HOW CAN THE BULGARIAN DAIRY INDUSTRY BENEFIT FROM THE OPPORTUNITY TO EXPORT BULGARIAN MILK AND MILK PRODUCTS TO CHINA? Aleko Popov: 13022253, ES3-3b



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## **Executive Summary**

The following report is a feasibility research and serves as an initial guideline to Bulgarian dairy companies in relation to the possibility to import Bulgarian dairy products into the Peoples' Republic of China. The document describes possible opportunities for Bulgarian dairy processors related to the future lift of restrictions for Bulgarian dairy products by China.

The need for Bulgarian dairy processors to reorient their export activities comes from a combination of recent developments in the dairy sector in Europe and the long lasting problems of the Bulgarian dairy industry. The former include the removal of dairy quotas in the European Union and the Russian embargo that have caused inflow of foreign production in the Bulgarian market while the latter include the low productivity of the Bulgarian dairy farms, high production costs and discrepancies between the quality of the production and the EU requirements.

The Bulgarian dairy sector is not in a favourable position. Productivity is around 60% of the European average which is a major issue. In addition, Bulgarian dairy processors experience problems with milk deliveries due to the fact the production of Bulgarian dairy farms is usually more expensive compared to the one their European counterparts provide on the Bulgarian market. Quality is also an issue as large amounts of extracted milk falls into 2<sup>nd</sup> and 3<sup>rd</sup> category which is not allowed to be exported outside the country. Nevertheless, in recent years more and more Bulgarian farms have been approved for production of 1<sup>st</sup> category milk and small dairy farms are being replaced with larger medium-sized ones which are significantly more productive. Lastly, Bulgarian dairy market is rich in variety of products that are unique in the region not only with their taste but also the benefits they provide for the human health.

The Chinese market for dairy products has been expanding extensively since the 1990s. Especially in urbanized areas consumption of dairy products is on the rise, therefore the demand for this type of products is constantly increasing and is expected to continue increasing in the future. Nevertheless, there are many important factors that would make extremely difficult for Bulgarian dairy processors to import independently into the country. The biggest concern is related to the taste preferences of the Chinese population. The most differentiated and unique Bulgarian dairy products such as the yogurt and white brined cheese do not fall into the category of preferred products for Chinese citizens due to their saltiness and sour taste. In addition, competition on the Chinese dairy market is rather intense and in order to compete successfully via marketing and distribution tools high amount

of capital would be needed. Last but not least, the whole import process is quite complicated and takes time and resources which would be a major difficulty for the relatively small and inexperienced dairy processors.

Therefore, the report has concluded that the best possible option for export would be through cooperation with the Chinese government and Chinese companies. As milk is a product that Bulgarian dairy processors can provide and is preferred and highly consumed by many Chinese citizens it would be the desired option for export. Furthermore, such cooperation needs to follow certain parameters on how it should be done in order for the Bulgarian dairy producers to be capable of exporting their production. It is advisable to exclude the possibility for transportation of the production all the way to China by Bulgarian companies and instead to be organized with the assistance of Chinese distributors which would take care of the distribution and marketing of the milk in the country. Bulgarian dairy companies and the Bulgarian state could assist the marketing activities by participating in trade forums in China and promoting Bulgarian dairy production in fairs and free trade zones there. In such scenario the Bulgarian dairy processors need to make sure and if needed to cooperate with each other in order to meet the potential demand that would allow higher profits due to economies of scale. In conclusion, this export opportunity would support the strengthening of the Bulgarian dairy sector in its aim to become more productive and profitable.

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## Introduction

The past several years have been extremely difficult for dairy farmers in Europe including the ones in Bulgaria. Recent developments such as the trade sanctions between the Russian Federation and the European Union and the removal of quotas for dairy products has caused price fluctuations of milk and milk products that has negatively affected many European dairy farmers. The situation in Bulgaria was exacerbated by the poor state of the dairy industry. This is due to past problems that have not been resolved such as the low subsidies for Bulgarian farmers in comparison to their EU colleagues, their incompetent and ill-usage, the low productivity of the dairy farms but also from the inflow of foreign EU dairy foods that are in most cases less expensive and sometimes of a lower quality.

In the past few months the Bulgarian government has worked in close cooperation with its Chinese colleagues in order to obtain official permission provided by the People's Republic of China to import Bulgarian dairy products into the country. The only thing that remains to finalise this process and that lacks so far is that the Bulgarian Ministry of Foods and Agriculture issues a certificate proving that the quality of the Bulgarian dairy products conforms to the standards set by the Chinese authorities. Therefore, Bulgarian dairy processors that are involved in the export of their production abroad could benefit from the lift of the mentioned regulations and enter the Chinese market.

The purpose of this report is to serve as a primary guideline or in more concrete words- to help such exporters (or potential exporters) with information on the potential strengths of the Bulgarian dairy industry they could use, the potential opportunities the Chinese market presents, a step-by-step explanation on the long and complicated import process into the country of China and finally elaborate on a possible strategy that could be a successful one for this type of exporters. The report is in its core a feasibility research written from the point of view of the Bulgarian Association of Dairy Processors and therefore, will be made available for the organisation to use in order to assist the Bulgarian dairy processors in their export strategy.

The report is divided into chapters that elaborate on different interconnected issues which will serve to answer the main research question which is: How can the Bulgarian dairy industry benefit from the opportunity to export Bulgarian milk and milk products to China? The document is divided in a series of sub-questions starting with an explanation of the reasons why export to new markets is needed for the Bulgarian dairy processors. It is followed by a review on the Bulgarian dairy sector as a whole. It later discusses the whole import process

of dairy products into China and gives detailed data on the Chinese dairy sector. The report then analyses the information in the results section in order to elaborate on the strengths and weaknesses of the Bulgarian dairy sector and the opportunities and threats of the Chinese one. It then presents a possible strategy for success and gives final conclusions and recommendations

## Methodology

#### **Research Strategy**

The research paper that has been written was executed as a combination of qualitative and quantitative research methods. Both methods have been used in order to acquire the most accurate and suitable information in relation to the main subject and the sub-topics of the paper. This combination of methods has given the study an opportunity to go more in depth in the main problem presented in order to analyse it successfully and elaborate on an appropriate conclusion. It is fundamental to bear in mind that for the completion of this report mainly secondary data has been used due to some issues that have arisen when gathering primary data. This will be further discussed in the following paragraphs. Therefore, as what has been described so far, the following text that is part of the methodology section illustrates the research methods used in order to carry out the final analysis successfully.

#### Data Collection

#### Primary Data

The successful completion of the reports required gathering primary data by doing both qualitative and quantitative research. It resulted in two interviews, a field research and a questionnaire. The first formal conversation was with an employee of the Bulgarian Association of Dairy Processors. Unfortunately it was not possible to conduct an interview with the director of the organization. The next interview was conducted with the marketing manager of a Bulgarian dairy processing company (Kremio EAD) which was extremely useful for the research. The field research was a half-day experience in a medium-sized farm in order to better understand the production process in the smaller dairy farms.

The quantitative research was a questionnaire that was completed by 18 Chinese citizens that are currently living in Bulgaria and its purpose was to evaluate the taste preferences of Chinese people in regard to the Bulgarian dairy products. The questionnaire was useful in gathering information about their preferences but several difficulties arose that did not permit to gather data from at least 50-60 individuals more. The main difficulty was that these people did not speak Bulgarian very well which made it difficult for them to understand some of the

questions. The second obstacle was to be able to persuade them to participate in the questionnaire due to the fact that Chinese citizens in Bulgaria, even though some of them have been living in the country for more than a decade, live in closed communities and are suspicious and reluctant to participate in such questionnaires. Therefore, the questionnaire could not extract the most accurate and complete information.

#### Secondary Data

In order to successfully conduct research on the main question and the sub-questions, data from relevant online sources has been gathered. Generally, it can be divided in two sections. The first information concerns documents related to the Bulgarian dairy industry and the second one- documents related to the Chinese dairy sector. The former section could be divided in data that has been collected form reports and from statistical sources from Bulgarian institutions such as The Bulgarian Association of Dairy Processors and The Bulgarian Ministry of Foods and Agriculture. The latter organization has been most useful as the department called "Agrostatistics" has a variety of statistics on the Bulgarian dairy sector. Two of the three main reports that have been used were from Bulgarian government institutions analysing the Bulgarian dairy sector. The third one was written from a Bulgarian for the USDA Foreign Agricultural Service and also contained important information.

It has been fairly easier to acquire secondary data on the Chinese dairy sector. On the matter of importing Dairy products into the People's Republic of China a document from a European Union organization- EU SME centre, has been extremely useful, providing an indepth examination of the whole import procedures of dairy products into the country. Another three reports were used that presented information and analysis on the dairy sector in China: Institute of Agriculture and Trade Policy, DSM Food Specialties, MarketLine and Biomin.

This type of methods in regard to the secondary data were chosen as the data gathered was sufficient to obtain information in the first place about statistics and tendencies in the Bulgarian dairy sector and second- about the main characteristics of the Chinese dairy sector.

#### Analysis

The analysis section resulted in examination and evaluation of all the information that has been gathered and included in the results section. It breaks down the data to formulate two sections about the strengths and weaknesses of the Bulgarian dairy sector and the threats and opportunities of the Chinese one. Nevertheless, not all the data from the results section has been used to conduct the analysis but only such that has been most relevant to the main research question.

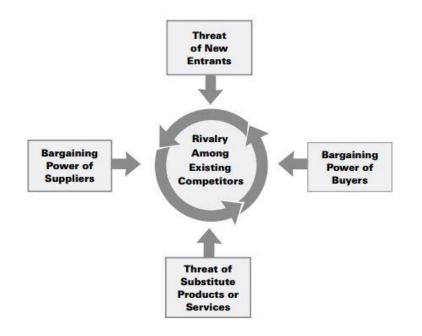
## Theoretical Framework

A correct definition of "Dairy Industry" is needed in order to comprehend the scope of this report. According to WORLD BANK GROUP, *"The dairy industry involves processing raw milk into products such as consumer milk, butter, cheese, yogurt, condensed milk, dried milk (milk powder), and ice cream, using processes such as chilling, pasteurization, and homogenization."* (WORLD BANK GROUP, 1998). However, for the purpose of this report the production of ice cream is not included in the research due to reasons related consumption habits for ice-cream products and the small scale of production of this product by Bulgarian processing plants.

A substantial part of this report will be presented as a detailed SWOT analysis. According to, T. Hill and R. Westbrook, *"The work of Kenneth Andrews has been especially influential in popularizing the idea that good strategy means ensuring a fit between the external situation a firm faces (threats and opportunities) and its own internal qualities or characteristics (strengths and weaknesses)."* (Hill & Westbrook, 1997). Therefore, the results section will present the internal characteristics of the Bulgarian dairy industry and the external situation of the dairy sector in China, thus resulting in a relevant SWOT analysis of the industries. By doing this a coherent analysis will be presented that will lead up to a logical conclusion for the Bulgarian dairy processors.

To successfully analyse an industry an appropriate method is required. As stated by Michael Porter in his 1979 article,

"In essence, the job of the strategist is to understand and cope with competition. Often, however, managers define competition too narrowly, as if it occurred only among today's direct competitors. Yet competition for profits goes beyond established industry rivals to include four other competitive forces as well: customers, suppliers, potential entrants, and substitute products. The extended rivalry that results from all five forces defines an industry's structure and shapes the nature of competitive interaction within an industry." (Porter, 1979).



## The Five Forces That Shape Industry Competition

Fig.1. Title: The Five Forces That Shape Industry Competition. Source: Harvard Business Review, January 2008

Therefore, this analysis was made to evaluate the Chinses dairy sector relevant to the Bulgarian dairy industry. However, the Bulgarian dairy industry itself has been examined by looking into different aspects of the industry with the assistance of data in the form of reports and statistics provided by relevant Bulgarian government institutions.

### Results

## Need for Reorientation of the Export Activities

In the past few years there have been two major developments in the dairy sector in the European Union that have negatively affected the Bulgarian dairy industry. This includes the Russian's Federation countermeasures in regard to Union's sanctions against it and the lift of production quotas in the EU in regard to production of dairy foods.

