

# Raspberry marketing channel on the example of arilje cooperative and "jugoprom" factory

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Mr Katica Radosavljević  
Faculty of Economics, Arilje

*The paper is an attempt to explain the complexity of the internal relations governing the agricultural produce. It is an analysis of raspberry specific nature, its marketing channel structure, the problems of forming prices and of promotion depending on marketing channels relations, conducted through the benchmarking analysis of these two factories. Specific features of fruit marketing channels are presented throughout the marketing process or through individual marketing activities having in mind the characteristics of certain sorts of fruit.*

In terms of spatial coverage, agricultural production can be defined as unevenly spread and seasonal in character (especially in case of the primary agricultural production). On the other hand, the need for the agricultural produce is rather continual. In addition to the specific features of the marketing channels for the agricultural produce, it is necessary that the specific nature of the marketing channel for each sort of agricultural produce be analysed within the overall industry, and for the purpose of satisfying the demand of end users in the best possible manner. Another fact that supports our assumption on the necessity to analyse the specific feature of each of the agricultural produce is a different perishability rate, storage period, territorial coverage, time of offer which is conditioned by a natural production process each sort of the produce has. The empiric analysis of the Jugprom, d.o.o company and the Arilje Cooperative is intended to explain a different combination of marketing mix and the company marketing channels, especially in case of raspberry, implemented to achieve both the companies' goals and the customers' demand.

Raspberry counts as one of the most important export produce, a key feature of rural development in some parts. The present and the future of Serbia is branding the raspberry. Serbia is one of the world's largest producers of raspberry, covering one fourth of the total production of raspberry worldwide. The income statement for raspberry presented below allows for a conclusion that there is a tendency in increasing the number of actively yielding bushes, however, the yield generally remains unchanged. This highlights great potentials of Serbia, which are still not appropriately put to use, due to inadequate agricultural engineering measures. The analysis of exports and consumption reveals a stagnation trend over the years, with the rise of prices in its wake. We can draw a conclusion that it is an insufficient production of raspberry that triggers the rise in prices and consequently a smaller share it has in human consumption. The export stagnation is also the result of too small a quantity of raspberry produced.

**Table 1.** – *Raspberry production balance<sup>1</sup>*

CATEGORY	UNIT OF MEASURE	1999	2000	2001	2002	2003	2004 (Projection)
<b>Number of active bushes</b>	1.000 bushes	12.996	13.519	14.753	15.293	16.354	17.000
<b>Yield</b>	Kg/bush	4.14	4.14	5.27	6.15	4.83	4.71
<b>Total production</b>	1.000 tons	53.81	56.00	77.78	93.98	78.97	80.00
<b>National production</b>	1.000tons	54.00	56.00	78.00	94.00	79.00	80.00
<b>Imports</b>	1.000tons		0.03	0.19	0.19	0.00	0.30
<b>Total quantities at disposal</b>	1.000tons		56.00	78.00	94.00	79.00	80.00
<b>Industry consumption</b>	1.000tons		1.32	4.98	3.99	3.03	3.50
<b>Consumption in human</b>	1.000tons		1.17	11.06	7.26	5.13	5.50
<b>Per inhabitant</b>	Kg/inhabitant		0.12	1.12	0.73	1.10	1.10
<b>Total national</b>	1.000tons		2.49	16.05	11.24	8.16	9.00
<b>Loss</b>	1.000tons		2.80	3.89	4.70	3.95	1.00
<b>Exports</b>	1.000tons		50.71	57.84	78.04	66.86	70.00
<b>Total consumption</b>	1.000tons		56.00	78.00	94.00	79.00	80.00
<b>Average market price</b>	din/kg		35.34	73.81	80.11	93.09	95.00
<b>Currency rate</b>	din/\$USD	11.66	66.84	64.19	57.43	57.27	58.00

<sup>1</sup> The Republic Statistical Institute, Customs Administration, Industrial and human nutrition use, calculated by the USAID method, loss estimate d

Together with blackberry, raspberry is one of the most recognizable Serbian brands in the world. This position is achieved due to a good quality and competitive quantities and prices. The positioning of raspberry in the world is related to the perception of Serbia and its political and social system abroad. Therefore, the greatest contribution to improving our brands worldwide may come from our politicians and ministers. A favourable attitude towards Serbia as a reliable partner and a steady socio-political environment may significantly help our exporters throughout the world

and in the media. The following table will give an idea of the Serbian raspberry quotation on world market. The following shows that Serbia has excellent conditions to increase the production of raspberry. However, to improve its position on the world market, Serbia has to renew old plantations and to be more efficient in introducing world standards, since in this area it is still at the beginning, whereas Chile is at the very top in using protection control. There is a positive correlation between a high level of protection control and standard implementation.

