	2.5	3.5	4.5	**3.93**	4	5	4.0	4.5	4.5	4.5	4.42
Health dimension of food in general	3.88	4.5	4.25	*3*	4	4	**3.94**	4	4	4.5	5	5	4,5	3.75
Public policy	2.75	3.3	3.0	2	2.5	4	**2.93**	4	4	3.0	4	4	3	3.67
Economic evolution	3.75	4.0	4.75	2.5	3.75	4	**3.79**	4	3	4.0	4.5	5	4.5	4.17
Lifestyle	3.75	4.0	4.0	3.25	4	4	**3.83**	3	4	5.0	4	3.5	3.5	3.83
Fashion	3.75	3.3	2.75	2.5	4.25	3.25	**3.3**	3	3	4.5	3.5	4.5	3.5	3.67

- **When prompted for particular factors of change, respondents consider all of them to be more or less important.**
- **Authorities mainly gave higher marks than processors did and there were not major differences in their opinions.**
- **They consider all factors to have big influence, but a little more influence on consumption have consumer nutrition knowledge (mean authorities 4.4), health dimension of food in general (mean authorities 3.8), lifestyle (mean authorities 3.8) and economic evolution (mean authorities 4.1).**

It is generally believed that people are more 'mechanically' oriented towards food and that they are not much informed about different types of food and their benefits. That is why consumers' nutritional knowledge and the health dimension of food were taken as very important for further developments in food consumption.

- **Processors gave lower grades to influence of all factors on consumption of processed fruit, but they are still considered high, which means that all these factors do have influence.**

They also give the highest grades primarily to consumers' knowledge about food (**mean processors 3.9,**), health dimension of food in general (**mean processors 3.9**) and lifestyle (**mean processors 3.8,**).

- **There are some differences in answers among processors from different countries.**

Means for grades from Bosnia and Herzegovina are somewhat lower than in other countries.

- **Processors and authorities agree that Public policy has the weakest influence on consumption of processed fruit (mean processors 2.9, mean authorities 3.7).**
- **Fashion is also considered to have lower influence than other factors do (mean processors 3.3, mean authorities 3.6).**
- **Additional factors which are mentioned are climate changes and design and pack (Serbia), marketing (Montenegro), health (Slovenia), legislation and market offer (Macedonia), price (Bosnia and Herzegovina).**

These factors were mentioned by the employed in fruit processing industry and they evaluate them as rather important.

5.2.3. Importance of factors (on a scale from 1 to 5) on consumption of processed fruit

Importance of factors (1 – very negative, 5 – very positive)	**1.Serbia**	**2.Slovenia**	**3.Croatia**	**4.B&H**	**5.Montenegro**	**6.FYR Macedonia**	**Mean Processors**	**1.Serbia**	**2.Slovenia**	**3.Croatia**	**4.B&H**	**5.Montenegro**	**6.FYR Macedonia**	**Mean Authorities**
Consumer nutritional knowledge	4.5	4.3	4.25	4	4.75	4.5	**4.47**	4	5	4.5	4.5	5	5	4.67
Health dimension of food in	4.25	4.3	4.75	4	4.75	4	**4.34**	5	4	4.5	5	5	4.5	4.67

general														
Public policy	4	2.8	3.0	4.25	4.5	4	**3.76**	4	4	3.5	4	3	3.5	3.67
Economic evolution	4.25	3.8	4.5	4.25	4	4	**4.13**	4	3	4.5	4.5	4.5	4.5	4.17
Lifestyle	4.25	3.5	4	3.5	4.75	4	**4**	3	4	4	4.5	4	4.5	4.00
Fashion	3.75	3.0	2.75	2.5	4.5	3.25	**3.29**	3	3	4.5	3	2.5	1.5	2.92

- **When evaluating the importance of factors, all of them got somewhat higher grades. Relying on that, we can conclude that those factors are important but in reality they have smaller influence than they should.**

- **Consumer nutrition knowledge (mean processors 4.5, mean authorities 4.7), health dimension of food in general (mean processors 4.3, mean authorities 4.7) and economic evolution (mean processors 4.1, mean authorities 4.2) again got higher marks from both authorities and processors.**

- **Fashion is the least important factor according to all participants (mean processors 3.3, mean authorities 2.9).**

- **Public policy got rather high grades when evaluating importance of that factor (mean processors 3.8, mean authorities 3.7).**

According to that and other information we have got in interviews, we may conclude that public policies can have great influence on consumption, but they don't have it at the moment, mainly because those policies do not exist.

5.3. Expectations on the trend of the consumption for processed fruit in future (medium-long term: 10 years) (Authorities and Processors)

- **Some respondents believe that it is very difficult to predict the trend given the existing economic crisis.**

Economic crisis was mentioned as a global factor that makes it difficult to forecast any trend at all and expectations were very much influenced by this phenomenon.

- **However, majority of processors and representatives of the Ministries expect future growth of consumption of quality processed fruit and growing market share of such products.**

Processors expect increase of healthy nutrition lifestyle which will reflect in consumption of products without additives. Consumers will be prepared to pay more to get better quality products in the future. This change in consumers' life style and buying habits would suit processors. All processors produce high quality products and this would directly increase frequency of buying their products**.**

Serbia:" In case it came to economic growth and increasing of living standard, many companies involved in low quality industrial production would be closed down."

