

Kyiv National University of Trade and Economics
Commodity Science and Customs Affairs Department

FINAL QUALIFYING PAPER

On the topic:

« Export and import of chocolate according to international trade agreements»

2nd year student of 10m group
Specialty 076 “Entrepreneurship,
Trade and Stock Exchange Activity”
Specialization “Customs Affairs”

Salah eddine Soltani

signature

Scientific supervisor
Candidate of Technical Sciences,
Associate Professor

Svitlana Galko

signature

Manager of the educational program
Doctor of Technical Sciences,
Professor

Taras Karavayev

signature

Kyiv 2020

Kyiv National University of Trade and Economics

Faculty of Trade and Marketing

Department of Commodity Science and Customs Affairs

Specialty 076 “Entrepreneurship, Trade and Stock Exchange Activity”

Specialization “Customs Affairs”

Approved by

Head of the Department

N. Merezhko

« ____ » ____ 20__

**Task
for a final qualifying paper**

Soltani Salah eddine

1. Topic of a final qualifying paper: “Export and import of chocolate according to international trade agreements”

Approved by the Rector’s order from 02.12.2019 №4100.

2. Term of submitting by a student his/her terminated paper: 15.10.2020.

3. Initial data of the final qualifying paper

Purpose of the paper (project) is to study the export and import of chocolate according to international trade agreements.

The object is chocolate imported into Algeria from Ukraine.

The subject is export and import operations as regards international trade with chocolate between Ukraine and Algeria.

4. Illustrative material: tables, graphs, diagrams illustrated the base text of the final qualifying paper.

5. Consultants of the research and titles of subsections which were consulted:

Section	Consultant (last name and initials)	Date and signature	
		The task given	The task received

6. Contents of a final qualifying paper (list of all the sections and subsections)

INTRODUCTION

Chapter 1. Theoretical background of commodity science expertise and customs procedures with chocolate in international trade

1.1. World market of chocolate

1.2. Analysis of international requirements to the quality of chocolate

1.3. International agreements regulating export and import operations with chocolate

Chapter 2. Assortment analysis and commodity science expertise of chocolate for customs purposes

2.1. Organization, object and research methods

2.2. Analysis of assortment of chocolate on the global market

2.3. Commodity science expertise chocolate for customs purposes

Chapter 3. Customs procedures of chocolate export from Ukraine to Algeria

3.1 Determination of chocolate country of origin

3.2 Customs valuation and taxation of chocolate import in Algeria

3.3 Analysis of the customs procedures of chocolate import to Algeria

CONCLUSIONS AND RECOMMENDATIONS

REFERENCES

ANNEXES

7. Time schedule of the paper

No.	Stages of the final qualifying paper	Terms of the final qualifying Paper	
		de jure	de facto
1.	Choosing and approval of the final qualifying paper topic	01.11.2019	01.11.2019
2.	Preparation and approval of task for the final qualifying paper	17.02.2020	17.02.2020
3.	Writing and pre defence of the 1 st chapter of the final qualifying paper	01.05.2020	01.05.2020
4.	Writing and pre defence of the 2 nd chapter of the final qualifying paper	25.06.2020	25.06.2020
5.	Writing and preparation of scientific article	till 01.05.2020	
6.	Writing and pre defence of the 3 rd chapter of the final qualifying paper	01.10.2020	01.10.2020
7.	Preparation of the final qualifying paper (title, content, introduction, references, appendences), presentation of master diploma paper on the department and pre defence in the committee	16.10.2020	16.10.2020
8.	Presentation of the final qualifying paper on the department and on the deanery, receiving of referrals for external peer review	10.11.2020	10.11.2020
9.	Additional processing, printing, preparation of material to final qualifying paper defence	25.11.2020	
10.	Defencing of the final qualifying paper in the Examination Board	According to the schedule	

8. Date of receiving the task: 25.02.2020

9. Scientific adviser of the research

Svitlana Galko

10. Manager of educational program

Taras Karavayev

11. The task received by the student

Salah eddine Soltani

12. Resume of a scientific adviser of a final qualifying paper

The final qualifying paper of Salah eddine Soltani is devoted to the study of export and import of chocolate according to international trade agreements.

Based on the learned legislative acts and published literature, the author evaluates the state of the world market of chocolate, provide a description of international quality requirements to the chocolate and provides analysis of international agreements/documents connected to regulation of export and import operations with chocolate. Customs examination of chocolate was conducted by student and its results were presented in the paper.

Materials presented in the paper covers determination of chocolate country of origin in Algeria for Ukrainian products and customs valuation and taxation of chocolate import in Algeria. As well analysis of necessary steps before customs control and the customs procedures of chocolate import to Algeria is given.

The paper is well structured and meets the requirements. It includes tables and figures that clearly improve the perception of information. This paper has applied interest. Recommendations developed by the master student can be taken into account in the practical activities of enterprises which involved in international trade between Ukraine and Algeria.

Final qualifying paper of Salah eddine Soltani is recommended for defence in the Examination Board of Kyiv National University of Trade and Economics and it deserves the high mark.

Scientific adviser of a final qualifying paper Galko S.V.
(last name, initials, signature)

Note about preliminary paper defence _____
(last name, initials, signature)

13. Resume about a final qualifying paper

A final qualifying paper of the student Soltani Salah eddine
(last name, initials)

can be admitted to defence in the Examination Board.

Manager of the educational program Karavayev T. A.
(last name, initials, signature)

Head of the Department Merezhko N. V.
(last name, initials, signature)

_____, _____, 2020.

АНОТАЦІЯ

Солтані С. Здійснення експортно-імпортних операцій з шоколадом відповідно до міжнародних торговельних угод.

У роботі проаналізовано ситуацію з какао та какао-продуктами, зокрема на ринку шоколаду у світі, виявлено сучасний асортимент шоколаду, представленого на світовому ринку. Були оглянуті міжнародні вимоги до якості шоколаду. В роботі вивчені міжнародні угоди, що регулюють експортно-імпортні операції з шоколадом. Запропоновано критерії та методи ідентифікації шоколаду для митних цілей, за якими була проведена експертиза шоколаду. Докладно викладено визначення країни походження шоколаду в Алжирі. Проаналізовано визначення митної вартості та оподаткування імпорту шоколаду в Алжирі. Проаналізовано класифікацію шоколаду відповідно до УКТЗЕД та Гармонізованої системи опису та кодування товарів. Наведено аналіз митних процедур шоколаду, що ввозиться з України до Алжиру.

Ключові слова: какао та виробництво какао, шоколад, світовий ринок, міжнародна угода, товарознавство, експертиза, імпорт, експорт, митне оформлення, митна вартість, митні платежі, імпорт, код HS, компанія НСС

ANNOTATION

Soltani S. Export and import of chocolate according to international trade agreements.

The situation of the cocoa and cocoa products, in particular chocolate market in the world is analyzed in the paper and modern assortment of chocolate presented on the global market was detected. International requirements to the quality of chocolate were observed. International agreements regulating export and import operations with chocolate were studied. The criteria and methods of identification of chocolate for customs purposes are suggested, according to them, was conducted chocolate expertise. Determination of chocolate country of origin in Algeria was observed in detail. The Customs valuation and taxation of chocolate import in Algeria were analyzed. The classification of the chocolate according to UCGFEA and HS has been analyzed. The analysis of the customs procedures of chocolate imported from Ukraine to Algeria is given.

Keywords: Cocoa and cocoa production, chocolate, world market, international agreement, commodity expertise, examination, import, export, customs clearance, customs value, customs payments, import, HS code.

ABBREVIATIONS

B2B – business to business

BIMO – Biscuiterie du Moghreb Company

CACI – certified addiction counselor, level I

CBES– cocoa butter equivalents

CBI–Centre for the promotion of imports from developing countries

CCI – Chambres de commerce et d'industrie

CD/ EU – customs duty / European Community (**DD/CE** Droit de Douane / Communauté Européenne)

CD/ GAFTA –customs duty / The Greater Arab Free Trade Area (**DD/GZALE** Droit de Douane /Grande Zone Arabe)

CD/ ICT –Internal Consumption tax **DD/TIC** (Droit de Douane / Taxe Intérieure Consommation)

CD/ SSC –Social security contributions SSC (Retirement pensions), (**DD/TCS** Droit de Douane /Taxe consommation Solidaire)

CD/DAPS –provisional additional safeguard duty (**DD/DAPS** Droit de Douane /Droit Application Provisoire)

CD/non-EU – customs duty / non- European Community (**DD/UC** Droit de Douane /hors Communauté Européenne)

CIS – Commonwealth of independent states

CMR – railway consignment note

CMU – Cabinet of ministers of Ukraine

CN – combined nomenclature

CNAS – caisse nationale des assurances sociales des travailleurs salariés

CTN – carton

DAPS – droit additionnel provisoire de sauvegarde

DCP – direction de commerce et des prix

EFTA – European free trade association

EU – European Union

EURL – entreprise unipersonnelle à responsabilité limitée

FAO – Food and agriculture organization of the United Nations

FDA – food and drug administration

GMO – genetically modified foods

GS1 – international system identification

GSP – generalized system of preferences

GZALE – great Arab free trade zone

HACCP – hazard analysis and critical control points

HCC – hyper chocolani company

HS – harmonized system

ICC – International Cocoa Organization

ICO – International coffee organization

ICT – internal consumption tax

ISO – International organization for standardization

JRC –joint research Centre

NIF– numéro d'immatriculation fiscale

NIS – numéro d'identification statistique

PJSC – private joint-stock company

REGULATION EC – regulation of the European commission

RTC–le renseignement tarifaire contraignant

SIGAD – système d'information et de gestion automatisée des douanes

SSC – social security contributions

T.CD – total customs duty

TARIC– Integrated tariff of the European communities

UCGFEA – Ukrainian classification of goods for foreign economic activity

VAT – Value Added Tax

VAT – value-added tax

WTO – World trade organization

CONTENT

INTRODUCTION	10
Chapter 1 Theoretical background of expertise and customs procedures with chocolate in international trade	
1.1 World market of chocolate	12
1.2 Analysis of international requirements to the quality of chocolate	18
1.3 International agreements regulating export and import operations with chocolate	22
Chapter 2 Assortment analysis and expertise of chocolate for customs purposes	
2.1 Organization, object and research methods	25
2.2 Analysis of assortment of chocolate on the global market	29
2.3 Expertise chocolate for customs purposes	32
Chapter 3 Customs procedures of chocolate export from Ukraine to Algeria	
3.1 Determination of chocolate country of origin	35
3.2 Customs valuation and taxation of chocolate import in Algeria	42
3.3 Analysis of the customs procedures of chocolate import to Algeria	46
CONCLUSIONS AND RECOMMENDATIONS	54
REFERENCES	58
ANNEXES	

INTRODUCTION

Topic actuality. Before wonderful creation of the chocolate bar, cacao in world was mostly consumed in the form of drink. It wasn't until inventors and innovators began to think outside the pod and wonder what else cacao can be transformed into.

Cacao over the past 200 years has undergone a major transformation and has gone through quite a process to get from bean to bar to industrialization of the bar.

Chocolate confectionery is one of the promising segments of Ukrainian exports. During 2015-2019, Ukrainian exports of these products grew by 9% annually, which is twice as much as global exports (on average, world exports of these products in 2015-2019 grew by 4% annually). Ukraine exports the most chocolate products to EU countries (39% of total Ukrainian exports) and CIS countries (36%), followed by Asian countries (19%). Among some countries, Ukraine's largest partners are Kazakhstan, Romania, Bulgaria and Georgia, and if exports to the CIS countries are gradually declining, supplies to the EU and other regions - are growing dynamically (in physical terms over the past 4 years, exports have grown: to Romania by 28%, in Bulgaria by 54%, Hungary by 79%, Poland by 30%, Germany by 32%, and in the United States by 64%). Among these countries the volumes of Ukrainian export of chocolate to Algerian market is not the biggest. Without taking into account the impact of the COVID-19 pandemic, we hope that this region for Ukraine is promising; therefore it is interesting to learn peculiarities of international trade with chocolate.

Research object – chocolate imported into Algeria from Ukraine.

Research subject – export and import operations as regards international trade with chocolate between Ukraine and Algeria.

The final qualifying paper purpose is to study the export and import of chocolate according to international trade agreements.

To achieve the mentioned above purpose, the following **tasks** should be solved in the paper:

- to analyse world market of chocolate and its assortment;
- to learn international quality requirements to chocolate;
- to study international agreements regulating export and import operations with chocolate;
- to conduct chocolate expertise for customs purposes;
- to determine chocolate country of origin and explain customs valuation and taxation of chocolate import in Algeria;
- to analyse customs procedures of chocolate import to Algeria.

Research methods: analytical, organoleptic, measuring and general scientific methods (system analysis and synthesis, comparison).

The final qualifying paper scientific originality. The main features important for chocolate classification in foreign trade were defined and on this basis the criteria, methods and means of chocolate expertise for customs purposes were suggested.

Obtained results practical value. Result of expert examination of chocolate, as well as analytics on world market, assortment, taxation, and customs clearance of imported chocolate in Algeria can be used as basic study for the next steps in developing chocolate export strategy of Ukraine.

The 3rd chapter of the paper is written based on the author's practical experiences in foreign trade and in Algerian company.

Research results approbation. The research results were presented and discussed at the III All-Ukrainian student scientific-practical conference "Actual problems of entrepreneurship, trade and marketing" and the article was published in the collection of students scientific articles: Soltani S. Identification expert examination of chocolate for customs purposes // Митна справа: практичний аспект. – 2020. – pp. 87-93 [1].