**Table 2. - Comparative analysis of raspberry production in the world<sup>2</sup>**

DESCRIPTION	CHILE	SERBIA	POLAND
Raspberry sort	<i>Miker</i>	<i>Vilamet, Miker</i>	<i>Polana</i>
Potential annual production of raspberry (t)	45.000 - 55.000	55.000 - 80.000	45.000
Form of lots organization	Large lots	Small lots	Grouping into larger lots
Type of plantations	Old and new plantations	Old plantations with few new ones	New plantations
Standards on the lots	EU, USA, Japanese	YUS	EU, Beginnings of setting the USA and Japanese
Use of machinery	High level	Low level	new
Succession	100%	Start	70%
Protection control	100%	Impossible	90%

With their effective placement of raspberry on the world market the Arilje Cooperative and the Jugprom, d.o.o company improved Serbian quotation significantly. We will conduct an analysis of the raspberry marketing channels compared to other marketing instruments via benchmarking analysis of the Arilje Cooperative and the Jugprom, d.o.o, to explain the work of the Serbian raspberry market.

Arilje is widely known for the production of berry fruits, especially raspberry, therefore it is often referred to as the raspberry metropolis. The growing of raspberry is an industry employing the entire population of the municipality. Arilje also shows the greatest concentration of raspberry plantations in the world, it houses the largest fruit cold-storage plant in Europe ("The Arilje Cooperative").

The company Jugprom d.o.o, Leskovac, was set up in 1984 as a private carrier. The founder and owner is Mr. Slobodan Stojanović, who was already in the business of transport, organization of agricultural produce purchasing and cooperation with the fresh fruit producers in the area. In a short period the business was

extended, to get the present name in 1992 and become engaged in the production and sales of frozen fruit, which still is the basic line of business in the company.

### 1.1. Specific nature of products and marketing channels structure

The selection of marketing channel is significantly conditioned by the stages of the life cycle in the raspberry production in the company Jugprom, d.o.o. and the Arilje Cooperative.

Jugprom, d.o.o. stocks the frozen or pre-frozen fruit products, of different types and quality. In addition to raspberry, they produce deep frozen and pre-frozen plum as well as deep frozen and pre-frozen sour cherry. Their target market are the juice, jam and preserves producers. The company also offers its products on export market. The basic feature of the export market is its demand for high quality finished products, as well as of the entire production process. Among the largest buyers of Jugprom raspberry are: Descours, France (20%), Agrana, Belgium (20%), Crops, Belgium (20%), Sentis, Germany (20%), and Melzer, Germany (20%). The Arilje Cooperative sells raspberry and raspberry processed produce to Descours (40%), Paulos, Belgium (30%), and to a group of smaller buyers (30%).

<sup>2</sup> Author's own presentation

The customary period from the beginning of sales negotiations (signing the letter of purpose or agreement for sale) is April, when the condition of plantation is known, that is, the yield is estimated. The contracts, stipulating the range of products, the quantity, the price and the delivery rate, are signed towards the end of May. It is much more difficult to ensure a firm long-term contract by which conditions for more accurate planning would be created.