B&H:" Consumption will grow. There will be a trend of new products without added sugar, pure products made of raw fruit. Given the fact that the market is being regulated and economically recovering, this production and consumption is considered a traditional heritage that will go toward the positive in this production."

Slovenia: Slovenia is a small market and if a company wants to develop a local trend it has to invest a lot of resources in education of consumers.

According to some, pace of modern life will also have influence on consumption of processed fruit. Namely, lack of time in general causes lack of time for preparation of breakfast, and processed fruit products are a breakfast that doesn't require long preparation.

Serbia:" These products are eaten for breakfast, and we don't have time to prepare breakfast, so they will be increasingly used. Habits and lifestyle are going to change."

Croatia:" *"I think the effort these housewives make is not needed"*

- **Representatives of Ministries also expect increase of consumption of processed fruit products.**

They expect economic growth and turning towards quality.

6. NATIONAL HEALTH POLICIES IN WESTERN BALKANS

6.1. Fruit consumption as an objective in general Public Health Programme (Authorities and Processors)

- **According to participants' answers, Slovenia is the only of six countries included in this research that has increasing fruit and vegetable consumption as an objective in general Public Health Programme.**

Slovenian Ministry of Health, in cooperation with other institutions, prepared the national food consumption policy about development in consumption of fresh fruit. The policy includes:

- ✓ Food safety,
- ✓ Safe and balanced food and
- ✓ Local food supply.

The main focus is on local food supply policy, with which ministry is trying to achieve the following:

- ✓ To increase consumption of high quality, locally made and healthy food,
- ✓ To strengthen care for environment and water,
- ✓ To encourage local economy development and rural areas,
- ✓ To establish good agricultural practice,
- ✓ And to strengthen the possibility for self provision in unstable conditions on global food markets.

Projects that are included in this programme are among others: "Apple a day in schools" and "5 vitamins per day".

- **Respondents from other countries, including authorities, believe that fruit consumption is not an objective in general Public Health Programme and some of them don't even know if that program exists.**

However, some respondents emphasize that the fact that they do not know anything about these programs does not mean that they do not exist. If there are such programs, the problem is visibility of their implementation and their recognition.

In Macedonia there is some information that fruit is included in this policy and that there are some information and advice on fruit consumption with minimal daily required quantities defined, but no concrete information could be provided.

- **All respondents agree that fruit consumption should be a part of general Public Health Programme and that should be promoted and advertised.**

- **Majority of authorities are representatives of Ministries of agriculture so their opinion is that Public Health Program is not under their jurisdiction, therefore they are not in a position to comment anything.**

6.2. National Public Programmes of communication to promote fruit or processed fruit consumption (Authorities and Processors)

- **Again, in majority of countries respondents are not familiar with any national program of communication for promotion of fruit consumption.**

Respondents found it hard to answer this question due to lack of information. Some of them referred to the public health programmes that might include this as well, but again majority could not provide any particular information. It is believed that fruit consumption is something that is not discussed on national level at all.

- **Some respondents mentioned that they have previously seen some information of this type in the media, some programs about nutrition, but they are not sure if that is part of national programme.**
- **In Slovenia The Ministry of Health has had two communication campaigns in the recent years**

The Ministry of Health named the program "**Scheme of school fruit and vegetables**". Main actors were elementary schools included in the scheme of Regulation on organization of the market with fresh fruit and vegetables. The main objective was to educate young people about the importance of consumption of fresh fruit, aiming at increased consumption of fruit and vegetables in everyday nutrition.

During recent years, the Ministry of Health had two extensive promotional campaigns for **encouraging consumption of fruit and vegetables called UŽIVAJMO** (eng. ENJOY). The campaigns were oriented towards general population and young population. Included were educational institutions, health care institutions, universities, media (TV, radio, internet, print posters, and leaflets), health professionals, the Ministry of Health. The main message of these campaigns was to ENJOY eating fruits and vegetables 5 times a day and include half an hour of exercise a day.

6.3. Opinion on public policy for nutrition (Processors)

- **No matter if respondents have information about public policy for nutrition and which topic they focused on when asked this question, they all stated that nutrition in their countries is not good enough.**

- **They all believe that more attention should be paid to this topic.**

Respondents agree that people are not educated enough and that public policy should primarily focus on younger population. Some believe that this is a subject one has to deal with from an early age and schools are where it should be started (preschool and school children).

Croatia: "I think it should be promoted. Health should be promoted. There is a campaign against smoking, obesity, but nobody is talking affirmatively about fruit, milk, and red meat. There's no such thing."

Serbia: "The state should educate the population through means of public information. We suppose that it is planned, but that it is left aside because of other priorities."

6.4. General programme funded by the sector on the health benefits concerning their family of products (Authorities and Processors)

- **Majority of producers and authorities are not aware of any general programmes referring to health benefits concerning their family of products.**

Campaigns of national character that emphasise values and positive effects of consumption of fresh products are something that all respondents find important, but they all claim that there are no such initiatives in their countries.