The final qualifying paper structure and volume. The paper consists of an introduction, three chapters, conclusions and recommendations, references, and annexes. The main text of the paper includes 58 pages. The paper contains 12 tables and 4 figures. The list of references includes 54 items. 24 annexes are added to the paper and appear on 34 pages.

CHAPTER 1

THEORETICAL BACKGROUND OF EXPERTISE AND CUSTOMS PROCEDURES WITH CHOCOLATE IN INTERNATIONAL TRADE

1.1 World market of chocolate

Chocolate, made from cocoa beans, which grow on Cacao Trees. Thousands of years ago, cocoa beans were discovered in South American rain forests where the humid and tropical climate mixed with elevated rainfall created the perfect place for cocoa trees to grow [2].

Chocolate is a solid *mixture*. In its basic form it is composed of cacao powder, cocoa butter, and some type of sweetener such as sugar; however, modern chocolate includes milk solids, any added flavors, modifiers, and preservatives.

The word “chocolate” comes from the Nahuatl (Aztecan) word Xocolatl for “bitter water”, referring to its original incarnation as a hot, spiced beverage in the Mayan and Aztec traditions [3].

Cacao vs. Cocoa – What’s the Difference? Is it cacao or cocoa? These terms are beginning to have some overlap, but in general, they have separate usage cases and cannot be substituted for each other [4]. Cacao is a type of evergreen tree native to South America and cacao products are made from non-roasted beans. Cocoa is a drink made from the powdered beans of this tree, or several other products and cocoa products are made from roasted beans. Therefore, South Americans (and Africans) grow cacao and people all over the world drink cocoa.

The data of the Trade Map of the International Trade Centre was used for our analysis of the world market of chocolate, which based on the statistical data of chocolate and other food preparations containing cocoa with HS code 1806. The chocolate world market size is valued at 28.1 billion of the US dollars in 2019. Volumes of the chocolate supplied to the global market raised from 19.1 billion of the US dollars in 2010 to almost 50 % in 2019 (Fig.1.1.).

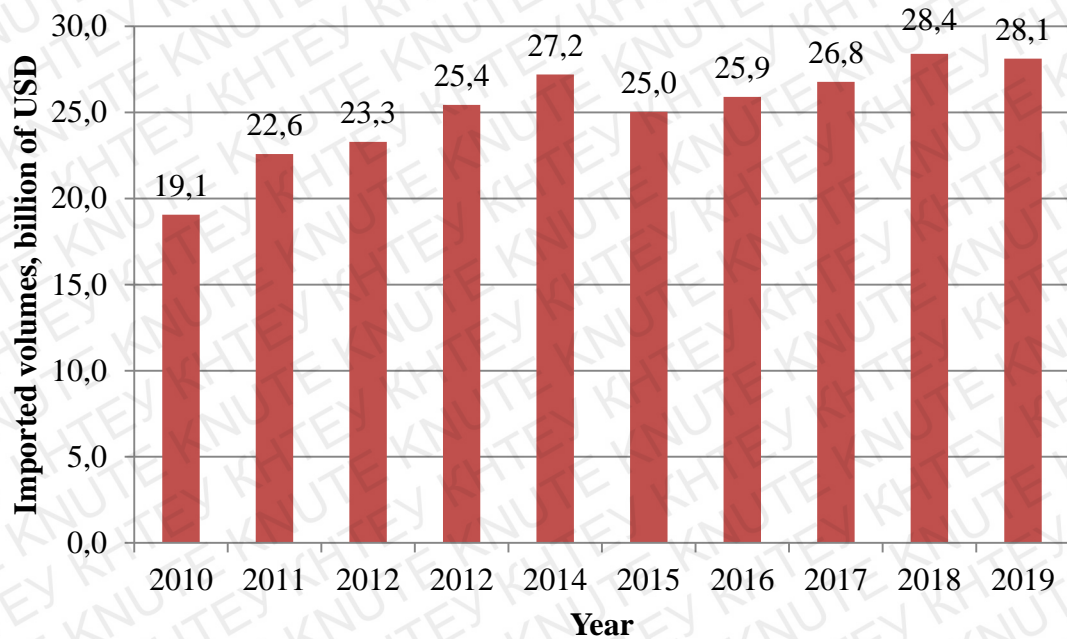


Fig. 1.1. Volumes of imported chocolate to the world market in 2010-2019

Among Top-20 countries of chocolate exporters to the world market in 2019 there are Germany, Belgium, Italy, Netherlands, Poland, United States of America, Canada, France, United Kingdom, Switzerland, Russian Federation, Mexico, Turkey, Spain, Singapore, Austria, Sweden, China, Ireland and Malaysia (Fig.1.2.). Export of chocolate from Germany amounted 4.9 billion of the US dollars in 2019. Annual growth in exported value of chocolate between 2015-2019 was the biggest in Malaysia (24%), Russian Federation (14%), Italy (9%) and Sweden (8%) [5].

Chocolate demand Global sales from chocolate exports by country totaled US\$29.2 billion in 2019. The overall value of chocolate exports rose by an average 13.9% for all exporting countries since 2015 when chocolate shipments were valued at \$25.6 billion. Year over year, the value of exported chocolate decreased by -0.4% from 2018 to 2019.

Among continents, European countries exported the highest dollar worth of chocolate during 2019 with shipments amounting to \$21.7 billion or roughly three-quarters (74.3%) of overall international chocolate sales. This compares with 13.4% from North America, 8.9% from Asia, 1.2% from Latin America excluding Mexico

but including the Caribbean, another 1.2% from chocolate exporters in Africa, and 0.9% from suppliers in Oceania led by Australia and New Zealand.

International purchases of imported chocolate totaled US\$28.5 billion in 2019.

Overall, the value of chocolate imports rose by 12% for all importing countries since 2015 when international purchases of chocolate cost \$25.5 billion. Year over year, chocolate imports fell by -1.3% from 2018 to 2019.

From a continental perspective, suppliers in European countries spent the most on imported chocolate during 2019 with purchases valued at \$17.1 billion or 60% of the global total. In second place were Asian importers at 18.4% while 14.8% of chocolate imported worldwide was delivered to customers in North America. Smaller percentages arrived in Latin America (2.4%) excluding Mexico but including the Caribbean, Oceania (2.3%) led by Australia and New Zealand, then Africa (1.9%).

Among Top-20 countries of chocolate importers from the world market in 2019 there are United States of America, Germany, France, United Kingdom, Netherlands, Canada, Belgium, Poland, Spain, Italy, Japan, Russian Federation, Austria, Saudi Arabia, China, Australia, Hong Kong (China), Sweden, Ireland and Czech Republic (Fig.1.3.). Import of chocolate to the United States of America amounted 3 billion of the US dollars in 2019. At the same time annual growth in imported value of chocolate between 2015-2019 was the biggest in Russian Federation (17%), Netherlands (8%), Poland (8%) and Sweden (7%) [6].

World cocoa production represents 4.55 million tons in 2016/2017, i.e. 145 kg per second. With 35% of world production, Cote d'Ivoire is the world's largest producer of cocoa with 1.4 million tons of cocoa beans harvested for 1.5 billion dollars, ahead of Ghana, Nigeria and Cameroon. 90% of the world cocoa production comes from 7 countries. Africa produces three quarters of the world's cocoa. Almost 40 million people depend on the cultivation of cocoa for a living [7].

It has to be highlighted that the United States and Germany alone accounted for 20% of world cocoa consumption (2010). Germany is the largest producer of chocolate in Europe. Chocolate sales in the United States amounted to 22 billion of the US dollar in 2017.

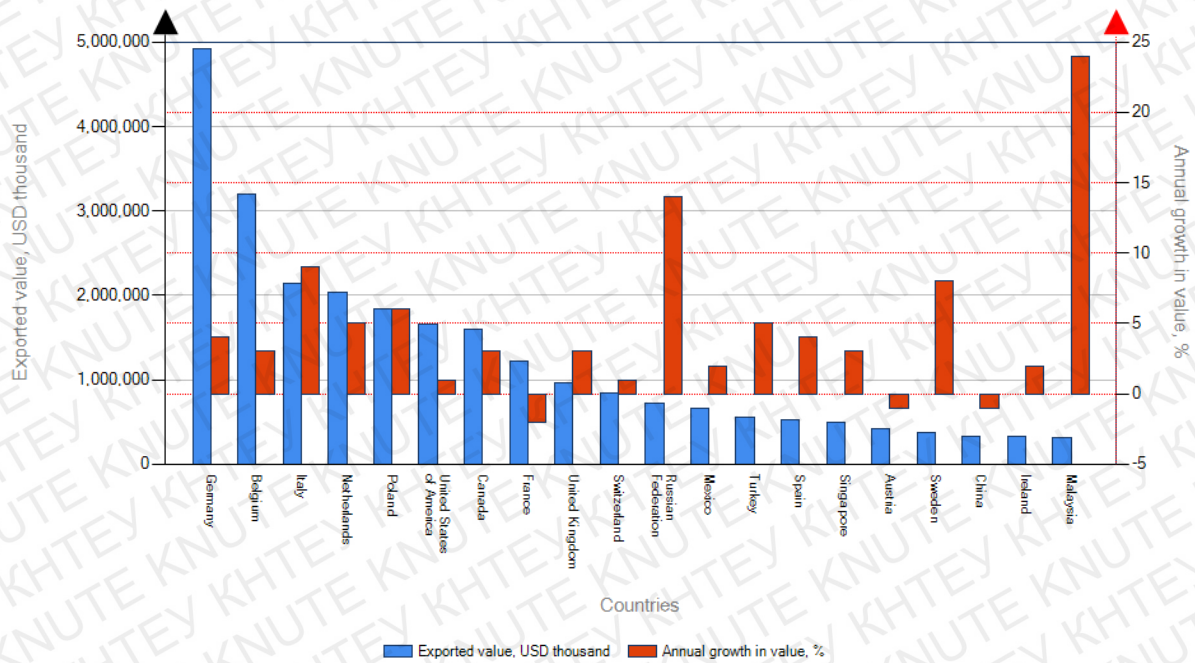


Fig. 1.2. List of Top-20 chocolate exporting countries to the world market in 2019

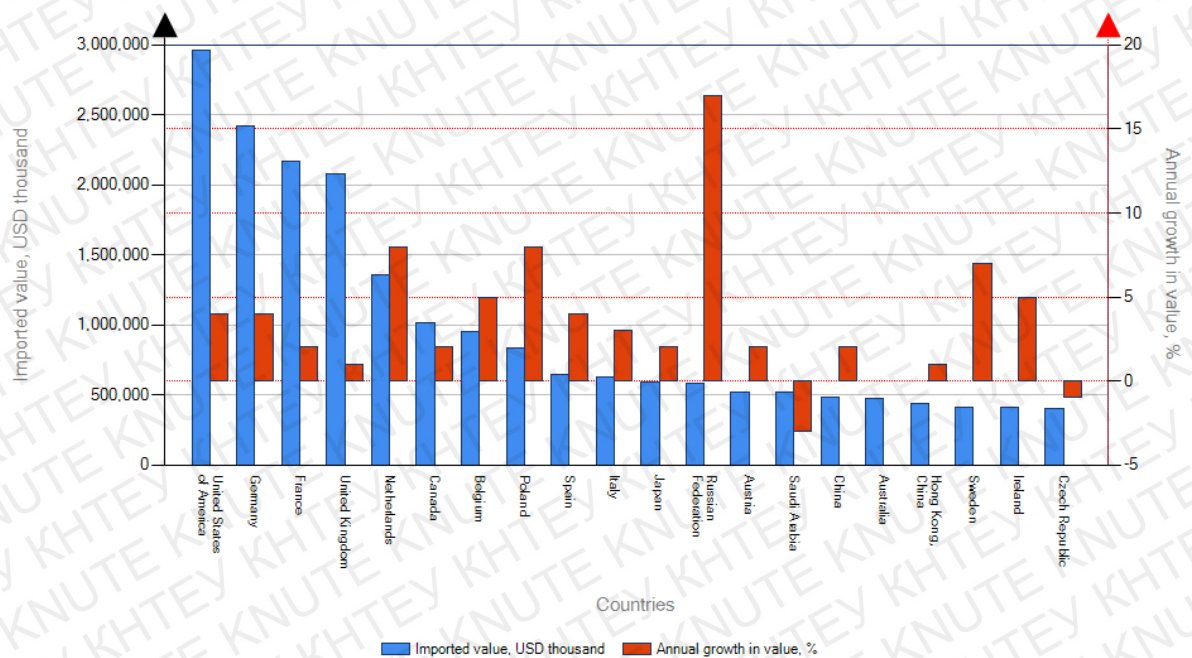


Fig. 1.3. List of Top-20 chocolate importing countries from the world market in 2019

Over 90% of global cocoa production comes from 6.5 million smallholder farms. Cocoa farmers export 2 billion of the US dollar a year. The cultivation of cocoa remains, mainly the fact of small family farms, which explains why local

farmers receive only 5 to 7% of the final price of the chocolate bar. Cocoa exporters thus generate 30 times less income than confectioners [7].

6 multinationals represent 85% of the cocoa market: Hershey, Mars, Philip Morris, Nestlé, Cadbury and Ferrero. Top 3 chocolate multinational companies are Kraft, Mars and Nestlé.