In this main area of business the company is facing fierce competition, both locally and internationally. Only in a couple of past years have almost 20 cold-storage plants been set up (70 are in private ownership) which clearly explains the profitability of the business. International competition comes from Bosnia and Herzegovina, Bulgaria, Poland, Hungary, Russia and Chile. From 1996 till 2002 the average export from Serbia amounted to 63,000 tons of frozen raspberry, at the average price of €0.989 per kilo. The production in Russia exceeded that of Serbia – the Russians produced 96,000 tons, however, more that 90% of the production is consumed in the producers' households. Besides Russia, the world's three larger producers are Serbia, 80,000 tons, Chile, 45,000 tons and Poland, 40,000 tons. Out of the total of the quantity produced, Serbia exports 70,000 tons, Chile exports 40,000 tons, Poland exports 35,000 tons, whereas the total exports of Hungary, Bulgaria and BIH amount to 10,000 tons. According to the abovestated, Serbia occupies the second top position in production and the very top position in the exports of frozen raspberry in the world (the Serbian share in the world's exports of raspberry ranges around 45,16%)<sup>3</sup>.

On the regional level, the two cold-storage plants face competition from 220 other cold-storage plants, while locally, Jugprom, d.o.o. is rivalled by Porečje Vučje, and the Arilje Cooperative competes with 80 cold-storage plants on the territory of the Arilje municipality whose lager capacities amount to 100 to 4000 tons each. Competition actually comes from companies and cooperatives that buy raspberry and forest fruit for their own purposes, but also on behalf of the processing industry companies.

**Table 3.** – *Frozen raspberry exports in the 2002 do 2005 period*<sup>3</sup>

Year	Exported frozen raspberry in tons
2002.	94.000
2003.	67.900
2004.	57.600
2005.	71.700

Jugprom d.o.o. plans a market share of 1,000 tons of raspberry for the following year, while the market share of Arilje Cooperative is planned to be 4,000 tons.

There is a threat coming from the backwards horizontal and the vertical integrations. Competition on the basis of the horizontal integration would come from the cold-storage plants, while the vertical integration would mean the building of cold-storage plants by the companies that deal in further fruit processing. However, since the largest buyers come from the European Union, and they do not have the opportunity of vertical integration, this is not supposed to be a serious threat to the business.

**Table 4.** – *SWOT analysis of the conditions and capabilities of the Arilje Cooperative*<sup>4</sup>

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>- picking period lasts 50 days (due to differences in height above sea level)</li> <li>- fair and correct relationship with suppliers</li> <li>- quality products</li> <li>- vicinity of supply source</li> <li>- hygienic conditions of work</li> <li>- concern about the employees</li> <li>- the greatest lager capacity in Serbia</li> </ul>	<ul style="list-style-type: none"> <li>- lower level of promotive activities</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>- building long-term cooperation with export buyers</li> <li>- lower cost of workforce</li> <li>- improving Serbia's reputation in the world</li> </ul>	<ul style="list-style-type: none"> <li>- high level of competition</li> <li>- long way Serbia has to go to join the EU</li> <li>- new standards and processing technologies</li> </ul>

<sup>3</sup> www.fao.org

<sup>4</sup> Author's own presentation

The production of raspberry is subject to oscillations, however, we can talk of the production growth trend due to the implementation of a modern method of growth.

From the above presented, a conclusion can be drawn that the capabilities of the companies subject to our analysis are great, however, due to a low level of promotional activities and an insufficient implementation of standards, the business efficiency does not reach the value of 100%.

**Table 5. - SWOT analysis of the conditions and capabilities of Jugprom d.o.o.**<sup>5</sup>

<b>STRENGTHS</b>	<b>WEAKNESSES</b>
<ul style="list-style-type: none"> <li>- picking period lasts ABOUT 25 days</li> <li>- fair and correct relationship with suppliers</li> <li>- quality products</li> <li>- vicinity of supply source</li> <li>- hygienic conditions of work</li> <li>- concern about the employees</li> <li>- own transport vehicles</li> </ul>	<ul style="list-style-type: none"> <li>- lack of raw materials base in the south of Serbia</li> </ul>
<b>OPPORTUNITIES</b>	<b>THREATS</b>
<ul style="list-style-type: none"> <li>- building long-term cooperation with export buyers</li> <li>- lower cost of workforce</li> <li>- improving Serbia's reputation in the world</li> </ul>	<ul style="list-style-type: none"> <li>- high level of competition</li> <li>- long way Serbia has to go to join the EU</li> </ul>

The following tables show the percentage of the raspberry programme shares of Jugprom, d.o.o. and Arilje Cooperative in sales for the year 2006, in which

Jugprom,d.o.o sold 500 tons, and Arilje Cooperative sold 3,500 tons of raspberry.