According to Marcin Szczepański, in early August 2014 Russia responded to trade restrictions imposed by the European Union by *"prohibiting (or limiting), for a period of one year, the import of agricultural products, raw materials and food originating in countries that have imposed sanctions against Russian entities or individuals."* (Szczepański, 2015, p. 3). In this list of agricultural products the majority of dairy foods<sup>1</sup> and dairy derivatives were also included.

Another development in the dairy sector in the European Union was the lift of production quotas for dairy products on the 31<sup>st</sup> of March 2015, according to the European Commission's web site (European Commission, 2015). As stated by Nigel Hunt before the 1<sup>st</sup> of April individual and national quotas for milk products existed. Therefore, if a company exceeded its set production ceiling it had to be charged with a levy but only if the national quota was also exceeded (Hunt, 2015).

The two aforementioned factors have negatively affected the uncompetitive Bulgarian industry in several ways. Firstly, there is the direct effect of the Russian sanctions which has resulted in the impossibility for the Bulgarian dairy exporters to import their production in the Russian Federation. For instance, according to data gathered from Eurostat and included in a briefing by the European Parliament, from 600,000 euro in the period August 2013- April 2014 exports were virtually non-existent in the period August 2014- April 2015 (Szczepański, 2015, p. 2). Moreover, there was a peak in dairy exports in 2013 (over 4 million USD), according to a report made by the Bulgarian Association of Dairy Producers, after which exports diminished due the conflict between the Russian Federation and the European Union (Bulgarian Association of Dairy Producers).

However, the indirect effect caused by the sanctions imposed by Russia is far more harmful not only to the Bulgarian dairy exporters but to the Bulgarian dairy producers as a whole. The

<sup>&</sup>lt;sup>1</sup> Dairy includes fresh milk (CN 0401), concentrated milk (CN 0402), buttermilk yoghurts and other fermented milk (CN 0403), whey (CN 0404), butter (CN 0405) and cheese (CN 0406).

reason for this is that dairy exporters from countries such as Finland, The Netherlands, Germany and Sweden among others, who are the biggest exporters of dairy products to Russia, are the ones who were most directly harmed from the sanctions. Therefore, what currently happens is that the large Russian market has been lost which causes overproduction, especially when the dairy quotas were removed in the spring of 2015, which drives milk prices down. As a result, Bulgarian dairy producers cannot compete with the lower prices of foreign production. As stated by Dimitar Zorov, chairperson of the board of managers of the Association of the Bulgarian Dairy Processors, a major reason for the low competitiveness of Bulgarian dairy farms is the fact that the old member states of the European Union receive 50% more subsidies than their Bulgarian colleagues (Zorov, 2015, p. 2). Furthermore, as stated by Spas Panchev, chairperson of the Agrarian Union "Alexander Stamboliiski", although Brussels has assured that the subsidies for Bulgarian dairy farms would be increased to the level of their European competitors by 2016 at the latest and the numerous tries of the Bulgarian Ministry of Agriculture and Foods to change this policy there is still no development on the matter (Panchev, 2016). This has resulted in Bulgarian milk products being uncompetitive on the European but also Bulgarian market for that they cannot afford to lower the prices the same way European dairy producers can.

The internal (Bulgarian) market was also mentioned because there is a recent trend that foreign milk products enter the Bulgarian market and compete with Bulgarian products but at much lower price. In many occasions raw foreign dairy products are used by Bulgarian Dairy processors in order to decrease production costs. According to a document by the Bulgarian Association of Dairy Processors in regard to the negative effects of the Russian embargo, there has been a significant increase in analogical dairy products from abroad being offered at much lower prices. In the report the opinion of Tsanko Tsanev, the owner of a firm in business with dairy products, is presented and he states that the cheap imports from Europe are devastating for the Bulgarian dairy farms. His company lost around 25,000 euro only for the month of August 2014 (Bulgarian Association of Dairy Processors, 2014, p. 4).

In conclusion, there are several factors that harm the Bulgarian dairy sector. However, at this moment it is extremely difficult for Bulgarian dairy farms to compete with the inexpensive dairy products that come from abroad. An agreement with Brussels in regard to the raise of subsidies for Bulgarian dairy products has not been reached; therefore, another solution in accordance with the specific strengths, weaknesses, know-how and activities of Bulgarian dairy producers needs to be found. That is why the Bulgarian Association of Dairy

Processors advises that exporters need to reorient their activities towards new niche markets in order to combat the difficulties the current situation of the European dairy sector presents (Bulgarian Association of Dairy Processors, 2014, pp. 2,3).

## Chinese Import Regulations

As discussed in the previous sections it is advisable that Bulgarian dairy producers try to find niches in foreign markets in order to neutralize some of the negative effects caused by the Russian sanctions against the European Union and the removal of dairy quotas in the community.

In the past more than 16 years, according to international trade data from Eurostat, Bulgarian exports of dairy products to People's Republic of China have been non-existent (Eurostat, 2016). The reason for this have been restrictions from Chinese side on Bulgarian exports. According to a document from the Bulgarian Export Portal, the import of foods from vegetal and animal origin without or with low ration of industrial processing in China is strictly forbidden unless there is a bilateral agreement on sanitary and phytosanitary matters (Ministry of Economy, 2014).

However, after a statement made by Desislava Taneva, the Bulgarian minister of foods and agriculture, in January 2016 Bulgaria has been approved to export dairy products to China starting from the second half of this year at the latest. This has been achieved after the Bulgarian delegation visited People's Republic of China in October 2015 and after the inspection of Bulgarian dairy farms in regard to the quality of their production. The only thing that needs to be completed in order for the Bulgarian dairy producers to start exporting to China would be the approval of the certificate that guarantees the quality of Bulgarian milk (Bulgarian Food Safety Agency, 2016).

The fact the restrictions for Bulgarian dairy products will most likely be lifted presents a great opportunity that should not be neglected, quite the opposite should be explored and could result in the creation of a niche for Bulgarian dairy products in People's Republic of China.

## The Bulgarian Dairy Sector

In order to successfully complete the report the strengths and weaknesses of the Bulgarian dairy industry should be examined. This will result in an evaluation of the strengths that could be utilized in the Chinese market and the weaknesses that are relevant to the Chinese market and cannot be omitted when taking the decision to export. In order to obtain

information about these two characteristics an examination of the situation of the Bulgarian dairy sector in the past several years will be presented. From the gathered information strengths and weaknesses will be located and later analysed.

#### General developments

After the incorporation of Bulgaria into the European Union, the dairy sector in Bulgaria has been influenced by both the free market, the subsidies and the new regulations imposed on the dairy producers by the Union.

However, these factors have not influenced the quantity of milk produced in the country. According to several different sources, the milk production has been relatively steady varying between 1,000,000 and 1,200,000 metric tons in the period 2007-2014. (Ministry of Foods and Agriculture, 2013, p. 2) (Boshnakova, 2015, p. 6)

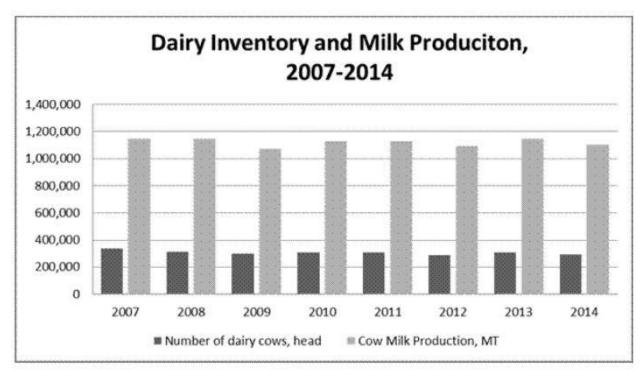
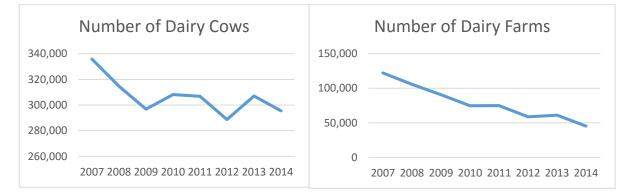


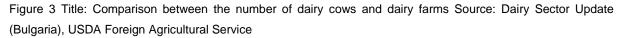
Fig.2. Title: Dairy Inventory and Milk Production 2007-2014. Source: Dairy Sector Update (Bulgaria), USDA Foreign Agricultural Service

From the 1,100,000 metric tons of milk that have been obtained for 2014, nearly half (516,067 MT) have been processed in order to produce derivatives such as yogurt and yellow cheese, as stated by Yavor Pindev. In addition, for the two years prior to that there has been a slight decline of milk used for processing, around 16,000 MT (Pindev, 2015, p. 1).

As for the number of the cattle, a negative trend could be noticed in the number of milk cows throughout the years. As stated by Mila Boshnakova, in the period 2007-2014 the number of milk cows have decreased from 335,900 to 295,400, a 12% decrease for the seven-year period.

What deserves to be mentioned as well is how the number of dairy farms has changed in the past decade in comparison with the number of milk cows. If the latter stays relatively stable at around 300,000, although there is still a decrease, especially the first year after Bulgaria's incorporation into the EU, the former number gradually decreases resulting in the number of dairy farms being around 45,000 in comparison to 122,000 in 2007. This means that the decrease in dairy farms is not consistent with the decrease in the number of milk cows as it can be observed on the following graph. (Boshnakova, 2015, p. 5)





The reason for this could be the changing structure in the Bulgarian dairy industry towards centralization and growth of big and medium-sized farms in regard to the number of milk giving cattle in their possession. Nevertheless, the productivity still remains very low. According to a report by the Institute for Agricultural Economy Bulgarian dairy cows give 60% of the average milk production in the European Union (Ivanov, Kirovski, & Stoychev, 2014).

As for the other types of animals, according to the Bulgarian Ministry of Foods and Agriculture, for the year 2013 there have been around 1,000,000 milk giving sheep, 245,000 milk giving goats and 6,000 milk giving buffalos with an increase in all three categories for the period 2012-2013 (Ministry of Foods and Agriculture, 2014, p. 2).

Moreover, dairy production is usually associated with cow milk, however, in Bulgaria there is also a significant number of sheep that are bred for milk production and to a smaller extend goats and buffalos. In comparison, according to statistics from the Bulgarian Ministry of Foods and Agriculture, 88% of the milk produced in 2012 comes from cows while for the EU this number reaches 98% meaning that there is still significant production of mostly sheep but also goat and buffalo milk. Nevertheless, for the period 2011-2012 there has been significant reduction in the production of the not so common goat and buffalo milk with 13.3% and 8.9% respectively (Ministry of Foods and Agriculture, 2013, p. 2). Therefore, the following 2013 comes to a surprise as there is rise in the production of all types of milk mostly noted in buffalo and sheep milk with an increase with 8% for both types of milk (Ministry of Foods and Agriculture, 2014, p. 2).

#### Structure of the sector

This section is going to discuss the structure of the sector including information about the size of the dairy farms and milk processing factories but it is also going to include data about the biggest players in this industry and what is the role and activities of suppliers.

According to Mila Boshnakova, as for 2014, 85% of the dairy farms have less than 10 cows and there are none that have more than 100 cows. In more detail, Boshnakova states that,

"In 2014 the number of dairy farms declined by 26%, and the dairy cow inventory decreased by 3.8%. The reduction was concentrated in small farms with up to 10 dairy cows. The number of farms with 1-2 cows decreased by 33%, and the inventory by 30%; for farms with 3-9 cows, the respective reductions were by 12% and 11%. On the other hand, there was growth in the category of commercial farms, especially those with over 50 dairy cows. Their number in 2014 was 9.1% higher and they raised 11% more dairy cows. Similarly, the largest farms also progressed well with 6% more farms and 9% more cows in this category. As of today, 7.4% of all farms have over 20 dairy cows and account for 60% of dairy inventory." (Boshnakova, 2015)

This leads to the conclusion that the structure in the Bulgarian dairy sector is changing with noticeable reduction in the number of very small and small sized dairy farms. On the contrary, medium-sized and large enterprises experience raise in numbers. This is supported by the fact the average number of dairy cows per farm went up from 2.7 in 2007 to 6.5 in 2014 (Boshnakova, 2015, p. 3).

A large part of the milk that is being extracted goes into dairy processing plants where it is converted in all types of dairy products such as milk, yellow cheese, white cheese, yogurt and etc. According to Yavor Pindev, for 2014 the number of such enterprises was 216 as 161 of these were trade partnerships and 43 were sole proprietorships. For 2014 they processed 43% of all the milk produced for that year (Pindev, 2015, p. 2).