It is interesting to know that global sales of chocolate bars represent 15,855 wafers per second, or a market of 17.3 billion chocolate bars per year and 80 billion euros [7].

In order to identify who are among main manufacturers of chocolate in the world we turned our attention to *Candy Industry* [8] that publishes an annual list of the top 100 global confectionery companies, ranking them by net sales (Table 1.1 - net confectionery sales value in 2019).

Table 1.1

The top ten global confectionery companies of chocolate, by sales value in 2019

COMPANY	NET SALES 2019 (USD millions)
Mars Wrigley Confectionery, division of Mars Inc (USA)	18,000
Ferrero Group (Luxembourg/Italy)	13,000
Mondelez International (USA)	11,800
Meiji Co Ltd (Japan)	9,721
Hershey Co (USA)	7,986
Nestlé SA (Switzerland)	7,925
Chocoladenfabriken Lindt & Sprungli AG (Switzerland)	4,574
Pladis (UK)	4,515
Ezaki Glico Co Ltd (Japan)	3,156
Orion Corp (Korea)	1,767

According to powerful FAOSTAT tool that is the world's largest database of food and agriculture statistics and the (paid) Quarterly Bulletin of Cocoa Statistics produced by ICCO is the most authoritative source of cocoa statistics in the world [9], in 2017 Africa region produced 3,5 million tons of cocoa bean, Americas – 818.7 thousand tons and Asia and Oceania – 326.6 thousand tons.

From 1980/81 to 2019/20 there was growth in the world cocoa production [10] from 1.7 to 4.8 million tons.

Chocolate Confectionery in Ukraine.

The world confectionery market is divided into three segments: chocolate, flour and sugar confectionery. The largest share falls on chocolate products (63% of the international market). This is the result of increased demand for black chocolate made of natural ingredients (quality and health safety are the main criteria in the food industry, as well as in others). Manufacturing of chocolate products also prevails in Ukraine, flour production is quite advanced, and a large proportion of sugar products is practically concentrated in one company – "Roshen" Corporation.

We can observe that the absolute leader in all three segments of the Ukrainian confectionery market is TM "Roshen" with annual output of 48.580 tons of chocolate, 47.648 tons of flour and 104.576 tons of sugar products. Although several years ago the priority in production of chocolate products belonged to "A.V.K.", and in flour products to "Kyiv-Konti". "Roshen" Corporation simultaneously occupies about 80% of Ukrainian sugar sweets market [11].

Chocolate Confectionery in Algeria.

Algeria sold 528 tons of chocolate in 2018. Across 2018 alone, the interest in the processed category has gone up, changing by 39.96 per cent compared to the year 2017. Between 2015 and 2018, chocolate exports improved by 88.83 per cent, earning the country \$1.32m for the year 2018. The chocolate exports are categorized as:

- Chocolate and other preparations containing cocoa, in blocks, slabs or bars of ≤ 2 kg (excluding filled) (HS code 180632)
- Chocolate and other food preparations containing cocoa, in blocks, slabs or bars weighing > 2 kg or in liquid, paste, powder, granular or other bulk form, in containers or immediate packings of a content > 2 kg (excluding cocoa powder) (HS code 180620)

- Chocolate and other preparations containing cocoa, in blocks, slabs or bars of ≤ 2 kg, filled (HS code 180631)
- Chocolate and other preparations containing cocoa, in containers or immediate packings of ≤ 2 kg (excluding in blocks, slabs or bars and cocoa powder) (HS code 180690)

The yearly growth in the quantity of Algeria chocolate between 2015 and 2018 was 88.83 % compared to the period between 2017 and 2018. Algeria's share of the world's total chocolate exports in 2018 was 0% [12].

Domestic players lead sales, boosted by the ban on imports. The local manufacturer BIMO (Biscuiterie Moderne) strengthened its value share as category leader in 2019, outperforming some international competition such as Ferrero & related parties and taking advantage of the problems of importing brands into Algeria. Moreover, BIMO chocolate confectionery products are very competitive due to their affordable prices and reasonable quality [13].

1.2. Analysis of international requirements to the quality of chocolate

There are certain legal and non-legal requirements you must meet to enter the European cocoa and cocoa products market, regarding food safety and food contaminant levels, for instance. Furthermore, European cocoa and cocoa products buyers increasingly apply additional requirements that you need to comply with to keep up with the market, especially in the field of food safety certification and sustainability. If you want to enter a specific niche market, you must comply with specific niche requirements. Meeting these additional requirements can increase your chances on the market considerably.

From design to finished products, operational controls are supported by strict monitoring of hygiene rules. Chocolate products are subject to very precise regulations defining the raw materials and detailing the categories of chocolate: milk chocolate, white chocolate, filled chocolate, etc. Thus, the permanent control of machines and computerization contribute to the assurance of the quality required.

In addition, each type of chocolate corresponds to a name determined

according to its cocoa content and other raw materials: % of total cocoa solids, % of total dry matter of lactic origin, % of butyric fat or even % of sucrose.

What legal and non-legal requirements must the product comply with?

Food safety and hygiene are key issues on the European market. To be exported to Europe, cocoa products must comply with the European law on food safety and food hygiene that ensure the quality of food products throughout the whole supply chain. An important aspect to control food safety hazards is defining critical control points (Hazard analysis and critical control points HACCP) by implementing food management principles.

Regulations as regards chocolate products include:

- ✓ *the General Food Law* (Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety) [14] *and the general rules on Food Hygiene* (Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs) [15];
- ✓ *the regulation on contaminants in foodstuffs* (Commission Regulation (EC) No 1831/2003 of 22 September 2003 setting maximum levels for certain contaminants in foodstuffs) [16].

In EU there is focus on applying good agricultural practices to reduce the presence of food contaminants. For example, *cocoa liquor* contains over 300 chemical compounds that give chocolate its addictive, aphrodisiac and euphoria-inducing attributes. Among the molecules are: anandamide, theobromine, phenyl ethylamine, tetra hydro-beta-carbolines, epicatechin, serotonin, tryptophan and procyanidins [17].

Special attention in EU is paid to packaging. Chocolate is packaged in materials that can protect it from: oxidation, moisture, insect infestation, light, excessive temperature [18].

During the production of classic chocolate, manufacturers are not obliged to mention the presence of soya lecithin, a synthetic flavor, in the list of ingredients if

this does not reach 1% of the total ingredients. In addition, since 2003, the European Community has authorized the use of vegetable fats other than cocoa butter in chocolate (up to 5% of the finished product). We can thus find ingredients such as palm oil, illipe, shea but also GMO soy lecithin to bind the ingredients to the fat mass, and synthetic vanilla (vanillin) aromatic adjuvant, as well as refined white sugar [19].

International rules and standards of cocoa and chocolate products.

The European Union (EU) defines a number of specific common rules for cocoa and chocolate products which complement the legislation applicable to foodstuffs. These rules concern composition, sales names, labelling and presentation [20].

In some countries, there are specific regulations as to what can be marketed as 'chocolate' and what different varieties of chocolate are comprised of (in the table 1.2 and 1.3 there are examples of EU and USA) [21].

Table 1.2

Different types of chocolate under EU law and their respective contents

Product	Total dry cocoa solids	Cocoa butter	Non-fat cocoa solids	Total fat1	Total fat	Milk solids	Flour/ starch
Chocolate	≥ 35 %	≥ 18 %	≥ 14 %	-	-	-	-
Couverture chocolate	≥ 35 %	≥ 31 %	≥ 2,5 %	-	-	-	-
Chocolate vermicelli/flakes	≥ 32 %	≥ 12 %	≥ 14 %	-	-	-	-
Milk chocolate	≥ 25 %	-	≥ 2,5 %	≥ 25 %	≥ 3,5 %	≥ 14 %	-
Couverture milk chocolate	≥ 25 %	-	≥ 2,5 %	≥ 31 %	≥ 3,5 %	≥ 14 %	-
Milk chocolate vermicelli/flakes	≥ 20 %	-	≥ 2,5 %	≥ 12 %	≥ 3,5 %	≥ 12 %	-
Family milk chocolate	≥ 20 %	-	≥ 2,5 %	≥ 25 %	≥ 5 %	≥ 20 %	-
Cream chocolate	≥ 25 %	-	≥ 2,5 %	≥ 25 %	≥ 5,5 %	≥ 14 %	-
Skimmed milk chocolate	≥ 25 %	-	≥ 2,5 %	≥ 25 %	≥ 1 %	≥ 14 %	-
White chocolate	-	≥ 20 %	≥ 2,5 %	-	-	≥ 14 %	-
Chocolate a la Taza	≥ 35 %	≥ 18 %	≥ 14 %	-	-	-	≥ 8 %
Chocolate familiar a la Taza	≥ 30 %	≥ 18 %	≥ 12 %	-	-	-	≥ 8 %

Table 1.3

Different types of chocolate under USA law and their respective contents

Product	chocolate liquor	milk solids	sugar	cocoa fat	milk fat
milk chocolate	$\geq 10 \%$	$\geq 12 \%$	-	-	-
sweet chocolate	$\geq 15 \%$	$\geq 12 \%$	-	-	-
bitter/semi-sweet chocolate	$\geq 35 \%$	$\geq 12 \%$	-	-	-
white chocolate	-	$\geq 12 \%$	$\geq 55 \%$	$\geq 20 \%$	$\geq 3,5 \%$

Inevitably, these regulations differ from country to country, though many have no concrete definition of what 'chocolate' is when sold to the consumer. Of course though, these places will have other regulations that must be followed for general sale [21].

Heavy metals, in particular cadmium. The European Union has regulation on cadmium (table 1.4) in cocoa and derived products - Commission Regulation (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs [16].

Table 1.4

The maximum levels of cadmium relate to finished chocolate products

Specific cocoa and chocolate products	Maximum permitted cadmium levels
milk chocolate with $\leq 30\%$ total dry cocoa solids	0,10 mg/kg
chocolate with $\geq 30 \%$ < 50 % total dry cocoa solids	0,30 mg/kg
chocolate with $\geq 50 \%$ total dry cocoa solids	0,80 mg/kg
cocoa powder (as an ingredient in sweetened cocoa powder) sold to the final consumer	0,60 mg/kg

Cadmium is found naturally in the soil, but pesticides and chemical fertilizers containing cadmium are also sources of contamination. The presence of cadmium is a particular problem for cocoa from some Latin American countries due to factors like volcanic activity and forest fires.

1.3. International agreements regulating export and import operations with chocolate

The International Cocoa Organization (ICCO) is a global organization, composed of both cocoa producing and cocoa consuming countries with a membership. Located in London, ICCO was established in 1973 to put into effect the first International Cocoa Agreement [22], which was negotiated in Geneva at a *United Nations International Cocoa Conference*. On 2 November 2005, the total percentage of exporting countries which had acceded to the Agreement surpassed 80%. Thus, the *UN International Cocoa Agreement*, 2001 entered into force definitively for the first time in the 30-year history of the International Cocoa Agreements. ICCO Member countries represent almost 85% of world cocoa production and more than 60% of world cocoa consumption. All Members are represented in the International Cocoa Council, the highest governing body of the ICCO.

Other document developed on the global level and it also related to chocolate is The Codex Alimentarius collection of international food safety standards that have been adopted by the Codex Alimentarius Commission. There is *Codex Alimentarius Standard for chocolate and chocolate products CODEX STAN 87 – 1981* [23], adopted in 1981 and revised in 2003. Among other important normative standard related to chocolate and cocoa (table 1.5), we would like to mention *ISO 67.190 Chocolate* [24], which applied internationally and *GOST 31721-2012 Chocolate*.

Table 1.5

The important normative standard related to chocolate and cocoa

Standard	Description	Country of application
Codex stan87-1981 [23]	Chocolate and chocolate products intended for human consumption	International
ISO 67.190 [24]	Chocolate	International
GOST 31721-2012 [25]	Chocolate. General technical conditions /Шоколад. Общие технические условия	CIS countries
DSTU 3924-2000 [26]	Chocolate. General technical conditions /Шоколад. Загальні технічні умови	Ukraine

General technical conditions [25] – applied in CIS countries. In Ukraine, *DSTU 3924-2000 Chocolate. General technical conditions* [26] is in force.

Without listing international agreements regulating export and import operations with chocolate we would like to highlight that between many countries there are agreements on trade with specific provisions on *food safety clearance*.

Food safety clearance of importing country has to be undergone for any import of Cocoa and Cocoa products. Normally, this procedure is done by drawing sample of imported goods which is sent to respective laboratories for testing purpose. The imported goods are released only after obtaining favorable test report. If such imports are regularly taken place, import shipments are selected randomly for inspection.

Food safety clearance may be required to obtain for export of Cocoa and Cocoa Preparations items. Phytosanitary certification also may be required if applicable to export Cocoa and Cocoa Preparations under chapter 18 of HS code (HS code). Even though according to the *WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement)* [27], WTO members have the right to take sanitary and phytosanitary measures necessary for the protection of human, animal or plant life or health, it has to be mentioned here that such measures should not be discriminative.

As regards agreements regulating the origin of chocolate, there is *WTO Agreement on Rules of Origin* agreed on September, 20 1986 [28]. Rules of origin are the criteria needed to determine the national source of a product. Their importance is derived from the fact that duties and restrictions in several cases depend upon the source of imports. The source of origin of imported Cocoa and Cocoa products are required in almost all countries. So a certificate of origin issued by necessary approved authorities at exporting country is required to import Cocoa and Cocoa products. Certificate of origin helps to determine origin of imported goods to avail exemption on import duties and other procedures based on different agreement between countries under their foreign trade policy [29, 30].