**Table 6. – Participation of Jugprom d.o.o. raspberry programme in percentages**<sup>6</sup>

<b>number</b>	<b>Program title</b>	<b>Purpose</b>	<b>% participation in 2006</b>
1.	Deep frozen ro lend raspberry (whole fruit)	Cakes, bakery industry, yogurts, jams	50%
2.	Deep frozen groats raspberry (groundraspberry)	Jams, marmelade, toppings, jellies, yogurts, aromas	35%
3.	Deep frozen bruch raspberry	yogurts	10%
4.	Deep frozen block raspberry	juices	5%

**Table 7. – Participation of Arilje Cooperative raspberry programme in percentages**<sup>7</sup>

<b>Number</b>	<b>Program title</b>	<b>Purpose</b>	<b>% participation in 2006</b>
1.	Deep frozen ro lend raspberry (whole fruit)	Cakes, bakery industry, yogurts, jams	55%
2.	Deep frozen groats raspberry (ground raspberry)	Jams, marmelade, toppings, jellies, yogurts, aromas	40%
3.	Deep frozen bruch raspberry	yogurts	2%
4.	Deep frozen block raspberry	juices	3%

<sup>5</sup> Author's own presentation

<sup>6</sup> Author's own presentation

<sup>7</sup> Author's own presentation

The entire production programmes in both cold-storage plants, are in the growth stage, since the demand for raspberry in the world steadily increases. Jugprom, d.o.o does not plan market evaluation, since climate and geographical conditions in the south do not allow for the growth in raspberry production and consequently, intensive distribution and adjusting to the changes in demand are out of the question. The Arilje Cooperative is another matter. Geographical and climatic conditions in the Arilje area offer an opportunity for the growth of production and to planning the market coverage evaluation due to increased demand. The main obstacle to the Arilje Cooperative to select a specific marketing channel may be the absence of HACCP and EUREPGAP standards.

The Arilje Cooperative and Jugprom d.o.o. can undertake planning the extension of the raspberry programme range, mainly by aseptic and purée raspberry. In this case, the most appropriate strategy of marketing channel selection in planning and introducing the new programmes, for both companies would be: engaging all members in generating aseptic and purée raspberry, adapting new programmes to the existing channels, estimation of the roles of Decours, Agrane, Crops, Sentis, Melzer, Grunword, SVZ, etc. in the diffusion of aseptic and purée raspberry.

## 1.2. Price problems and marketing channels relations

The prices of agricultural produce in the world may often exert a crucial influence upon forming the prices at home. For example, every year, in the eve of raspberry picking we witness the producers speculating about the buying price of raspberry. In the last two years the producers demanded that the price be €1 a kilo of fresh, raw raspberry, whereas the buyers' unions offered half the price, explaining this by the level of prices on the world market which absorbs a larger quantity of the production.

Exports and imports are good instruments to compare home market prices with the level of prices achieved on the world market. This fact has to be paid special attention to since the world prices of agricultural produce are defined by the countries in which agriculture is highly developed. Countries with a less developed agriculture try to lessen or surpass the discrepancy between the home prices and the lower, world prices by closing the national frontier or by introducing protective measures (agricultural protectionism).

The problem of prices in agriculture can be described as rather complex and sensitive, from the points of view of both the consumers and the producers and the

state, since it is on the issue of prices that their interest clash, and these interests are different and often opposing to one another.

All the freely formed prices are extremely dynamic and changeable. They are especially important in observing the phenomenon of prices disparity. The prices disparities emerge as a consequence of the economic policy measures applied, not as a result of the differences in the real cost of reproduction of certain products. By way of demand and offer, the market has the power to not only determine the price of a product, but also to establish a balance among various products, in that it gives a stronger stimulus to the production of one or another product. The mechanism fails to act in this way only when it is hindered by some social measures in the market and prices areas, and this is how price disparities emerge.

Fruit processing in the Republic of Serbia suffered serious oscillations resulting from the shrinking of market caused by the disassembling of the former SFRY, the economic sanctions, the customs and non-customs barriers imposed by the EU, but also by the fall in domestic demand due to the overall fall of the standard of living. The price of raspberry depends on the quality achieved. The fruit is classed into categories and the prices are determined according to the category concerned. Prices for certain categories vary a great deal from one region of Serbia to another. The last year (2006 picking) prices for category I amounted to around RSD 55 per kilo, and for category II they were around RSD 50 a kilo.