An additional important part of the structure in the dairy sector in Bulgaria is the supply chain. There are three ways in which the dairy processors can acquire the raw material needed for the production of dairy products. First, they may produce their own milk, second, they may purchase raw material from Bulgarian dairy farms and last, they can rely on using imported milk and milk products from abroad.

It is important to discuss the situation regarding the local, Bulgarian milk deliveries. As stated by Mila Boshnakova,

"The biggest concern for the industry has been the steep decline in milk deliveries for processing. While cow milk production shrunk by 4% between 2007 and 2014, milk deliveries had a pronounced decline of 34%. The reasons for this trend are complex and related to the introduction of EU milk quality and hygiene requirements, inconsistent milk quality among farms, high milk collection cost for a big number of smaller farms, lack of dairy farm coops and collection points, and market demand for consistent, quality dairy products. In 2014 cow milk deliveries continued to decrease (by 3.3%) and accounted for 45% of supply. Industry data for January-April 2015 shows that milk deliveries were at 280,000 MT, 7.4% less compared to 2014." (Boshnakova, 2015, p. 6)

However, she also mentions the possibility about the existence of a black market for selling milk which was also confirmed by Yordan Stoyanov, the marketing manager of a Bulgarian dairy processing plant- Kremio EAD. To add to this statement she also comments that to overcome the decrease in milk deliveries there has been a raise in the import of less expensive but also lower quality substitutes such as powder milk, concentrated and non-concentrated milk, whey and cream.

#### **Product Quality Requirements**

After the incorporation Bulgaria into the European Union the milk produced in the country needs to correspond to the requirements imposed by the Union. According to Mila Bishnakova, "As of November 2015, the number of dairy farms complaint with the EU milk quality standard was 3,980, with a total inventory of 157,000 dairy cows (53% of all dairy cows)." (Boshnakova, 2015, p. 2) This means that there is a correlation between the size of the farms and the quality of their milk with the larger farms being more complaint to milk standards. Therefore, Bulgarian dairy processors need to make sure that they purchase or produce milk corresponding to EU standards even though an agreement has been reached between the Republic of Bulgaria and People's Republic of China regarding Bulgarian milk quality. In an interview, the marketing manager of a Bulgarian dairy processing plant, Yordan Stoyanov, has stated that so far his biggest concern has been the quality of the milk that goes out of some of the Bulgarian dairy farms. He mentioned that only in Bulgaria it is allowed that II and III category milk, which does not correspond to the common EU regulations for quality, is allowed to be sold in the market. This, alongside with the low productivity of the Bulgarian dairy farms has forced the company Kremio EAD to also

purchase milk from abroad (Hungary, Poland, Germany) which according to Yordan Stoyanov is less expensive and of a higher quality (Stoyanov, 2016).

#### Dairy companies active in the Bulgarian marketplace

As stated before, there are 216 dairy processing plants in Bulgaria for 2014 as nearly <sup>3</sup>/<sub>4</sub> of them are companies that process 93.4% of the milk that goes into this type of plants. According to I. Ivanov and T. Ignatova, for the period 2011-2012 the companies with the biggest revenues from sales were "Danone Serdika AD", "Obedinena mlechna kompania AD" and "Tirbul EAD" with 87.6, 56 and 55.3 million leva respectively (Ivanov & Ignatova, 2014, p. 97). The latter was even awarder the best Bulgarian exporter for 2014, as stated in the website of the Bulgarian Associacion of Dairy Processors. The rest of the 17 largest dairy companies according to revenues are as follows:

No	Company	City	Revenues (sales) in:	
2012			2012	2011
1	Danone Serdika AD	Sofia	87,618	83,821
2	Obedinena mlechna kompania AD	Plovdiv	56,021	51,365
3	Tirbul EAD	Sliven	55,340	50,109
4	Meggle Bulgaria EOOD	Shumen	35,827	33,111
5	Kodap EOOD	Sofia	28,932	30,007
6	Mandra Riltci EOOD	Sofia	20,613	16,011
7	Bi Si Si Handel OOD	Veliko Tarnovo	20,572	17,465
8	Zorov 91 Dimitar Zorov ET	Sofia	17,112	14,768
9	Em Dzhey Deriz EOOD	Sofia	16,497	17,586
10	Bor-Chvor EOOD	Plovdiv	16,159	15,966
11	Mizia Milk OOD	Targovishte	14,230	16,188
12	Zhosi OOD	Sofia	13,430	12,833
13	Cheh 99 OOD	Veliko Tarnovo	12,386	10,061
14	Filipopolis RK OOD	Plovdiv	12,280	9,922
15	Serdika Bulgaria AD	Sofia	12,186	16,748
16	Elvi OOD	Velkovtsi - Gb	11,696	8,915
17	Vakom MP OOD	Sofia	11,605	11,105
18	Milki-luks EOOD	Byala Cherkva	11,001	9,234
19	Makler komers EOOD	Sofia	10,782	8,947
20	Polidey-2 OOD	Karlovo	10,554	10,026

Table 1. 20 leading companies in the dairy sector according to revenues in sales (2011-2012), thousand leva (companies approved for export to the EU and third countries are marked in red)

Nevertheless, some of these Bulgarian companies are partially owned by foreign firms as is the example of Danone Serdika AD which is owned by the French leader in dairy products-Danone, and only operate in the Bulgarian market as their parent companies come from abroad and their subsidiaries' prime objective is not related to export activities. On the other hand, Tirbul EAD, which is owned by the Greek company Tyras, has very strong presence on the foreign markets and is export oriented. (Panayotova, 2014)

Therefore, not all of the best performing dairy companies in Bulgaria are export oriented. Nevertheless, according to the List of approved establishments for intracommunity trade with food products of animal origin, covered by Annex III of Regulation (EC) No 853/2004 of the European Parliament and of the Council, SECTION IX, currently there are 269 enterprises that are approved for export to EU and third countries from Bulgaria (Bulgarian Food Safety Agency). In addition, it is important to note that the vast majority of these companies are registered and operate in small villages which gives the notion that these enterprises do not possess a lot of capital and resources to produce vast quantities of dairy production for massive export activities. The majority of these firms are probably small and medium-sized dairy producers and processors that export highly differentiated production such as bio or natural products or such that are not of high circulation in the foreign markets such as the Bulgarian yogurt, the white brined cheese or the goat and sheep dairy products.

#### Product variety and characteristics

As mentioned before, the cow milk is the main type of milk produced in Bulgaria. In regard to milk processing, according to Yavor Pindev, the use percentage of cow milk is even higher-93%, for 2014. Nevertheless, for the period 2012-2014 there has been an increase in sheep (4.9% from total), goat (1.5% from total) and bison milk (0.6% from total) with 4%, 12.6% and 11.7% respectively. As Pindev states, there are three major products being produced after processing the milk. Around 133,000 tons is the production of different types of yogurts (12,500 tons of which are fruit yogurt deserts) for 2014, followed by 77,000 tons of different types of cheese (51,000 tons for white brined cheese "sirene" and 20,000 tons of yellow cheese "kashkaval") and 65,000 tons of packaged milk for drinking. An interesting fact is that 7.9% of the produced cheese for 2014 has been made by sheep milk and 5.1% by buffalo milk with the latter having a staggering annual increase of 61% reaching 4000 tons for 2014 (Pindev, 2015, pp. 1,2,3).

In regard to milk's intrinsic qualities there is a difference between cow, goat, sheep and buffalo milk. For example, according to a report made by the Bulgarian Industry Association, in comparison to cow milk, goat milk contains higher percentage of calcium, iron and cobalt. As for sheep milk it has more proteins, fat, calcium, phosphorus, cobalt and vitamins form the B-group. In addition, it is very rich in replaceable and irreplaceable amino acids. Finally the

buffalo milk contains a higher quantity of proteins, fats, minerals and vitamins (Zhelyazkov, Apostolova, Tolova, Apostolov, & Boykov, 2011, p. 60).

In regard to the characteristics of certain Bulgarian dairy products the Bulgarian yogurt takes the lead. According to the website Lactobacillus Bulgaricus, the Bulgarian yogurt,

"is undoubtedly the best and the healthiest of all dairy products that are available to consumers nowadays... Bulgarian yogurt comes under the general category of yogurts which contain live bacteria. For yogurt to be considered of the Bulgarian variety, it needs to be made with two specific starter bacteria, Lactobacillus delbrueckii subspecies bulgaricus (often simply called Lactobacillus bulgaricus) and Streptococcus salivarius subspecies thermophilus (often shortened to Streptococcus thermophilus)." (Bacillus Bulgaricus, n.d.)

In addition, it is extremely difficult to produce this type of yogurt outside Bulgaria as the bacteria Lactobacillus bulgaricus only thrives in the country. Finally, the benefits of the Bulgarian yogurt are also a strong point for the quality of the products. According to the company Bacillus Bulgaricus,

- "Yogurt is an excellent source of "good" bacteria that is needed in the digestive tract. Active live cultures are basically good bacteria that are necessary for the body to function at its best. These good bacteria prevent the growth of harmful bacteria that cause bacterial infections and diseases. Healthy levels of good bacteria also promote digestive health and boost the immune system.
- Yogurt strengthens the immune system and helps prevents tumour growth.
- Its high concentration of calcium also helps against osteoporosis and reduces cholesterol levels.
- It reduces the risk of high blood pressure.
- Active cultures help certain gastrointestinal conditions including lactose intolerance, constipation, diarrhoea, colon cancer, inflammatory bowel disease, H. pylori infection and many others.
- Bulgarian yogurt is organic yogurt and organic yogurt is an excellent diet food. Not only yogurt is nutritionally sound but it also makes you feel fuller faster. It is a good source of proteins too." (Bacillus Bulgaricus, n.d.)

Another interesting Bulgarian product is the Bulgarian brined cheese. As stated by Bintsis and Papademas, *"Most of these cheeses are dry-salted and then matured and stored in brine, and this salting is the main difference from the cheese varieties produced in northern European countries."* (Bindsis & Papademas, 2002, p. 113) Different types of white brined cheeses could be found in many Balkan countries, but they all have different texture, taste and their own unique characteristics. Some are quite popular such as the Greek feta cheese but others such as the Bulgarian "sirene" or the Cypriot "halloumi" are not known outside the borders of the countries they originate from. According to Bintsis and Papademas, the qualities of this type of cheeses are attributed to the microflora present in these products just like in the case of the previously mentioned product- the Bulgarian yogurt. (p. 113) Therefore, the intrinsic qualities of the Bulgarian white brined cheese are similar to the ones typical for the Bulgarian yogurt. In addition, as a food product it is rich in proteins, salts and vitamins (Stefanova, 2009, pp. 2,3). Moreover, according to a report made by the Bulgarian Industry Association, there is also a chemical compound- *S*-Methylmethionine, unofficially called vitamin U that is found in the Bulgarian brined cheese and which assists the work of the liver (Zhelyazkov, Apostolova, Tolova, Apostolov, & Boykov, 2011, p. 33).

In conclusion, the Bulgarian yogurts and white brine cheeses present their unique gustatory and health qualities that have the potential of finding new niche markets abroad.

# Chinese Legal Requirements and Procedures for Import of Dairy Products

Actually being able to enter and present its dairy products on the Chinese market is an indispensable factor for the successfulness of the export strategy of a company. China is a very large market but it also presents many difficulties and obstacles when it comes to importing dairy products into the country. According to a report made by Pablo Gracia, since 1<sup>st</sup> of May 2014 a new list of rules and regulations in relation to the import of dairy products entered into force. The two major changes were the requirement for registration of the plant that makes the products and for the need of a quarantine license (Gracia, 2014, p. 1). The document created by P. Gracia constitutes a guide regarding the legal framework of the procedure of importing dairy products into People's Republic of China and explains all the steps that need to be undertaken in order for a company to be successful in its export activities regarding dairy products into the Asian country.

According to Gracia, several major barriers to import of dairy products into China exist. Importers should bear in mind that these are not the only ones but the ones that are most likely to pose problems to export companies. The key barriers are as follows:

- "Requirement for a bilateral agreement and a shared health certificate between the country of origin and China. This is the first issue that the prospective exporter should check. If either the bilateral agreement or health certificates are not yet in place, it is not possible to export dairy products to China...
- Requirement for registration with the General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) (generic and specific). The online registration common to all food products for export to China is a simple procedure. However, the additional registration of dairy producing plants is quite the contrary, and ultimately depends on the Chinese authorities.
- Unstable, complex, and excessive regulation. As a result of several scandals that shook the country, the Chinese government approaches this market very cautiously.