DIRECTIVE 2000/36/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL relating to cocoa and chocolate products intended for human consumption. The purpose of these Regulations [31] is to give legal effect to Directive 2000/36/EC of the European Parliament and of the Council, which

prescribes, and harmonizes within the European Union, standards for the composition and labelling of cocoa and chocolate products. The so-called Chocolate Directive (Directive 2000/36/EC) allows the addition of up to **5%** of vegetable fats other than cocoa butter, the so-called cocoa butter equivalents (CBEs), in chocolate. If CBEs are added, consumers have to be informed by appropriate labeling. EU Member States' laws, regulations and administrative provisions have had to comply with the Chocolate Directive since August 2003.

Assessing compliance of chocolate products with the labeling provisions cannot be done without appropriate methods of analysis. The chemical composition and physical properties of the CBEs resemble those of cocoa butter very closely, making them extremely difficult to quantify and in some cases even difficult to detect. The JRC has developed a reliable analytical approach to detect and quantify CBEs in dark and milk chocolate.

The International Convention on the Harmonized Commodity Description and Coding System (HS Convention) [32], entered into force on 1 January 1988, is also important document in international trade. Any importer or exporter of Cocoa and Cocoa Preparations should know HS code of their export product. Chocolate falls under HS code (Harmonized System Code) chapter 18 “Cocoa and Cocoa Preparations”.

As regards Ukraine and its legislation we can identify new law expected to prompt changes in chocolate confectionery in Ukraine. In January 2018, a new law regarding the classification and production standards of chocolate and chocolate-based products came into force. According to this law, confectionery products can only be called “chocolate” if they contain at least 43% cocoa-based products in terms of dry material and over 25% cocoa butter [33].

As regards Algeria we have to notice that costly and reduced importation is tilting sales away from internationals. Chocolate confectionery's competitive landscape in Algeria has significantly changed due to currency devaluation and government caps on imports of its products. As a result, Ferrero & related parties, which up until 2018 led the category for several years, has fallen down the rankings.

CHAPTER 2

ASSORTMENT ANALYSIS AND COMMODITY SCIENCE EXPERTISE OF CHOCOLATE FOR CUSTOMS PURPOSES

2.1 Organization, object and research methods

The object of paper is chocolate transported cross the customs border. Thus three samples of chocolate were selected for identification expert examination aiming to find the correct codes for these chocolate products exported from Ukraine to Algeria.

Sample #1 was dark chocolate bar with crushed hazelnuts “Old collection” produced by Kharkiv biscuit factory, sample #2 was Roshen milk-chocolate bar with caramel filling and sample #3 was plum & chocolat candy of the Goluba sweets.

The research was carried out according to the general scheme (Fig.2.1.) and in line with the established tasks.

As regards means and methods used for our chocolate expert examination, an important means of identification for chocolate was marking that contains all the product information and is used for identification purposes. Marking helped to define components and other important for identification features. The means of identification of chocolate for customs purposes include regulatory documents on quality indicators and can be used for identification purposes. Type and form of the prepared product defined by using Codex Alimentarius Standard for chocolate and chocolate products CODEX STAN 87 – 1981 amended in 2016 [23].

Aroma or smell and taste of the chocolate defined by using draft of the Elements of a harmonized international standard for cocoa quality and flavour assessment which is developed by Working Group on the Development of International Standards for the Assessment of Cocoa Quality and Flavours [34].

Used identification methods for chocolate research include analytical (by documentation), organoleptic and measuring laboratory methods.

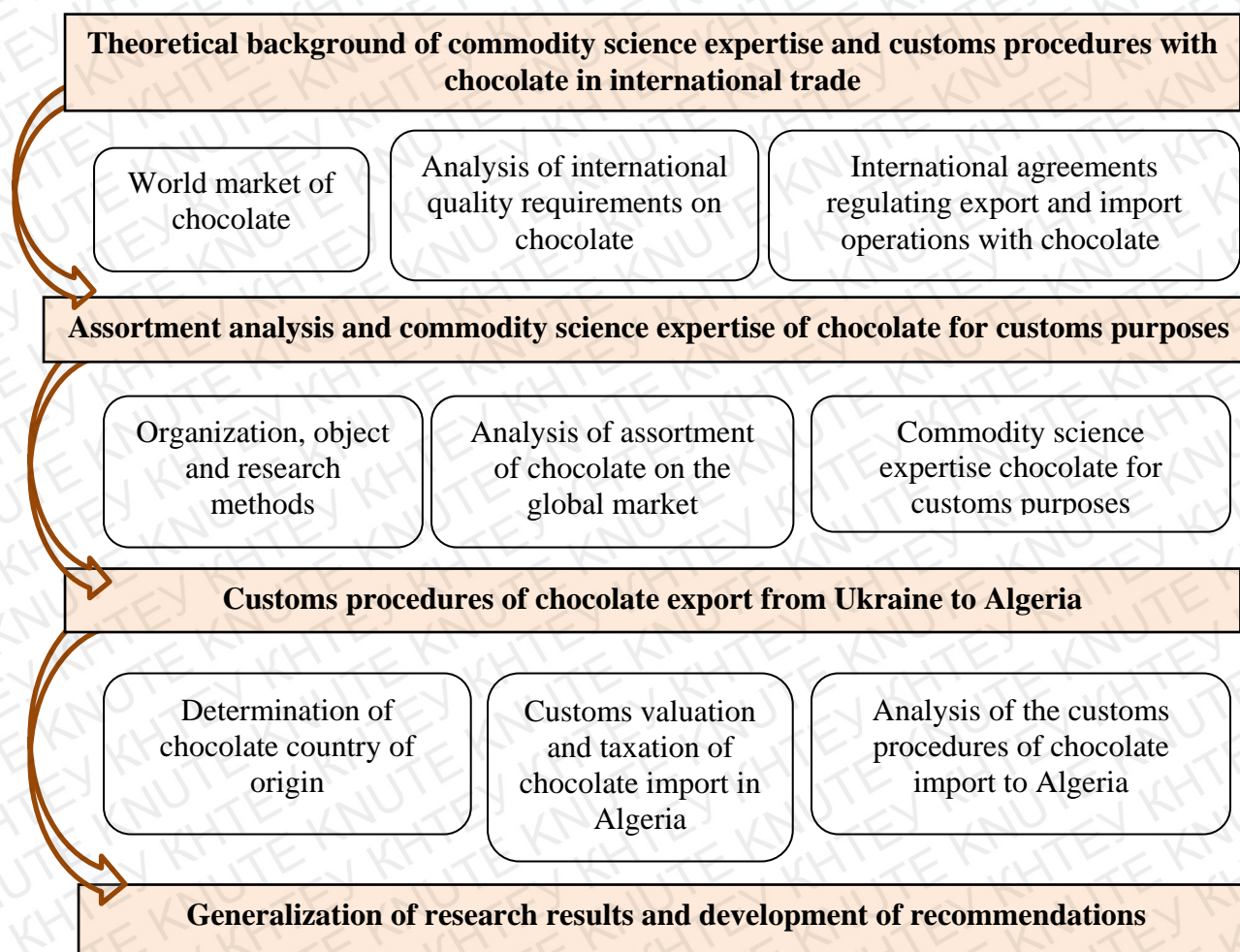


Fig. 2.1. General scheme of chocolate research

Chocolate is classified in the Chapter 18 “Cocoa and cocoa preparations” of the Section IV “Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes” (table 2.1). There are 3 subheadings for the chocolate: 1806.20, 1806.30 and 1806.90.

Table 2.1

HS classification of chocolate	
HS code	Description
Section IV	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes
Chapter 18	Cocoa and cocoa preparations
1806.10	-Cocoa powder, containing added sugar or other sweetening matter
1806.20	- Other preparations in blocks, slabs or bars weighing more than 2 kg or in liquid, paste, powder, granular or other bulk form in containers or immediate packings, of a content exceeding 2 kg
1806.30	- Other, in blocks, slabs or bars :
1806.31	-- Filled
1806.32	-- Not filled
1806.90	- Other

So the main HS classification features important for identification of chocolate are the following:

- *Cocoa content;*
- *Weight;*
- *Form of the prepared product.*

However, in addition to the mentioned above can be some other features that are really important in different countries. For example, in Algeria we will find more specification in some subheadings for chocolate (Table 2.2).

Table 2.2

Classification of chocolate in Algeria for customs purposes [35]

Code	Description
Section IV	Food industry products; beverages, alcoholic liquids and vinegars; tobacco and manufactured tobacco substitutes
Chapter 18	Cocoa and cocoa preparations
1806.10	-Cocoa powder, containing added sugar or other sweetening matter
1806.20	- Other preparations presented either in blocks or in bars weighing more than 2 kg, either in a liquid or pasty state or in powders, granules or similar forms, in immediate containers or packages, of a content exceeding 2 kg:
	- - - Presented in blocks or bars, weighing more than 2 kg:
1806.201100	- - - - in blocks
1806.201200	- - - - in bars
	- - - Presented in liquid or pasty state or in powders, granules or similar forms, in containers or immediate packaging, of a content exceeding 2 kg:
1806.202100	- - - -Liquid or pasty
1806.202200	- - - -powders
1806.202900	- - - -others
1806.30	- Others, presented in shelves, bars or sticks:
1806.310000	-- Filled
1806.32	-- Not filled
1806.321000	- - - Addition of cereals, nuts or other fruits
1806.329000	- - - Others
1806.90	- Others:
1806.9010	- - - Chocolate and chocolate products:
1806.901100	- - - - Chocolate candies (pralines), filled or not
1806.9019	- - - - Others:
1806.901910	- - - - - Filled
1806.901920	- - - - - Not filled
1806.902000	- - - Sugar confectionery and their substitutes made from sugar substitution products, containing cocoa
1806.903000	- - - Spreads containing cocoa
1806.909000	- - - Others

Thus, in Algerian classification for chocolate in addition to mentioned HS features of chocolate classification like *cocoa content, weigh and form of the prepared product*, were included also *the presence of filler, presence or absence of cereals, nuts or other fruits and the type of the prepared chocolate product (candies/pralines or other)*.

So, in case of conducting identification expert examination of chocolate for customs purposes these particular features were selected as basic criteria for expert examination of chocolate. In general to identification criteria we recommend to include the following: name of the product, manufacturing company, country of origin, product appearance, color, aroma/smell, taste, cocoa content, weigh, form of the prepared product, the presence of filler, presence or absence of cereals, nuts or other fruits, type of the prepared chocolate product (Table 2.3).

Table 2.3

The main criteria, methods and means of chocolate identification expert examination

Criteria/indicators	Means of identification	Identification methods
Name of the product	Marking of product or packaging, shipping documents, labels, trademark (if any)	Analytical
Manufacturing company	Marking, shipping documents, manufacturer code	Analytical
Country of origin	Contract, certificate of origin	Analytical
Product appearance	Product (packaging)	Organoleptic, analytical
Colour	Product	Organoleptic
Aroma/smell	Product, International Standards for the Assessment of Cocoa Quality and Flavour [34]	Organoleptic
Taste	Product, International Standards for the Assessment of Cocoa Quality and Flavour [34]	Organoleptic
Cocoa content	Marking of product or packaging	Organoleptic
Weigh	Product or marking of product or packaging	Measuring
Form of the prepared product	Product, Standard for chocolate and chocolate products CODEX STAN 87 – 1981 [23]	Organoleptic
The presence of filler	Product, product marking	Organoleptic, analytical
Presence or absence of cereals, nuts or other fruits	Product, product marking	Organoleptic, analytical
Type of the prepared chocolate product (candies/pralines or other)	Product, Standard for chocolate and chocolate products CODEX STAN 87 – 1981 [23]	Organoleptic

2.2. Analysis of assortment of chocolate on the global market

According to UN International Cocoa Agreement, 2010 [22] the chocolate and chocolate products are products made from cocoa beans which comply with the Codex Alimentarius standard for chocolate and chocolate products [23], where it is stated that chocolate and chocolate products shall be prepared from cocoa and cocoa materials with sugars and may contain sweeteners, milk products, flavouring substances and other food ingredients.

Chocolate can be typed by composition and by form.

There are different type of chocolate by composition, for instance: chocolate, sweet chocolate, couverture chocolate, milk chocolate, family milk chocolate, milk chocolate couverture and other chocolate products like white chocolate, gianduja chocolate, gianduja milk chocolate and chocolate para mesa [23].

By forms chocolate divided into chocolate vermicelli and chocolate flakes, filled chocolate and a chocolate or praline. The mentioned types of chocolate have different requirements concerning percentage of the following constituents: cocoa butter, fat-free, cocoa solids, total cocoa solids, milk fat, total milk solids, starch / flour, hazelnuts.

For example, *chocolate* (in some regions also named *bittersweet chocolate*, *semi-sweet chocolate*, *dark chocolate* or “*chocolat fondant*”) shall contain, on a dry matter basis, not less than 35% total cocoa solids, of which not less than 18% shall be cocoa butter and not less than 14% fat-free cocoa solids.

Milk chocolate shall contain, on a dry matter basis, not less than 25% cocoa solids (including a minimum of 2.5% fat-free cocoa solids) and a specified minimum of milk solids between 12% and 14% (including a minimum of milk fat between 2.5% and 3.5%).