Since the majority of products of the companies are placed on the export markets, the price is primarily conditioned by economic events on the world stage. The demand – offer relations also have an impact upon the price. The table below presents the prices of the “Rawland“ type of raspberry on the “free receiver“ parity in the previous years.

**Table 8. - Izvozna cena maline<sup>8</sup>**

Year	Export price of raspberry in EUR/kg
1998.	1,167
1999.	0,997
2000.	0,948
2001.	0,843
2002.	1,094
2003.	1,35
2004.	1,64
2005.	1,4
2006.	1,55

<sup>8</sup> Source: [www.serbiafood.co.yu](http://www.serbiafood.co.yu), [www.poljoprivreda.co.yu](http://www.poljoprivreda.co.yu)

**Table 9. – Sales price of raspberry<sup>9</sup>**

Year	Export price of raspberry in EUR/kg
1998.	1,167
1999.	0,997
2000.	0,948
2001.	0,843
2002.	1,094
2003.	1,35
2004.	1,64
2005.	1,4
2006.	1,55

**Table 10 – Comparative analysis of fall and growth in the purchasing and exports prices of raspberry<sup>10</sup>**

Year	Purchasing price of raspberry in EUR/kg	Difference in amounts fo purchasing prices EUR/Kg	Export price EUR/Kg	Difference in amounts of export prices EUR/Kg
2002	0,545	+0,023	1,094	+0,251
2003	0,733	+0,188	1,35	+0,256
2004	0,697	-0,036	1,64	+0,29
2005	0,613	-0,084	1,40	-0,24

From the above presented comparative analysis a conclusion can be drawn that the rise and fall o channel may be the absence of HACCP and EUREPGAP standards.

The Arilje Cooperative and Jugprom d.o.o. can undertake planning the extension of the raspberry programme range, mainly by aseptic and purée raspberry. In this case, the most appropriate strategy of marketing channel selection in planning and introducing the new programmes, for both companies would be: engaging all members in generating aseptic and purée raspberry, adapting new programmes to the existing channels, estimation of the roles of Decours are deprived of such aid. This disproportion in prices further results into a fall in the production of fresh raspberry, since the producer is not stimulated to develop the business. The programme of allocation and use of subsidies for the year 2007 includes resourcing of input into the field crops and vegetable production by 5,632,000,000 dinars.

The price flexibility of demand in the primary processing of fruit is primarily preconditioned by the price flexibility for final products. Since the price flexibility in the consumption of jams and juices in Serbia is still significant, having in mind the quality of living here, the lower prices of inputs in their production have an impact upon the quantity demanded. On the world market, however, the demand for semi-frozen and frozen fruit is primarily conditioned by the price and the quality. Serbian raspberry still remains more competitive compared to Chilean, Polish, Hungarian, Russian and Bulgarian raspberry, therefore Jugprom,d.o.o. and the Arilje Cooperative implement the strategy of high and low price. The higher sales price is achieved by the direct contact and sales to industry buyers. Thus a greater impact upon buyers and a longer-term cooperation are achieved, gaining significant sources of information along the way.

The companies, the subject of our analysis, calculate the raspberry and raspberry products costs, in the following manner (example : average costs of yield 2007).

<sup>9</sup> Source: [www.serbiafood.co.yu](http://www.serbiafood.co.yu), [www.poljoprivreda.co.yu](http://www.poljoprivreda.co.yu)

<sup>10</sup> Author's own presentation

## CALCULATIONS FOR D/F RASPBERRY ORIGINAL

<b>A.</b>		
1.	Raw materials price eur/kg (95 din) – 1 eur = 79 din.	1,202
2.	Costs of purchase eur/kg	0,060
3.	Loss of weight 1% to purchase price eur/kg	0,012
4.	Loss of weight freeze-processing – max. 7%	0,084
<b>TOTAL A</b>		<b>1,358</b>
<b>B.</b>		
1.	Receipt, unload, freeze, shake, ,package, int. trans., electricity, water, gas eur / kg (PLATE)	0,055
<b>TOTAL B</b>		<b>0,055</b>
<b>C.</b>		
1.	Packaging for receipt for 2 years eur/kg	0,020
<b>TOTAL C</b>		<b>0,020</b>
<b>TOTAL</b>		<b>1,433</b>

The deep frozen (D/F) raspberry original makes the first stage of processing, which entails the change of fresh raspberry into the frozen form, without finishing processing.