This reactive approach makes it difficult for foreign companies to keep track of the increasing and ever-changing regulations affecting all aspects of the dairy products industry. It is unclear how the Chinese government will react should a new scandal affect either a local or foreign producer. China has several standards applying to milk, including: GB 19301-2010 "Raw milk", GB 19645-2010 "Pasteurised milk", GB 25190-2010 "Sterilised milk", GB 25191-2010 "Modified milk", GB 19302-2010 "Fermented milk", GB 13102-2010 "Evaporated milk, sweetened condensed milk and formulated condensed milk", etc. Moreover, these standards are not only concerned with the type of milk, but they also take into account aspects such as: GB 541333-2010 "Determination of specific gravity in raw milk", GB 541334-2010 "Determination of acidity in raw milk and dairy products", etc.

- Unclear implementation of new regulations. There is uncertainty surrounding how AQSIQ will implement the new set of rules coming into force during the first half of 2014. In the worst-case scenario, registration of dairy producing plants in the country of origin will require an onsite approval by Chinese technicians, after which the plant will be included in a "safe list". It is anticipated that the careful checks for infant formula that comprise part of current policy will remain in place. Milk attracts the second-largest number of random inspections of all consumer products. Cheese producing facilities, however, are not often inspected.
- Lack of consistency in the customs clearance procedure. The clearance procedure for entry ports can differ from one port to another. For quarantine purposes, the first time that a dairy producer uses an entry port, they are treated as a first timer, regardless of any successful history using other ports. For example, cheese importers have reported receiving different treatment when shipping to Shanghai or Tianjin. Cheese import checks are not usually so thorough. For instance, for imports of less than 100 kg of cheese, authorities will take 8-10 kg for quality inspection – around 10% of the total – even for a product that has previously been imported.
- Delays at customs clearance. Some importers have reported random and unjustified delays when trying to import products into China." (Gracia, 2014, pp. 10,11)

The second part of this section will examine all the steps necessary that an exporter needs to undertake in order to import its dairy production into the country. The following figure presents the major steps that are needed for the mentioned type import.

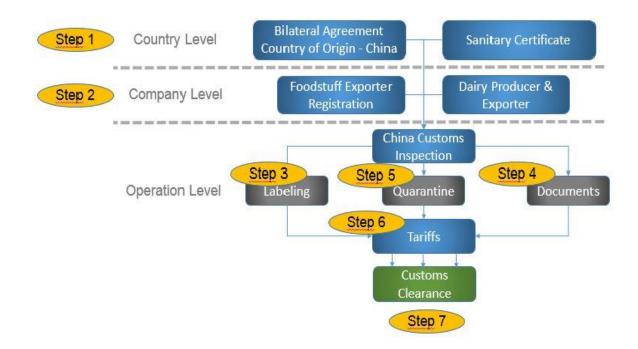


Fig. 4. Title: Step-by-step importation procedure Source: EU SME Centre

The first step is not going to be discussed in much detail as half of it is already completed. According to Chinese regulation procedures, an export company can import dairy products into China only if the country where the company conducts its product processing activities has signed a protocol with the government of People's Republic of China. As mentioned earlier, in the second half of 2015 there was a Bulgarian delegation in China after which Chinese experts assessed Bulgarian dairy plants and products and a protocol between the two countries was signed. The only thing that remains at this stage is the ratification of a health/sanitary certificate between China and Bulgaria. According to Decree N°152/2013 Article 7, the certificate will include information that:

"1) Raw materials used in the dairy products come from healthy animals;

2) The dairy products do not have and will not transfer animal epidemics during processing;

3) The dairy producer is under the supervision of the competent authority in the region where it operates; and

4) The dairy products are safe and fit for human consumption. " (Gracia, 2014, p. 14)

At this moment the Bulgarian Minister of Foods and Agriculture has assured that the ratification of the certificate will be completed during the first six months of 2016.

If both requirements from step 1 are fulfilled then the exporter can continue with its online registration as an exporter. According to Pablo Gracia, this step could be divided into two separate parts. First, a registration as a foodstuff exporter is needed. This is required in order to obtain customs clearance. In general, it is not complex but relatively simple and quick procedure (it should be completed in 5 days) (Gracia, 2014, p. 17). In order to complete the registration the exporter needs to go to the website <a href="http://www.aqsiq.net/importer-register.htm">http://www.aqsiq.net/importer-register.htm</a> and from there send an online application form which is going to cost 230 USD. However, as stated by the AQSIQ Association, *"The application form accessible from the site is currently only available in Chinese. To help Foreign Food Exporters companies who wish to register themselves, the AQSIQ Association has prepared an unofficial translation of the application form. To receive a copy, please email to <u>info@aqsiq.net</u>." (AQSIQ Association, n.d.) In addition, the application process takes around two weeks and the registration is valid for 3 years.* 

The second part of the registration process includes the registration of the foreign plants that are going to produce their dairy foods for export into China. This process is explained by the *Decree N°152/2013. Article* 7 that can be found in the Annex under Annex 1 (Gracia, 2014, p. 18). As a whole this process is more time consuming and involves more paperwork. According to Pablo Gracia, in order to initiate the process the exporting company needs to contact the relevant authority in the home country (in this case The Bulgarian Ministry of Foods and Agriculture) which is going to submit to AQSIQ a list of documents that includes:

*"1. "Overseas Production Enterprise Registration Application Form" (in English or Chinese): this document must be completed by the company seeking registration.* 

2. "Questionnaires on Registration of Foreign Plants Producing Dairy Products for Export to China" (in English or Chinese): this document must be filled out by the competent authority of the home country of the company seeking registration.

3. "Attachment to the Questionnaires – Production Regulation and Equivalency Form": this document must be filled out by the competent authority of the home country of the company seeking registration.

4. "Sample of Official Declaration of Compliance": this document must be filled out by the competent authority of the home country of the company seeking registration.

5. "List of Dairy Plants Applying for Registration Exception" (infant formula milk powder plants): this document must be filled out by the competent authority of the home country of the company seeking registration. " (Gracia, 2014, p. 19)

Once the documents have been submitted Chinese authorities may be required to inspect the plant site. Exporters should bear in mind that there is a deadline for the registration procedure. If the deadline has passed interested countries could apply for a regular registration within a new timeframe in agreement with Chinese authorities. It is advisable that exporters ought to contact the correspondent authorities (CNCA or AQSIQ) in order to obtain information about the registration periods. They usually take place once or twice a year (Gracia, 2014, p. 19)

According to Pablo Gracia, the following step is one of the most complicated ones for the exporter and it involves the labelling of the products. There are three main documents that explain all the requirements needed in regard to the labelling of the products and an additional one that involves mainly matters on the quarantine process but it also includes a paragraph about labelling. (Gracia, 2014, p. 20) Before conducting export activities into China it is advisable that the exporter informs himself/herself about all the details included in these documents. A brief summary on the most important requirements will be included in this document along with the list of the important documents with sources to their unofficial English translation. The documents that need to be examined by the exporter are as follows:

- GB 7718-2011 "Food Safety National Standards General Rules for the Labelling of Pre-packaged Foods" <sup>2</sup>
- GB 2760-2011 "Food Safety National Standards for the Usage of Food Additives"
- GB 28050-2011 "Nutrition Labelling of Pre-packaged Food"<sup>3</sup>
- AQSIQ No. 53-2013 "Implementation Measures for Inspection, Quarantine and Supervision of Imported and Exported Dairy Products"- there is only one paragraph regarding labelling and it could be found under Annex 2. (Gracia, 2014, pp. 20-23)

The reader must be aware that these are unofficial translations and the regulations themselves could change in the future.

The most important and main regulation is specified in GB 7718-2011 "Food Safety National Standards General Rules for the Labelling of Pre-packaged Foods". It includes the main requirements when labelling dairy products. 15 key requirements could be extracted from the document, some of which are quite basic but others tend to be more detailed and complex in nature. The label ought to include the following components:

"• Product name.

<sup>&</sup>lt;sup>2</sup> Unofficial English translation:

http://www.ccilc.pt/sites/default/files/general rules for the labeling of prepackaged foods gb7718-2011.pdf

<sup>&</sup>lt;sup>3</sup> Unofficial English translation can be found at: <u>http://www.agrichina.org/admin/kindeditor-4.1.2/attached/file/20130321/20130321195042\_3280.pdf</u>

- Place and country of origin.
- Establishment number.
- Production date.
- Expiration date or best before date.
- Storage temperature and conditions.
- Net weight (in English).
- Minimum font height is 2mm for packages under 50 ml/gr.
- Producer's name and address (in English).
- Production lot number (as defined by the exporter).

• Ingredients list: all ingredients must be listed in descending order of weight added during the process of manufacture or preparation of the food. Any ingredients constituting less than 2% of the food need to be listed, although not necessary in descending order.

• The label must be in standard Chinese characters (except for registered trademarks). In addition to Chinese characters, foreign languages corresponding to the Chinese characters may also be used (exceptions are the name and address of the manufacturer of the imported food; the name and address of the overseas distributor; website addresses). Foreign lettering must not be larger than the corresponding Chinese characters (except for registered trademarks).

• Where the largest surfaces area of a package or container of the pre-packaged food exceeds 35 cm2, the minimum size of the words, symbols, and numerals in the mandatory labelling information must not be less than 1.8 mm in height.

• If the package in a selling unit includes different kinds of food, and several independent packages can be sold independently, the labelling of each independent package shall be declared separately.

• In cases where the outer wrapper is readily opened, where labelling information can be distinguished through the outer wrapper, or where all or part of the mandatory labelling information can be clearly distinguished in the inner package or container, the same labelling information need not be repeated on the outer wrapper. Otherwise, the mandatory labelling information must appear on the outer wrapper." (Gracia, 2014, p. 21)

The next regulation concerns the use of additives in food products. According to mandatory standard GB 2760-2011 all additives, included in the process of production or manufacturing of the foods, must be indicated on the label in a descending order by weight. The names of the additives should be indicated in accordance with the regulation. However, the content of each ingredient ought not to be declared. If the reader wants to examine in more detail the general requirements for labelling food products it is advisable that he/she reads the document- GB 7718-2011 "Food Safety National Standards – General Rules for the Labelling of Pre-packaged Foods". Currently two documents exist which include the lists with additives permitted in food products<sup>4</sup> (Gracia, p. 22). Nevertheless, as stated by David Wan, numerous

<sup>&</sup>lt;sup>4</sup>Unofficial English translation of the list of the permitted additives can be found at the following links:

new additives have been approved for usage by the Ministry of Health (MOH) through Public Notice of MOH. If exporters would like to receive an official English translation of GB GB2760-2011, GB14880-2012 along with all lists of newly approved food additives they should follow the instructions in the paragraph "How to check if a food additive is legal in China" at the website of Chemical Inspection & Regulation Service<sup>5</sup> (Wan, n.d.).

According to Pablo Gracia, the standard regarding nutrition labelling of pre-packaged food is in force since January 2013. An unofficial English translation of the document was presented in footnote No.3 and the following picture presents the general requirements.

Article 3. General requirements

3.1 Any nutritional information presented on a nutrition label should be truthful, subjective, and not in any way deceptive. It should not exaggerate any nutritional or other functions.

3.2 Nutrition labels of pre-packaged food should be written in Chinese. If a foreign language is also used, its content should correspond to the Chinese. The foreign letters shall not be larger than the corresponding Chinese characters.

3.3 Nutritional components of food should be indicated in the form of a boxed table (except in exceptional circumstances), which can be any size and should be perpendicular to the baseline of the packaging. The title of the table should be "Nutrition Components Table".

3.4 The content of the nutrition component should be indicated as a special value, which may be obtained by calculation of raw materials or by product detection. The nutrient reference values (NRV) of the nutrient components are established in Annex A.

3.5 The nutrition label formats are specified in Annex B. Food companies can choose from these according to elements such as nutrition properties, packaging dimension and shape, etc.