Macedonia: "Never heard of something like that... I don't think we have such programmes, you can check with the public Health Institute ..."

- **There are few participants who heard something about certain projects and programmes, but most of those programmes are either not public yet or they are about some other issue.**

In Serbia, representative of the biggest company mentions subsidies of the state given for programs related to food safety and he considers them good, but insufficient.

One producer form B&H explained that there is a plan for a project initiated by the Chamber of Commerce and the Republic of Srpska businessmen called ''Buy and use domestic'', but it is not only about buying and usage, but also about a healthy diet, about how important declaration and raising awareness of consumers is. This project has not started yet.

- **Respondents from Slovenia again mentioned campaigns the Scheme of school fruit and vegetables and "5 vitamins per day".**

6.5. Opinion on sufficiency of communication to develop fruit consumption (Authorities and Processors)

- **All participants agree that their states should invest more in various types of promotions of fruit and fruit products and healthy food.**

All respondents find communication on fruit consumption to be not sufficient at all. According to them, immediate action should be made on many levels to improve situation. Producers and authorities agree that the population needs to be educated about healthy nutrition by the media and by activities of some institutions.

Some suggestions were active participation of consumers through workshops and discussion between experts and public, free fruit distribution, education of consumers about processing of fruit and vegetables, inclusion of agricultural sector etc.

Macedonia:" Definitely NO! I have said it before –I really do think there is a lot to be done. I will try not to repeat myself and say that school policies I have mentioned can really solve many issues and increase fruit consumption in the near future."

B&H:" It is not enough to have a campaign that goes straight to the media, although they are significant. It must be comprehensive; education should start in the nursery."

7. EXPECTATIONS AND CONCLUSION

- **Processors expect consumption of their products to grow and also authorities expect consumption of all fruit (fresh and processed) to grow.**

- **What they have in common is their belief that awareness of healthy nutrition has to rise among population in order to achieve those goals.**

They all agree that the state needs to initiate several programmes and projects that will educate people about nutrition and necessity of eating fruits.

- **Processors from all countries expect financial support from the state for developing their industry.**

This is especially pointed out in Macedonia, since respondents perceived this sector of industry as put aside, and in Montenegro, where this sector in not developed enough. Respondents from B&H mentioned favourable financing conditions that do not exist at the moment.

B&H: "Fresh funds are always welcome, under favourable conditions and favourable conditions are favourable interest rates. If you have a good source of funding it is certainly welcome and if you do not, than you can not move forward, what is happening now in the entire B&H."

Some of that money should be invested in new technologies and modernizing this sector, which is especially pointed out in Croatia.

- **In Montenegro, respondents expressed concerns about market regulations and pointed out that it is necessary to put all flows, production and expenditures into a legal framework.**

The existing laws ought to be applied by establishment of control mechanisms. B&H is another country faced with the problem of informal economy, according to participants who live and work there.

Montenegro: "There are still a lot of sales in the black market, but poor quality goods..."

- **Majority of producers hope that association will be formed and that they will eventually join international associations of producers.**

Such association would support interest of producers and manual producers insist that clear differentiation be made between that type and classical industrial processing, so that it is clear which product is truly „homemade„ and which product can have that label.

They believe that also associations of primary producers should be founded.

Serbia: "Quality of raw materials is not controlled; no attention is paid to whether material was treated correctly or not. We spray apples 23 times during one season, while it is done 27 to 30 times in the EU, but they have strict regulations about when it is allowed to spray fruit. There are no inspections here."

- **Institutions need to be formed or the existing ones have to be modernized in order to perform quality control and do necessary analysis.**

In those countries that are still facing problems regarding quality control such as B&H, respondents focused on implementing control standards and forming organizations such as mentioned Food Agency in B&H.

In Serbia this refers particularly to exporting sector, since, in the respondents' words, our products can't satisfy large number of criteria set by the Western market because we have no adequate technology at our disposal. Regarding export, which is one of the main goals for majority of Balkan countries, all respondents expect EU standards to be implemented in primary production and processing fruit.

Serbia:" If I showed you Swedish requirements for product you would see two pages filled with parameters, we can't check all that and we have to since it is not good to export products and have those product rejected when they reach their destination because of inadequate quality. There is no institution here to control all this."

B&H: "One targeted support from the state level, to what direction (where and how to) develop capacity; good support in terms of creating prevention standards and EU standards so these same producers would be able to spread products out on the world market; making a good connection of domestic producers with processors and a good support from the state or entity level, promotion of these products, awareness of domestic products ''Buy local'' and be sure to link it with health care."

- **All respondents, except from those from Slovenia, hope for EU membership.**

They all believe that becoming part of the EU will help development of fruit industry and export of fruit products, among other things.

PART 2

READING GUIDE PART II

In the previous chapters the fruit industry in Western Balkan countries is described. This part will reflect on the research findings in part I.

The mentioned first opportunity is further growth in exports. Through its growing system of symmetrical and asymmetrical array of free trade agreements, Balkans countries' potential biggest market by far is the European Union. Therefore the reflection will start with an analysis of the European Market by going more deeply into its strengths, weaknesses, opportunities and threats in chapter 1.