A

1. The raw material price is the price of fresh raspberry in the given moment.
2. The buying costs include the organization of purchase and the transport of fresh raspberry to the cold-storage plant.
3. The 1% loss of weight at purchasing price is the raspberry weight lost during the transport.

1. The loss of weight in the freezing procedure of the processed material is the weight lost by in fresh raspberry during the freezing process.

B

1. The costs of the first stage of processing.

C

1. The costs of packaging used as primary packaging in the first stage of processing.

## CALCULATIONS FOR D/F RASPBERRY ROWLAND 4?2,5

<b>A.</b>				
1.	Shaking up, manipul. Eur /kg	0,005	0,005	0,005
2.	Processing, packaging. eur /kg	0,350	0,250	0,200
<b>TOTAL A</b>		<b>0,355</b>	<b>0,255</b>	<b>0,205</b>
<b>B.</b>				
1.	Packaging: box, bag, tape, stretch foil eur/kg	0,006	0,006	0,006
<b>TOTAL B</b>		<b>0,006</b>	<b>0,006</b>	<b>0,006</b>
<b>C.</b>				
1.	Transport	0,004	0,004	0,004
<b>TOTAL C</b>		<b>0,004</b>	<b>0,004</b>	<b>0,004</b>
<b>PRICE FOR D/Z RASPBERRY ORIGINAL</b>		<b>1,433</b>	<b>1,433</b>	<b>1,433</b>
<b>TOTAL</b>		<b>1,798</b>	<b>1,698</b>	<b>1,648</b>

The D/F raspberry original is transformed into Rawland raspberry and is packed into cardboard packaging of 10 kg each (4 bags of 2.5 kilos each). The Rawland D/F raspberry means: whole, sound, unified produce with no traces of impurity. To obtain the price for Rawland D/F raspberry the calculation for D/F raspberry original is used, adding the costs of Rawland D/F raspberry processing.

A

1. D/F raspberry original stored in chambers enters the processing procedures that also include shaking and manipulation.
2. The processing means the selection of sound whole units of produce and conditioning.

B

1. The costs of new packaging, such as box, bag, tape, stretch foil.

C

1. The cost of transport.

The costs of processing will vary in accordance with the quality of raw materials. The higher the quality of raspberry, the lower the input into the workforce and consequently the lower the prices are.

### CALCULATIONS FOR D/F RASPBERRY (BRUCH)

<b>A.</b>		
1.	Shaking up, manipul. Eur /kg	0,005
2.	Processing, packaging. eur /kg	0,321
<b>TOTAL A</b>		<b>0,326</b>
<b>B.</b>		
1.	Packaging:box,bag, tape,stretch foil eur/kg	0,052
<b>TOTAL B</b>		<b>0,052</b>
<b>C.</b>		
1.	Transport - eur/kg	0,004
<b>TOTAL C</b>		<b>0,004</b>
<b>SALES PRICE FOR D/F RASPBERRY ORIGINAL</b>		<b>1,433</b>
<b>TOTAL</b>		<b>1,815</b>

The D/F raspberry of the bruch type contains 50% of whole fruits, 25% of industrial litter and 25% of raspberry groats (ground raspberry). The D/F bruch raspberry is absolutely pure fruits, withno traces of impuri-

ty. The total costs ofr D/F bruch raspberry start from the calculation for D/F raspberry original to which the costs of D/F bruch raspberry are added.