3.6 The nutrition label should be indicated in the packaging of the minimum sales unit offered to consumers.

Article 4. Mandatory labelling items

4.1 Energy, core nutrients content value, and percentage in the NRV are mandatory for labelling pre-packaging foods. When other nutritional components are included, appropriate measures should be taken to highlight the energy contents and core nutrients.

Fig. 5. Title: General requirements on nutrition labelling of pre-packaged food Source: EU SME Centre

http://www.chilealimentos.com/medios/Servicios/Normas\_internacionales/Norma\_otros\_paises/China/ Standards\_China\_1.pdf

http://www.chilealimentos.com/medios/Servicios/Normas\_internacionales/Norma\_otros\_paises/China/ Standards for Uses of Food Additives Part II Beijing China Peoples Republic of 7 15 2011 U SDA.pdf

<sup>5</sup>http://www.cirs-reach.com/China\_Chemical\_Regulation/GB\_2760-

2011\_Food\_Safety\_National\_Standards\_for\_the\_Usage\_of\_Food\_Additives.html

The following step examines all documentation needed during the export-import process into China. A short list with the main documents will be presented. However, it is advisable that the exporter gets acquainted with all the relevant data in regard to exporting dairy products into China available at the Market Access Database that could be found on the official website of the European Commission (http://madb.europa.eu/madb/indexPubli.htm)

Document	Description	Language	Specific Form	Prepared By
Commercial Invoice	Document detailing the terms of the transaction	ENG or CHI	No	Exporter
Packing List	Document detailing the goods	ENG or CHI	No	Exporter
Registration of Foreign Exporters of Foodstuffs	Document certifying that the exporter has been registered as an exporter of foodstuffs with AQSIQ	ENG	Yes	Exporter
Certificate of Origin	Document certifying the origin of the goods	ENG or CHI	Yes	Exporter
Sanitary Certificate	Document certifying the infection- free origin of animal products	Any Language <sup>6</sup>	No	Exporter
Registration of Foreign Plants Producing Dairy Products	Document certifying that the plant producing dairy products has been successfully registered and approved by the CNCA	ENG or CHI	Yes	Exporter
Air Waybill, Rail Waybill or Bill of Lading	Document detailing transportation.	ENG or CHI	No	Carrier
Cargo Manifest	Document detailing the cargo goods	ENG or CHI	No	Carrier
Insurance Certificate	Document certifying that the goods have been insured	ENG or CHI	No	Insurance Company
Customs Registration	Document certifying that both the importer and exporter are registered with GAC	СНІ	Yes	Importer
Customs Import Declaration	Document for the customs clearance of the goods	СНІ	Yes	Importer
Automatic Import Licence	Document used for statistical purposes	СНІ	Yes	Importer

<sup>&</sup>lt;sup>6</sup> It is available in the language of origin and includes an English translation.

Business Licence of the Importer	<i>Certification of registration and approval to start business operations</i>	СНІ	Yes	Importer
Import and Export Business Licence	Certification of registration as an import and export business	СНІ	Yes	Importer
Registration of Importers of Foodstuffs	Document certifying that the importer has been registered as an importer of foodstuffs with AQSIQ	СНІ	Yes	Importer
Permit to Import Quarantine Material into The People`s Republic of China	Document approving the importation of goods subject to quarantine	СНІ	Yes	Importer
Commodity Inspection Certificate	Document certifying that the goods have been successfully inspected and, therefore, the importation approved	СНІ	Yes	Importer

Table 2. Title: List of documents needed for the export-import process from EU to China. Source: European Commission

Step six involves inspection at Chinese customs. As stated by Pablo Gracia, when goods arrive at Chinese customs, the relevant authorities inspect the documentation and labelling of the products. If everything is in order the Chinese authorities proceed with the quarantine test report check. This check is regulated by Decree 152-2013, Decree 25, and Announcement No. 53-2013<sup>7</sup>. Should the inspection be successful, the products are permitted to enter the country and the enterprise that imports the products is added to the list of the approved imports. However, the approved future imports should take place under the exact same conditions as the original, first import. This means that if the importer changes the formula, brand or even port, the import is treated as a first import and the importer will have to go through the same procedures as during the first time when they imported their goods into China. In addition, importers should bear in mind that it is extremely important to pass the first test because if it is failed then they have to go through five consecutive "first-time" import procedures in order to gain the approved status. Nevertheless, Chinese authorities have the right to inspect any import at any given time regardless of its track record. (Gracia, 2014, p. 27)

<sup>&</sup>lt;sup>7</sup> Unofficial English Translation can be found at

http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Implementation%20Measures%20of%20Ch ina's%20Decree%20152%20for%20Dairy%20Products\_Beijing\_China%20-%20Peoples%20Republic%20of\_6-24-2013.pdf

Decree 152-2013. Article 11 states the major differences between first-time imports and non-first-time imports.

Decree 152-2013. Article 11.

3. A test report of items listed in the corresponding national standards for food safety is required in the event that the dairy product is being imported for the first time. "Imported for the first time" refers to dairy products with identical information, including the overseas producer, product name, formula, overseas exporter, and domestic importer who has imported from the same port.

4. For dairy products not imported for the first time, a copy of the first-time test report and a test report of items requested by AQSIQ are required. The items requested for testing for non-first-time imports are decided by AQSIQ according to the situation regarding risk monitoring of dairy products. These items are published on AQSIQ's official website.

5. Dairy products that fail the safety and sanitary requirements (including pathogens, mycotoxins, contaminants, heavy metals, and illegal additives) must provide test reports of items listed in the corresponding national food safety standard when importing in the future. If all safety and sanitary requirements are met for the next five consecutive shipments, a copy of the test report of items listed in the corresponding national food safety standard and a test report of items requested by AQSIQ shall be provided at the time of the next import.

Fig. 6. Title: Differences between products that have never been previously imported and those that have. Source: EU SME Centre

Another difference for first-time imports and non-first-time importers is that the former need to provide a test report for the items listed in the national standard for food safety for corresponding products during the quarantine declaration (this includes the standards for contaminants and fungal toxins in food as cited in the standard) while the latter only present a copy of the test report and the quarantine declaration sheet provided during the first import as well as the test report on the items regulated by AQSIQ (Announcement no. 53- see footnote No.7) (p. 28)

After import procedure has been dealt with the importer should consider the tariffs and taxes. A table with the import duties and VATs for the main dairy products is provided below. However, more detailed information could be found on the China Customs web site.

HS Code	Item	Import Duty	VAT
0401	Milk and cream, not concentrated or sweetened	15%	17%
0402	Milk and cream, concentrated or sweetened	10%	17%
040310	Yogurt	10%	17%
040390	Buttermilk, Curdled Milk and Cream, Kephir, Other Fermented Milk, Cream	20%	17%
0404	Whey & milk products nesoi, flavoured etc. or not	10%	17%
0405	Butter and other fats and oils derived from milk	10%	17%
0406	Cheese and curd (except for Blue- veined cheese)	12%	17%

Table 3. Title: Taxes and tariffs on import of dairy products into China. Source: EU SME Centre

In conclusion, although Bulgaria is soon to be approved for exports of dairy products to China, the whole process involves many bureaucratic procedures that are not easy to comply and also take time. Therefore, Bulgarian dairy processors need to pay special attention to the quality of their products as the Chinese authorities are very strict in regard to this matter. In addition, companies that would like to export dairy products to the country need to follow the instructions mentioned in the report correctly as each step is of importance and is regarded as an essential part for the success of the export activity.

## **Chinese Dairy Sector**

China is an enormous market and as the population and its purchasing abilities are constantly growing since the last decade of the previous century it could present an interesting opportunity for the Bulgarian dairy sector. According to Shefali Sharma and Zhang Rou, in the past, before the 1990s, milk and milk products consumption was extremely low. Chinese people were mostly relying on other food products such as vegetables, rice and etc. to acquire the so much needed calcium. Therefore, dairy products' consumption was very low. Nowadays, although the trend is changing, a big part of the Chinese population suffers from lactose intolerance. This could be attributed to the lack of milk products in the local cuisine for centuries. The fast growth of the sector started since 1978 but in the 90s consumption continued to remain low at 4.75 kg. The consumption levels are actually considerably higher in urban regions compared to agricultural ones due to the higher purchasing power of the population in the former (Sharma & Rou, 2014). Consumption

increase has been so strong in recent years that according to the China National Bureau of Statistics for the period 2011-2013 the dairy products consumption per capita in urban areas has increased with 10 kg (from 20 kg to 30 kg) and is expected to keep increasing in the long term (Xu, 2014).

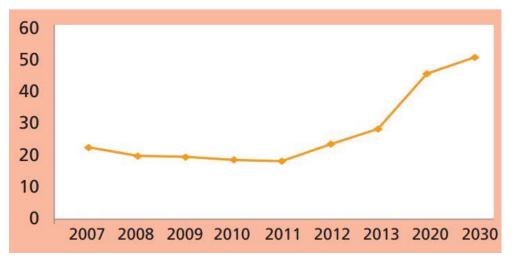


Fig. 7. Title: China urban dairy consumption- 2007 to 2030 forecast (kg/capita/year). Source: China National Bureau of Statistics

An important event that changed the Chinese dairy sector was the milk scandal, also known as the melamine scandal that took place in 2008. As stated by Sharma & Rou, thousands of Chinese infants fell sick after they had drank infant formula. An industrial chemical called melamine had been added to the milk during the supply process which resulted in 30,000 children being severely sick. Twenty two local milk producers were involved in the scandal which undermined Chinese consumers' confidence in the Chinese dairy brands. As a result, foreign companies took the opportunity and increased their market presence in the country which resulted in an increase of milk imports into the country.

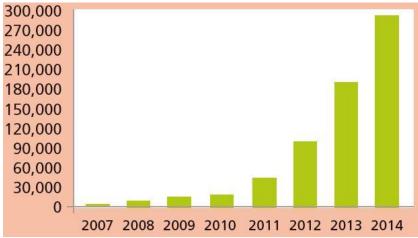


Fig. 8. Title: Liquid milk imports (tonnes). Source: China Customs; Li Shengli

#### Market Overview

#### Market Definition and Market Analysis

In order to understand what the Chinese dairy market consists of, the types of dairy products offered must be examined. According to report created by MarketLine, the market consists of retail sales of milk, cheese, soy products, spreadable fats, yogurt, cream, chilled dessert and fromage frais (MarketLine, 2015, p. 7).

Currently China is the largest and the fastest growing market for dairy products in the region. Moreover, it is considered as the second largest dairy market worldwide. Growth in value of the Chinese dairy market has slightly slowed down in 2014, however, it is expected that it will increase as 2019 approaches. Total revenues for 2014 have been around 45.2 billion US dollars keeping an average annual growth rate of 9.1% in the period 2010-2014. In comparison, the other two big dairy markets in the region, Japan and India have had growth of 1.7% and 8.8% respectively for the same period reaching 18.24 and 5.41 billion US dollars. For the period 2014-19 this trend will continue as it is expected that the value will increase to 71,138.5 million US dollars (9.5% average annual growth rate). On the other hand, average annual growth rate in the other two large dairy markets will slow down to 1.3% and 5.1% in Japan and India respectively. (MarketLine, 2015, p. 7)

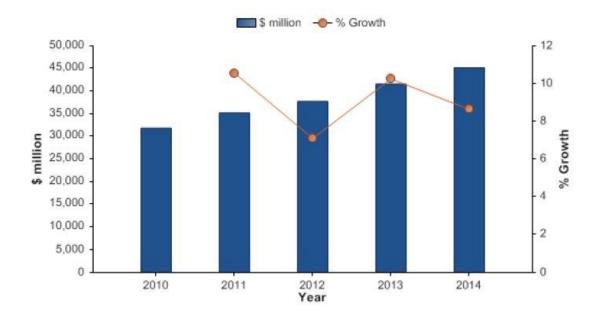


Fig. 9. Title: China dairy market value: \$ million, 2010-14 Source: MarketLine

In regard to consumption of dairy products for the whole market, it increased with a CAGR<sup>8</sup> of 5.6% for the period 2010-2014 reaching 5,430.5 million kg and is expected that the average CARG growth for the period 2014-2019 will increase to 6.1% reaching market consumption of 7,290.3 million kg. Population wise this represents 3.97 kg dairy consumption per capita in 2014 and 5.19 kg in 2019. This increase in consumption has been fuelled by the increasing urbanization and purchasing power parity among the Chinese population (dairy consumption is more than 2.5 times higher in urban areas according to OECD) and also due to the change in one child policy towards a more eased one allowing Chinese families to have more children than it was allowed before (MarketLine, 2015, p. 7).