Besides this, from a consumer point of view, a lot of the topics mentioned in part I are relevant. We selected some of them, and will more deeply into it in chapter 2. In general, the selected aspects can be structured according to topics related to socio-demographics, consumers and contextual factors.

Finally, some final remarks are presented in chapter 2.

1. SWOT analysis of the European market[3]

The mentioned first opportunity is further growth in exports. Through its growing system of symmetrical and asymmetrical array of free trade agreements, Balkans countries' potential biggest market by far is the European Union. Therefore the reflection will start with an analysis of the European Market by going more deeply into its strengths, weaknesses, opportunities and threats.

1.1. Strengths

The fruit sector is responsible for 17% of total EU agricultural production in terms of value. Each country experienced a different specialisation: producers, processor or re-exporters. Spain and Italy contributing to production more than 50%, followed by France, Greece, the Netherlands, Germany and Poland. Italy and Spain are the largest consumers, together already accounting for one-third of the EU market. The imports of Italy and Spain are relatively small compared to their domestic production. In both countries, a large part of the demand is met by domestic produce. Germany, France and the UK also have large markets (together 30% of EU consumption). France is both a major consumer and producer. French imports are higher than the fore mentioned countries while its exports are also substantial. Germany and the UK have high levels of consumption and limited domestic production and therefore rely heavily on imports. Belgium and the Netherlands have average market sizes, but are important fruit traders (re-exporters).

The main fruits produced are apples, oranges, peaches and tangerines. The temperate climate of Northern Europe results in a shorter production season than in Southern Europe. However, greenhouses enable the year-round production of vegetables in Southern Europe and extend the production season in Northern Europe. Important trends in production are offshore outsourcing and adding value in the country of origin.

Fruit products are increasingly available throughout the year, through improved production and logistical techniques.

The general adoption of marketing standards (EurepGap, globalGap for example) facilitates trade based on fair competition and, consequently, helps improve the fruit sector's profitability. These standards ensure that retailers know what they are buying without having to physically check the products at the time of ordering. At the same time, rules on definition, presentation and labelling – including country-of-origin labelling- prevent consumers from being misled.

Accessing EU markets requires compliance with a strict regulatory framework of measures designed to ensure human and plant health within the EU that sometimes

[3] Based on several EC documents and sites, Commission's White Paper 2007/0279 and website Globalgap.

go beyond the international requirements set under the SPS and TBT agreements administered by the World Trading Organisation

1.2. Weaknesses

The EU consumption is larger than EU production and imports are therefore necessary. The EU25 trade balance in fruit remains firmly negative due to high imports.

Major imports are apples, oranges, pears and lemons (out of season products) and tropical fruits. Since the EU exports much less fresh Fruit to third countries than it imports, it carries a trade deficit of around that remain small if compared with the deficit of vegetable sector (for which industrial processing is much more important).

Low competitiveness of the sector, but in particular fluctuations in farmers' income, give to the all chain poor capacity to manage crises. This factor is main due to fragmentation of exploration, bad price transmission mechanism, long and inefficient marketing channel.

The only way to solve our structural problems is to strengthen the role of the producer organisations (POs). In 2004, close to 34 % of total production was marketed via POs. The total value of production marketed by POs varies by country, ranging from below 10% in Poland to over 80% in Belgium, Ireland and the Netherlands. Farmer membership in POs also varies, averaging about 33.7% Union-wide, well below the Commission's 60% target for 2013.

From the technological point of view the varietal mix of supplies is continuing changing, but we can note an increasing polarization between the progressive and the traditional segments of the industry. Each segment has a very different attitude to innovation, marketing mix choice, storage techniques, etc.

1.3. Opportunities

The recent reform of the Common Market Organisation for fruit and vegetables in EU is aimed to bring the fruit (and vegetable) sector into line with other sectors under the Common Agricultural Policy (CAP) which has already been reformed.

Use of Operational Funds for technical measures in marketing, production, control for quality and phytosanitary measures, and special environmental measures will help producers and their association.

Within the general policy framework there are a number of specific support programmes for processed fruit. These include aid to fruit-products and dried grapes.

Specific measures, including direct financial assistance from the EU budget to encourage higher consumption, has been proposed by the Commission.

The main long-term trends in EU food markets are health, convenience, and pleasure, and each of these also affects the market for fresh and processed fruit.

The 2007 reform emphasises the need to make POs more attractive to growers, not only to concentrate supply and prevent crises but also to improve production quality and protect the environment.

Consumers ask for convenient propositions such as washed, pre-cut, pre-packed and portioned fruits.

1.4. Threats

There is a strong trend towards concentration in the supply of fresh fruit throughout the EU, although the extent of this varies between countries. Concentration is especially visible at the retail level, where an ever-smaller number of highly professional players dominate distribution. This, in turn, has provoked changes in the supply chains with larger companies (importers/wholesalers) working closely with retailers. Suppliers of multiple retailers must be able to supply consistent volumes of guaranteed quality on a year-round basis, and be very efficient, flexible and alert to new developments. This process is most advanced in northern and western EU countries, but present in the eastern part of the EU too. But high levels of concentration among retailers and discount chains have enabled the player to assume a strong role in the determination of market prices.