### CALCULATIONS FOR D/F RASPBERRY GROATS - OF ALREADY SEPARATED MASS

<b>A.</b>			
1.	SHAKE UP, MANIPULATION	EUR/KG	0,005
2.	SELECTING FROM THE MASS FOR GROATS	EUR/KG	0,100
<b>TOTAL A</b>			<b>0,105</b>
<b>B.</b>			
1.	GROUNDING	EUR/KG	0,037
<b>TOTAL B</b>			<b>0,037</b>
<b>C.</b>			
1.	PACKAGING:CARDBOARD BOX,PE BAG,TAPE, STRETCH FOIL	EUR/KG	0,055
<b>TOTAL C</b>			<b>0,055</b>
<b>D.</b>			
1.	TRANSPORT	EUR/KG	0,004
<b>TOTAL D</b>			<b>0,004</b>
<b>PRICE OF D/F RASPBERRY ORIGINAL</b>			<b>1,433</b>
<b>TOTAL</b>		<b>EUR/KG</b>	<b>1,634</b>



The D/F groats raspberry is entirely made up of litter resulting from the freezing process, malformed fruit items, dark fruits, which in total makes the material

for groats. This mass is subjected to further grinding the result of which is the D/F groats raspberry mass.

### CALCULATIONS FOR D/Z RASPBERRY BLOCK

<b>A.</b>		
1.	SHAKE UP, MANIPULATION EUR/KG	0,005
2.	GROUNDING, PACKAGING	0,085
<b>TOTAL A</b>		<b>0,090</b>
<b>B.</b>		
1.	PACKAGING: - KRAFT PAPER BAG 25/1	0,012
2.	CARDBOARD BOX, PE BAG, TAPE, FOIL - EUR/KG	0,055
<b>TOTAL B</b>		<b>0,012/0,055</b>
<b>C.</b>		
1.	TRANSPORT - EUR/KG	0,004
<b>TOTAL C</b>		<b>0,004</b>
<b>PRICE OF D/Z RASPBERRY ORIGINAL</b>		<b>1,433</b>
<b>TOTAL – kraft paper bag</b>		<b>1,539</b>
<b>TOTAL – cardboard box</b>		<b>1,582</b>

The block raspberry is whatever remains of D/F raspberry Rowland, the D/F bruch raspberry and the D/F groats raspberry. These are malformed fruit items which include: rotten fruits, half-rotten fruits, burned fruits, overripe and fermented fruits. Such malformed fruits are further subjected to a process of making semi-products by grinding. Two types of packaging are used for this raspberry semi-product: kraft paper bags of 25 kilos or cardboard boxes and bags.