Finally, according to Dairy in China report by MarketLine, "Supermarkets/hypermarkets account for the largest proportion of sales in the Chinese dairy market in 2014, sales through this channel generated \$30,523.6m, equivalent to 67.5% of the market's overall value. Sales through the independent retailers generated revenues of \$5,555.1m in 2014, equating to 12.3% of the market's aggregate revenues." (MarketLine, 2015, p. 7)

#### Market Segmentation

For the purpose of this report only the product category segmentation, taste preferences of the Chinese citizens, company segmentation and distribution segmentation will be described.

#### **Category Segmentation**

Product categories will be examined according to their value in the market. According to Dairy in China by Marketline, milk holds the highest share- almost half of the total value. Yogurt and soy products are quite close in regard to value, holding 2<sup>nd</sup> and 3<sup>rd</sup> place with almost ¼ of the market value each. Cheese and spreadable fats have insignificant position in the market with both holding below 1% of the market value (MarketLine, 2015, p. 10).

<sup>&</sup>lt;sup>8</sup> Compound Annual Growth Rate: the mean annual growth rate over a specified period of time longer than one year. Source: Investopedia

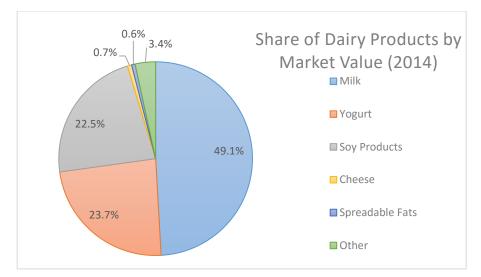


Fig. 10. Title: Share of dairy products by market value. Source: MarketLine

#### Taste preferences

It is extremely important to provide information about the specific taste preferences of the Chinese population. First of all it is essential to mention that for a large part of Chinese citizens sugared dairy products are becoming an important part of their diet. According to a report by DSM Food Specialties, a survey conducted in China has revealed that 50% of adults and 67% of children (15 or younger) have indicated an increase in sugared dairy products in the past three years. In addition, 49% of adults and 68% of children up to 15 years of age have indicated that they expect an increase of sugared dairy consumption in the next three years (DSM Food Specialties, 2015). This corresponds to the responses in the questionnaire conducted among 18 Chinese individuals that are currently living in Bulgaria. According to the results, the vast majority of the questioned indicated that they preferred sugared/fruit yogurt instead of the sour, traditional, Bulgarian variety. This corresponds with the opinion of Yordan Stoyanov (a marketing manager of Kremio EAD) (Stoyanov, 2016) and Magdalena Apostolova (an employee in the Bulgarian Association of Dairy processors) (personal communication, April 7, 2016). Nevertheless, 24% have stated that they consume white cheese which corresponds with the percentage of people that have indicated that they consume yellow cheese. This differs from the opinion of Yordan Stoyanov and Magdalena Apostolova that have stated that traditionally Chinese people do not prefer these products due to their salty and sour taste. This could be attributed to the fact the questionnaire was conducted among Chinese citizens that have been living in Bulgaria for years and in some cases had adapted to the local cuisine.

#### **Company Segmentation**

In general, the Chinese market for dairy products could be considered a rather decentralized one. The four biggest companies hold 47.3% of the market share and are represented in the following chart.

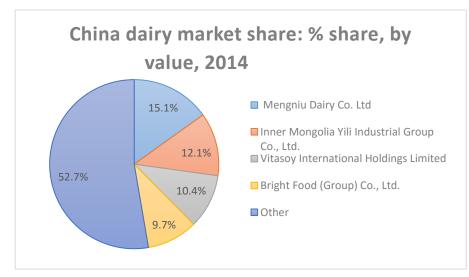
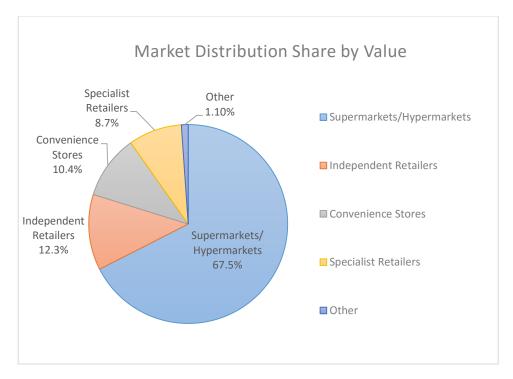


Fig. 11. Title: Companies' market share, 2014. Source: MarketLine

Taking into consideration this information and applying it by using the Herfindahl index as a measurement (explanation of the calculation could be found in the Annex section under Annex 3) it could be concluded that the structure of the market, according to Besanko, Dranove, Shanley and Schaefer could be considered as an either perfect or monopolistic competition with a rather moderate to more intense competition depending on the degree of differentiation of the product. (Besanko, Dranove, Shanley, & Schaefer, 2012, pp. 171-173)

#### Market Distribution Segmentation

In regard to market distribution, as discussed above, supermarkets/hypermarkets account for the largest share according to value. Independent retailers, convenience stores and specialist retailers are the other places where dairy products are mainly sold. The latter three hold similar shares in the distribution channel. (MarketLine, 2015, p. 15)





#### Five Forces Analysis

In order to successfully analyse the dairy market in China, the report is going to include several paragraphs describing the five forces of Porter- buyer power, supplier power, new entrants, thread of substitutes, and degree of rivalry.

#### **Buyer Power**

According to the MarketLine report, the current situation in China is such that in fact, players in the market can sell only to a small number of large buyers which strengthens the buyer power. In the past it was very common that dairy producers sold their products directly to the customers via morning deliveries. However, this channel has declined over the years and there is a relatively little chance that this trend will return. This, of course, boosts the buyer power of the retailers. Nevertheless, dairy products play an important role in the eating habits of the population, therefore retailers are strongly motivated to stock such products. This weakens their power somewhat. The dairy market in the country is considered price sensitive with customers opting out for the less expensive option, especially for products that are hard to differentiate such as milk which enhances buyer power additionally. Product wise, staple foods such as milk and butter are hard to differentiate. Nevertheless, yogurt and cheese products are more differentiated where many niche markets for these products exist. In order to counter balance the power of buyers to influence end consumers via price changes alone, manufacturers can target end-users with more premium and individual products such as organic yogurt for example. Overall, buyer power is assessed as moderate (MarketLine, 2015, p. 17).

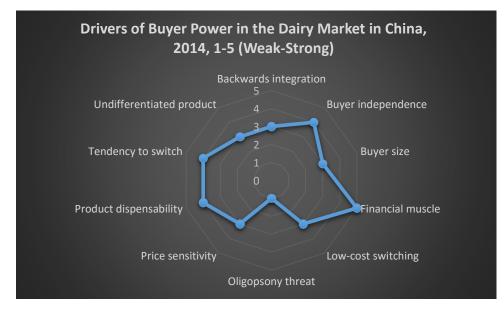


Fig. 13. Title: Drivers of Buyer Power in the Dairy Market in China. Source: MarketLine

#### Supplier Power

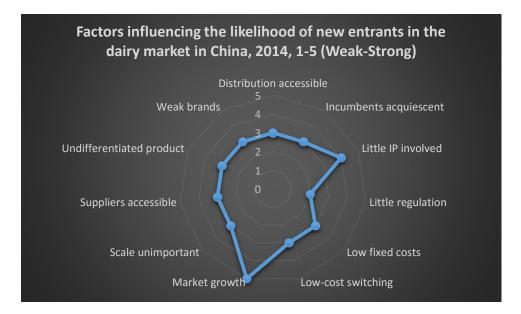
The main suppliers in the market are dairy farmers, according to MarketLine. Many of the large-scale dairy processing plants purchase the raw milk from many individual or cooperative dairy farms. Nevertheless, even the largest dairy processors are not immune to the constant fluctuations of the price of milk. As milk prices are changing on a daily basis, buyer purchase supplies on already agreed prices on the futures market in order not to be unpleasantly surprised by unexpected price increases. Such strategy boosts the switching costs which increases supplier power. As a whole, there are now real alternatives to the raw materials which is basically raw milk. Therefore, suppliers are quite limited in the ability to differentiate their product offering, although products such as organic milk for example do exist and attract some of the buyers in the market. Forward integration is a possibility, however it could be a successful strategy only on a small scale. Some farmers could sell their products online or on farmer's markets or try sell more differentiated and higher margin products such as cheese, for example instead of offering a more undifferentiated and low margin product such as milk. Overall, supplier power is evaluated as moderate (MarketLine, 2015, p. 18).

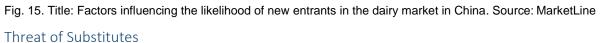


Fig. 14. Title: Drivers of Supplier Power in the Dairy Market in China. Source: MarketLine

#### New Entrants

As discussed before, there has been a long historic growth in the Chinese dairy market. This is a factor that could attract new players. However, strict regulations for entry of dairy products into China make it fairly difficult for new entrants to import their products. In addition, according to Dairy in China report by MarketLine, there is increased concentration of the market which leads to large companies increasing their brand value and product market share. Leaders in the industry have strong brands which are aimed to retain the end consumer and this makes it more difficult for new entrants to distinguish their products from the competitors. Moreover, there is a trend towards expansion by players in the market through mergers and acquisitions. The divers for this trend are considered to be economies of scale, reducing overheads and increasing profits. Nevertheless, the entry barriers for small-scale entrants the offer premium dairy products are much lower in comparison to large-scale entrants that want to challenge the big players in the market. As a whole, there are moderate chances that new entrants will appear in the market (MarketLine, 2015, p. 19).





As discussed before, the dairy products intake has become an important part of Chinese people's diet. In addition, the benefits of calcium in dairy products are constantly in public's attention. Therefore, it is very unlikely that dairy products will be replaced. However, for those who are lactose intolerant or for some reason are deciding to cut off dairy products potential substitutes exist. As stated by Dairy in China report, almond, soy and rice milk could be a substitute to regular milk and similar types of substitutes could be found for cheese and ice-cream as well (MarketLine, 2015, p. 20).



Fig. 16. Title: Factors influencing the threat of substitutes in the dairy market in China. Source: MarketLine

#### Degree of Rivalry

As dairy products are usually perishable, storage costs are high. Therefore, players are trying to sell their production as fast as possible which increases the rivalry. In addition, according to MarketLine, there are high exit costs due to the fact that industrial production of dairy products requires substantial, specialized assets that need to be sold off when exiting the market. Moreover, in recent years the market has become highly volatile (fluctuating prices, for example), influenced by lower international trade of milk. Such unsecure environment boosts rivalry additionally. On the other hand, the high historic growth has made it possible to alleviate competitiveness. Finally, as stated by Dairy in China report, *"Switching costs for buyers are not particularly high, although some retailers may allocate contracts to single suppliers of dairy products. The larger multinational players tend to operate in a number of fast moving consumer goods markets, therefore may not be as reliant on sales of dairy products, which decreases their competitive threat." (MarketLine, 2015, p. 21) In conclusion, rivalry is considered to be moderate.* 

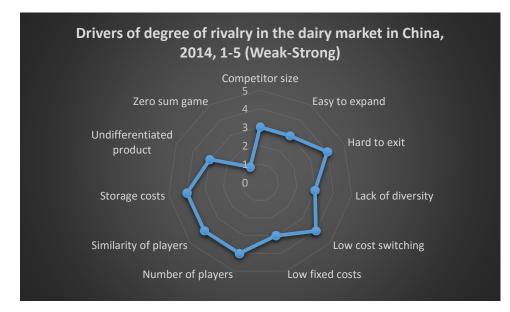
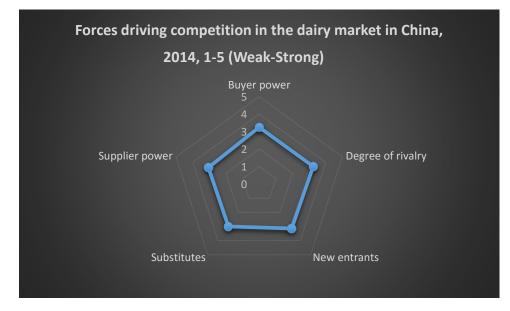


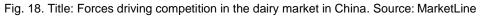
Fig. 17. Title: Drivers of degree of rivalry in the dairy market in China. Source: MarketLine

#### Summary

In conclusion, dairy products are a firm part of Chinese people's diet. However, for those with certain diet needs substitutes are available. The market is fairly easy to enter as a small player. However, companies that want to sell their products on a larger scale will need a lot of capital to build their successful position into the market. Suppliers, in general, are favouring forward integration as it gives them better opportunities such as access to larger

markets and usage of capital items (packaging and processing plants). Finally, many players are similar in the market for dairy products and this tends to boost rivalry.