Marketing practices have changed under the influence of the large retail chains. This is characterised by centralised supply and the use of specialised wholesalers, 'preferred suppliers' and private standards (such as EurepGap).

Increasing competitive pressure from third country imports is making matters worse.

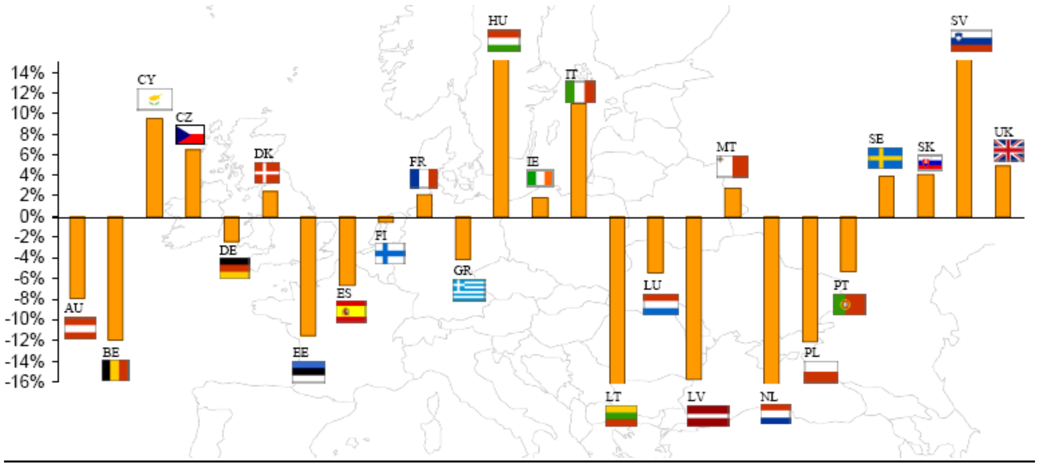
Despite public initiatives, the consumption market in many of the large EU countries is decreasing. Germany and Poland experienced the largest decrease.

2. Consumer topics lifted out

2.1. Socio-demographic related topics

In general, socio-demographic variables are important predictors of preferences and behaviour. For example, especially in Poland the changing of lifestyle together with the increase of disposable income are influencing the fruit consumption (Groot et al., 2008). Several studies explored the role of socio-demographic variables in fruit consumption behaviour. First of all, in a systematic review of studies on fruit and vegetable consumption, Kamphuis et al. (2006) found *household income* to be the most important factor. They found that people with lower household incomes consistently had a lower fruit and vegetable consumption. In addition, *education level* is a relevant factor as it comes to fruit consumption. Several studies (Brug et al. 2006; Pollard et al. 2001; Roos et al. 2000) found that fruit intake is less likely among less-educated people. Furthermore, age also plays a role. Higher prevalence of low fruit intake has been observed among young people (Brug et al. 2006). Next to this, gender plays a role in fruit consumption. For example, Johansson and Andersen (1998) show that fruit consumption is higher among women and Vereecken et al. (2005) found that among adolescents especially girls consume fruit more often. Finally, previous research indicates that the type of household affects the consumption habits. Kamphuis et al. (2006) and Pollard et al. (2001) found that married people had higher fruit and vegetable intakes than those who were single, whereas having children showed mixed results. In Spain, the laggards in fresh fruit consumption are couples with children under 7 years-old and couples with children between 7-17 years-old (MAPA 2005). Finally, region or country-of-origin play a role in fruit consumption. For example, Leather (1995) showed that within different regions in the UK large differences were found in fruit consumption.

Figure XX presents fruit consumption trends across the EU-25. Almost all experts in the different countries in EU project ISAFRUIT (Bartels et al., 2008)) think that fruit consumption will increase. In the future important trends are the same as in the past, the health and well being aspects of fruit are still emphasised as most important in all countries. In addition to this, convenience in relation to health is becoming more important. Except for Poland, convenience was mentioned explicitly by experts in all countries. Product variation (e.g. consumption moment, preserved fruits and functional foods) is an upcoming trend in all countries. However, every country has its own phase in this development. In the countries in which economic factors were important in the past, this factor will decrease in the future.



Source: Freshfel Fruit & Vegetable Production, Trade & Consumption Monitor in the EU (2006)

2.2. Consumer-related topics

Eating fruit is not always an easy option. First of all: what is fruit? This is not clear from a consumer point of view. Briz cum suis (2007a) found that dealing with the *perceptions* of consumers regarding fruit and fruit products, the term fruit is directly related to "fresh fruit". When asked about fruit, all participants assumed they were being asked about "fresh fruit". Regarding fruit products, there are varied opinions. Juices are only considered "fruit" if they are freshly squeezed. Many people do not consider "processed fruit juices" (canned or bottled) as "fruit". There is an overall lack of confidence in the components of canned or bottled fruit juices and consumers do not perceive they are having "fruit". Regarding processed fruit products, most of the consumers affirmed that some of the most important properties of fruit are: freshness and juiciness, therefore, whenever fruit loses its original properties it is no longer considered fruit. Other fruit products like dried fruits or marmalades were also the objects of part of the discussion. Some people more or less considers them to be fruit and some others do not.