White chocolate shall contain, on a dry matter basis, not less than 20% cocoa butter and not less than 14% milk solids.

Globally, seven multinational companies represent the bulk of the market for final chocolate products: *Mars*, *Ferrero*, *Mondelez*, *Meiji*, *Hershey*, *Nestlé* and *Lindt*

& *Sprüngli* [36]. All these multinationals have chocolate confectionery production plants in Europe except for Meiji (Japan) and Hershey (United States).

Industrial chocolate, such as chocolate couverture, is sold as an intermediary product to food manufacturers of all sizes in the mainstream and gourmet food segments. *Barry Callebaut* is the world's largest producer of industrial chocolate (product sales volume of 2.1 million tonnes in 2019) [36].

In Ukraine there are also big producers of chocolate like *Guylian*, *Patchi*, *Ferrero Spa*, *Domingo Ghirardelli*, *Toblerone*, *Cadbury*, *Kitkat* and *Galaxy* (Table 2.4).

Current coronavirus crisis affected the range of chocolate products. Since consumers have switched to more affordable mass-market products and private label retail chains. Instead, the premium and craft chocolate segment suffers from both higher prices and less representation in retail chains. In response, small craft chocolate makers are focusing on online promotion. As a result, the *Stay Home with Chocolate* platform has been created [37], which uses various online tools, such as real-time tasting and e-commerce, to increase sales of high-quality chocolate from small producers.

Chocolate products are traditionally considered to be not very good for health, in particular, due to their high sugar content. The trend of a healthy lifestyle, characteristic of developed countries, stimulates the demand for “healthier” products, namely:

- with a reduced content of added white sugar or its replacement with other sweeteners;
- with the addition of useful ingredients;
- made from natural and organic ingredients;
- made exclusively from plant ingredients.

In Asian countries, the popularity of the so-called “functional” chocolate with added vitamins, probiotics, fiber, useful trace elements, and seeds, is growing.

The world chocolate market is quite traditional in terms of flavours and aromas. Products with the usual flavours and ingredients are best sold.

Top 8 import Chocolate market players in Ukraine

Name	Logo of brand	Country of original
Guylian ,in 2008 Lotte Confectionary, 1958 by Guy Foubert		Belgium
Patchi, 1974 by Nizar Choucair		Lebanon
Ferrero Spa , 1982 by <u>Michael Ferrero</u>		Italy
Domingo Ghirardelli , 1852 by <u>Domenico Ghirardelli</u>		US of Swiss confectioner Lindt and Sprungli
Toblerone ,in 1990 Mondelēz International U.S 1908 by Emil Baumann & Theodor Tobler		Switzerland
Cadbury, 1824 by <u>John Cadbury</u>		England
Kitkat , (Nestlé) 1935 by <u>Rowntree's</u>		UK
Galaxy , 1960 by <u>mars</u>		UK

Nuts and berries are most often used for chocolate products. However, manufacturers are actively innovating in flavours, textures and flavours, such as [37]:

- unsweetened and spicy flavours (chili pepper, ginger, salt, mustard, bay leaf);

- local flavours and aromas (exotic fruits, flowers, herbs, seeds, spices);
- unusual combinations of flavours and aromas (chili peppers and cherries, berries and matcha).

Specific examples include Nestlé Aero Bliss Peppermint milk chocolate, which is filled with a mint flavoured centre and contains crunchy pieces of cookies (UK). In Asian countries, the use of traditional local products is popular, such as goji berries, matcha, chia seeds, flower aromas, spices. However, new unusual flavours and aromas are introduced by manufacturers very carefully. For example, American chocolate lovers tend to buy the same type of chocolate (56%), and 63% agree that they like the same type of chocolate they ate as children [37].

2.3. Commodity science expertise chocolate for customs purposes

Three following samples of chocolate were selected for identification expert examination aiming to find the correct codes for these chocolate products exported from Ukraine to Algeria (Table 2.5):

Sample #1 – dark chocolate bar with crushed hazelnuts “Old collection” produced by Kharkiv biscuit factory;

Sample #2 – Roshen milk-chocolate bar with caramel filling;

Sample #3 – plum & chocolat candy of the Goluba sweets.

All of samples, according to the marking on the packaging, contained cocoa.

On the sample #1 was marked only one ingredient cocoa in the amount not less than 69 %. However, sample #2 and #3 had full information about their components. For example, plum & chocolat candies (sample#3) contained following ingredients: sugar, plum, apple puree, black chocolate cocoa 73% min. (cocoa mass, cocoa butter, cocoa powder, emulsifier: soya lecithin, vanillin), acidity regulator: citric acid, acidity regulator: sodium citrate, flavored natural “Prunes”, natural flavored “Whipped cream”.

Milk-chocolate bar with caramel filling (sample#2) included: filling 43 % (glucose syrup, sweetened condensed composite milk product (skimmed milk 27%, sugar, vegetable fat (palm oil, sunflower oil), lactose), vegetable fat (palm oil), salt,

Table 2.5

The results of the chocolate expert examination for customs purposes

Identification criteria	Sample number		
	1	2	3
Name of the product	Dark chocolate with crushed hazelnuts “Old collection”	Milk-chocolate bar with caramel filling	Plum & chocolat candies
Manufacturing company	Kharkiv biscuit factory	PJSC Vinnytsia Confectionery Factory, Roshen	Goluba sweets
Country of origin	Ukraine	Ukraine	Ukraine
Product appearance			
Colour	Dark brown	Brown with white filling	Brown top with transparent light brown filling
Aroma/smell	distinct smell of hazelnut is present	subtle smell of vanilla is present	subtle smells of prune and cream are present
Taste	sweet and astringent	sweet and milky	sweet, fruity and bitter
Cocoa content	69 %	57 %	73%
Weigh	100 gr	40 gr	17 gr
Form of the prepared product	other cocoa preparations in bars weighing less than 2 kg	other cocoa preparations in bars weighing less than 2 kg	other cocoa preparations not belonging to blocks, slabs or bars, weighing less than 2 kg
The presence of filler	present	present	present
Presence or absence of cereals, nuts or other fruits	present	absent	present
Type of the prepared chocolate product (candies/pralines or other)	chocolate bar	chocolate candy	chocolate candy
Code, Algerian Customs Tariff	1806.321000	1806.3100	1806.901100

flavouring, emulsifiers: soya lecithin, E472c), sugar, cocoa butter, whole milk powder, cocoa mass, emulsifier: soya lecithin; flavouring: vanillin. Milk

chocolate contains (57 %): cocoa solids 34 % minimum, milk solids 17 % minimum. As regards this product on the label was mentioned that it may contain traces of nuts.

The results of the chocolate expert examination for customs purposes are presented in the Table 2.5.

The most influenced identification criteria for our classification for these three samples were *cocoa content* (helped us to classify products in heading 1806 of the chapter 18), *weigh* (weigh of all products less than 2 kg allowed us to escape the sub-heading 1806.20 and to be focused only on the sub-headings 1806.30 and 1806.90) *form of the prepared product* (sample #1 and #2 in bars up to 2 kg were separated to 1806.30 easily from the other forms like candy of the sample #3 -1806.90), *the presence of filler* (helped to divide milk-chocolate bar to 1806.3100 and dark chocolate with crushed hazelnuts to 1806.32), *the type of the prepared chocolate product* in the form of candy immediately drew our attention to the code 1806.901100 for sample #3 and *presence or absence of cereals, nuts or other fruits* that was the final stage for classification of sample #1 with code 1806.321000.

Thus, as chocolate identification criteria we would like to distinguish basic HS classification features of chocolate (*cocoa content, weigh and form of the prepared product*) and local tariff classification features of chocolate, in particular Algerian, like *the presence of filler, presence or absence of cereals, nuts or other fruits and the type of the prepared chocolate product (candies/pralines or other)*.

Application of the developed criteria in the expert examination of chocolate for customs purposes will allow us quickly and correctly determine the product code, which in turn helps to speed up the movement of goods across the Algerian customs border and avoid any customs violations.

CHAPTER 3

CUSTOMS PROCEDURES OF CHOCOLATE EXPORT FROM UKRAINE TO ALGERIA

3.1 Determination of chocolate country of origin

The origin of goods is one of the three essential concepts, along with the tariff species and customs value, determining the customs treatment of a commodity. Currently, this concept is gaining more importance with the proliferation of free trade agreements. Exchanges and agreements provide preferential tax regimes. These preferential relationships come in different forms:

- Agreement concluded with the partner country: the countries have a common definition of origin and reciprocally grant a tariff preference to products deemed to be originating (e.g. EU / Algeria Agreement);
- Tariff concessions granted unilaterally by a country (generally developed) in favor of a country or a group of developing or less developed countries (example: generalized system of preferences (GSP), concession granted by the European Union to certain countries West Africa) [38]

The country of origin and the country of provenance of the merchandise must be distinguished. The country of origin of a commodity, according to Article 14 of the Customs Code [39], is the country where it was wholly obtained or has undergone substantial processing. The country of origin, According to article 15 of the Customs Code, is the country from which the goods are shipped directly to the customs territory. For example: chocolate of Ukrainian origin is imported into Algeria from Poland. In this case, the country of origin is “Ukraine” and the country of provenance is “Poland”.

When several countries are involved in the production of a good, it is considered as originating in the country where it underwent the last substantial transformation. Is considered as substantial transformation, the transformation which is carried out on the basis of the criteria, in particular:

- The criterion of added value;
- The criteria for changing the tariff heading;
- The working and processing criteria [40].

The interest of determining the origin.

The relevance of the concept of origin differs depending on whether it is of non-preferential origin or of preferential origin.

Non-preferential origin is a key aspect in the control of foreign trade operations. Non-tariff restrictive measures may be imposed on goods originating in certain countries to meet specific concerns: economic (quantitative restrictions, safeguard measures, anti-dumping) , health, policies (embargo, reprisals) ... etc.

It can also be used to determine origin in the context of the "origin marking" of goods (i.e. the "made in" label). In addition, foreign trade statistics are compiled by country of origin. This makes it possible to distribute imports and exports according to trade partners, to know the geographical structure of trade and finally to establish trade balances.

As for the interest of determining non-preferential origin, origin becomes an element of taxation which makes it possible to determine preferential treatment (zero or reduced rate of customs duty and other duties and taxes having equivalent effect) to be reserved for a commodity depending on the country of origin with which a preferential trade agreement is concluded.

Preferential agreements (conventions).

The association agreement between Algeria and the European Union: signed in Valence on April 22, 2002, ratified by presidential decree n° 05/159 of 04/27/2005 and entered into force on September 1, 2005.

Rules for determining the origin under Protocol 6: According to the provisions of Article 2 of Protocol No. 06, origin can be acquired by the fact that the goods have been wholly obtained, or because they have been sufficiently worked or processed.

Thus, two criteria are clearly defined for acquiring Algerian or Community origin within the framework of the Algeria-EU association agreement, namely:

- Products fully obtained;

-Sufficient processing or processing.

Nevertheless, the same protocol provides for mitigations to the sufficient transformation rule. These are the rules of cumulating

- The Great Arab Free Trade Zone (GZALE): signed in Tunis on February 27, 1981, ratified by presidential decree n ° 04/223 of 08/03/2004 and entered into force with its executive program on January 1, 2009.
- The Algerian-Jordanian convention: signed in Algiers on May 19, 1997, ratified by presidential decree n ° 98-252 of 08/08/1998 and entered into force on January 31, 1999;
- The Algerian-Tunisian trade agreement: This agreement was signed in Tunis on December 4, 2008 and ratified, in Algeria, according to Presidential Decree n ° 10-12 of January 11, 2010.

Criteria for determining the origin.

The determination of the country of origin of a good is based on the distinction between that produced in a single country qualified as a “wholly obtained” good and that in the production of which several countries have. In the latter case, the acquisition of origin follows a series of rather complex rules to determine, which is the country where the goods have undergone the last substantial transformation.

1) Entirely obtained merchandise: This concept, which is almost universal, considers as entirely obtained from a country: -mineral products extracted in this country In practice, the application of the criterion of goods wholly obtained in one country poses much less problem compared to the criterion for determining the origin when the production of the goods takes place in two or more countries.

2) Substantial transformation: The Kyoto convention (specific annex k relating to origin) specifies that "the origin of goods is determined by considering as the country of origin that where the last substantial transformation or working deemed sufficient was carried out. to give the goods their essential character ”.

Across the world, three criteria are generally used to determine whether a transformation qualifies as substantial. It's about:

➤ *Change of tariff heading:* Each non-originating material must undergo, during processing, a change in tariff classification within the framework of the nomenclature of the Harmonized System (HS). In some cases, this is a change in heading four digits and others at the six digit tariff subheading level.

➤ *Percentage of added value:* In this case, to confer origin, it is required that the added value brought about by the processing is not less than a certain percentage (generally between 40 and 60%) of the value of the product.

➤ *The combination of the three criteria:* Each criterion has its advantages and disadvantages. However, none in reality applies perfectly to all products for all uses, so countries tend to use combinations of the three criteria.

Duty rates, preferential trade agreements, trade sanctions and import quotas are regulated according to country of origin. Because of the revenue and admissibility issues involved, Customs is vigilant about verifying accurate country of origin.

Country of origin is also important for marking purposes. The import regulations put an emphasis on informing the end user of the country of origin of imported articles.

Let's analyze determination of the country of origin of a batch of chocolate (White, Milk, Black) imported from Ukraine to Algeria MD 012853/2020 of 25/08/2020 (Annex A). Invoice number 90006244 of 29/07/2020 (Annex B).