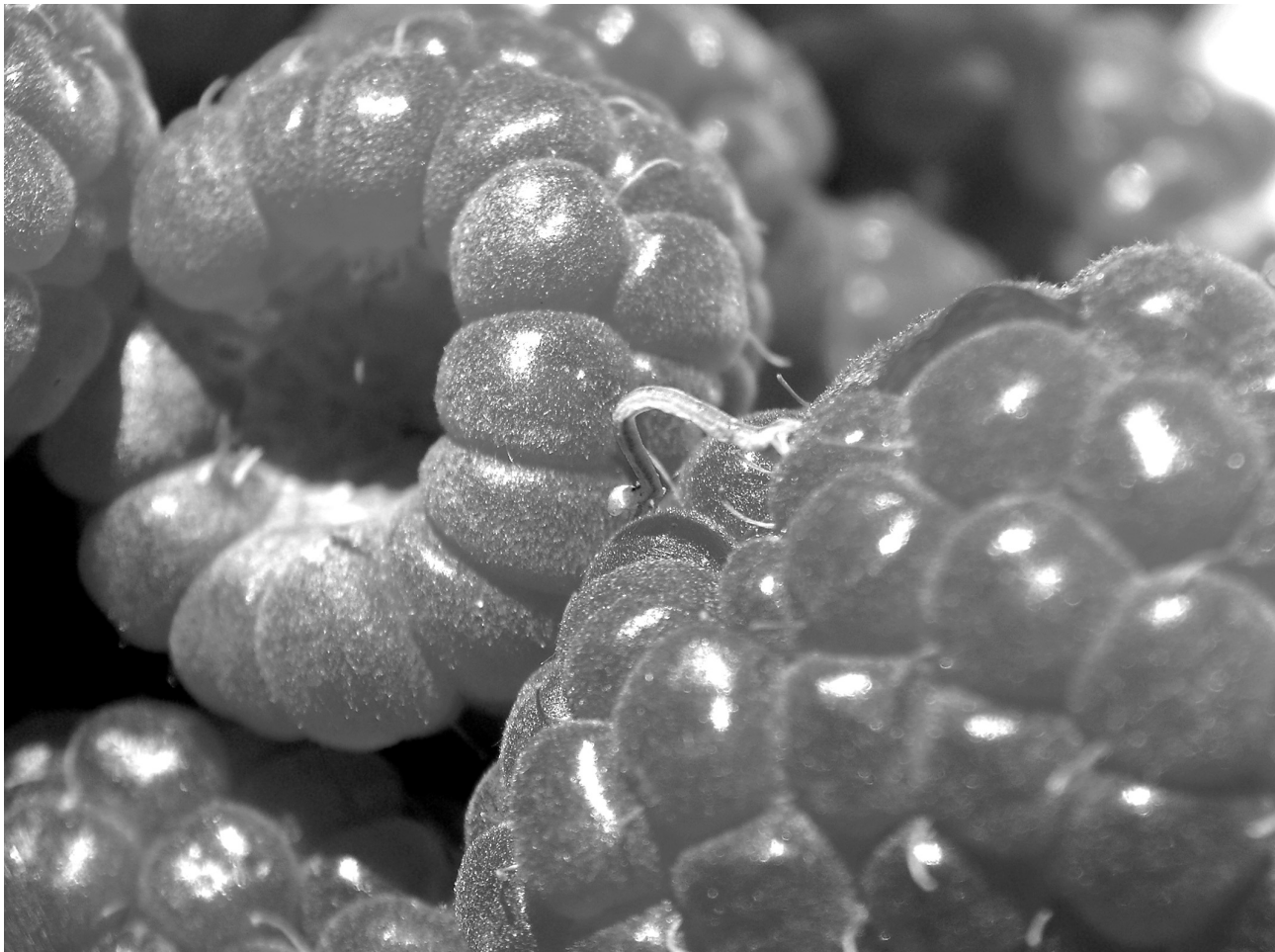
#### Promotion in the marketing channels

The position and the role of promotion are very important. The promotion (as a marketing mix instrument) is efficient if the other instruments (product, prices, sales channels) function adequately. For example, if by its properties an agricultural produce is below the market criteria (e.g., the price is too high, the sales channels inefficient), these flaws cannot be compensated by the promotion, so the promotion will not be as efficient as it is planned.

It is important to know that the raspberry and raspberry products of Jugprom, d.o.o and of the Arilje Cooperative are meant primarily for export buyers. The communication with this category of buyers differs from that with the end buyers. Having in mind all the promotional elements (economic advertising, personalized sales, sales improvements, public relations) we can say that Jugprom d.o.o. implements the sales

promotion. In this field the company takes part in FAIRS, CONGRESSES. For these purposes the company has prepared a promotional catalogue, since it communicates mostly with the export buyers. Economic advertising is not the dominant kind of mass communication in the area of frozen fruit placement. Personalized sales concentrate on direct introducing the buyers to the plantations, to the production process, and to the quality of the produce on offer, which is what the Jugprom d.o.o. cold-storage plant does. One aspect of communication and presentation could be also a web-site on the Internet.

A short marketing channel that entails a direct contact contributes to making a higher impact upon the buyers, as well as to building a longer-term collaboration, and accessing significant sources of information along the way. The company uses the telephone and the Internet facilities to contact the mediators, and also uses the “medium“ in addition to short marketing channels. The Jugprom d.o.o. company, Leskovac, uses the short marketing channel, since it has its own rolling plant consisting of 6 trucks of 25 tons transport capacity and the cold-storage plant. This allows for the transport to be conducted smoothly, both in case of purchasing from the producers to the cold-storage plant and in case of the finished produce transport to end buyers throughout Europe.



Promotional activities for the Arilje Cooperative are identical, and as both cold-storage plants sell the raspberry and raspberry produce to industrial buyers, the strategy of promoting the produce at fairs, congresses and promotional catalogues is satisfactory from the promotional standpoint. Since the sales in both plants are created through the stock system, the strategy of raspberry produce promotion proves to be a relevant strategy in this field as well.

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