Subsequently the most important barrier alleged by consumers in the focus group discussions within the EU project ISAFRUIT (Briz et al., 2007b) is the lack of taste and smell of some fruits. Consumers recalled eating fruit in their childhood and youth and complained that fruit nowadays has little or no taste at all. This was a general opinion that arose in the four countries where focus groups were carried out. Benefits which are important over all countries are mentioned below (scale 1 to 5)

- Having a good taste (4.39)
- Giving me energy (4.17)
- Containing no pesticides (4.15)
- Helping to satisfy my hunger (4.15)
- Making me feel healthy (4.14)
- Prevents diseases/illness (4.14)

To consume fruit (products) as positive attitude is needed. The extent to which someone has a positive attitude towards fruit depends on the extent to which this person believes or feels fruit has certain qualities and to what extent these qualities are important to him/her. And, though someone might have a positive attitude towards fruit in general, this person might have a negative attitude towards apples, because he or she just does not like the taste or has other negative beliefs or feelings about this product. Participants of focus groups (Briz et al., 2007a)) have discussed this topic and the majority of consumers show a positive ***attitude*** towards fruit consumption. They consider eating fruit is a pleasure, since they appreciate its inherent characteristics (taste, juiciness, texture, etc). Both pleasure and health are the main motives for fruit consumption. Health and well being are the most important trends which have influenced fruit consumption. Important as health may be, there are other essential preferences that consumers take into account when choosing their food. So, Andrew Steptoe et al. (1995: 268) rightly maintain “that health is one of many considerations relevant to food choice.” For example, taste, appearance, price and perishability are some examples of other considerations, and though, the importance of fruit quality is decreasing, but is still an important factor. Regarding the participants’ attitude towards food safety, their interest and concern was clearly differentiated. In some countries (Spain and The Netherlands) people did not even mention it; while in others (Poland or Greece) people seemed to be very concerned. Some participants in the focus group discussions mentioned they distrusted the chemicals that were applied over fruit; others mentioned that the chemicals affected the taste and/or the appearance of the fruit.

Next to this, habit strength is shown to be a strong predictor of attitudes and behaviour related to fruit consumption (Brug et al. (2006). According to Pollard et al. (2002), food habits evolve from learned experiences in the past, and as such become a form of self-expression. Moreover, Reinaerts et al. (2007) found habit to be the most influential factor affecting fruit consumption. In general, habits are very hard to change and it needs learning and planning to adopt new behaviour. When considering habit from a general perspective it is an action we do without (much) consideration and awareness. This puts emphasis on the element of automatism as an important part of habitual behaviour. Brug (2006) studied predictors of fruit intake. Age, intentions, and habit strength were significant predictors of consumption of two or more servings of fruit per day. With relation to habits, Spanish and Greek consumers eat fruit mainly at home, as a dessert, and prefer buying it at a greengrocer’s; whereas Polish and Dutch consumers eat fruit as a snack or between meals, and buy fruit wherever is more convenient (market, supermarket)

If consumers have eaten fruit since their childhood, it becomes a need. This fact appeared several times in the focus-group discussions (GR, SP) and there is also literature about it: “If you started when you were a baby eating an orange a day or something similar, you would continue to eat an orange a day” (John, Ziebland, 2004). In addition, it is often mentioned that fruit consumption is strongly dependent on the family situations (GR, PL and SP). There is a positive association between children’s fruit intake and their parents’ (De Bourdeaudhuij, van Oost, 2000; Kratt et al, 2000; Longbottom et al., 2002; Bere, Klepp, 2004; Hanson et al., 2005). Also, about a third of American adults of the 5-a-day survey felt strongly that family and friends encouraged them to eat fruits and vegetables, and another third felt strongly that they had made it a habit to eat lots of fruits since childhood (Krebs-Smith et al, 1995).

Household income and price, as characteristics of economic factors, are relevant as well in fruit consumption behaviour. In previous studies, although with less than 1 € per day the recommendations for fruit of the Food Pyramid could be fulfilled, price is constantly mentioned as a barrier to consumption (Marshall et al, 1994; Brug et al, 1995; Van der Pol, Ryan, 1996; John, Ziebland, 2004). Briz cum suis (2007b) described that in discussions with consumers price was considered a relevant issue for many consumers, but not for all of them, that is, this issue did not arise in all the focus group sessions. There were consumers that considered quality and convenience aspects to be more important than price. Seasonal fruit was considered to be affordable in the season. However, consumers mentioned that out-of-season fruits are usually more expensive.

Developing urbanization and economy proves to have an influence on the changing consumption patters in different countries. These changes deal not only with what one eats but also how, and when. The so called "nutrition transition" means dietary changes including both quantitative and qualitative changes in the diet. One can observe a tendency of consuming products of higher energy density (fat, added sugars in foods, reduced intakes of complex carbohydrates and dietary fibre), and reduced fruit and vegetable intakes. Besides this social-related issues, such as cultural preferences (and habits), and the current social environment consumers are in, should be considered strong factors that influence fruit consumption. In the literature the influence of culture/ethnicity on the fruit consumption is not always clear (Osler, 1993; Levine, 1997, Reynolds, 1999). However, the discussions with consumers in the EU project ISAFRUIT (Briz et al., 2007b) showed that there were main differences among the people from the different countries studied. During the focus groups, the differences between consumers of the four countries appeared continuously. And for example; consumers of Spain and Greece do not know their driving force to eat fruit: they simply admit it is a habit. So it seems cultural background to be a key factor when dealing with fruit consumption.