In our case, the manufacturer is *ROSHEN* Confectionery Corporation, so the origin country is Ukraine of the 3 kinds of products

- Roshen Whole Hazelnuts Milk Chocolate 90g;
- Roshen bubble aerated white 80g;
- Roshen 80% Brut Chocolate from 90g.

And the exporter here needs to formalize some documents for obtain and confirming the Ukrainian origin of the Chocolate:

- 1) Application-declaration (ЗАЯВКА-ДЕКЛАРАЦІЯ)
- 2) Documents confirming registration of the exporter and the fact of export of chocolate:
 - Contract;

- Customs declaration with marks of customs on crossing the border (in case of issuing the certificate subsequently);
- Invoice;
- Specification;
- Contract for forwarding services, assignment from the exporter to the forwarder, according to which he has the right to submit an application-declaration, present the necessary documents and certify certificates;
- Certificate of state registration of taxpayer (for an exporter);
- Card for registration and accounting of foreign economic agreement / contract (in case of subordination of registration of a foreign economic agreement / contract at the Ministry of Economy and European Integration of Ukraine or at the bodies authorized by the Ministry), export license (if the goods fall under a special import / export regime);

3) Documents for get and confirming the Ukrainian origin of the Chocolate. For all goods, except for agricultural products and minor forest resources:

- certificate on procedure for manufacture of the goods, which is drawn up at least once a year, as well as in the event of any change in the sources of raw materials, technological process, etc., and contains information about the enterprise;
- Registration number, when and by whom the enterprise was registered;
- List of goods manufactured by the enterprise;
- Sources of supply of raw materials and other materials from which the goods are manufactured;
- A list of the main technological operations used in production;
- Information on production areas, equipment and employees;
- Documents on purchase of raw and other materials (contracts, transport and payment documents);
- Manufacturer's confirmation documents (certificate of quality, certificates, regulatory, technical and technological documentation, marking on the goods, etc.);

- 4) Documents to be submitted to obtain a free sale certificate
- Constituent documents and certificate of state registration of a business entity
 - List of goods for which you need to provide the free trade certificate
 - Information on the manufacturer of the goods - the certificate of production activity or technological process according to which the goods are manufactured
 - Certificates of quality, certificates, markings on goods or containers
 - Certificates of conformity of goods
 - License for the manufacture of goods (in cases stipulated by the law)
 - GS1 international system identification number - barcode (if available)
 - Confirmation of sale of the goods in the territory of Ukraine to business entities in Ukraine (2-3 buyers, invoices, payment documents and tax invoices) [42].

If the exporter is Algerian, to obtain the origin of the goods, we need to formalize.

According to Article 17 of Protocol 6, proof of origin is provided by means of the production of a movement certificate EUR1 according to the model appearing in its Annex 3. This certificate is issued by the customs authorities of country of export on written request in one of the languages in which this Agreement is drawn up, drawn up by the exporter or, under the latter's responsibility, by his authorized representative. In the case of Algeria, this certificate is distributed at the level of the Algerian Chamber of Commerce and Industry as well as the various regional Chambers of Commerce and Industry and endorsed by the Algerian customs authorities.

The EUR.1 certificate is not required when the value of the shipment consists of one or more packages containing originating products whose total value does not exceed 6,000 euros. In this case, a declaration called “invoice declaration” (the text of which appears in Annex IV of this protocol) must be drawn up by the exporter on an

invoice, a delivery slip or any other document, describing the products concerned in sufficient detail to identify them.

Likewise, this certificate will not be required for exporters referred to by the Agreement as “approved exporters” carrying out frequent exports of products covered by this agreement and who have an authorization from the customs authorities of the exporting State to establish declarations on invoice, regardless of the value of the products concerned, under the conditions set by Article 23 of the Protocol.

This proof of origin is valid for four months from the date of its issue in the exporting country and must be produced within this same period to the customs authorities of the importing country, exceeding this period may be accepted. For the purposes of the application of the preferential regime when the failure to respect the deadline is due to exceptional circumstances.

Types of certificates of origin in Algeria.

There are seven types of certificates of origin in Algeria.

1) *EUR1 movement certificate* [43]. It only concerns member countries of the European Union and acts as a certificate of origin. It was established following the implementation of the association agreement between Algeria and the European Union which entered into force on 01/09/2005. It should be noted that only the Algerian customs services are authorized to stamp it.

2) *Certificate of origin according to the Generalized System of Preferences - Formula A* [44]. It concerns all the countries which offer tariff advantages according to the generalized system of preferences.

3) *Certificate of origin of the Arab Free Trade Zone* [45]. It concerns all the member countries of the Arab League with the exception of the Republic of Djibouti, the Democratic Republic of Somalia and the Comoros Islands. Mauritania has frozen its participation in the GZALE convention.

4) *Certificate of movement of goods under the preferential Algerian-Tunisian trade agreement* [46]. It concerns goods traded directly between the two countries and meeting the rules of origin agreed, under the preferential trade agreement signed

in Tunis on December 4, 2008 and entered into force on March 1, 2014. It is issued by the CACI services only and stamped by the customs services.

5) *Non-preferential certificate of origin issued by the CACI*. This certificate serves only to establish the origin of the goods and does not give the right to preferential treatment.

6) *Certificate of origin of products exported to Jordan*. It was established following the commercial agreement between Algeria and the Kingdom of Jordan of 19/05/1998.

7) *Certificate of origin of products exported to Mauritania*. It was established following the trade agreement between Algeria and Mauritania of 23/04/1996 [47].

3.2 Customs valuation and taxation of chocolate import in Algeria

We will provide our analysis on example of importation of a batch of chocolate (White, Milk, Black) from Ukraine to Algeria MD 012853/2020 of 25/08/2020 (Annex A). Invoice number 90006244 of 29/07/2020 (Annex B).

In Algeria the importer / operator / or the declarant (the customs broker) can determine the HS code of the product, and they assume responsibility of any mistake, if they have doubt or they are not sure about the right code position of the product, once our container arrived precisely after disembarkation of the goods on the port of Bejaia, Algeria. During the customs control of the container the customs broker (declarant) takes a sample of chocolate and prepares the declaration D48 (Annex K), with a demand of RTC for determination the correct tariff number HS CODE and formulate other documents.

To set up the RTC Le Renseignement Tarifaire Contraignant (BINDING TARIFF INFORMATION) request the following operations must be done:

- ✓ separate request for each product must be done; as such, it is strongly recommended to fill out the said form by a data processing machine (PC);
- ✓ two copies on the regulatory form reserved for this purpose must be established, downloadable from the website: www.douane.gov.dz ;
- ✓ information provided in confidence must be specified;
- ✓ following documents to the request must be attached:

- A copy of the commercial register (Annex L);
- A copy of NIF card (la carte d'identification fiscale) the tax identification (Annex M);
- A copy of the approval decision for economic operators approved by the customs administration;
- A copy of the pro-forma invoice (Annex P);
- A copy of the original BTI (RTC) decision for the case of the renewal request [48];
- All descriptions, plans, photographs, catalogs, commercial prospectuses, sketches, technical documentation including methods of analysis and useful specifications, relating to the goods subject to the request of the RTC decision;
- A sample of the merchandise, if possible.

Place to submit the request:

Request must be filed with the required documents:

- Either at the level of the General Directorate of Customs (sub-directorate responsible for customs tariffs);
 - Either at the level of the Regional Customs Department (sub-directorate responsible for customs tariffs) or the Divisional Customs Inspectorate (offices responsible for tax items) to which the applicant's head office falls or to which the import or import operation. Export is considered.
- Once the request is accepted by the customs administration, a written decision will be reserved for you within a maximum of 90 days. To this end, this period should be taken into account when carrying out your import or export operations.
- This operation should be paid by the demander.

The provisional declaration: The provisional declaration called "*incomplete declaration*" is a detailed declaration, including a guaranteed commitment, according to the model "D48" (Annex K) attached in appendix n °02 of this note, with the aim of subsequently completing this declaration or to produce the missing documents, within one month. It is filed at the IPS level, by the declarant / operator, when, for valid reasons, does not have all the information necessary for the establishment of the

regulatory detailed declaration or cannot immediately produce the documents required to supporting this statement. The relevant quantitative elements of the provisional declaration are thus deemed to be declared as approximate or provisional [49].

After checking the documents of our samples we will have the following:

- The manufacturer: is *ROSHEN* Confectionery Corporation, so the origin country is Ukraine (the exporter).
 - Ukraine is European country is not member of EU.
 - The importer is Algeria is African, Arabic, country.
 - Chocolate apperences : Solid, Bars, Cream, Powder, Liquid...
 - ✓ Roshen Whole Hazelnuts Milk Chocolate 90g – chocolate bar
 - ✓ Roshen bubble aerated white 80g – chocolate bar
 - ✓ Roshen 80% Brut Chocolate from 90g –chocolate bar
 - Types of chocolate : we have here 3 samples White ,Dark, Milk
 - ✓ Roshen Whole Hazelnuts Milk Chocolate 90g -- Milk
 - ✓ Roshen bubble aerated white 80g -- White
 - ✓ Roshen 80% Brut Chocolate from 90g – Dark
 - Cocoa ,Cocoa butter content percent :
 - ✓ Roshen Whole Hazelnuts Milk Chocolate 90g -- present
 - ✓ Roshen bubble aerated white 80g -- present
 - ✓ Roshen 80% Brut Chocolate from 90g – present
 - Presence or absence of cereals, nuts or other fruits
 - ✓ Roshen Whole Hazelnuts Milk Chocolate 90g -- Nuts: with hazelnut
 - ✓ Roshen bubble aerated white 80g -- Tablets chocolate—absent
 - ✓ Roshen 80% Brut Chocolate from 90g –absent
- The wording of tariff heading 18.06 covers chocolate and other food preparations containing cocoa.
- The wording of tariff heading 17.04 covers Sugar confectionery (including white chocolate), not containing cocoa.

After the expert examination of our chocolate and according to the HS system of Algeria the classifications of our samples are as follows (Annex X):

- ✓ Roshen Whole Hazelnuts Milk Chocolate 90g -- 1806 32 10 00 with added cereal, fruit or nuts;
- ✓ Roshen bubble aerated white 80g -- 1704 90 50 00 white chocolate;
- ✓ Roshen 80% Brut Chocolate from 90g -- 1806 32 90 00 Other.

Tax measures. The Finance Law for 2018 [50] has toughened the tax and customs regime applicable to import operations by providing, notably:

- A solidarity contribution at the rate of 2% applicable to operations of importing goods released for consumption in Algeria is hereby established;
- An increase in customs duties for certain products;
- The creation of a new customs duty rate of (DAPS): 70% for chocolate.
- DAPS (droit additionnel provisoire de sauvegarde) : Following the complementary finance law of 2018, the Algerian government introduced an additional provisional safeguard duty (DAPS) which applied to imported goods. The rate could range from 30% to 200%.

After banning the import of around 1,000 products at the start of the year, Algeria wished to authorize them again, on condition that they are subject to an additional customs duty of up to 200% [53].

Total customs duty that have to be paid in the case of import from Ukraine to Algeria of three different types of chocolate (3 different HS code) will be 121 % from customs value for 80% Brut Chocolate 90g and Whole Hazelnuts Milk Chocolate 90g and 81 % from customs value for Aerated white bubble 80g (Table 3.1).

Here is an example of *the calculation of customs duty and Value Added Tax* on a good of 100 USD.

- ✓ The exchange rate in the example is \$ 1 = 100 D.A.
- ✓ The goods in issue are subject to a customs duty rate (D.D) of 30% and a VAT rate of 19%.

Table 3.1

The total customs tariff of chocolate imported from UA to DZ

Commodity description on supplier invoice	(HS) Codes	CD/non-EU (Ukraine)	CD/EU	CD/ GAFTA	CD/ SSC	CD/ ICT	CD/ DAPS	VAT	Unit	T.CD
80% Brut Chocolate 90g	1806 32 90 00	30%	30% (-7.5%)	0%	2%	/	70%	19%	Kg	121%
Whole Hazelnuts Milk Chocolate 90g	1806 32 10 00	30%	30% (-7.5%)	0%	2%	/	70%	19%	Kg	121%
Aerated white bubble 80g	1704 90 50 00	30%	22.5%	0%	2%	30%	/	19%	Kg	81%

- ✓ Customs value in D.A. = 100 dollars (price in currency) x 100 (exchange rate) = 10,000 D.A.
- ✓ Amount of customs duty = 10,000 D.A (customs value) x 30% (D.D rate) = 3,000 D.A.
- ✓ VAT amount = (customs value + customs duty amount) x VAT rate
VAT amount = (10,000 D.A + 3,000 D.A) x 19% = 2,470 D.A.
- ✓ Amount of duties and taxes to pay = amount Customs duty + VAT amount of duties and taxes payable = 3,000 D.A + 2,470 D.A = 5,470 D.A.