#### Realities, Possibilities and Cooperation

This section is going to describe an interview with a marketing director of a Bulgarian dairy company. During the interview with Yordan Stoyanov, he mentioned that there has been a marked interest by Chinese side for export of Bulgarian dairy products into the country. This corresponds to recent trends such as the increased presence of Chinese investors and the recent creation of the agency for cooperation in the sphere of agriculture between China and the countries of Central and Eastern Europe in Sofia. He stated that in recent years China has entered a process of transformation from a country producer to a country that consumes dairy products. The main interest of the country towards Bulgaria and other countries from Eastern Europe is related mainly to milk and sweetened yogurts instead of the traditional for Bulgaria- white brined cheese, regular cheese and traditional yogurt. Mr. Stoyanov mentioned that there is an idea that is still in a process of development and that has been presented by the Chinese the Alibaba Group in Sofia a month and a half ago. This idea involved creating an online platform for agricultural products from the countries of Eastern Europe and from China. In addition, the company had suggested to create a hub in Burgas seaport and two free-trade zones in Shanghai and Hangzhou in order to send the production to China and vice versa. Mr. Yordanov stated that it was proposed that the transport costs would be covered by the Chinese side. However, in order to achieve better coordination it was suggested that one Bulgarian brand for dairy products is created which will include several certified Bulgarian dairy processing companies that will work together to ensure the successfulness of the project. Nevertheless, Mr. Yordanov expressed his concerns related to the difficulties such coordination between Bulgarian dairy processors involves and therefore, Kremio EAD is currently negotiating in parallel with two Chinese distribution companies for export of Bulgarian milk to China (Stoyanov, 2016). Nonetheless, a possible cooperation with Chinese companies could be a successful solution to export Bulgarian dairy products.

# Analysis

## Strengths and Weaknesses of the Bulgarian Dairy Industry

The first section of this part of the report will evaluate the information presented so far in relation to the Bulgarian dairy sector and will offer some conclusions on the strengths and weaknesses of the Bulgarian dairy industry.

This paragraph will discuss the weaknesses of the Bulgarian dairy sector. The major concern of the sector is related to its low state of competitiveness in relation to the dairy industries in other European Union member states. It is extremely difficult for Bulgarian dairy processors to compete with the current lower prices of the foreign production. This causes many small and medium-sized enterprises to close down due to the lack of sufficient profits. Many Bulgarian dairy producers and processors cannot compete successfully due to the high market price of their production which makes many of them to opt out for less expensive foreign variant. Another weakness is related to the quality of milk. As many of the smaller dairy farms which consist of no more than several animals do not have the financial capabilities to invest in technologies that will improve the quality of their milk they cannot sell their production to the medium-sized and large dairy processing plants. This also harms the latter as they need to purchase foreign production for a lower price which sometimes is also of lower quality. This way these dairy processors cannot present the origin of the raw material for their final products as Bulgarian. In addition, the relatively small production scale of the Bulgarian dairy industry that is usually directed at the Bulgarian end consumer and the small size of the Bulgarian dairy processing plants does not allow for many opportunities to export abroad which makes countries geographically closer and for which import duties and tariffs do not apply such as the countries from the European Union to be the preferred destinations for export.

Nevertheless, many strengths exist that could be developed and used in order to combat the negative effects coming from the current situation of the dairy sector in Europe. One of the major strengths is that in comparison to other European producers, the sheep, goat and buffalo milk production is still at a relatively high level. Dairy products made from these animals possess qualities and characteristics that are different from the products made with cow milk. This is an important strength because it makes the Bulgarian dairy products stand out in regard of variety. Furthermore, products such as Bulgarian yogurt and Bulgarian white brined cheese are also something only typical for the region which further enhances the notion about the variety, differentiation and beneficial qualities of such Bulgarian dairy

products. Another strength that could be utilized is that much of the Bulgarian milk, whether from cows, goats, sheep or buffalo, is extracted in a more natural way which could be important considering the trend in recent years- the demand for natural and regional products.

This information leads to a conclusion that independent export to China would be a very difficult process due to the small scale and uncompetitiveness of the dairy industry in Bulgaria. In addition, traditional yogurt cannot last more than 20 days which makes it impossible to export on a larger scale. Sugared yogurts which last longer do not occupy a substantial part of the production portfolio of the Bulgarian dairy processors and therefore, would be considered as a viable option. Nevertheless UHT milk which lasts much longer is a possibility for export. Individually companies prefer to distribute their production in Bulgaria or the nearer markets because they do not have the financial capabilities to cover the transportation, distribution and marketing costs that would be needed for a DAT, DAP or DDP<sup>9</sup> type of export.

#### Opportunities and Threats of the Chinese Dairy Industry

The Chinese dairy industry is extremely large and relatively complex in order to evaluate it with ease. The general requirements that create opportunities for potential importers into the country are present. Dairy consumption in the country is constantly rising. Although there has been a slow decrease in last 1-2 years, growth in consumption is expected to increase substantially by 2019. Consumption of milk and milk products has been something that the Chinese government has been promoting which further increases the positive conception for this type of products amongst the Chinese citizens. In addition, due to the milk scandal in 2008, Chinese consumers have become rather reluctant in regard to the consumption of local, Chinese dairy products. This has allowed for foreign companies to enter the market due to the trust Chinese people express towards the quality of the foreign brands such as Danone, for example. Moreover, the standard of living of the Chinese is steadily rising which allows for more and more of the country's citizens to spend an increased amount of money on a higher quality, local bio products. This could be an opportunity for Bulgarian exporters that can provide exactly this type of goods.

Furthermore, as import of Bulgarian dairy products has been prohibited and is expected to still be for only 2-3 months, the lift of the regulations could provide a profitable opportunity of the Bulgarian dairy industry. As Chinese consumers are not aware of the Bulgarian dairy

<sup>&</sup>lt;sup>9</sup> Delivered at terminal, Delivered at place, Delivered duty paid

products this could be used by Bulgarian companies to promote Bulgarian dairy products as something new and exotic but still traditional and beneficial for human health. This is also of course a double edge sword meaning that the threat about Bulgarian products entering the Chinese market for the first time would also mean that Chinese people would be unaware of the value and all the benefits the Bulgarian dairy products provide.

Threats are connected mainly to the fact that Bulgarian dairy companies do not have experience in importing into China. First of all, the whole importation process including various complicated procedures is extremely difficult to go through, especially for a company that is not experienced and does not possess a high amount of capital resources to finance a large scale independent export activity. In addition, the Bulgarian dairy sector on occasions is still experiencing some problems following the imposed EU regulations on quality. Therefore, high-class quality control ought to be assured before taking the decision to export Bulgarian dairy products into People's Republic of China as the smallest lack of correspondence between the quality indicated and the quality at inspection on Chinese customs could lead to fiasco not only for the specific company but for the whole Bulgarian industry as a whole.

Another issue is related to the competition in the market. There are many companies operating in the Chinese marketplace which increases the rivalry. Currently, the largest share of the market is held by Chinese companies that are in constant direct competition with their foreign counterparts. These companies have all the resources needed to compete successfully in order to win the choice of the Chinese consumer. Bulgarian dairy companies clearly cannot compete with such players in the market. For this reason large-scale independent import activities are not a viable option and Bulgarian dairy processors, if exporting independently, could focus on small-scale imports for which the entry barriers are much lower if they wish to export independently. Therefore, if they want to be successful independently they need to find a niche in the market. Such niche should be located in larger settlements where the standard of living of the population there is substantially higher in order to be able to purchase potential Bulgarian dairy products which will be offered at a higher price due to higher production and transport costs and small scale import into the country.

In regard to product variations the threat is that consumption of cheeses in China is actually very low (0.7%) and a large percentage of it is consumed by the foreigners living in the country. Therefore, it would be extremely difficult and actually close to impossible for the Bulgarian dairy producer to penetrate the Chinese market with cheese products. Another

problem involves Bulgarian yogurt. It could be a viable option as it is highly consumed (almost <sup>1</sup>/<sub>4</sub> of total consumption of dairy products). In addition, this product is highly differentiated which makes it much easier to stand out as a unique product. However, the major issue involves its sour taste that does not appeal to the majority of Chinese citizens. In addition, the expiration date of this product is 20 days after its production which makes it very difficult to transport to distant areas. On the other hand milk is largely consumed and corresponds to Chinese taste preferences and the demand for it is rising. In addition, the product could be consumed up to 6 months after its production as long as it is thermally processed via the UHT conservation process. However, milk is not as differentiated as yogurt and cheese and therefore, it would be harder to market as a unique product.

distribution network for dairy products in Finally, the major China is via supermarkets/hypermarkets. Many of the big players in the market actually compete to put their products on the shelves which increases rivalry and makes it difficult for smaller importers to actually be able to compete there due to their lack of strength and resources. However, this would also not be a viable option for the potential Bulgarian exporters as it has already been concluded that large scale independent export activities would be extremely difficult. Therefore, Bulgarian exporters if acting independently ought to focus their efforts on distributing their products in specialist retailers that hold 8.7% of the market. These types of stores focus on specific type of products such as bio products of dairy products for example. Such retailers also attract population with higher purchasing power that would be interested in a more differentiated product.

Besides independent exports to China a possibility exists that would allow for larger companies in the Bulgarian dairy sector as a whole to work in cooperation with each other (which will increase the total production output) in order to export to the Asian country on a larger scale with the help of the Chinese state through the Association for the promotion of agricultural cooperation between China and CEE countries. This so far would be the most appropriate course of action and aim of the Bulgarian dairy processors. The Chinese side has expressed interest in purchasing Bulgarian milk in order to answer to the increased demand for dairy products into the country. A possible option that has been mentioned concerns the creation of a hub in a Bulgarian port so that merchandise could be purchased and sold there. This variant would alleviate the export process of Bulgarian dairy processors as they would not have to cover transport costs from Bulgaria to China and would not have to be responsible for the direct marketing of their product which would require significant

amount of capital for the Bulgarian standards. A possible concern is related to the production capacity Bulgarian processing plants can achieve as many of them are not prepared to significantly increase the amount of milk produced. If this problem is to be resolved successfully such strategy would be extremely beneficial for the Bulgarian dairy industry. However, this project is still at an early stage and in a process of development and therefore, results are still to be expected.

# Conclusions

This section of the report will give a concise conclusion of the thorough investigation that has been conducted for the completion of this paper.

In recent years the condition of the Bulgarian dairy industry has been deteriorating due to internal and external factors causing many dairy farmers and processors to go bankrupt or to lose a major part of their revenues. This was caused by the Russian sanctions imposed to EU member states which resulted in a complete suspension of export of Bulgarian dairy products into the federation and inflow of cheaper EU dairy production on the Bulgarian market. A very problematic issue has also been the great difference between the amounts of subsidies the rest of the member states receive in comparison with Bulgaria. The difference of more than 50% has made Bulgarian production uncompetitive in regard to pricing. In addition, internal problems such as the low productivity and the inconsistency in the quality of some of the Bulgarian dairy products in the market are further harming the industry. Nevertheless, it has been observed that in recent years there has been improvement in quality to conform to the EU regulations. Moreover, the sector is rich in regard to the variety of dairy products that are being offered in the market including a relatively large number of such that come from goat and sheep milk. Many of them are also famous for their health benefits such as the Bulgarian yogurt that is extremely popular in Japan. That is why the lift of restrictions for import of Bulgarian dairy products into China could be a solution to the problems for some dairy processors.