Increasing activities to inform and educate people on health aspects of fruit are regarded as essential ways to promote fruit consumption. Findings indicate that information does matter—better-educated consumers with more nutrition knowledge consume more fruits and vegetables and make more nutritious choices within the category (Guthrie et al., 2004). West and South East Europe have a limited amount of campaigns due to their nutritional habits which already contain a high intake of fruit & vegetable products. North-East Europe, as the new EU member states, have a limited number to no promotion campaigns at all.The Internet is a favorable option for reaching young adults with nutrition messages Park (2008). Promotion campaigns are not always effective. Some participants of the focus groups (especially the elderly consumers) showed confusion regarding the optimal fruit intake. In addition, some of them did not know what was a serving and expressed the required quantities were quite unclear *("There is not a clear answer of what is enough as a daily intake", Spain)*. This fact is consistent with previous studies, like Krebs-Smith, (1995) or Marshall et al, (1994). Because habitual behaviour is considered to be triggered by environmental cues, fruit promotion interventions should further explore environmental change strategies (Brug, 2006).

Finally, in a EU consumer study (Zimmermann et al., 2009) where they aimed to understand the forces that drive consumer preferences with respect to fruit and fruit products and wanted to identify cross-cultural consumer segments to stimulate the consumption of fruit in Europe they concluded as followed:

- Segmenting the European consumers on the base of benefits reveals different groups of individuals
- Benefits convenience, health and safety seem to differ a lot between the segments
- Taste is important within each segment
- It is very relevant to develop apply different marketing strategies on these different segments

2.3. Contextual related topics

Lifestyle refers to a pattern of consumption reflecting a person's choice of how he or she spends time and money (Solomon 2002). So, theoretically, consumers could be raised in the same type of social class, could have similar educational backgrounds, could have the same age, and work for the same company, but have different lifestyles. People sort themselves into groups on the basis of the things they like to do and how they like to spend their income (Zablocki and Kanter 1976). As consumers often choose certain products over others because they are associated with a certain lifestyle, we assume that fruit consumption and preference for certain types of fruit differs according to someone's lifestyle. Marketers are constantly trying to identify and reach groups of consumers that are united by a common lifestyle. To meet this need, many research companies have developed their own lifestyle segmentation typologies. General accepted segmentation systems are the List of Values (LOV) and the Values and Lifestyles System (VALS) (Kahle et al. 1986). With regard to lifestyle, Pollard et al. (2001) found that vegetarian and non-smoking women are more likely to consume fruit than non-vegetarian and smoking women. In addition, Johansson and Andersen (1998) showed that those individuals who participated in regular physical leisure activity and paid close attention to a healthful diet had a higher frequency of fruit consumption. When comparing fruit and vegetable lovers, exploratory efforts have shown that vegetable lovers, for instance, enjoy cooking, entertaining and using new recipes more than fruit lovers (Wansink & Lee 2004).

Though slightly different it can be noted in this respect, that consumers expressed that there are certain *life stages* that contribute to increased fruit consumption (Briz et al., 2007b). The opinions of focus group participants showed that many of them had the habit of eating fruit at home in their childhood. Then, when they grew up (in their 20s) and moved away from home, some of them quit eating fruit, and afterwards, (in their 30s) they started to eat fruit again (GR, PL and SP). Also, pregnancy is a life stage where women increase their fruit intake because they care about their babies and retirement influences the eating habits, since many people that were used to have lunch out-of-home, stay at home and fruit is always available.

Availability is defined as the amount of food available in space and time. The availability of fruit is often seen as a constraint to its consumption. Participants in the focus-group discussions expressed that they ate frequently out of home, (usually lunch) and fruit was not always available. Consumers complained fruit is not available at workplaces or vending machines. However, some participants expressed there were nice initiatives starting, for example, fruit-break instead of coffee-break in some official institutions (idea expressed by Spanish worker). Also, vending machines with fruit products are starting to be present in many places. "They are encouraging vending machines at schools that offer fresh fruit and fruit juices, instead of sodas or snacks" (National Conference of State Legislatures, 2005). In addition, consumers expressed that not all restaurants offer fresh fruit in their menus; luckily you can find juices or fruit salads. Consumers admit that restaurants' menus offer tempting choices of desserts that are not usually available at home, so they prefer to try new things. Since people spend more and more hours out of home (in their offices and on the way), ***out-of-home*** consumption is a growing trend. This trend, to eat more and more meals outside the home, is probably the biggest challenge to those seeking to promote fruit consumption, given the very small amounts of fruit consumed away from home (Guthrie et al., 2004)[4].