3.3 Analysis of the customs procedures of chocolate import to Algeria

Growing exported quantities of chocolate and other food products containing cocoa from Ukraine to Algeria make us thinking about creating a project for importation chocolate into Algeria, because the production in Algeria is low and the quality is unsatisfactory for Algerian customers. We modulated the situation of importation chocolate to Algeria from Ukraine. Prehistory is like this: November 19, 2015 I created my business company which is basically a large chocolate super market (hyper market) in several regions of Algeria, or opening an agency, a branch or any other establishment with headquarters abroad. Each hyper market consists of several chocolate lanes, each gallery consist of chocolate imported from a country with employees who master the language of the country of origin of chocolate, and in

my hyper market you will find many models of chocolates provenance from several countries. My company is HCC HYPER CHOCOLANI COMPANY:

HYPER: super big

CHOCOLANI: CHOCOLATE + my surname SOLTANI

HCC is an EURL enterprise's privately held company, EURL (*entreprise unipersonnelle à responsabilité limitée*) Sole Proprietorship with Limited Liability". It is a one-person SARL, i.e. an SARL with a single partner.

The HCC HYPER CHOCOLANI COMPANY has following identification data:

- ✓ The commercial registry with the number: 00 B 00083842 from 19/11/2015;
 - ✓ NIF: 000019008384230;
 - ✓ N° Code N.I.S : 000019019024640;
 - ✓ The status company;
 - ✓ Bank account 303 400 41545 11 50 IBAN: CH3808686001130772000
- Agency: Setif 303.

Bank CPA CREDIT POPULAIRE D'ALGERIE.

Some details of the international trade operation:

- ❖ On the 25.07.2020 were established a supply contract or a purchase order (see Annex O), confirmed by the General Director of the HCC company. In this document (purchase order) you can find: identify both the importer and exporter (name, social reason...), and the information's about them (address, phone, email...) and their bank (account N°, RIB, Swift...), about product (designation, quantity...), conditions (sending documents, delivery terms, Method of payment...).
- ❖ On 25/07/2020 PJSC Kyiv Confectionery Factory, Roshen received the supply order BCE202001 and sent to buyer a Proforma invoice N° 94725383 (see Annex P) with an amount of 16 660.40 euro for the 3 kinds of bars chocolate: Roshen Whole Hazelnuts Milk Chocolate 90g; Roshen bubble aerated white; Roshen 80% Brut Chocolate from 90g.

- ❖ When the buyer opened cash against document at his bank, a Swift to the issuing bank (this as an approval for the exporter to start producing of your order) will be sent; during this time the supplier starts production of buyer demand.
 - ❖ The supplier sends all the documents mentioned on BCE202001, he can send them via banking channel, via courier DHL, UPS or the both.
 - ❖ When buyer receives the documents le plie a cartable it means the supplier has already loaded the goods, because the exporter does not obtain the BL (bill of lading) only after 48 hours from the vessel leaves the port.
 - ❖ Now it is necessary to proceed to the preparation of the documents for the domiciliation at buyer bank, for which the following is needed :
 - ✓ Import COMMITMENT – engagement d’importation (Annex R).
 - ✓ Domiciliation request – demande de domiciliation (Annex S).
 - ✓ Import authorization commitment – engagement d’autorisation d’importation (Annex T).
- We fill this document according our original invoice.
- ✓ The transfer order – ordre de virement.
 - ✓ Promissory note or LC (lettre de credit) if we have applied for bank credit, in case of payment by bank credit you should
- Fund your account at 120% of the invoice amount, and you can’t do any operation import/export only after 120 days if the activity practiced of your commercial register just import/export.
- ✓ Bring with you the plie cartable (le plie a cartable) of the documents.

N.B these entire documents are stamped and signed by the General Director of the HCC Company.

List of documents in the plie cartable:

- Final invoice (03 copies) (Annex B);
- Original bill of lading (03 copies) (Annex C);
- Certificate of origin (Annex D);
- EUR 1 ;

- Certificate of analysis (Annex F);
 - Certificate of conformity (Annex G);
 - Halal certificate (Annex H);
 - Technical sheet (Annex I);
 - Packing list (Annex J).
- ❖ Attentive checking of documents made by the Foreign Trade service of the importer bank (social reason, NIF, NIS, N° commercial register, all certificate ...) before the domiciliation
 - ❖ Buyer sends these documents domiciled to the customs broker or agent transit, custom commissioner or declarant (le transitaire) for they start the customs procedures of the container.
- He stays checking the tracking of the vessel till the arrival; he will receive an arrival notice on 29/08/2020 (Annex V) from the shipping company MSC, of our 40ft container.
- ❖ When the ship docks in the harbor on 29/08/2020, and on 29/08/2020 the unloading of the container done by the company BMT: BEJAIA MEDITERRANEAN TERMINAL SPA for the Ministry of Public Works and Transport, Port Service Group Serport SPA
 - ✓ Annex W - for shipping cost MSC (container, unloading...)
 - ✓ the invoice of the port company BMT of Bejaia, Algeria for the warehousing, storage, security.

In this moment the *Declarant check all documents* before starts the customs registration with the SIGAD Algerian system:

- ✓ *Final invoice N°90006244* on 29/07/2020 domiciled 24/08/2020 with an amount of 16 660.4 euro (Annex B)
- ✓ *Original bill of lading BL N° MEDUAP619524* of 20/08/2020 domiciled on 24/08/2020, shipment company :MSC, Vessel: MSC NITA Qty :01 container HIGH CUBE REEFER 40ft (Annex C)
- ✓ *Certificate of origin 902020 002130* of 29/07/2020 for chocolate bars provenance Europe-Ukraine (Annex D).

- ✓ *EUR I* (Annex E) :chocolate imported from Ukraine to Algeria of 29/07/2020
Total Gross Weight: 3 145.49 KG, Total Net Weight: 2 793.6 KG.
- ✓ *Certificate of analysis of the batch:* 1005080/1005081/1005082, production date: 01/07/2020 Expiration date: 01/01/2022. Temperature condition: 15 – 18°C (Annex H).
- ✓ *Certificate of conformity.* What is mentioned in the certificate of analyze comply with international legislation and Algerian importation rules (Annex G)
- ✓ *Halal certificate:* The importer is Algeria is African, Arabic, Muslim country.
Muslim country: the chocolate must meet the requirements of certificate HALAL [54], it means our chocolate don't contain any Haram ingredients (alcohol, animal fat, gelatin, bacon) (Annex F)
- ✓ *Technical data sheet:* version of Jun 2020: regulation of labeling, nutritional information, component (Annex I).
- ✓ *Packing list:* there are 7/7 pages, every pages contain a table, the table is filled according the shipping method: every pallets of chocolate of every types than his empty wood pallet including the samples, with theirs weight, dimension, Qty: shipment number: 2957788 delivery number: 86742070/86742071/86742072 Batch: 1005080/1005081/1005082 (see Annex J).

Quantity Details of the imported chocolate from Ukraine to Algeria provided in the table 3.2.

Table 3.2

Quantity Details of the imported chocolate from Ukraine to Algeria

Commodity description on supplier invoice	Batch	delivery number	Pcs/u	Qty/ KG	CTN/ Pcs	Nbr of CTN	CTN/ pal	Nbr of pal
Whole Hazelnuts Milk 90g	1005080	86742070	7 920	712.80	18	440	220	2
80% Brut Chocolate 90g	1005081	86742071	9 680	871.20	22	440	220	2
aerated white bubble 80g	1005082	86742072	15 120	1 209.6	20	756	252	3

Every declarant has access account in the SIGAD system (Système d'Information ET de Gestion Automatisée des Douanes). Once declarant receives the documents from the importer he registers this operation of importation and creates the customs declaration D10 (see Annex A), after the validation of entering information of D10 (importation regime resale to the state, final product, from Ukraine country non-EU)

Automatically the MD declaration transferred to the customs authority. And the declarant can't modify or ignorant the declaration.

After few hours the system SIGAD will show for the declarant the name of the customs inspector who will follow and control the customs clearance of the goods at the level of DCP Direction du Commerce de Béjaia.

More than 1 year ago the owner or represent of the company can bring the documents and go to the DCP for the examination of the documents. The inspector decides if your container need examination or he gives you the Authorization to allow you for evacuate your container from port.

The declarant or representative of the company bring the BL original and go to the MSC Company for paid the fees (presentation costs. Container deposit) of transportation, because they followed up the commodity until it reached the importer. Than Buyer will receive Delivery Bond.

In general every operation of importation in Algeria pass through 3 examination or control (visite), one by the DCP (visite DCP), second by the customs authority of port (visite douaniere), third by the veterinary or laboratory (visite veterinarie) inspector of the laboratory.

Laboratory control

This control is always obligatory to carry it out before start the declaration of the goods submitted under this control. This operation need the Copy of all documents exception the certificates of veterinary and analyze must be original, the importer or represent of the company and the customs agent and the inspector of veterinary service of the agriculture minister, they open the container and take a sample.

The declarant brings the sample and goes to the research center of analyses (laboratory) for the expert examination of this sampling.

- If your container imported with multi articles like mine, for facilitate and accelerate this operation, I demanded before to my supplier to prepare sampling and put them near to the door of the container.
- Each region of Algeria have the research center of analyses , for example in the port of the capital Algiers This sampling will go to The Pasteur Institute of Algeria is one of the research centers of the international network. Address: Route de petit Staouéli, Dély Ibrahim, Algeria

But more than a year they canceled this procedure; now they only check the certificates of Analysis, Halal. For the chocolate there is no control veterinary.

The control now is mixed and in parallel customs control with control veterinary (it means the presence of the inspector veterinary during the control of the container).

Control DCP (direction de commerce et des prix)

This is the control of documents, 2 years ago, the represent of the company can carry out this procedure but now only declarant , when the customs declarant receives the name of the customs inspector who will follow and control your customs clearance of the goods at the level of DCP Direction du Commerce de Béjaia. He takes the entire documents; fill the product entry license (Annex Q).

For AEOs and investors who have the green corridor 90% obtain easily the product entry authorization visa after document verification, without the need to do the customs control.

In our case, importer of a sensitive product, chocolate is always subject to customs control.

Customs control (DCP direction de commerce et des prix)

After checking the documents by the DCP control, if there is no anomaly, we pass to the next procedure the mixed control of the DCP control and customs control, they will examine the container and the chocolate (sealing, labeling, packaging,etc.) with their documents, with taking a sample and doing the declaration detail D41

(permis d'examen) (see Annex U), if everything is in order, they will give the visa to release the product.

- ❖ In case of any anomaly for example: the absence of the Arabic language on the labeling you will pay a charge of 400,000 Da, and if it is non-conform (haram food, expired product ...) there, the product to have submitted for re-export (you need a letter of acceptance of the container from the supplier) or destruction and you will pay for this operation.
- ❖ The declarant will get the declaration D10 and the product entry license DCP with the documents of the chocolate, he brings them to pay the customs clearance fees and taxes in the customs office.

The Annex N presents the Release customs N°011514 of 31/08/2020 of the declaration N°012853 of 25/08/2020 with an amount of 11 453 328.00 Da.

Then we need to pay the costs of warehousing, storage, guarding, handling, and demurrage to the company BMT of the Bejaia port.

Finally, all customs processes were carried out and the container can be taken out from the port.

CONCLUSIONS AND RECOMMENDATIONS

Chocolate is the most widely-consumed sweet treat in the world. The World Cocoa Foundation states that cocoa beans have a consumption value of over 3 million tons every year. Chocolate and chocolate products are products made from cocoa beans which comply with the Codex Alimentarius standard for chocolate and chocolate products.

The chocolate world market size is valued at 28.1 billion of the US dollars in 2019. Volumes of the chocolate supplied to the global market raised from 19.1 billion of the US dollars in 2010 to almost 50 % in 2019.

Among Top-20 countries of chocolate exporters to the world market in 2019 there are Germany, Belgium, Italy, Netherlands, Poland, United States of America, Canada, France, United Kingdom, Switzerland, etc. Export of chocolate from Germany amounted 4.9 billion of the US dollars in 2019.

Among Top-20 countries of chocolate importers from the world market in 2019 there are United States of America, Germany, France, United Kingdom, Netherlands, Canada, Belgium, Poland, Spain, Italy, Japan, etc. Import of chocolate to the United States of America amounted 3 billion of the US dollars in 2019.

Globally, seven multinational companies represent the bulk of the market for final chocolate products: Mars, Ferrero, Mondelez, Meiji, Hershey, Nestlé and Lindt & Sprüngli. All these multinationals have chocolate confectionery production plants in Europe except for Meiji (Japan) and Hershey (United States).

There are different type of chocolate by composition, for instance: chocolate, sweet chocolate, couverture chocolate, milk chocolate, family milk chocolate, milk chocolate couverture and other chocolate products like white chocolate, gianduja chocolate, gianduja milk chocolate and chocolate para mesa.

By forms chocolate divided into chocolate vermicelli and chocolate flakes, filled chocolate and a chocolate or praline. The mentioned types of chocolate have different requirements concerning percentage of the following constituents: cocoa

butter, fat-free, cocoa solids, total cocoa solids, milk fat, total milk solids, starch / flour, hazelnuts.

Chocolate products are subject to very precise regulations defining the raw materials and detailing the categories of chocolate: milk chocolate, white chocolate, filled chocolate, etc. Thus, the permanent control of machines and computerization contribute to the assurance of the quality required. Each type of chocolate corresponds to a name determined according to its cocoa content and other raw materials: % of total cocoa solids, % of total dry matter of lactic origin, % of butyric fat or even % of sucrose.

Among Internationally recognized agreements influencing export and import operations with chocolate we would like to highlight the following: UN International Cocoa Agreement, Codex Alimentarius Standard for chocolate and chocolate products CODEX STAN 87 – 1981, ISO 67.190 Chocolate, GOST 31721-2012 Chocolate. General technical conditions, WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), WTO Agreement on Rules of Origin, Directive 2000/36/EC of the European parliament and of the council relating to cocoa and chocolate products intended for human consumption, and the International Convention on the Harmonized Commodity Description and Coding System (HS Convention).