The Chinese market presents a big opportunity as it is a large market with constant increase in dairy products consumption that is expected to grow even further. However, many obstacles exist that will make it extremely difficult for Bulgarian dairy producers to penetrate the market individually. First of all the dairy exporters have to go through a very complicated and time consuming process at the Chinese customs in order to be able to enter the market. And even the smallest mistake in the quality or the packaging can cause a fiasco. Furthermore, a major part of the Bulgarian dairy processors do not have the financial capabilities to be an important player in the market and compete with the larger and more experienced local and foreign brands. Therefore, import on a large-scale is not a viable possibility. Operations on a smaller scale in a niche market are possible but still fairly difficult due to the inconsistencies in the taste characteristics that Bulgarian dairy products offer and the taste preferences of the Chinese population that does not favour the sour taste of the white brined cheese and the yogurt that are by far the most differentiated and most prone to be successful generally. This could also be said about the products that are being produced from goat and sheep milk and that have a very strong taste. Simply said, even if the Bulgarian dairy producers could offer the highest quality product at the lowest price it would still be close to impossible to be successful with a foodstuff whose taste does not suit the preferences of the people. In addition, such independent export activities require much capital for marketing and distribution which would be a major difficulty for Bulgarian dairy processors that lack the financial resources.

Therefore, the most viable option is related to the interest expressed by Chinese side to import milk from the countries of Eastern Europe (including Bulgaria). Bulgarian milk corresponds to the taste preferences of the Chinese population and the UHT variety could last for up to 6 months. Due to the fact that China cannot meet the demand for milk caused by the rise in its consumption the country needs to import from abroad. China has the capacity and financial resources to organize a larger scale export activities of Bulgarian milk by using an online trade platform and purchase the production from a trading hub in Bulgaria. This would decrease transportation costs for Bulgarian dairy processors if they are only required to transport the products to the Burgas seaport which would be a FOB (Free on Board) type of export. In addition, this type of export would further decrease the potential marketing costs and completely eliminate the distribution costs.

In conclusion, in order for the Bulgarian dairy processors to be successful in their export activities they need to seek the assistance of the Chinese authorities and/or companies that would allow larger scale exports of milk without a significant increase in costs. This possibility would be extremely beneficial for the Bulgarian dairy industry as a whole as it would not only support the Bulgarian dairy processors but the Bulgarian dairy farms as well.

## Recommendations

As a final step towards the end of this report this section is going to offer some recommendations for the Bulgarian dairy sector if they decide to export to People's Republic of China, considering all the information that has been gathered so far and the analysis that has derived from this information.

Bulgarian dairy processors, through institutions and associations such as The Bulgarian Association of Dairy Processors and the Association for the Promotion of Agricultural Cooperation between China and the CEE Countries but also through the Bulgarian Government in the face of The Bulgarian Ministry of Foods and Agriculture, should seek contact and collaboration with the Chinese state and Chinese government in order to use the potential for export of Bulgarian dairy products.

If collaboration with the Chinese side is possible then Bulgarian dairy processors would need to work in close cooperation in order to increase the total milk production that would be needed to be exported to China. In addition, Bulgarian dairy processors could work together under a common Bulgarian brand name that would be directed solely for Chinese consumers. This would allow export of larger quantities due to the fact that separately, Bulgarian dairy processing plants do not have high production capacities. In addition, the quality of the milk, which is extremely important for the Chinese side, should be in correlation with the standards imposed by Chinese authorities to avoid any inconsistencies through the export process.

A possible option would be to make use of the current Bulgarian stands with food products from the country such as the ones at the permanent exhibition for goods of Central and Eastern Europe in Ningbo and the pilot area for cross-border online trade in Hangzhou. This could allow the Chinese citizens to get familiar with the Bulgarian dairy products before entering into a full-scale export activity into the country.

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# Annexes

Annex 1: Decree N°152/2013. Article 7

Decree Nº152/2013. Article 7.

AQSIQ implements a registration system for overseas food producers (hereinafter referred to as "overseas producers") that export dairy products to China. Registration is executed subject to AQSIQ's regulations.

The overseas producer shall be an entity established under an official competent authority's approval of the exporting country (region) and comply with related laws and regulations of the exporting country or region.

The overseas producer shall be familiar with and ensure that its dairy products exported to China will be compliant with China's national standards of food safety and requirements, and be able to provide test reports of items regulated by these standards. The overseas producer shall clarify the types and brands of dairy products it plans to export to China when applying for registration.

The list of registered overseas producers shall be published on AQSIQ's official website.

Annex 2: 53-2013 "Implementation Measures for Inspection, Quarantine and Supervision of

Imported and Exported Dairy Products" Paragraph IX

IX. For overseas awards, honours, and certifications marked on the label of imported dairy products, the relevant certificates and documents, verified through diplomatic channels, should be provided. "Diplomatic channels" here refers to the overseas embassies and consulates of China, or the embassies and consulates of foreign countries in China.

Annex 3: English translation of the questionnaire

17.05.2016 r.

Questionnaire about the Bulgarian dairy products

# Questionnaire about the Bulgarian dairy products

1. Please	indicate	your	age
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Mark only one oval.

$\bigcirc$	0-20
$\bigcirc$	21-30
$\bigcirc$	31-50
$\bigcirc$	51+

2. Do you consume Bulgarian dairy products?

Mark only one oval.

$\bigcirc$	Yes (go to question 3)		
$\bigcirc$	No (fill questions 2, 6 and 7)		

3. What are the general the reason(s) for which you do not consume Bulgarian dairy products?

Tick all that apply.

I do not like the taste

I do not like the quality

I do not like the price

- I am not aware with the Bulgarian dairy products
- Other:

4. Which Bulgarian dairy products do you consume? Tick all that apply.

Milk
Yogurt
White cheese
Yellow cheese
Butter
Other:

17.05.2016 r.	Questionnaire about the Bulgarian dairy products		
	<ol><li>Which Bulgarian dairy products do you like the most? Tick all that apply.</li></ol>		
	Milk		
	Yogurt White cheese		
	Yellow cheese		
	Other:		
	Une.		
	6. Please indicate what exactly do you like about the Bulgarian dairy products?		
	7. Please indicate what exactly you do not like about the Bulgarian dairy products?		
	8. What would you improve in the Bulgarian dairy products?		
	Powered by		
	Google Forms		

https://docs.google.com/forms/d/11LSIP7demCAH3-Xn3D8SjZrxx6\_74ah5Uql823eh84VA/edit?usp=drive\_web

#### Annex 4: Herfindahl index calculation for the Chinese dairy market

In order to come up with the Herfindahl, the sum of the squared market shares of all the firms in the market that have a market share larger than 10% should be calculated (10%=0.1, 20%=0.2 and etc.). Companies with market shares larger than 10% are Mengniu Dairy Co. Ltd with 15.1%, Inner Mongolia Yili Industrial Group Co., Ltd. With 12.1% and Vitasoy International Holdings Limited with 10.4%. Therefore, the calculation is:  $0.151^2+0.121^2+0.104^2$  with a result of approximately 0.05 which falls into the first two categories presented in the table below.

FOUR CLASSES OF MARKET STRUCTURE AND THE INTENSITY OF PRICE COMPETITION

Nature of Competition	Range of Herfindahls	Intensity of Price Competition
Perfect competition	Usually below .2	Fierce
Monopolistic competition	Usually below .2	May be fierce or light, depending on product differentiation
Oligopoly	.2 to .6	May be fierce or light, depending on interfirm rivalry
Monopoly	.6 and above	Usually light, unless threatened by entry

Fig.19. Title: Market structure by range of Herfindahls. Source: Economics of Strategy, 6<sup>th</sup> edition

Annex 5: Transcript of the interview with Yordan Stoyanov, marketing manager of Kremio EAD in English

#### Interviewer: How would you present your company?

Interviewee: Our company is currently unique in the Bulgarian market as in comparison with the other dairy processors in Bulgaria we focus on producing only milk and cream. In addition, more than 65% of the production is being exported to Germany, Italy, Hungary and etc. As for the Bulgarian milk market we are currently occupying 2<sup>nd</sup> or 3<sup>rd</sup> place. As for our products, the milk we produce could be divided into two categories: pasteurized milk with and expiration date of 45 days after production and the so called UHT milk which could last for 6 months due to the fact that it is processed thermally.

Interviewer: Could you share whether you produce your own milk or you purchase it?

Interviewee: We do not possess any dairy farms and therefore, we have signed contracts with 12 Bulgarian dairy farms but also purchase milk from abroad: Germany, Poland and Hungary. The reason for the latter is that currently the situation is that foreign milk is significantly cheaper but also of a higher quality.

Interviewer: How has the Russian embargo and the removal of the dairy quotas has affected the company?

Interviewee: In Europe, my opinion is that the countries were prepared for the removal of the quotas and that is why significantly increased their production after 1<sup>st</sup> of April 2015. Whether

this is the reason, their own governments' policy or something else, their milk is on average 10%-15% cheaper.

Interviewer: You mentioned government policy. How would you comment on the fact that other EU dairy farmers are better subsidized in comparison to their Bulgarian colleagues?

Interviewee: Honestly, the problem is not in the subsidies. The bigger issues is that the Bulgarian state has neglected the hygienic problem with 2<sup>nd</sup> and 3<sup>rd</sup> category milk. It has just failed to restrict its production and use as it is in the rest of Europe. Probably due to financial reasons. Nevertheless, large part of the milk produced in Bulgaria is second and third category. That should not be allowed in the market in the form of milk as a final product. Using it to produce cheese and yellow cheese is another story.

Interviewer: How would you comment on the Bulgarian dairy industry?

Interviewee: Currently the market is quite inflated due to the large number of players. Also around 45% is the grey sector for dairy products which is something that should be taken care of by the state. In addition, this could be applied to the use of subsidies which in many cases are not used appropriately. Also in many cases working with milk turns out not to actually bring profits but quite the opposite it eats out financial resources. Therefore, many companies, in order to cover this expenses focus also on cheese and yogurt production. In our case that is cream production. Only recently milk production has turned out to bring some profits.

Interviewer: What is your position on the possibility to export Bulgarian dairy products to China?

Interviewee: I assume you have heard about the programme "16+1". It sounds too modern in order to be a Bulgarian initiative. I believe it is a Chinese initiative. The programme is about creating a hub on the Burgas seaport where all the products from Central and Eastern Europe will arrive to go to China and vice versa. And one of the products the Chinese are interested in is exactly milk. The thing is that China is currently in a process of transformation. By this I mean that from a country producer they try to become a country consumer. Moreover, they do not have high production capacity for dairy products and the government has decided that the answer to this problem would be import of foreign milk. From what I know, in general, Chinese citizens do not consume large quantities of milk. As for the rest of the dairy products, Bulgarian cheeses and yogurts just do not correspond to their taste preferences. But they are in demand for milk and sugared yogurts. And they prefer to supply themselves with such products from the countries of the former Soviet Bloc. The interesting thing was that around a month and a half ago I participated in a seminar organized by the "Association for the promotion of agricultural cooperation between China and CEE countries". The Chinese side presented how they saw the project would work and honestly the organization seemed a little strange. Astonishingly for me during the seminar there were three representatives of the company AliBaba. From what I witnessed instead of the ordinary trading way of doing things, the Chinese side showed that they saw this process to be handled online. And when something is ordered it should arrive for 82 hours. And you can imagine how difficult this would be bearing in mind how far Bulgaria is. Therefore, the solution presented from our side was the creation of a free trade area in Shanghai and the city where the headquarters of AliBaba are located. And the idea is to send regularly large quantities of the production to these two areas with the transportation costs from Burgas to

China being covered by the Chinese side, and from there to be distributed across the country. This is of course a very nice sounding idea and although the Chinese on average do not consume so much milk, in total the whole country creates a really high demand for milk products. I am not so sure if the Bulgarian dairy processors could respond to such demand but if a common Bulgarian brand for China is created and used by multiple Bulgarian dairy producers, things would be much easier. And even if we talk about relatively low consumption of Bulgarian dairy products in China this could really increase the production output of milk products in Bulgaria. And as opposite as it is in Bulgaria where people are willing to pay less for a larger quantity, in China people are willing to pay more for less quantity which will allow a rapid growth.

Interviewer: Well, thank you for your time. These were all my questions unless there is something you would wish to add.

Interviewee: Well, no, but the topic is quite extensive. This is definitely an opportunity. However, if you look at the Bulgarian dairy companies, not many are actually exporters. And my main concern is that our inability to provide the sufficient quantities would fail the project. A second thing is that cooperation between dairy processors would be quite difficult. The question is if we could take advantage of this opportunity.