To end this section we underline the topic seasonality. Regarding the consumption level, consumers in the ISAFRUIT project are aware that, although most of the fruit is available all year long, fruit of the season is the best one. There were no differences depending on the countries or on the age groups. In addition, the consumption of fruit declared by the participants clearly followed a seasonality pattern. Almost all consumers agreed that in summertime they increase their intake because the higher temperatures encourage the fruit consumption and the variety of available fruits makes it easier. And as already mentioned, seasonal fruit was considered to be affordable in the season. However, consumers mentioned that out-of-season fruits are usually more expensive.

3. Final remarks

Although domestic consumers are increasing their attention to quality attributes of produce, the domestic market seems to remain primarily price-oriented. Therefore,

[4] This fact is strongly linked to habits and social norms. Participants admitted that they associate eating fruit to eating at home (especially consumers from Greece and Spain), and usually, to dessert. In previous studies it was confirmed that ice creams and sweet desserts (35.8% and 45.7% respectively) are the substitutes for fruit in out-of-home situations (MAPA, 2005).

nowadays quality of fruit is an export issue in most of the Balkans countries. Through its growing system of symmetrical and asymmetrical array of free trade agreements, Balkans countries' potential biggest market by far is the European Union. Croatia, Macedonia and Slovenia are already WTO members, while Bosnia and Herzegovina, Montenegro and Serbia are invited as observer governments. Balkans countries may benefit from a favourable geographical location in the global fruit market: not far from EU markets, close to European logistics corridors that provide for excellent transport connections. Western Balkan Countries have a good position regarding fruit production as well. For example, fruit producers may find cheap and skilled labour that is abundantly available in the region as an additional point of strength. The European market is an attractive market for Western Balkan Countries. Regarding exploiting this opportunity, generally speaking, there is a broad need across the region for strengthening competitiveness of the sector also via improved supply chain agreements and the establishment of viable Producer Organisations.

As for the fruit processing sector, we would recommend that attention is additionally given to: the improvement of infrastructures and equipment; the implementation of HACCP system and other HACCP-based quality standards, such as IFS and BRC for those companies that are connected to export markets (please note that Global-GAP is not a fruit processing quality standard but a primary production quality standard); the improvement of marketing of final fruit processed outputs; the adoption of signs and marks of quality and origin; the stimulation of a higher level of specialization in production, both at a primary production level and at a processing level. Investments in nursery gardening should be promoted for more specialization of production and higher quality of regional fruit production.

The regional canning sector, in particular, appears to be not strongly structured in several Balkans countries, with processors often struggling to get their own supplies from domestic producers. No common mechanism is in place to orient the setting of (minimum) prices for traded goods and for providing guidance to operators. In general, the fruit processing sector has a major need to establish direct linkages with the primary producers. In fact, shortage and inconsistency of raw material supplies is identified as a major impediment for further growth of the Balkans fruit processing sector. Also owing to a widespread tendency, usually by farmers, to breech contracts when market conditions are more favourable then those agreed in the contracts they stipulated with processors. The reluctance, among growers, to introduce new varieties/products to better fit processor's needs and the uneasiness, due to their financial constraints, of processors to advance money to producers for purchasing production inputs also reduce the level of competitiveness of the fruit processing sector in Balkans countries.

For the Western Balkan countries as well as for all Member States of the European Union a lot of aspects are important considerations in the light of fruit consumption behaviour. Especially, socio-demographics, consumers and contextual aspects. In general, socio-demographic variables are important predictors of preferences and behaviour. Habit strength is shown to be a strong predictor of attitudes and behaviour related to fruit consumption and cultural preferences should also be considered relevant factors that influence fruit consumption. Of course, characteristics of economic factors, such as household income and price are relevant as well in fruit consumption behaviour.

Remarkable is that convenience is not brought up by the WBC experts – one of the most influencing factors regarding fruit consumption indeed. Convenience includes all aspects that help to increase an individual's available time and is characterized by a high degree of comfort of consuming. For example, convenience appeared to be an important factor in Greece, the Netherlands and Spain. Convenience was considered one of the most important barriers in qualitative research done for EU project ISAFRUIT: this issue arose in all the sessions. Most of the participants felt lazy when having to peel fruit. The necessity to have a knife, to keep the waste, etc., when eating some fruit act as main barriers to fruit consumption, ("I am too lazy to peel fruit", Poland). Situational characteristics, for example moment, are influencing fruit consumption behaviour as well. It would be interesting to see how people evaluate their beliefs and feelings regarding fruit in different consumption moments. Is fruit evaluated different for breakfast than for lunch for example? For example, in Japan fruits are preferred to be consumed in the morning (Gerht and Shim 1999). Brug et al. (1995) stated that eating fruit can be awkward or messy, but it can also be an easy snack between meals. In general, the described aspects can be structured according to consumer topics, context, and product (benefits) next to general socio-demographic trends.

Finally, the majority of consumers show a positive attitude towards fruit consumption. They consider eating fruit is a pleasure. Next to pleasure, health is another main motive for fruit consumption. Almost all experts in the different countries in EU project ISAFRUIT (Bartels et al., 2008) think that fruit consumption will increase. In the future important trends are the same as in the past, the health and well being aspects of fruit are still emphasised as most important in all countries. In addition to this, convenience in relation to health is becoming more important.

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