Chocolate is classified in the Chapter 18 “Cocoa and cocoa preparations” of the Section IV “Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes”. There are 3 subheadings for the chocolate: 1806.20, 1806.30 and 1806.90. Main HS classification features important for identification of chocolate are the following: cocoa content; weight; and the form of the prepared product. In addition to the mentioned can be added some other features important in different countries. Thus, in Algerian classification for chocolate in addition to mentioned HS features of chocolate classification like cocoa content, weigh and form of the prepared product, were included also the presence of filler, presence or absence of cereals, nuts or other fruits and the type of the prepared chocolate product (candies/pralines or other).

Three samples of chocolate were selected for identification expert examination aiming to find the correct codes for these chocolate products exported from Ukraine to Algeria. Sample #1 was dark chocolate bar with crushed hazelnuts “Old collection” produced by Kharkiv biscuit factory, sample #2 was Roshen milk-chocolate bar with caramel filling and sample #3 was plum & chocolate candy of the Goluba sweets.

The most influenced identification criteria for our classification for these three samples were cocoa content (helped us to classify products in heading 1806 of the chapter 18), weight (weight of all products less than 2 kg allowed us to escape the sub-heading 1806.20 and to be focused only on the sub-headings 1806.30 and 1806.90) form of the prepared product (sample #1 and #2 in bars up to 2 kg were separated to 1806.30 easily from the other forms like candy of the sample #3 -1806.90), the presence of filler (helped to divide milk-chocolate bar to 1806.3100 and dark chocolate with crushed hazelnuts to 1806.32), the type of the prepared chocolate product in the form of candy immediately drew our attention to the code 1806.901100 for sample #3 and presence or absence of cereals, nuts or other fruits that was the final stage for classification of sample #1 with code 1806.321000.

There are seven types of certificates of origin in Algeria: EUR1 movement certificate, Certificate of origin according to the Generalized System of Preferences - Form A, Certificate of origin of the Arab Free Trade Zone, Certificate of movement of goods under the preferential Algerian-Tunisian trade agreement, Non-preferential certificate of origin issued by the CACI, Certificate of origin of products exported to Jordan, Certificate of origin of products exported to Mauritania. For chocolate exported from Ukraine to Algeria EUR 1 will be provided for customs clearance.

In Algeria the importer / operator / or the declarant (the customs broker) can determine the HS code of the product, and they assume responsibility of any mistake, if they have doubt or they are not sure about the right code position of the product, once our container arrived precisely after disembarkation of the goods on the port of Bejaia, Algeria. During the customs control of the container the customs broker (declarant) takes a sample of chocolate and prepares the declaration D48 (Annex K),

with a demand of RTC for determination the correct tariff number HS CODE and formulate other documents.

As regards tax measures in Algeria, the Finance Law of 2018 has toughened the tax and customs regime applicable to import operations by providing, notably: a solidarity contribution at the rate of 2% applicable to operations of importing goods released for consumption in Algeria is hereby established; an increase in customs duties for certain products; the creation of a new customs duty rate of (DAPS): 70% for chocolate.

In general every operation of importation in Algeria pass through 3 examination or control (visite), one by the DCP (visite DCP), second by the customs authority of port (visite douaniere), third by the veterinary or laboratory (visite veterinaire) inspector of the laboratory.

For customs clearance of chocolate in Algeria must be provided such documents: Invoice, Original bill of lading, EUR 1, Certificate of analysis of the batch, Certificate of conformity, Halal certificate, Technical data sheet, and Packing list:

Recommendations:

This paper may be a reference or an encouragement for those who want to export or import chocolate all over the world, particularly from Ukraine to Algeria.

Result of expert examination of chocolate, as well as analytics on world market, assortment, taxation, and customs clearance of imported chocolate in Algeria can be used as basic study for the next steps in developing chocolate export strategy of Ukraine.

Application of the developed criteria (name of the product, manufacturing company, country of origin, product appearance, color, aroma/smell, taste, cocoa content, weigh, form of the prepared product, the presence of filler, presence or absence of cereals, nuts or other fruits, type of the prepared chocolate product) in the expert examination of chocolate for customs purposes will allow quickly and correctly determine the product code, which in turn helps to speed up the movement of goods across the Algerian customs border and avoid any customs violations.

REFERENCES

1. Soltani S. Identification expert examination of chocolate for customs purposes // Митна справа: практичний аспект. – 2020. – pp. 87-93.
2. Cocoa History. URL : <https://rodellekitchen.com/resources/learning/cocoa-history/>.
3. Chocolate . URL :<http://chocolate.mit.edu/science/>.
4. Cacao vs. Cocoa – What’s the Difference? URL :<https://writingexplained.org/cacao-vs-cocoa>.
5. Consommation mondiale de chocolat . URL :<https://www.planetoscope.com/sucre-cacao/1988-consommation-mondiale-de-chocolat.html>.
6. The Chocolate Industry. 2020. URL : <https://www.icco.org/about-cocoa/chocolate-industry.html>.
7. Research and Interpretation of FAO vs. ICCO Statistical Data on World Cocoa Production. URL : <https://foodensity.com/cocoa-producing-countries/>.
8. Cocoa production worldwide from 1980/81 to 2019/20 . URL : <https://www.statista.com/statistics/262620/global-cocoa-production/>.
9. Chocolate Exporters by Country. June 18, 2020 by Daniel Workman . URL : <http://www.worldstopexports.com/chocolate-exporters/>.
10. Chocolate Imports by Country. May 1, 2020 by Daniel Workman . URL :<http://www.worldstopexports.com/chocolate-imports-by-country/>.
11. The current state of confectionery market in ukraine: competitive aspectsand monopolization. URL : <https://economics.opu.ua/files/archive/2018/No3/55.pdf>.
12. Algeria Chocolate Market Insights. URL : <https://www.selinawamucii.com/insights/market/algeria/chocolate/>.
13. Chocolate Confectionery in Algeria. URL : <https://www.euromonitor.com/chocolate-confectionery-in-algeria/report>.
14. Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law,

establishing the European Food Safety Authority and laying down procedures in matters of food safety. URL : <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32002R0178>

15. Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs. URL : <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32004R0852>.

16. Commission Regulation (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs. URL : <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32006R1881>

17. What requirements must cocoa beans comply with to be allowed on the European market? URL : <https://www.cbi.eu/market-information/cocoa/buyer-requirements>.

18. Materials that can be used for chocolate packaging. URL : <https://www.standuppouches.net/blog/materials-that-can-be-used-for-chocolate-packaging>.

19. Chocolat classique vs Chocolat biologique. URL : <https://www.consoglobe.com/chocolat-classique-vs-chocolat-biologique-3849-cg>.

20. Cocoa and chocolate. 2014. URL : <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3A121122b>.

21. Regulation of chocolate. URL : <https://www.moofreechocolates.com/en/wiki/regulations-chocolate>.

22. International Cocoa Agreement . URL : https://unctad.org/system/files/official-document/tdcocoa10d5_en.pdf

23. Codex Alimentarius. Standard for chocolate and chocolate products CODEX STAN 87 – 1981. Adopted in 1981. Revision: 2003. Amendment: 2016. URL: http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXS%2B87-1981%252FCXS_087e.pdf

24. ISO 67.190 Chocolate

25. ГОСТ 31721-2012. Шоколад. Общие технические условия

26. ДСТУ 3924 Шоколад. Загальні технічні умови
27. WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement). URL : https://www.wto.org/english/tratop_e/sps_e/spsagr_e.htm
28. WTO Agreement on Rules of Origin. URL https://www.wto.org/english/docs_e/legal_e/22-roo_e.htm
29. Validation of an analytical approach to determine cocoa butter equivalents in milk chocolate. URL : European Commission, 2006. https://ec.europa.eu/jrc/sites/jrcsh/files/EUR%2022553%20EN_0.pdf.
30. Export procedures and documentation. URL : 2019. <https://howtoexportimport.com/Export-procedures-and-documentation-1397.aspx>.
31. DIRECTIVE 2000/36/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL relating to cocoa and chocolate products intended for human consumption. URL : <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32000L0036>.
32. The International Convention on the Harmonized Commodity Description and Coding System (HS Convention), entered into force on 1 January 1988. URL : <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=LEGISSUM:4438748&rid=2>.
33. Chocolate Confectionery in Ukraine. URL : <https://www.euromonitor.com/chocolate-confectionery-in-ukraine/report>.
34. International Standards for the Assessment of Cocoa Quality and Flavour. Elements of harmonized international standards for cocoa quality and flavour assessment, 2017. URL: <https://www.cocoaqualitystandards.org/fileadmin/templates/CocoaQuality/Uploads/Documents-and-reports/WG-Quality-Flavour-Standards-ENGLISH-11Set2017.pdf>
35. Direction Générale des Douanes D'Alger. Tarif douanier. URL: <https://douane.gov.dz/spip.php?page=position§ion=04&chapitre=18&range=06>
36. What is the demand for cocoa on the European market? URL : <https://www.cbi.eu/market-information/cocoa/trade-statistics>

37. Тренди світового ринку шоколадних виробів URL :
https://epo.org.ua/trends_chocolate/
38. MANUEL SUR LES REGLES D'ORIGINE APPLIQUEES EN ALGERIE. URL :
https://www.douane.gov.dz/IMG/pdf/manuel_sur_les_regles_d_origine_applicables_en_algerie.pdf
39. JOURNAL OFFICIEL DE LA REPUBLIQUE ALGERIENNE N° 11. LOIS. 2017. URL : https://www.douane.gov.dz/IMG/pdf/loi_no_17-04_du_16_fevrier_2017_code_des_douanes.pdf.
40. Estimation des droits et taxes à payer à l'importation. URL :
<https://www.douane.gov.dz/spip.php?article215&lang=fr#collapse2>.
41. Algérie –Ukraine : vers le redressement des relations économiques. URL :
<https://www.algerie-eco.com/2018/08/21/algerie-ukraine-vers-le-redressement-des-relations-economiques/>
42. CERTIFICATE OF ORIGIN OF GOODS. URL :
<https://www.kcci.kharkov.ua/en/certificates.html>
43. EUR1 movement certificate. URL:
<https://www.caci.dz/fr/Formalit%c3%a9s/Visas%20des%20documents%20commerci aux/Documents/EUR1.pdf>
44. Certificate of origin according to the Generalized System of Preferences - Formula A. URL :
<https://www.caci.dz/fr/Formalit%c3%a9s/Visas%20des%20documents%20commerci aux/Documents/CO.pdf>
45. Certificate of origin of the Arab Free Trade Zone. URL :
<https://www.caci.dz/fr/Formalit%c3%a9s/Visas%20des%20documents%20commerci aux/Documents/Gzale.pdf>
46. Certificate of movement of goods under the preferential Algerian-Tunisian trade agreement. URL :
<https://www.caci.dz/fr/Formalit%c3%a9s/Visas%20des%20documents%20commerci aux/Documents/Tunisie.pdf>

47. Certificate of origin of products exported to Mauritania. URL : <https://www.caci.dz/fr/Formalit%C3%A9s/Visas%20des%20documents%20commerciaux/Pages/Visa-des-Certificats-d%27origine.aspx>
48. Original BTI (RTC) decision for the case of the renewal request. URL : https://www.douane.gov.dz/IMG/pdf/rtc_formulaire.pdf
49. Note_no945. URL : https://www.douane.gov.dz/IMG/pdf/note_no945_du_08-07-2020_covid19.pdf.
50. JOURNAL OFFICIEL DE LA REPUBLIQUE ALGERIENNE N° 11. LOIS. URL : 2017. https://www.douane.gov.dz/IMG/pdf/loi_no_17-04_du_16_fevrier_2017_code_des_douanes.pdf.
51. Annexes tarif d'usage 2020 . URL : https://www.douane.gov.dz/IMG/pdf/annexes_tarif_d_usague_2020.pdf.
52. Tarif douanier. URL : <https://douane.gov.dz/spip.php?page=position§ion=04&chapitre=18&range=06>.
53. Estimation des droits et taxes à payer à l'importation. URL : <https://www.douane.gov.dz/spip.php?article215&lang=fr>.
54. A list of halal-haram food additives. URL : <https://www.les-additifs-alimentaires.com/liste-tous-halal.php>

LIST OF ANNEXES

ANNEX A: MD declaration (D10)
ANNEX B: Invoice
ANNEX C: Bill of lading
ANNEX D: Certificate of origin
ANNEX E: EUR1
ANNEX F: Certificate Halal
ANNEX G: Certificate of conformity
ANNEX H: Certificate of analysis
ANNEX I: Technical data sheet
ANNEX J: Packaging list
ANNEX K: Declaration D48
ANNEX L: Commercial register
ANNEX M: Release customs
ANNEX N: NIF card
ANNEX O: Purchase order
ANNEX P: Proforma invoice
ANNEX Q: Product entry License DCP
ANNEX R : Import engagement
ANNEX S : Domiciliation request
ANNEX T: Company commitment
ANNEX U: Declaration detail
ANNEX W: Arrival notice
ANNEX U: invoice SHIPPING COSTS MSC
ANNEX X: INVOICE PORT COMPANY BMT FOR WAREHOUSING,
STORAGE, SECURITY